

## **Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the End of the Second Millennium.I. Introduction, History, Biographical Sketches, and Omaliine Group**

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CATALOG OF THE STAPHYLINIDAE  
(INSECTA: COLEOPTERA).  
1758 TO THE END OF THE  
SECOND MILLENNIUM.

I. INTRODUCTION, HISTORY,  
BIOGRAPHICAL SKETCHES,  
AND OMALIINE GROUP

LEE H. HERMAN

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Number 265, pages 1–650

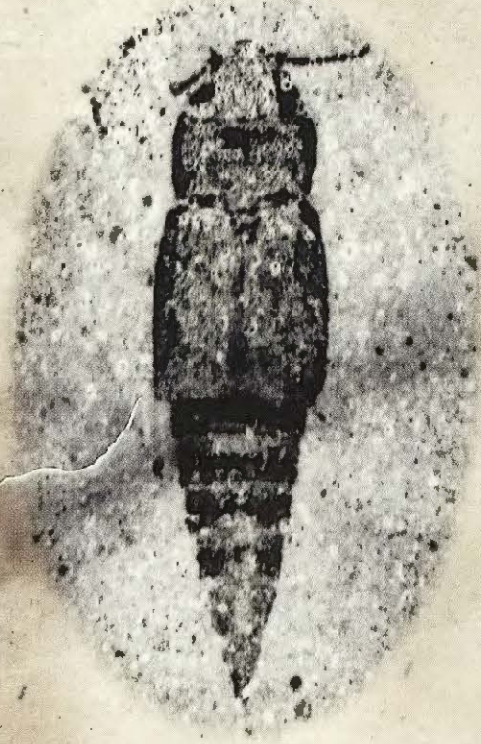
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*Staphylinus hirtus* Fabr.



*Unnamed Triassic Fossil*

**Top:** *Staphylinus hirtus* Linné, the first species of Staphylinidae described (illustration after Panzer, 1796, Faunae insectorum Germanicae). **Bottom:** Unnamed Triassic fossil, the oldest known species of Staphylinidae (from photograph of original fossil).

CATALOG OF THE STAPHYLINIDAE,  
PARTS I–VII

PART I, pages 1–650

Introduction

Brief History of Taxonomic Studies of the Staphylinidae

Research History • Biographical Sketches

Overview of Classification

Omaliine Group

Dasycerinae • Empelinae • Glypholomatinae • Micropeplinae • Microsilphinae •  
Neophoninae • Omaliinae • Proteininae • Protopselaphinae

PART II, pages 651–1066

Tachyporine Group

Habrocerinae • Olisthaerinae • Phloeocharinae • Tachyporinae • Trichophyinae

PART III, pages 1067–1806

Oxyteline Group

Apateticinae • Osoriinae • Oxytelinae • Piestinae • Trigonurinae

PART IV, pages 1807–2440

Staphylinine Group

Euaesthetinae • Leptotyphlinae • Megalopsidiinae • Oxyporinae • Pseudopsinae •  
Solieriinae • Steninae

PART V, pages 2441–3020

Staphylinine Group, *continued*

Staphylininae

Diochini • Maorothiini • Othiini • Platyprosopini • Staphylinini (Amblyopinina •  
Hyptiomina • Anisolinina • Philonthina)

PART VI, pages 3021–3840

Staphylinine Group, *continued*

Staphylininae, *continued*

Staphylinini (Quediina • Staphylinina • Tanygnathinina • Xanthopygina •  
Incertae Sedis)

Xantholinini

Staphylinidae: Subfamily Incertae Sedis

Protactinae†

PART VII, pages 3841–0000

Bibliography

Index

CATALOG OF THE STAPHYLINIDAE (INSECTA: COLEOPTERA).  
1758 TO THE END OF THE SECOND MILLENNIUM

ABSTRACT

This catalog (published in seven parts, all released on the same day) is based on only the published literature for the Staphylinidae. Of the 32 subfamilies, the following 28 are included herein: Apateticinae, Dasycerinae, Empelinae, Euaesthetinae, Glypholomatinae, Habrocerinae, Leptotyphlinae, Megalopsidiinae, Micropeplinae, Microsilphinae, Neophoninae, Olisthaerinae, Omaliinae, Osoriinae, Oxyporinae, Oxytelinae, Phloeocharinae, Piestinae, Protactinae†, Proteininae, Protopselaphinae, Pseudopsinae, Solieriinae, Staphylininae, Steninae, Tachyporinae, Trichophyinae, and Trigonurinae. The Aleocharinae, Paederinae, Pselphinae, and Scaphidiinae are excluded from this edition of the catalog. References to the original citation or description are given for available family-group, genus-group, and species-group names of both extant and extinct forms. The type genus is cited for each family-group name, the type species for each genus-group name, and the type locality for each species-group name. Where appropriate, all subgenera, subspecies, or synonyms are listed for each valid name. Annotated subsequent references are presented for all names. Distributional summaries are given for each valid taxon. Full bibliographic citations are in Part VII. A short historical review, coauthored with Aleš Smetana, follows the Introduction (Part I), with the main focus on biographical sketches that include many photographs. The goal of this catalog is to summarize the current state of knowledge of the family and to stimulate worldwide monographic studies.

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Please send comments, corrections, or updates to either the postal or e-mail address. Reprints of new publications would be helpful and appreciated.

# CONTENTS

## PART I

### INTRODUCTION, HISTORY, BIOGRAPHICAL SKETCHES, AND OMALIINE GROUP

Introduction . . . . .	1
Acknowledgments . . . . .	14
Brief History of Taxonomic Studies of the Staphylinidae Including Biographical Sketches of the Investigators, <i>by Aleš Smetana and Lee H. Herman</i> . . . . .	17
Research History . . . . .	17
Biographical Sketches . . . . .	38
Overview of Classification . . . . .	161
Staphylinidae . . . . .	167
Omaliine Group . . . . .	175
Dasycerinae . . . . .	175
Empelinae . . . . .	179
Glyphomatinae . . . . .	181
Micropeplinae . . . . .	183
Microsilphinae . . . . .	205
Neophoninae . . . . .	207
Omaliinae . . . . .	209
Anthophagini . . . . .	210
Aphaenostemmini . . . . .	377
Corneolabiini . . . . .	378
Coryphiini . . . . .	381
Boreaphilina . . . . .	381
Coryphiina . . . . .	389
Eusphalerini . . . . .	409
Hadrognathini . . . . .	467
Omaliini . . . . .	468
Proteininae . . . . .	599
Anepiini . . . . .	600
Austrorhysini . . . . .	600
Nesoneini . . . . .	601
Proteinini . . . . .	602
Silphotelini . . . . .	648
Protopselaphinae . . . . .	649

## PARTS II–VII

Tachyporine Group . . . . .	Part II
Oxyteline Group . . . . .	Part III
Staphylinine Group . . . . .	Parts IV–VI



Staphylinidae: Subfamily Incertae Sedis .....	Part VI
Protactinae† .....	Part VI
Bibliography .....	Part VII
Index .....	Part VII

## INTRODUCTION

Catalogs are among the most indispensable tools used by systematists and other biologists; their scarcity is a major impediment to progress in the study of a group. Without catalogs it is laborious to determine what groups are described, what species are included in each group, and what has been published about them. Minimally, catalogs present a list of species and genera. Maximally, they tabulate the names of the taxa with their author and date and place of publication; their subsequent use; their synonyms; notation of homonyms; the current classification; the type species for each genus-group name; the type locality for each species-group name; the original, subsequent, and current genus-species combination; the geographical distribution, habitat, host, natural history; and so on for each species, in short, every published mention of a taxon.

Ideally, catalogs permit us to keep track of available names, valid names, unavailable names, and the composition of taxonomic groups. Catalogs state the spelling, validity, and availability of names and their dates of publication; verification of these data, particularly the last, are not as simple as might first appear. They permit discovery of homonyms and help prevent publication of others. They organize the scattered original descriptions and subsequent literature. Catalogs summarize the historical development and studies of a group. They outline the currently recognized classification and the state of knowledge of a taxon, bringing together in one place all that we know about it. Catalogs provide a common language through which we can communicate, and without which we would be immersed in a bedlam of names and literature. My intention is to provide a guide to the taxa and literature of the Staphylinidae and to make both the catalog as practical as possible and the literature accessible.

This project was undertaken because a new catalog was desperately needed. The Bernhauer-Schubert-Scheerpeltz catalogs and supplements were long out of date and no one else volunteered to produce a new one. It had become necessary to review over 60 years of the Zoological Record to begin a new research project, to gather information about a taxon and its composition, or to know which names were valid and which were synonyms.

The most recent catalog for the Staphylinidae of the world was published in six parts between 1910 and 1926 (Bernhauer and Schubert, 1910, 1911, 1912, 1914, 1916; Bernhauer and Scheerpeltz, 1926) with major supplements by Scheerpeltz (1933, 1934). All subsequent catalogs or checklists have been restricted to specified geographical regions. Some examples of such lists and catalogs include those for Mexico, Central America, the West Indies, and South America (Blackwelder, 1944), central Europe (Horion, 1963, 1965, 1967; Lucht, 1987), Austria (Scheerpeltz, 1968a), the former Soviet Union (Tikhomirova, 1973a), Taiwan (Shibata, 1973c, 1986a), America north of Mexico (Moore and Legner, 1975), Japan (Shibata, 1976, 1977, 1983, 1984, 1985a), Britain (Pope, 1977), Poland (Burakowski et al., 1979; Burakowski et al., 1980), Fennoscandia and Denmark (Muona, 1979), Korea (Yuh et al., 1985), Fennoscandia, Denmark, and the Baltic region (Silfverberg, 1992), the former Czechoslovakia (various authors, *in* Jelínek, 1993, Check-list of Czechoslovak Insects IV), Denmark (Hansen, 1996, along with subsequent multi-authored supplements), Latvia (Telnov et al., 1997), Italy (*in* Ciceroni, Puthz, and Zanetti, 1995), Ireland (Anderson et al., 1997), and northeastern Asia (Ryabukhin, 1999), and so on. The preceding list is not complete; it includes only some of the multitude of such lists, particularly for Europe, many of which are cited in the catalog and many of which are not. These checklists provide lists of taxa, citations to their original descriptions, and (in some cases) their synonyms for the region under consideration as well as their distributions within those regions. They summarize the fauna for a region and may report the first published record for a taxon from a region. Most omit references published after the original description of the taxon.

The volume of literature and surfeit of species make the preparation of a new catalog of the Staphylinidae a formidable undertaking. The original and supplemental catalogs by Bernhauer, Schubert, and Scheerpeltz included nearly 20,000 species (Arnett, 1963). In the succeeding 65 years the number of taxa has nearly doubled. It was decided to publish a new catalog rather than provide a supplement to the old because of the tens of thousands of new genera and species and changes such as genus-species recombinations, emendations, elevations, reductions,

synonyms, and replacement of homonyms. A new supplement would be cumbersome to use because it would compel researchers to have at hand and use the earlier catalogs and supplements along with the new supplement. Although the existing catalogs were vital and provided direction for vast quantities of work, many errors needed correction, many species were overlooked, some taxa were misinterpreted, fossil taxa were omitted, misidentified taxa were cited as synonyms, and few subsequent references were included. Moreover, thousands of articles have been published since 1934; therefore, searching the literature is increasingly complex and time consuming.

Of the 32 subfamilies, 28 are included in the present work. The Aleocharinae was omitted so as to produce a catalog for the majority of the subfamilies within a reasonable time frame. An unedited, unverified checklist, the precursor to a catalog of that subfamily, has been prepared. The Pselaphinae was excluded because it was transferred to the Staphylinidae recently (Newton and Thayer, 1995: 302; Lawrence and Newton, 1995: 825, 828) when the present catalog was in advanced stages of preparation. An annotated list of the genera of the Pselaphinae was published (Newton and Chandler, 1989), but it is hoped that the generic catalog and the present work will serve as cues for someone to publish a species-level catalog with subsequent references for the group. The Scaphidiinae was not included because a catalog for the group was already underway and has since been published (Löbl, 1997). The Paederinae are separated from the present work. A catalog for that subfamily is finished. However, since the revision of the subtribal and generic classification currently underway and in advanced stages of development will result in thousands of changes (Herman, in prep.), a published catalog for that group is premature and will be published upon completion of the revision.

A published estimated number of species in the family through 1987 is 41,983 (Newton, 1990a). That number includes four families, Dasyceridae, Micropeplidae, Scaphidiidae, and Pselaphidae, that are now subfamilies of the Staphylinidae (Lawrence and Newton, 1995). Since then three other subfamilies were added, Microsilphinae, Protopselaphinae, and Empelinae (Lawrence and Newton, 1995), and many species have been added to the other subfamilies. Through 1999 at least 45,700 species have been included in the family (table 4, p. 000).

Excluding the Aleocharinae, Pselaphinae, and Scaphidiinae, nearly 18,000 available names had been published by the end of 1933, more than 12,000 of which are still valid. Since then over 13,600 more names have been made available, excluding the three subfamilies listed above. Among these more than 31,000 available names, over 23,500 are valid species and 979 are valid genera.

This is not a complete catalog; it does not include every published mention of each taxon. Its emphasis is a list of the names and references to the original descriptions for the genera and species and their synonyms, documentation of the status of each name, references to revisionary and monographic publications for each taxon, and a summary of the distribution of each species and genus.

All new taxa, newly recognized synonyms and homonyms, revised genus-species combinations, and subfamilial assignments were reported. Emphasis was placed on published monographs, revisions, faunal studies, keys, and morphological and distributional data. References to descriptions of immature stages and natural history phenomena were included, but no systematic search was made for them. For taxa occurring outside Europe, almost any article found was cataloged. Because of the immense number of articles published on European species, many of those articles were omitted. For example, articles that provided only a list of species collected at one site or another in Europe were often excluded; there are hundreds of such articles. In descriptions or redescrptions of taxa there are often comparisons to another taxon of the same rank. These comparisons were not cataloged, in spite of the fact that there may be new information presented. In the present work, the listing for each nominal genus and species included in the catalogs of Bernhauer and Schubert (1910–1916) and Scheerpeltz (1933, 1934) is recorded. Their catalogs played such a pivotal role in the recent development of the study of the Staphylinidae that it seemed important to be able to go easily from the present catalog to theirs. Such complete tabulation of taxa was done for few of the plethora of other catalogs and checklists. The other compilations are cited among the subsequent references for the genus and/or subfamily.

The present work was done chronologically. First a skeleton for each subfamily was prepared. The skeleton consisted of a list of species for each genus and a list of genera for each subfamily. This list was extracted from the catalogs of Bernhauer and Schubert (1910–1916) and the supplement by Scheerpeltz (1933, 1934); the author, date of publication, and page for the original references for each genus and species name were copied. To update the list, names, authors, dates, and page numbers of new taxa were drawn from the 1933 through 1999 volumes (vols. 70 to 136) of the Zoological Record. The resulting list was, in effect, an unverified checklist of the genera and species and their synonyms. To verify every original description, add subsequent references for each taxon, and ascertain the status of each name, the entire unverified checklist, the skeleton, was reorganized chronologically. The first reference examined was Linné, 1758, the second was Sulzer, 1761, the third, Scopoli, 1763, and so forth, year by year, decade by decade. The original citation for every genus and species and every subsequent citation included was examined.

### STRUCTURE AND CONVENTIONS

The present catalog was begun with a format similar to that used by Bernhauer, Schubert, and Scheerpeltz but I soon realized that the project was too large to comfortably accommodate their organization. Furthermore, a somewhat modified form was needed to add tools and structure that would facilitate the catalog's use. The devices include, among others, cross-indexing, annotated original and subsequent references, and full bibliographic citations. Fundamentally, catalogs are not merely lists of the literature and taxa of a group but include the author's interpretations of the literature. Therefore, the present catalog is annotated throughout to clarify the logic of particular actions.

This catalog is a reflection of the published literature and the sources of the information included are documented. Unpublished information is excluded. In the course of preparation, many errors in the previous world catalog that needed correction were discovered. Certain mistakes, such as erroneous dates, page numbers, authorship, gender endings for species, and (some) misspellings, were altered directly in the catalog and annotated where needed for clarity. Others, resulting in about 750 nomenclatural changes, were published by Herman (2001).

The arrangement of subfamilies is that proposed by Lawrence and Newton (1995). An alternative classification that differs in details was published by Hansen (1997). However, much work on the higher classification remains.

Names are listed in accordance with their current disposition as to availability, validity, and generic and subfamilial assignment. For each taxon the reference (author, date of publication, page number) to the original citation is included. Full references for all citations are included in the bibliography in the last volume. Within each subfamily, tribe, and subtribe the genera are arranged alphabetically, as are the species in each genus. Synonyms and homonyms are listed chronologically under the valid name. Species-group homonyms and synonyms are cross-indexed within the genera. The alignment of the names indicates which names are valid and which are subordinate. Valid names are flush to the left margin and their synonyms and subordinate names are indented. To determine if a subordinate name is a subgenus, subspecies, or synonym, the user must inspect the annotations for the original and subsequent references. The most recent reference usually dictates the current status.

The genera are arranged alphabetically in the subfamily or, where applicable, in tribes and subtribes. The genera included in each tribe and subtribe are taken from an unpublished manuscript by Newton. In subfamilies with a tribal (or subtribal) classification, genera without tribal (or subtribal) assignment are listed as "incertae sedis" at the end of the subfamily listing. Species are arranged alphabetically within their respective genera. Subgeneric assignments may be determined by inspection of the annotations of the subsequent references. An index to all taxonomic names is provided in the last volume.

Issues of nomenclature were resolved by consulting the fourth (1999) edition of the *International Code of Zoological Nomenclature*, hereafter referred to as "the Code". Of particular importance for the stability of names were provisions of Articles 23.9 (Reversal of Precedence)

and 70.3 (Misidentified Type Species). Opinions rendered by the International Commission on Zoological Nomenclature are cited in the text and in the bibliography as “ICZN” along with a date. Articles of the Code cited in the catalog are simply cited as, for example, “Article 13.3”.

EXAMPLES:

*Quedius* Stephens, 1829a: 22. **TYPE SPECIES:** *Quedius levicollis* Brullé, fixed by subsequent designation in Opinion 1851 (ICZN, 1996: 215).

ICZN (International Commission on Zoological Nomenclature)

1996. Opinion 1851. Xantholinini Erichson, 1839 and Quediini Kraatz, [1857] (Insecta, Coleoptera): given precedence over some senior synonyms; *Quedius* Stephens, 1829: *Staphylinus levicollis* Brullé, 1832 designated as the type species. The Bulletin of Zoological Nomenclature 53(3): 215–217.

**FAMILY-GROUP NAMES.** Each subfamily name begins on a right-hand page followed by a bracketed statement of the number of genera and species in the group and a summary of its distribution by zoogeographic region. Tribes are alphabetical within the subfamilies and subtribes are similarly arranged within tribes. The original reference is cited with the original spelling of the family-group name, date of publication, and page number and, in parentheses, a list of the originally included genera. It is from these genera that the type genus is chosen. Next is a statement of the type genus and a reference concerning its designation. Synonymic family-group names are indented under the appropriate senior name. Subsequent references are further indented. The date of publication and type genus of each family-group name were taken from Newton and Thayer (1992), and the data verified against the original literature.

EXAMPLE:



[42 genera; 513 species; Neotropical, Nearctic, Palaearctic, Ethiopian, Oriental, and Australian Regions]

Leptotyphlinae Fauvel, 1874.

**Tribe Cephalotyphlini**

Cephalotyphlini Coiffait, 1963d: 380, 381 (genera included: *Cephalotyphlus*). **TYPE GENUS:** *Cephalotyphlus* (see Newton and Thayer, 1992: 56).

**Tribe Leptotyphlini**

Leptotyphlini Fauvel, 1874.

Leptotyphli Fauvel, 1874: 329 [= 1874b: 35] (genera included: *Leptotyphlus*). **TYPE GENUS:** *Leptotyphlus* (see Newton and Thayer, 1992: 56).

**GENUS-GROUP NAMES.** For valid genera, the centered genus heading is followed (in brackets) by the number of currently included valid species and a summary of the distribution by zoogeographic region. The first line of the generic paragraph includes the valid generic name in italics, the author, date, and page number for the original reference and (in parentheses) a list of the originally included, available nominal species, from which the type species is selected. If the genus was *originally* described as a subgenus, that is also stated, but obviously the original use of the name is not necessarily the current status. Following the information in parentheses is the type species and the method of fixation or reference to such information. Following the valid generic name are synonymic or subgeneric genus-group names listed chronologically. The synonymic or subgeneric genus-group names include the same kind of information given for the valid name. Synonymic and subgeneric names are identified by examining the original and subsequent references to ascertain the most recent disposition of the name.

## EXAMPLE:

**Acylophorus**

[128 species; Neotropical, Nearctic, Palaearctic, Ethiopian, Madagascan, Oriental, and Australian Regions]

*Acylophorus* Nordmann, 1837: 127 (species included: *ahrensii*, *femoralis*). **TYPE SPECIES:** *Acylophorus ahrensii* Nordmann, fixed by subsequent designation by Blackwelder, 1943: 466.

*Rhygmacera* Motschulsky, 1845a: 40 (species included: *nitida*). **TYPE SPECIES:** *Rhygmacera nitida* Motschulsky, fixed by original designation and monotypy.

— Smetana, 1971: 246 (synonym of *Acylophorus*).

*Paracylophorus* Bierig, 1938: 123 (subgenus of *Acylophorus*; species included: *schmidti*). **TYPE SPECIES:** *Acylophorus (Paracylophorus) schmidti* Bierig, by original designation and monotypy.

— Blackwelder, 1952: 289 (subgenus of *Acylophorus*; type species: *schmidti*).

**SPECIES-GROUP NAMES.** Valid species are in boldface type and are flush to the left margin. Each includes the name of the species, the author, date, and page number for the original description, followed by (in parentheses) the original genus-species combination and the type locality. Synonymic and subspecific names are listed chronologically below the valid species name and include the same type of information given for the valid name. If a species-group name was originally included in a subgenus, or described as a subspecies, race, variety, form, aberration, or mutant, that is stated. To determine the current status of a species-group name, the user must look at the original and most recent subsequent references. Gender agreement with the genus of current assignment was corrected where necessary.

EXAMPLE (from *Gabrius*):

**astutus** Erichson, 1840: 492 (*Philonthus*; Type locality: Austria).

*erythrostromus* Hochhuth, 1851: 22 (*Philonthus*; Type locality: Armenien).

*mendosus* Bernhauer, 1928b: 12 (*Philonthus*; subgenus *Gabrius*; Type locality: Kaukasus: Borshom).

**hoggarensis** Coiffait, 1966b: 343 (*Gabrius*; subspecies of *nigritulus*; Type locality: Hoggar, Tamanrasset).

**PARENTHESSES.** Article 51.3 of the Code requires that “When a species-group name is combined with a generic name other than the original one, the name of the author of the species-group name, if cited, is to be enclosed in parentheses.” Because the original and current generic assignments are specified in the catalog, the author’s name is not enclosed by parentheses.

**HOLOTYPES.** The depositories of holotypes, syntypes, or lectotypes are not provided. The published information for the deposition of holotypes is not always available or reliable and the logistics of verifying the repositories for 31,000 species-group names would have been monumental.

**SUBSEQUENT REFERENCES.** References to information published after the original description of taxonomic names follow the relevant names. Subsequent references provide a history of the use and summary of the knowledge for each name. Each subsequent reference begins on a separate indented line, preceded by a dash and arranged in chronological order. For both genus-group and species-group names the subsequent references include the author, date and page, and a summary of the contents of the article. The summary includes the generic and, if applicable, subgeneric placement used in that article, a brief notation of the kind of information included, and the country or region from which the species was reported. If the species was assigned to a

subgenus or its status altered, that information is included and is the basis upon which the user can determine the current disposal of a name.

EXAMPLES (from several genera):

- Coiffait, 1974: 54 (*Gabrius*; characters; subspecies of *nigritulus*).
- Nowosad, 1990: 147 (*Quedius*; collected from mole nest; notes; Poland).
- Huth, Dettner, Frössl, and Boland, 1993 (*Oxytelus*; defensive secretion; biosynthesis of solvents; ester formation).
- Schillhammer, 1996a: 81 (*Gabrius*; valid species; France).

**CURRENT STATUS OF A NAME.** The status and assignment of a name are usually determined by the most recent publication. For example, if a name was originally described as a species, reduced to varietal status, then considered a synonym, then elevated to subspecies by the most recent author, the name is treated as a subspecies.

In some few cases the most recent disposition of the name may not determine its placement in the catalog. For example, a species name has been listed for many years by many authors as a synonym. Then recent work that included examination of the type specimen resulted in the recognition of the synonym as a valid species. If, after the revised status was published, another author continued to list it as a synonym and gave no indication of awareness that it had been elevated, then the name was listed as a valid species in the present work. The disposition of genus-group names is similarly reflected in the catalog.

**DISTRIBUTION.** For genera, a distributional summary is given by zoogeographic region. The regions are divided along political boundaries for practical reasons. The regions as used herein are summarized below.

*Neotropical:* Falkland Islands, Juan Fernandez Islands, Galapagos Islands, South America, Central America, Mexico, the West Indies including the Bahamas.

*Nearctic:* Greenland, Canada, USA to the Mexican border, and Bermuda.

*Palaearctic:* Iceland, Atlantic islands (including Azores, Madeira Islands, Canary Islands), Morocco, Algeria, Tunisia, Libya, Egypt, Arabian Peninsula, Middle East, Europe, Russia, Caucasus, Turkey to Pakistan and Afghanistan, Turkmenistan, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, northern India (including Kashmir, Himachal Pradesh, Uttar Pradesh, Sikkim, and Darjeeling), Nepal, Bhutan, Mongolia, China (all), Taiwan, Korea, and Japan.

*Ethiopian:* Cape Verde Islands, Saint Helena, Africa from Mauritania, Mali, Niger, Chad, and Sudan south through South Africa.

*Madagascan:* Madagascar, Comoros, Seychelles, Mauritius, and Réunion.

**ORIENTAL:** India (excluding Kashmir, Himachal Pradesh, Uttar Pradesh, Sikkim, and Darjeeling), Sri Lanka, Laccadive and Maldiv Islands, Andaman Islands, Bangladesh, Myanmar, Malaysia, Singapore, Thailand, Laos, Cambodia, Vietnam, Island of Borneo, Indonesia (excluding Irian Jaya), Philippines.

*Australian:* Island of New Guinea, Australia, Lord Howe Island, New Zealand, and Chatham Island.

*Oceanic:* Pacific Islands including New Britain, Solomon Islands, New Caledonia, New Hebrides, Fiji, Hawaiian Islands, Marquesas Islands, Society Islands, Pitcairn, Easter Islands.

*Antarctic:* Subantarctic Islands including South Georgia, Prince Edward Islands, Crozet Islands, Kerguelen Islands, Macquarie Island, Auckland Islands, Campbell Island but excluding southern Chile, Argentina, and New Zealand.

For species, following the original and subsequent references for the *valid* name, a summary of the geographical distribution by country is included. This information is taken from the references cited for the valid and synonymic names. The countries are listed geographically, from north to south, east to west, etc., to facilitate visualizing the pattern of distribution.

## EXAMPLES:

- ▲ **DISTRIBUTION:** Pakistan, India, Sri Lanka, Myanmar, Indonesia, Philippines.
- ▲ **DISTRIBUTION:** Canada, United States, Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama.
- ▲ **DISTRIBUTION:** Spain, Morocco, Algeria, Tunisia, Libya, Egypt.

The spelling of countries is according to the Merriam Webster's Geographical Dictionary, 1997, 3rd ed. (Springfield, Massachusetts: Merriam-Webster, Incorporated). The same source was used for the definition of most regional names. The Times Atlas of the World, Comprehensive Edition, 1981 (London: Times Books), was used for finding localities.

Because some older regions are now poorly understood or are currently part of more than one country, some regional names are used in the distributional summaries for species. These regions are discussed in the following paragraphs.

"East Indies" is a vague term used for the localities cited as "India orientalis" or "Indes orientales" by Kraatz (1859) and Motschulsky (1857a, 1858, 1858a) respectively (and a few other authors). This term has been stated in geographical dictionaries to include India only, India and Southeast Asia, or the Malay Archipelago which is now Indonesia. However, in the introduction to his *Die Staphylinen-Fauna von Ostindien insbesondere der Insel Ceylan*, Kraatz explained that about 230 species included in the work were collected by Nietner in "Ceylan", 150 by Helfer in "Hinterindien", and 40 by Bacon in "nördlichen Indien". He mentioned that more precise information about the regions of "Hinterindien" explored by Helfer could be found in Schmidt-Göbel's *Fauna Coleopterorum Birmanae*. In that work Helfer is stated to have collected in Burma and Bengal (reference not examined by Herman but relevant information from it supplied by A. Smetana). The localities for most of the species described by Kraatz were "Ceylan, India boreali, or India orientali". Kraatz seems to have reported all the species collected by Helfer in "Hinterindien" as "India orientali". Kraatz goes on to write that some species from "Hinterindien" are identical to species from Ceylon and "Vorderindien". In Stielers Hand-Atlas (Haack, 1925) "Hinterindien" includes Myanmar, Thailand, Laos, Vietnam, and West Malaysia; "Vorderindien" includes India. It is probable that the material reported from "India orientali" by Kraatz is from modern-day Myanmar, Bangladesh, and eastern India, but since it is unclear which species are from which area, all those sites are referred to as "East Indies". Motschulsky presented no information concerning the source of the material described from "Indes orientales".

"Transcaucasus, Transcaucasia, or Caucasus" is now Azerbaijan, Armenia, Georgia, and part of Russia. "Transcaspia" is now Turkmenistan and part of southwestern Kazakhstan. "Turkestan" is thought to have comprised present day Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, southern Kazakhstan, western China, and northeastern Afghanistan. The "Altai region" is the Altai Mountains or Altay Shan in western Mongolia, northwestern China, eastern Kazakhstan, and Russia adjacent to the juncture of these three countries. "Somaliland" is an old name for a region that now includes Somalia, Djibouti, and southeastern Ethiopia. "Carniola or Krain" is a region at the head of the Adriatic Sea and now (mostly) part of Slovenia.

For a species reported from numerous European countries, the distributional summary is often given as "Europe". Also, since not all literature for each species was cataloged, the European distribution of many species is more extensive than reported herein, so the general designation "Europe" is sometimes cited in the distributional summary. However, even when the distributional summary only states "Europe", particular countries from which a species was reported are provided in the annotations of the subsequent references. A more complete and detailed summary of the distribution of the Palearctic species will be published in the forthcoming, multiauthored catalog of beetles for the region.

Russia, China, India, Australia, and Brazil are listed without further breakdown because to do otherwise would have required looking up numerous localities since most authors did not provide the state or provincial names. By contrast, the states and provinces are listed herein for the United States and Canada because most authors did cite them. The recent reorganization of the former Soviet Union, Yugoslavia, and Czechoslovakia, is mostly reflected in the catalog.



The former Zaire is called Congo herein and the Republic of Congo is called Congo Republic. New Guinea and Borneo are listed as a geographical, rather than political, entities. Indonesia is listed in the distributional summary, but the particular islands are often listed in the annotations for the subsequent reference. Groups of smaller islands are listed in the distributional summary by country, for example, Vanuatu, or by island group, for example, Society Islands. If a species has been reported from a particular country in the past but later found to be based on an erroneous identification, then that country is not listed in the distributional summary. However, the erroneous locality *is* reported in the summary of content of the reference that cited it.

**TYPE LOCALITY.** The type locality for each species-group name is taken from the original publication and is transcribed, with abbreviations, in the language and form of the original citation (but the order of the elements is sometimes changed). For type localities published in Slavic languages using Cyrillic, the characters are transliterated to Latin characters. Transliteration was based on the American or the Library of Congress system. If other countries were listed in addition to that of the type locality, they are listed after the phrase “Also cited from . . .”. In some cases, particularly in Europe, the type locality was cited originally in one country but that place is now in another. For example, Herkulesbad, now in Romania, was usually cited in Hungary in the older literature.

**EXAMPLES** (from *Bledius* and *Anotylus*):

**fageli** Kashcheev, 1991: 110 (*Bledius*; subgenus *Elbidus*; Type locality: Pseki Kyzylkum, Chaban-Kazgan).

**opacifrons** Hammond, 1976a: 45 (*Anotylus*; Type locality: Nigeria: Jos. Also cited from Mali, Zaire, and Ethiopia).

The type localities for species named by Gravenhorst (1802) require comment. For nearly all the species described in the first 158 pages the type locality is Brunsvigae or no locality is cited. Based on the title of the work, it was assumed that all the species for which no type locality is cited are probably from Brunsvigae. Although the title of the work also stated that “exotic” species were included, those species were included in a separate section (pp. 159–202). In the catalog, for all the species in Gravenhorst (1802) described without specified localities in the first 158 pages, the type locality is cited as: “Not cited, but presumably Brunsvigae”.

**LECTOTYPES.** For many species, particularly in older descriptions, no type locality was designated, and the species may have been cited from more than one site. For these species-group names, all the localities published in the original description are the type locality (Article 73.2.3) and are listed. Species for which lectotypes were designated are denoted by “[**Note:** See lectotype designation by . . .]” following the type locality. That notation directs the user to the reference in which the lectotype was designated. If the designator of the lectotype chose a locality from among several that were originally listed, that locality is cited as the type locality. To preserve published information, the other localities originally cited are listed following the notation of lectotype designation as “Also cited from . . .”. Some authors have designated a specimen as the lectotype from a locality that was not cited in the original publication. Such specimens may not be part of the original series and, if not, then application of Article 72.2 of the Code will strip them of their status. Lectotype designations are recorded when an author selected them explicitly and intentionally by using the word “Lectotype” or “Lectotype designation” or a similar phrase. For lectotype designations prior to the year 2000, the Code permits use of the term “the type” to indicate a lectotype designation (Article 74.5). Probably many such designations were overlooked.

**EXAMPLE** (from *Gabrius*):

**adustus** Casey, 1915: 440 (*Philonthus*; Type locality: California: Sta. Cruz Mts.; [**Note:** See lectotype designation by Smetana, 1995e]. Also cited from San Francisco, California).  
— Smetana, 1995e: 720 (*Gabrius*; lectotype designation: Santa Cruz Mts, California; characters; notes; California; Oregon).

- confusus** Cameron, 1932: 148 (*Philonthus*; Type locality: Kansar, Chakrata dist., 7050'; [Note: See lectotype designation by Schillhammer, 1997]. Originally cited from Chakrata, Mussoorie, and Simla districts, alt. 7000–8000 feet.)  
 — Schillhammer, 1997: 21 (*Gabrius*; lectotype designation: Kansar, Chakrata dist., 7050'; characters; India).
- hesperius** Fauvel, 1878: 124 [= 1878a: 44] (*Philonthus*; Type locality: Edough, près Bône; Espagne: Andalousie, Algésiras; Portugal).

**TYPE SPECIES.** The type species is stipulated for each genus-group name along with the method of fixation and, for subsequent designations, the author responsible for that designation.

For names proposed before 1950, Blackwelder's (1952) study of the type species of the family, which evidently concluded with the literature published in 1950, was the point of departure. The accuracy of all the designations he included was checked; a few errors were found. A few minor errors were corrected directly in the catalog. Disagreements over the particular species designated are discussed in a separate article (Herman, 2001).

Blackwelder judged a significant number of type species to have been designated by R. Lucas (1920). He presumably accepted these designations as valid based on statements in the "Vorwort" of that work. Lucas (1920: VI) wrote, "Die Anordnung des Stoffes ist folgende: Hinter dem Gattungsnamen folgt der Autor und die älteste (also Typen-) Literatur. Daran schliesst sich zumeist die Type, event. auch alte oder bekannte Arten." Blackwelder failed to explain how he applied these statements, but at least two interpretations are possible. To Puthz (1974: 912), Lucas's use of the word "zumeist" [in most cases] left uncertain the name designated as type species when multiple species were listed. This uncertainty made the supposed designation unacceptable according to Article 67.5.3 of the Code. This interpretation would result in acceptance of Lucas's designations for genus-group names as valid only when he cited only one of the originally included nominal species and even then there would be room for doubt. Another interpretation was stated and applied to type species designations in the Pselaphidae (Newton and Chandler, 1989:4). Those authors "... accepted a single name or the first of two or more names listed for a genus or a designation of that species as type species for the genus, unless there was a query, or the first two names were connected by 'et'." The second interpretation was accepted herein. Obviously, the name must have been one of the originally included nominal species (Articles 67.1, 67.2.1).

After 1930, a type species designation was required for genus-group names to be available (Article 13.3). For a few post-1930 names Blackwelder fixed a type species by "subsequent designation". However, by designating the type species, Blackwelder became the first to make the name available and is therefore the author of the name (Article 50.1). In those instances both the authorship of the name and its date of establishment change. All such cases are discussed in a separately published article (Herman, 2001).

For genus-group names published after 1950, the cutoff date for Blackwelder's (1952) work, the type species fixations were taken from the original proposal of the name.

According to the Code, the type species of nominal genera and subgenera can only be one of the originally included nominal species (Articles 67.1, 67.2.1). If that species is currently listed as a junior synonym it is incorrect to cite the senior name as the type species. Accordingly, the type species is cited by the species-group name used in the original establishment of the genus-group name. If a type species is a junior synonym, the senior synonym can be found under the listing for the appropriate genus. The type species is cited as the original genus-species combination.

**EXAMPLE:**

*Bledius* Leach, 1819: 174 (species included: *armatus*). **TYPE SPECIES:** *Staphylinus armatus* Panzer, fixed by monotypy.

**FOSSILS.** Several hundred taxa described as fossils are included within the main body of the catalog rather than cited as a list in a separate section. Nomenclaturally these names compete

equally with extant forms. Names of fossil taxa are distinguished from extant taxa by a “dagger” (†) following the name.

EXAMPLES:

*Abscondus*† Tikhomirova, 1968: 151 (Jurassic fossils; species included: *regularis*, *similis*).

**TYPE SPECIES:** *Abscondus regularis* Tikhomirova, fixed by original designation.

**regularis**† Tikhomirova, 1968: 152 (*Abscondus*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).

Some Recent species are also known by fossil specimens and in a few cases were collected outside the present-day geographical range. Localities from which Recent species were collected as fossil specimens are marked with daggers (†).

**CROSS-INDEXING.** To facilitate finding names and to help prevent homonymy, species names are cross-indexed. In the Bernhauer and Schubert catalogs and the Scheerpeltz supplements, homonymic usage can only be gleaned from the index. That method is cumbersome and primary homonyms of species no longer congeneric are easily overlooked.

Species-group names can be cross-indexed either to the senior species name or, if the species was described in one genus and moved to another, to the genus of current assignment.

EXAMPLES (from *Gabrius*):

*ajmonis* Gridelli, 1934, see: *furtivus* Cameron, 1932.

*cinerascens* Stephens, 1833, see: *Neobisnius*.

In these examples, *Gabrius ajmonis* was described in *Gabrius* and is now a junior synonym of *Gabrius furtivus* Cameron. *Neobisnius cinerascens* (Stephens) was also originally described in *Gabrius* but is presently in *Neobisnius*.

Genus-group names are listed alphabetically within subfamilies, tribes, or subtribes, as centered, boldfaced headings. For valid genera the original citation and other information follows that heading as described previously. The location of genus-group names can be found in the index.

**ANNOTATIONS.** In addition to annotations on the contents of the original citation and subsequent references for each taxon, many remarks concern inconsistencies or problems within the cited article or issues requiring resolution. Such comments are enclosed in brackets “[ ]” and usually begin with “**Note:**”.

EXAMPLE (from *Gabrius*):

**novellus** Tottenham, 1956b: 208, 213 (*Gabrius*; [**Note:** Cited as *novus* Cameron on pages 208 and 213 but renamed as a new species according to footnote on page 213]; Type locality: Angola).

**HOMONYMS.** Preoccupied names are annotated as **preoccupied**, following the reference for the original description for genus-groups names or the original generic assignment for species-group names. Replacement names are so indicated by the phrase “replacement name”.

EXAMPLES (from *Eppelsheimius* and *Acylophorus*):

*Eppelsheimius* Bernhauer, 1915j: 270 (replacement name for *Oncophorus* Eppelsheim).

*Oncophorus* Eppelsheim, 1885a: 46 (species included: *pirazzolii*; **preoccupied** by Glocker, 1850, and Rudkow, 1870).

*Oncogenys* Champion, 1919b: 154 (replacement name for *Oncophorus* Eppelsheim).

**caseyi** Leng, 1920: 109 (*Acylophorus*; replacement name for *longicornis* Casey).

*longicornis* Casey, 1915: 427 (*Acylophorus*; [**preoccupied**]; Type locality: New York: Peekskill).

**PROTECTED AND FORGOTTEN NAMES.** To help promote stability of names, the fourth edition of the Code (ICZN, 1999) permits, within specified limits, setting aside the priority of rarely used older homonyms and synonyms in favor of more commonly used younger homonyms or synonyms (Article 23.9). The names to which this article has been successfully applied are annotated in the catalog as “**Note: Nomen protectum**” for the younger name and “**Note: Nomen oblitum**” for the older name. Details surrounding designations for each such name are supplied by Herman (2001).

**UNAVAILABLE NAMES.** Some unavailable names have been listed but in ALL instances they are identified as **Note: Nomen nudum** both in the citation to its original proposal and in the cross-indexing entry. For each unavailable name, the Article in the Code that dictates its rejection is cited.

The vast majority of unavailable names were omitted. However, some were listed to eliminate confusion or questions about their status. This listing is particularly important for unavailable names with a long history of use. These names are included within the body of the text of the appropriate genus or subfamily so they can be easily located. Nonetheless, they have no nomenclatural status.

EXAMPLES (from *Gabrius* and *Philonthus*):

**appendiculatus** Sharp, 1910: 131 (*Gabrius*; Type locality: Anglia et Scotia).

*subnigritulus* Reitter, 1909: 132 (*Philonthus*; subgenus *Gabrius*; aberration of *nigritulus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]).

*subnigritulus* Reitter, 1909 [**Note: Nomen nudum**], see: *appendiculatus* Sharp, 1910.

*Philonthus* Stephens, 1829a: 23 (species included: *laminatus* . . .).

*Parambigus* Marcuzzi, 1977: 12 (subgenus of *Philonthus*; without description; [**Note: Nomen nudum**, Article 13.1.1]; species included: *lucidus* Fauvel).

**DOUBTFUL NAMES.** Some genera include species described in the 1700s or 1800s that were not used, or only rarely used, after the original description. Those names are available but since they have not been studied their dispositions are unknown, so there is no choice but to list them in the same manner that accepted valid species are cited. However, to distinguish them from valid species, these rarely used names have all been “flagged” with the phrase “**Note: Nomen dubium**”. Nearly all the species named by Gistel fall into this category, but there are available names that are unknown entities published by Linné, Scopoli, Goeze, Fabricius, O. Müller, Gmelin, Stephens, and others. Undoubtedly most, perhaps all, of these names are synonyms of currently recognized species. If they are older synonyms, then Article 23.9.1 can be applied to protect the younger names.

EXAMPLES: (from *Staphylinus*)

**agarici** O. Müller, 1776: 97 (*Staphylinus*; [**Note: Nomen dubium**]; Type locality: Dania).

— Gmelin, 1790: 2033 (*Staphylinus*; characters; Denmark).

▲ **DISTRIBUTION:** Denmark.

**alatus** Gmelin, 1790: 2037 (*Staphylinus*; [**Note: Nomen dubium**]; Type locality: Europa).

▲ **DISTRIBUTION:** Europe.

**sapphirinus** Gistel, 1857: 35 (*Staphylinus*; [**Note: Nomen dubium; preoccupied**]; Type locality: Brasilia).

▲ **DISTRIBUTION:** Brazil.

**MISIDENTIFICATIONS.** In the catalogs by Bernhauer, Schubert, and Scheerpeltz, misidentified names are cited as though they were synonyms. This practice is misleading, confusing, and inaccurate. Herein, names regarded as misidentifications are annotated, in brackets, and the reference for that misuse is cited among the subsequent references for the correct name of the species.

EXAMPLE (from *Philonthus laminatus*):

— Marsham, 1802: 504 (*Staphylinus*; [**Note:** Misidentification: Bernhauer and Schubert, 1914: 343, cited *politus* Marsham as a synonym of *laminatus*, but Marsham did not describe the species as new, he attributed it to Linné]; characters; Britain).

In this example, Bernhauer and Schubert (1914: 343) listed *Philonthus politus* Marsham, 1802: 504, as a junior synonym of *Philonthus laminatus*. Using their catalog it is impossible to know that Marsham attributed the species to Linné and that his citation is simply a misidentification; it appears that Marsham published a homonym. To know the status of the name, the user of Bernhauer and Schubert's catalog is compelled to consult Marsham's work. In the present catalog, Marsham's use of *Staphylinus politus* is listed as a subsequent reference and misidentification under *Philonthus laminatus*.

**BIBLIOGRAPHY.** The bibliography for the catalog is in the last volume. More than 5000 publications written by hundreds of authors are listed. Unexamined articles were not included either in the bibliography or in the body of the catalog. The vast majority of the articles were cataloged by consulting the original journals or books rather than relying on separates or reprints, which often have incomplete bibliographic information or incorrect dates or pagination.

The title of each article is stated as in the original publication. For titles published in Slavic languages using Cyrillic, the characters are transliterated to Latin characters using the American, Library of Congress, system. Articles in Chinese usually included a translation of the title to English; the translated title was used. The titles of journals are spelled out. The actual year of publication is listed. If that date differs from the year the volume should have been published, that year, in parentheses, usually follows the volume number. For many articles the month and day of publication are cited at the end of the citation enclosed by brackets and begin with "NOTE:".

EXAMPLES:

Bernhauer, M.

1909c. Zur Staphylinidenfauna von Südamerika. Bollettino della Società Entomologica Italiana 40(1908): 225–251.

1915m. Neue Staphyliniden aus dem Kongogebiet. Wiener Entomologische Zeitung 34: 298–300. [NOTE: Date of publication: October 22, 1915.]

Veselova, E. M.

1981. O nekotorykh predstaviteliakh roda *Tachinus* (Coleoptera: Staphylinidae) iz Kitaia. Zoologicheskii Zhurnal 60(7): 1724–1726. [NOTE: Date of publication: July 1981.]

Problems concerning a particular reference are discussed and resolved at the end of the citation, within brackets and beginning with "NOTE:". The most significant problem encountered was determination of the correct year of publication.

EXAMPLE:

Fauvel, A.

1862. Description d'une espèce nouvelle d'*Oxytelus*. Bulletin de la Société Linnéenne de Normandie 6: 42–44. [NOTE: This reference has been cited as 1861 (Bernhauer and Schubert, 1911: 117). However the date on the title page and cover page of the journal is 1862. According to the Table des Matières (pp. 184–185) of volume 6 this article was presented at the March 4, 1861 meeting of the entomological society.]

The citation of the title of what most authors cite as “Ent. Bl. Biol. Syst. Käfer” (or some variation of that) requires some comment because the actual title has changed over the years. The following discussion is based on the titles given on the title page or wrapper for the journal. For volumes 3 to 5 (vols. 1 and 2 were unavailable at this writing), the title was “Entomologische Blätter. Internationale Monatschrift für die Biologie der Käfer Europas, mit besonderer Berücksichtigung der Forstentomologie” (1905–1909). From 1910 to 1913 (vols. 6–9) it was “Entomologische Blätter. Internationale Monatschrift für Biologie und Systematik der Käfer unter besonderer Berücksichtigung der Forstentomologie”. In 1914 (vol. 10) the title was “Entomologische Blätter. Internationale Zeitschrift für Biologie und Systematik der Käfer . . .”. In 1915–1922 and 1934–1944 (vols. 11–11 and 30–40) it was “Entomologische Blätter. Zeitschrift für Biologie und Systematik der Käfer . . .” and from 1923 through 1933 the title changed to “Entomologische Blätter. Zeitschrift für Bionomie und Systematik der Käfer . . .” From 1949 (1945; vol. 41) to present the title has been “Entomologische Blätter für Biologie und Systematik der Käfer”. Rather than cite all these variations in the bibliography of the present catalog, the journal is cited as follows. From 1905 through 1944 it is cited simply as “Entomologische Blätter” and after that as “Entomologische Blätter für Biologie und Systematik der Käfer”.

In the 19th century some writers published the same article in two different places. In some cases, bibliographic information on one or both articles pointed out that the two were the same. See for example, Mannerheim’s *Précis d’un nouvel arrangement de la famille des brachélytres de l’ordre des insectes coléoptères*, which was published both as a separate and in a journal.

Other cases of multiple publication were not documented and led to confusion. This type of problem was encountered in a number of works by Fauvel and by Mulsant and Rey. In some instances both articles were published in the same year, so that the only difficulty would be the pagination and the publication in which one would look to find the taxon. The situation is more problematic when the same article is published in different years. The citations of new taxa included in these articles have been cited from one article by some writers and from the other article by others. Species described in the same genus in these twice-published works have been cited with two different years of publication. In the present work, multiple publications of the same article are listed in the bibliography with a statement that equates the versions.

EXAMPLE:

Fauvel, A.

- 1865a. Énumération des insectes recueillis en Savoie et en Dauphine (1861–1863) et descriptions d’espèces nouvelles. Bulletin de la Société Linnéenne de Normandie 9: 253–321. [NOTE: Same as Fauvel, 1865b.]
- 1865b. Énumération des insectes recueillis en Savoie et en Dauphine (1861–1863) et descriptions d’espèces nouvelles. Notices Entomologiques 3: 3–71. [NOTE: Same as Fauvel, 1865a.]
- 1865c. Études sur les Staphylinides de l’Amérique centrale principalement du Mexique. Notices Entomologiques 3: 1–18. [NOTE: Same as Fauvel, 1866.]
- 1866. Études sur les Staphylinides de l’Amérique centrale principalement du Mexique. Bulletin de la Société Linnéenne de Normandie 10: 9–26. [NOTE: Same as Fauvel, 1865c.]

In the body of the catalog I have handled this problem in one of two ways. The two articles are cited separately but their equivalency is stated in the bibliography.

EXAMPLE (from *Anotylus tetracarinus*):

- pusillus* Mannerheim, 1830: 48 (*Oxytelus*; Type locality: Finlandia: Willnäs).
- Mannerheim, 1831: 462 (*Oxytelus*; Finland).

More commonly however, the two articles are cited together with one citation in brackets that enclose an “equals” sign “[= ]”. By this convention there is no doubt that the two articles are the same.

EXAMPLE (from *Oxyporus*):

**mexicanus** Fauvel, 1865c: 13 [= 1866: 21] (*Oxyporus*; Type locality: État d'Oaxaca).

A third type of multiple publication of the same article is when it is translated from one language to another. Most examples of this phenomenon are in the translation of *Entomologicheskoe Obozrenie*. Citations of these translated articles appear in the catalog either as separate articles or with one in brackets “[= ]” as described above.

EXAMPLE

Gusarov, V.

1992a. Novye i maloizvestnye Palearkticheskie stafilinidy (Coleoptera, Staphylinidae). *Entomologicheskoe Obozrenie* 71(4): 775–788.

1993a. New and little known Palearctic rove beetles (Coleoptera, Staphylinidae). *Entomological Review* 72(5): 62–78. [NOTE: Translation of Gusarov, 1992a.]

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During the final stages of preparation of the catalog I had the opportunity to work in other libraries in search of the 200 or so references not found in my own library or in that of the AMNH. I am grateful for permission to use these libraries and for the help of the librarians. These librarians generously provided me with help in finding the last, often rare, references during my visits to their respective libraries. In particular I thank the following individuals.

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two articles I needed from the Widener Library. The librarians of the Widener denied me entry to the facility and use of its holdings.

Beatrice Brewster, a now retired former employee of the AMNH, typed the “skeleton” of the catalog from the Bernhauer and Schubert catalogs and the supplements by Scheerpeltz.

I offer deeply felt gratitude to the reviewers of this catalog. As a result of their comments the catalog is more consistent, has fewer errors, and is more useful. The opportunity of working with them, studying their comments, and discussing problems with them led me to grateful admiration and respect for their knowledge, scholarship, and dedication. Clearly the catalog would have suffered without their input. Each person reviewed one or more subfamilies. Reviewers include the following.

Volker Assing (Hannover, Germany; Habrocerinae and Othiini).

Arnaldo Bordoni (Museo Zoologico “La Specola”, Firenze, Italy; Xantholinini).

Giulio Cuccodoro (Muséum d’Histoire Naturelle, Genève, Switzerland; Proteininae).

Anthony Davies (Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada, Ontario, Canada; Tachyporinae).

Peter Hammond (Natural History Museum, London, UK; Apateticinae, Micropeplinae, Oxytelinae, Phloeocharinae, Piestinae, and Trigonurinae; he also perused most of the other subfamilies in search of errors or problems and shared with me deep and broad knowledge of the Staphylinidae and the associated literature).

Rodney Hanley (Snow Entomological Museum, University of Kansas, Lawrence, Kansas; Oxyporinae).

Ulrich Irmeler (Christian-Albrechts-Universität, Kiel, Germany; Osoriinae).

Ivan Löbl (Muséum d’Histoire Naturelle, Genève, Switzerland; Dasycerinae).

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# BRIEF HISTORY OF TAXONOMIC STUDIES OF THE STAPHYLINIDAE INCLUDING BIOGRAPHICAL SKETCHES OF THE INVESTIGATORS

By Aleš Smetana and Lee Herman

The decision to write this chapter evolved in the course of preparing the catalog. In the early years of working on the catalog, Herman stumbled upon a portrait of W. F. Erichson. Since Erichson has had such a profound impact on the classification of the family and since many of us had probably not seen a picture of him, Herman thought it would be interesting to include it somewhere in the catalog. As he found more portraits and developed a “feel” for various authors and their work, he thought that a short history of the research on the Staphylinidae with short sketches on those who contributed would enliven the catalog. Herman remembered that years earlier Smetana had remarked that someday he wanted to write a history of the work on the family. Most of the work on the Staphylinidae has been done by Europeans, and information on the deceased investigators was published in a multitude of languages. Smetana seemed the ideal collaborator because he has the interest, reads many European languages, and he actually knew some of the older workers. When asked, Smetana readily agreed to help write the present essay on the history of the study of the family.

We divided the project so that Smetana portrayed the deceased staphylinidologists and Herman the rest. Smetana’s essays are identified with his initials [A.S.], the other biographical sketches and the research history were written by Herman.

## RESEARCH HISTORY

**THE BEGINNING: 1758–1799.** At age 51, Carl von Linné published the 10th edition of *Systema Naturae*. Among the approximately 4400 species of animals he described were the first 19 species that formed the nucleus of the family Staphylinidae. He included them all in the genus *Staphylinus*. These species are now distributed among 15 genera, namely *Emus*, *Ontholestes*, *Creophilus*, *Staphylinus*, *Philonthus*, *Oxyporus*, *Paederus*, *Tachinus*, *Quedius*, *Stenus*, *Sepe-dophilus*, *Aleochara*, *Anthophagus*, *Tachyporus*, and *Gyrophaena*. He added two more species in 1761 and five others in 1767, which are now in *Lordithon*, *Aleochara*, *Tachyporus*, *Cilea*, *Lathrobium*, *Staphylinus*, and *Oxytelus*. His 26 species included variation that would one day represent eight of the most speciose and recognizable subfamilies: the Aleocharinae, Staphylininae, Paederinae, Steninae, Oxytelinae, Tachyporinae, Omaliinae, and Oxyporinae. From this modest beginning the number of described species has increased to about 45,700, about 14% of the Coleoptera and about 5% of animals (fig. 1; table 1). The remaining discussion will be restricted to the “classical” Staphylinidae; the Pselaphinae and Scaphidiinae have had separate histories that, to our knowledge, have not been summarized.

By 1774 *Staphylinus* had accumulated 58 species but it was still the only genus until Fabricius segregated *Oxyporus* and *Paederus* in 1775. Latreille added three more genera, *Proteinus*, *Lesteva*, and *Stenus*, in 1796. By the end of 1799 there were 310 species in these 6 genera, but this cluster of genera had no group name. Before continuing with the history of the work at the generic and specific level, we pause with a slight detour to review the history of the family-group names.

**HIGHER TAXA: 1800–1999.** According to Lawrence, Ślipiński and Pakaluk (1995: 99, 132), Dumeril was the first to use Brachyélytres for the family in 1800. Two years later Gravenhorst (1802) used the term Microptera and Latreille (1802: 124) used Staphyliniae, Pselaphii, and in 1807 Scaphidilia; the two latter groups were cited as families separate from the Staphylinidae for most of two centuries. None of these authors published a formal infrafamilial classification.

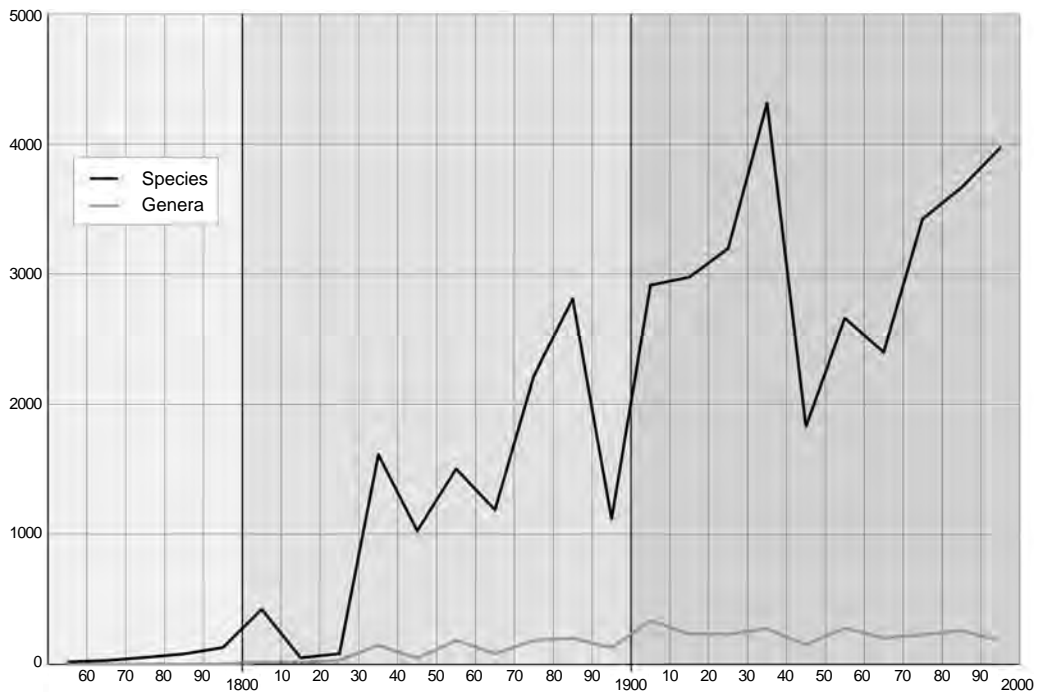


Fig. 1. Graphical representation of the number of species described each decade from 1758 to 1999.

Latreille (1802) characterized several groups designated by numbers and letters. Gravenhorst (1802, 1806) numbered the genera 1 to 14, although the sequence varied in the two works. In his 1804 and 1810 works, Latreille was still simply numbering the genera, but by 1825 he was calling the family Brachélytres and had characterized four tribes, namely Fissilabri (with *Oxyporus*, *Astrapaeus*, *Staphylinus*, *Xantholinus*, *Pinophilus*, and *Lathrobium*), Longipalpi (with *Paederus*, *Stilicus*, *Stenus*, and *Euaesthetus*), Depressi (with *Prognathus*, *Ziophorus*, *Osorius*, *Oxytelus*, *Piestus*, *Omalium*, *Lesteva*, *Proteinus*, and *Aleochara*), and Microcephali (with *Lomechusa*, *Tachinus*, and *Tachyporus*). Leach (1815) used Micropeplida for *Micropeplus*; this group has been cited both as a subfamily of the Staphylinidae and as a separate family.

A few years before Latreille named his four tribes, Fleming (1821) proposed a parallel, somewhat more elaborate, overlapping classification with the groups Staphylinidae (for *Staphylinus*, *Pinophilus*, and *Lathrobium*), Oxyporidae (*Oxyporus* and *Astrapaeus*), Poederidae (with *Paederus*, *Euaesthetus*, and *Stenus*), Oxytelidae (*Oxytelus*, *Siagonium*, *Omalium*, *Piestus*, *Proteinus*, and *Lesteva*), Aleocharidae (*Aleochara*), Lomechusidae (*Lomechusa*), and Tachinidae (*Tachinus* and *Tachyporus*). Most of these names still survive but were only recently attributed to Fleming (Newton and Thayer, 1992). In 1825, W. S. MacLeay proposed Omalidae, Stenidae, and Tachyporidae. Since 1802, over 386 family-group names have been proposed (Newton and Thayer, 1992), all but 14 of them after W. S. MacLeay's 1825 work. Many of these family-group names are synonyms, but about 211 are valid at one level or another. The composition of most groups has been in constant flux. The tortuous history of the proposed family groups and their composition is too complex (and probably too uninteresting) for the present discussion.

Mannerheim (1830) and Laporte (1835) each presented classifications including six tribes named by earlier authors, but without attribution. Kirby (1837) used nine "families", four of which he used first and five borrowed from other, unacknowledged workers. Heer (1839) and Erichson (1837–1839, 1839–1840) used similar classifications; existing groups were again unattributed and each proposed additional new groups. Erichson (1839–1840) was the first (and last)

TABLE 1  
Number of Described Species and Genera by Decade

	Species	Genera
1758	19	1
1760–69	29	0
1770–79	53	2
1780–89	80	0
1790–99	129	3
1800–09	424	17
1810–19	50	16
1820–29	82	31
1830–39	1613	146
1840–49	1028	46
1850–59	1504	186
1860–69	1189	81
1870–79	2220	184
1880–89	2807	201
1890–99	1119	126
1900–09	2913	337
1910–19	2975	233
1920–29	3196	232
1930–39	4315	274
1940–49	1830	150
1950–59	2659	278
1960–69	2397	202
1970–79	3423	227
1980–89	3671	260
1990–99	3971	185
Total	43,696	3418

to attempt a classification of all the species and genera of the family. He apportioned the species among 11 tribes, 10 of which are now subfamilies. The Staphylinini and the Oxytelini were further divided into subtribes, which are now subfamilies or tribes.

Redtenbacher (1849) and Kraatz (1856–1857) were among the first to begin attributing family-group names to earlier authors (though often erroneously); Bernhauer and Schubert (1910–1916) and Bernhauer and Scheerpeltz (1926) continued doing so. All the while, family-group names were constantly being proposed, often for the same or similar groups of genera. The plethora of family-group names was addressed and organized, and the most current classification summarized, by Newton and Thayer (1992). Although considerable work is needed on nearly all subfamilies before we understand the relationships among and within each, Newton and Thayer's contribution is an indispensable prerequisite for the task.

1800–1829. The first decade of the 19th century (1800–1809) witnessed a modest spike of descriptions with the addition of 424 species and 17 genera (fig. 1; table 1). Fourteen of those genera and over three-quarters (330) of the species were added by Gravenhorst (1802, 1806). Most of the remaining species were added by Paykull (1800), Fabricius (1801), Latreille (1804, 1806), and Marsham (1802). From 1810 to 1829 only 132 species were added, most of them by Gyllenhal (1810, 1813, 1827) but the number of genera grew by 47. These genera were added primarily by Leach (1819), Stephens (1829, 1829a), and Curtis (1829).

Until this point, most of the work was concentrated on species of Europe. Throughout the following years there was increased activity, by both collectors and describers, in other parts of the world.

1830–1849. By the 1830s the number of species tripled, with over 1600 species added, and the number of generic names increased to 216. This was the first decade in which the number of newly described species surpassed a thousand. The main contributors were Mannerheim (1830; 91 species, 18 genera), Stephens (1832–1835; 457 species, 10 genera), Lacordaire (1835; 73 species, 1 genus), Nordmann (1837; 89 species, 17 genera), Heer (1839; 160 species, 7 genera), and Erichson (1834, 1837, 1839a, 1839b; 447 species, 44 genera). Gistel (1834) added 11 genera but this work and all his others (1829, 1848, 1856, 1857) were ignored until Blackwelder (1952) resurrected them. Not only were the species authored by Gistel overlooked, but the collections seem to have been lost. During this period Curtis and Stephens each published substantial studies that summarized the British staphylinid fauna and were influential for decades. During the 1830s, Wilhelm Ferdinand Erichson, one of the most compelling figures in the study of staphylinids, began publishing.

In total, Erichson described 908 new species and 46 genera; no one had yet even approached those numbers. Erichson's writings, particularly his "Genera et species Staphylinorum . . ." were fundamental to the developing knowledge of the family. He was the first to discuss, describe, and redescribe species from all parts of the world. The geographical scope of his work surely aided his high rate of valid species; 83% are still recognized. Before Erichson's time, most of the described species were from Europe, with relatively few reported from outside the region. One exception was work by Say (1823, 1830–1833, 1834). He described only 64 species and 2 genera of staphylinids, but he was the first, and at that time, only, non-European to take up the group. All of his work on the family was in North America, but he was one of the early workers to pry open the lid of extra-European regions to search for staphylinids.

Erichson, at the age of about 29, presented in one volume (*Genera et species Staphylinorum*) virtually all that was known about the family, including comparative anatomy, immature stages, living circumstances, and geographical distribution. He allocated the valid genera (115) and valid species (1573) to 11 tribes (now 10 subfamilies), and listed the synonyms of each genus and species. His was the first extensive, complete classification of the family. He published keys for identification of tribes and genera and brought together the literature for each species and genus. His efforts resulted in a new starting point for staphylinid studies. After his encompassing work, most authors continued regional treatments of the family. It was not until late in the 1900s that greater efforts were put into studying taxa for the entire world.

During each decade from the 1830s to present more than 1000 species have been described. Since the 1870s more than 2000 species have been named each decade; the only exception was the 1890s.

In 1840, 461 species were named, 447 of them by Erichson. During the remainder of the decade many fewer species were described. Some of the active workers included Laporte (1840), Blanchard (1842), Heer (1841), Mannerheim (1843a, 1843b), Guérin-Méneville (1844), Melsheimer (1844), Kiesenwetter (1844), R. Sahlberg (1844, 1847), Motschulsky (1844, 1845a, 1845b), and Kolenati (1846). Erichson's last article that included staphylinids appeared in 1847; he died two years later, still a young man. Gravenhorst named his last three species in 1846 and 1847. These were his first articles on the family since 1806.

1850–1869. In the 1850s, notables such as Thomson, Kraatz, LeConte, Mulsant, Rey, Fairmaire, and Wollaston began publishing. Hochhuth, Kiesenwetter, Mäklin, and Motschulsky continued working; the latter published important studies on the fauna of the East Indies that conflicted with studies in the same region by Kraatz. G. Waterhouse (1858) published a catalog of British beetles in which he tried to evaluate the placement of names proposed by Stephens.

Mulsant published on the family in 1847, and in 1850s began a collaboration with Rey that endured for 30 years, until his death in 1880. Rey completed their series on the family. Most of their work covered the French fauna but was broadly influential for many years in France and western Europe. They coauthored 359 species and 108 genera; three-quarters of the species are synonyms.

In 1854 Wollaston published the first of a series of books and articles on the staphylinids of the eastern Atlantic islands. His studies, published between 1854 and 1877, included the Madeiras, Canary Islands, Cape Verde Islands, and St. Helena. He named 186 species and 6 genera of staphylinids. Although many names are now synonyms, his work introduced the faunistic wealth and endemism of these islands that continue to be explored today.

Fairmaire began publishing in 1843, but named his first staphylinid (from Polynesia) in 1849. Most of the 183 species he described or coauthored were from outside Europe. His publications on staphylinids of northern and eastern Africa, China, Tibet, and the Comoros were among the first for these regions. He and Germain coauthored studies on the beetles of Chile. Together they named 67 species and 2 genera of staphylinids for the region; most of these taxa still stand. With Laboulbène, Fairmaire published a major treatise on the beetles of France in which they named 38 species, over half of which are now synonyms. During the preceding 100 years, so many had studied the European fauna that finding valid new species was increasingly difficult.

For nearly 50 years, Thomson published extensively on the staphylinids of Scandinavia. Since the European staphylinid fauna was increasingly well known, Thomson named 146 species but nearly 60% of those are synonyms. Thomson also named 70 genera. He published the first volume of "Skandinaviens Coleoptera . . ." in 1859; that series continued until the late 1860s.

Kraatz, one of the most influential of European coleopterists, published his first staphylinid species in 1851 and went on to name more than 560 species and 69 genera. Between 1856 and 1857 he published, in parts, the staphylinids of Germany. Although this work was principally regional, Kraatz included a significant number of new genera and species from regions beyond Europe. Most of his studies were confined to European taxa, but in 1859 he published an article of nearly 200 pages on the staphylinids of the "East Indies"; this was the first general treatment of the group for the region. At about the same time, Motschulsky was also publishing on species of the same region. This overlap led to many problems of priority; almost half of the species described by Motschulsky are now synonyms. He named over 384 species (and 44 genera), most of them in the 1850s (256) and 1860s (120).

Of 294 staphylinids and 14 genera, LeConte named his first 6 species in 1850; about 80% of the names are still valid. His work on staphylinids was restricted to North America which, at the time, had a largely unknown fauna. Since he worked on many families of beetles, he made little headway on the staphylinids of the continent, but he did try to bring together what was known about the family in North America. Several important contributions to the knowledge of the family are contained in his 1861 "Classification of the Coleoptera of North America", his 1863 "List of the Coleoptera of North America", and "New Species of North American Coleoptera", and his 1877 study of the Oxytelini, Piestidae, and Micropeplidae. He published many other articles on the family and also collaborated with G. Horn on the 1883 "Classification of the Coleoptera of North America" that treated the known genera of the continent and which, of course, included the Staphylinidae.

In the 1860s two of the giants in the field, Sharp and Fauvel, began publishing. Between them they added over 4000 species from widely scattered parts of the world. Fauvel published numerous articles on staphylinids and described species from many exotic regions in North, Central, and South America, northern Africa, Réunion, Madagascar, the East Indies, New Guinea, Australia, Polynesia, and elsewhere. He was one of the first to describe so many species from such diverse locales. Fauvel began publishing on the Staphylinidae as early as 1861 and described his last staphylinid in 1908. Throughout nearly five decades, he named more than 1850 species and 96 genera. He was the first to describe more than 1000 staphylinids. His most influential work in Europe was his "Faune Gallo-Rhénane . . ." which was published in parts. One of the difficulties with his work was that these parts were each published twice, thereby leading to confusion over the date of publication for some species and genera.

With more than 2300 species and 145 genera of staphylinids to his credit, Sharp was the first author to name more than 2000 species. He described his first staphylinid in 1864 and the last in 1915. He was the author of several influential works such as "The Staphylinidae of Japan",

published in 1874 and expanded in 1888 and 1889, and “Contribution to an insect fauna of the Amazon Valley. Coleoptera-Staphylinidae” (1876). He authored the section on the Staphylinidae for the *Biologia-Centrali Americana* in parts from 1883 to 1887 and described many species from Hawaii (1908). His “. . . Comparative anatomy of the male genital tube in Coleoptera”, coauthored with Muir, was a landmark study in 1912 that is still consulted.

At the time that Fauvel and Sharp were beginning their work, others, including such notables as Fairmaire and Germain, Kraatz, Motschulsky, Mulsant and Rey, Thomson, Wollaston, and LeConte continued. Pandellé published his monograph of the European Tachyporini in 1869. Toward the end of the decade, in 1868, Gemminger and Harold published the staphylinid section of “*Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus*”. Essentially an annotated list of valid names, synonyms, and general distributions, this was the first world catalog of the family. It included a list of 266 genera and 4130 species, but some nominal genera and species were omitted. By the end of 1868, 6092 species and 529 genera had actually been named (Duvivier, 1883). The catalog appeared at the beginning of a enormous and rapid increase in the number of named species and genera. Forty years passed and thousands of additional species were named before publication of the next world catalog.

1870–1889. The arrival of the 1870s brought a surge in the number of newly described species. Much of this increase can be attributed to Sharp’s work on the staphylinid faunas of Japan and the Amazonian region and to the continued collaboration of Mulsant and Rey; these three men added 926 of 2220 species during the decade. In 1873, Eppelsheim published the first of nearly 500 staphylinids that he named during the next 22 years. W. J. MacLeay published 60 new species from Australia in 1873. In North America, G. Horn, who named 125 staphylinids, described the first in 1868 and added 41 in the 1870s. His work continued the slow accretion of North American species. Horn, who published on staphylinids until 1895, presented the first North American syntheses of the Tachyporini, Quediini, *Staphylinus* and related genera, and *Cryptobium*. In 1877 abbé Provancher treated the Staphylinidae in his “Petite Faune Entomologique du Canada . . .”. His was the first such treatment of the family for eastern Canada (mainly Quebec). Fauvel, who published 577 species during the decade, was increasingly active. He issued his influential “Faune Gallo-Rhenane” and published many new species from Australia, Polynesia, Brazil, Argentina, North America, North Africa, New Guinea, and elsewhere.

The 1880s brought a further deluge of species, the greater part supplied by Sharp, who described 1496 species between 1880 and 1889, including 1243 species from Mexico and Central America. His work on the Mesoamerican fauna was the most comprehensive ever for the region and, until then, was the largest faunistic work published on the family. During this 10-year period he also described 243 species from Hawaii, New Zealand, and Japan. Fauvel continued studying staphylinids from various parts of the world, but only added about 90 species in this period. In 1882 he began publishing his “Revue d’Entomologie”. This journal was used heavily as an outlet by him and many others until, after 28 volumes, it ceased publication in 1910. After the death of Mulsant in 1880, Rey continued their work on the “Tribu des brévipennes”. Duvivier (1883) corrected and updated the 1868 staphylinid catalog of Gemminger and Harold, and added 105 genera and 2509 species to their list. In a still poorly studied region of the world, Lynch Arribálzaga (1884) published “Los estafilinos de Buenos Aires” in which he redescribed all the species known from the region, added those that were described but previously unreported from Argentina, and named about 70 new species and 11 genera. He defined 58 genera and 118 species. Extending Sharp’s work in New Zealand, Broun began publishing new taxa of the family in 1880 and continued to do so for more than 40 years. He named nearly 200 species, of which about 87% are still valid, but described only 10 genera from this isolated part of the world. The number of Australian species continued to grow slowly with the works of Olliff, who added 53 between 1886 and 1889, and Blackburn, who described 95 staphylinids in a series of articles begun in 1888 and continuing until 1903.

Two men, one of the “cloth” the other of the “sword,” began publishing in the 1880s. They were born only two years apart and died within six years of each other; both were responsible

for important advancements in their respective areas of research. One added species to a largely unknown region; the other interpreted insect societies. Wasmann, a priest who worked almost entirely with species that inhabited the nest of ants and termites, provided insight as to how inquilines insinuated themselves into these highly protected societies. In the course of these investigations he named almost 260 staphylinid species and 96 genera. Casey, a former Colonel who published his first work on staphylinids in 1884, worked with an enormous beetle fauna that until then, despite the efforts of Say, LeConte, and G. Horn, was substantially unknown. This oft-reviled man built an enormous collection and named more than 9000 beetles. Between 1884 and 1924 he described over 1800 species of staphylinids and nearly 250 genera, most from North America; currently about 28% are considered to be synonyms and others will likely be pointed out. His intense attention to detail, microscopical skills, and philosophy as to the origin of species led him to name many species more than once, but overall his synonymic record is no worse than that of many others. Despite his errors, his organizational work and meticulous collection made deep inroads in a largely unexplored fauna. At the time Casey's analysis of the North American fauna was barely beginning, Fowler (1888) published a masterful summary of a largely known fauna in "The Coleoptera of the British Islands". In that work he explained where to go, where to look, and how to identify British beetles.

1890–1899. In the 1890s there was a precipitous decline in the description of new taxa. No massive faunal studies were published and no individual authors dominated the accumulation of new taxa. Those who had been publishing on staphylinids continued to do so. Lea, who began describing staphylinids in 1895 and continued until 1931, added, in total, 264 species and 5 genera to the meagerly known Australian fauna.

Two events of singular importance occurred in the 1890s. Ganglbauer, a broadly knowledgeable and influential coleopterist, published the staphylinid section of his monumental "Die Käfer von Mitteleuropa". In that work he redescribed and wrote keys to the genera and species of central Europe, and included summaries of distributions and important literature citations for most taxa. This book inspired many coleopterists of the region. Ganglbauer's interpretation of the literature and classification of the central European staphylinids was to become the core of the staphylinid section of the Junk and Schenkling "Coleopterorum Catalogus", compiled by one of his preeminent proteges.

The second noteworthy event was the appearance of a man who, by the time of his last article in 1947, had named a fifth of the staphylinids named since 1758. In 1898, a few years after the appearance of Ganglbauer's "Die Käfer . . .", Bernhauer published the first of many articles and new species. He published two articles in 1898 and four more in 1899. Those six articles, which named 32 new species and 5 genera, revealed nothing of the flood of articles and new taxa that this one man was to produce. Bernhauer produced relatively few "analytical" or revisionary studies. He did publish revisions for the Palaearctic *Aleochara* and *Leptusa* in 1901, the Aleocharini in 1902, the Leptochirina in 1903, and *Zyras* in 1926, among others. But most articles described the staphylinid fauna of a particular region (Australia, Madagascar, Palaearctic, Neotropics, tropical Africa and so on), as he worked his way through most regions of the world. His papers were usually descriptions of new species in various genera and subfamilies and they rarely included keys or illustrations. During nearly five decades he organized massive numbers of specimens, and that legacy, his collection and articles, is constantly consulted by nearly all staphylinid taxonomist. By the time the last of his 285 articles appeared in 1947 (see Puthz, 1980n), this most prolific of describers had named 5251 species and 342 genera. Less than 12% of his species-group names are now synonyms. This percentage is remarkably low for a body of work by a man who described species from all parts of the world and in most subfamilies. It seems unlikely that a feat of similar magnitude will ever be accomplished again.

1900–1919. By the end of the 19th century 12,346 species and 1040 genera had been named, nearly 40 times the number that had been named at the end of the previous century. The first decade of the 20th century saw a rebound in the number of species described, more than twice



the number described during the previous decade and almost as many as had been described during the 1870s. This parade of species was dominated by no one person, but three authors supplied the bulk of them. Bernhauer, Fauvel, and Casey added 851, 700, and 546 respectively. Many others added the remaining species. Most of Bernhauer's contributions were presented as accumulations of new taxa from various parts of the world. Fauvel, whose work of nearly 50 years on staphylinids was coming to a close, described his last staphylinid in 1908. The last 38 articles he published during the decade were typical of those that had characterized his career; they were often synoptic and generally included keys. Casey published monographs on the North American Paederini, Xantholinini, and Aleocharinae. Fall began describing staphylinids in 1901 and continued with occasional articles until 1932; most of his work was on other groups of beetles but he added 67 North American staphylinids. Although Sharp's work with the Staphylinidae was beginning to wind down, he published a major article on the species of Hawaii in which he described 77 species and 10 genera. Luze, who published on staphylinids for only 13 years, described his first staphylinid species in 1900, adding 140 during the decade and only 29 thereafter. Most of his work was monographic. He published revisionary studies of the Palaearctic *Tachinus*, *Tachyporus*, the Bolitobiini, *Conosoma* [= *Sepedophilus*], *Coproporus*, *Anthophagus*, *Geodromicus*, *Lesteva*, *Olophrum*, *Lathrimaemum* [= *Anthobium*], *Omalium*, and a number of other tachyporine and omaliine genera.

The inauspicious debut of another giant among staphylinid investigators occurred in 1904, when Cameron described his first two species, both in *Diglotta* and both from Perim Island (at the entrance to the Red Sea). Cameron is the only describer to rival the stupendous output of Bernhauer. In his lifetime Cameron named over 4100 species; fewer than 9% of them are currently cited as synonyms. Although he published on staphylinids from most parts of the Old World, including Africa, Australian, New Guinea, the Indonesian region, and some Palaearctic areas, the vast majority of his work was concentrated in southern Asia. His forays into the fauna of the New World were rare and mostly in the West Indies. Jakobson, in his unfinished work on the beetles of Russia, published the section on the Staphylinidae in two parts in 1908 and 1909. Reitter, who had been actively publishing on many groups of beetles, described his first of nearly 150 staphylinid species in 1872 and last in 1918. His mastery of the Coleoptera permitted him to write his "Fauna Germanica. Die Käfer . . .", begun in 1908 and completed in 1916; this work inspired generations of central European coleopterists. Each volume included keys to the families, subfamilies, tribes, genera, and species (and lists of their synonyms) found in Germany and each ended with plates of elegant, beautifully rendered, colored illustrations of many species along with line drawings of larvae and beetle parts. Volume 2, published in 1909, included the Staphylinidae. In footnotes, Reitter named 31 species, subspecies or varieties and 18 genera or subgenera of staphylinids.

Reitter's volumes brought to a close the first decade of the new century and a work coauthored by Bernhauer opened the next. On August 30, 1910, Bernhauer and Schubert published the first of five parts of a staphylinid catalog for the world. The parts were published in 1910, 1911, 1912, 1914, and 1916 and included all staphylinids (in the classical sense) except the Aleocharinae. The last subfamily was published 10 years later, in 1926, by Bernhauer and Scheerpeltz. Many interpretations of taxa and their synonymic lists were extracted from Ganglbauer's 1895 magnum opus. The publication of this catalog must have been a watershed event. It was the most complete catalog ever published for the family. Other catalogs were lists of names and original references, and most were regional. This new work by Bernhauer and Schubert was the first world compilation of family-group, genus-group, and species-group names that presented citations for both original descriptions and the more consequential subsequent references for each name, along with a summary of the geographical distribution and a list of some references to larval descriptions and natural history studies. By the end of 1916, when the fifth part was published, more than 17,846 available nominal species and 1579 nominal genera had been published. One unfortunate, misleading feature of their catalog was that, in addition to available names, Bernhauer and Schubert listed misidentifications as synonyms and cited them as though they were available names. Bernhauer and Schubert omitted some species and genera published by some authors, notably

Gmelin, Stephens, and Gistel, and simply overlooked the works of other authors. Despite these minor defects, the appearance of the catalog, which summarized the state of knowledge of the group, must have inspired renewed efforts to fathom the staphylinid fauna of the world.

Between 1910 and 1919, 337 genera and slightly more than 2900 species were named. Bernhauer and Casey were responsible for 70% of these species. Bernhauer continued apace with nearly 1300 more species and by now his description of species after species was an entrenched style of publishing; his most prolific year was 1915 with 445 species. Casey added about 750 species, most of them in studies of American Aleocharinae and Staphylininae. Cameron added 185 species. In one of the few regional treatments of all beetles in North America, a work similar to those found in Europe, Blatchley (1910) described or redescribed and published keys for all the beetles of Indiana (he excluded the Rhyncophora but published a volume for it in 1916 with Leng). For the Staphylinidae, Blatchley described 21 species, half of which are still valid. Another American who started publishing on staphylinids in this decade was Notman. He contributed no synthetic studies but was an avid coleopterist who described 95 species and 10 genera of North American staphylinids and built a large collection of beetles. In 1918, 1920, and 1921, Fenyès published his "Coleoptera. Fam. Staphylinidae. Subfam. Aleocharinae" in Wytsman's *Genera Insectorum*. This important work redescribed all the genera of Aleocharinae known through 1913. For each genus he presented a checklist of the species with the reference to their original description and a summary of their distribution. Keys provided aids to identification of genera and higher taxa and lists of synonyms were given for each taxon. His was the last taxonomic treatment of all genera of the Aleocharinae. L. Benick appeared on the scene in 1913 with his first description of a new species of *Stenus*. By the end of his career he had named nearly 390 staphylinid species. Most of his work was on the Steninae and Megalopsidiinae. He described his last species in 1952. His work put the classification of these subfamilies on firm footing and prepared the way for extraordinary work by Puthz, who described his first species 12 years after Benick's last. In 1911 Matsumura, the first Japanese worker to describe a staphylinid, named four species.

1920–1939. Most of the work from 1920 to 1929 was a continuation of trends already established; there were few major works in this period. By the end of the decade 3196 species had been named, the first time that more than 3000 species were named in a decade. Nearly 70% of the species were named by Bernhauer and Cameron. In 1926 the final volume of the world catalog of the Staphylinidae, the Aleocharinae, was published by Bernhauer and Scheerpeltz. In 1920 Leng published his *Catalogue of the Coleoptera of America, North of Mexico*. This checklist included all the species and genera reported for the region with their synonyms; no subsequent references were cited. The species and genera were arranged according to their presumed relationships, making the work cumbersome to use. The list must have been greeted with great enthusiasm because it was the first list of species for the region since Casey began altering the terrain of North American coleopterology. Leng and Mutchler published supplements to this list in 1927 and 1933; later supplements were supplied by Blackwelder (in 1939 and 1948). In eastern North America, Notman published all but eight of the staphylinids he was to name in this decade. He described no more staphylinids after 1929. Casey published his last three staphylinid species in the year before he died in 1925. Mann described 40 of his 46 species of inquiline staphylinids during the decade. Wendeler described the first of his total of 243 species in 1920. G. Müller focused on intraspecific variation in *Staphylinus* and related genera and published his first such articles in 1904 and 1911; he did the bulk of this work in the 1920s. Porta treated the Italian species in *Fauna Coleopterorum Italica* (1926) and updated it with three supplements (1934, 1949, 1959). The most significant figure to begin publishing on the family in this decade was Scheerpeltz. He started naming species in these years and coauthored, with Bernhauer, the 1926 catalog to the Aleocharinae. In 1925 he was the author of the Staphylinid section of the monumental *Catalogus Coleopterorum Regionis Palaearcticae* edited by Winkler. Some of his works were monographs and regional revisions. Examples include those on *Domene* in 1925, *Olophrum* in 1929, *Edaphus* in 1936, *Ancyrophorus* in 1950, and *Piestus* in 1952. His key to the genera of Palaearctic staphylinids

(1940) was particularly useful. Much of his work, particularly in the early years, was characterized by elegant line illustrations of whole beetles and dissected structures, keys to species, and long, verbose descriptions. During his career he named over 1400 species and 181 genera from many parts of the world, often in one of his many faunal studies.

At the height of a worldwide economic depression, the 1930s brought a stunning influx of 4315 new species. That total, 1200 more than had been described during any previous decade, has never been surpassed. Bernhauer was still one of the principal authors, but the 1930s was the first decade in which he did not describe the most. That distinction went to Cameron, who named over 1800 species and was, henceforth, to outstrip Bernhauer for the number of species named in a decade. Most of Cameron's species were described in his magnificent four volume (in five parts) *The Fauna of British India including Ceylon and Burma. Coleoptera. Staphylinidae*. That magnum opus brought together all that was known about the Staphylinidae of the region. All the species were described or redescribed and some line and color illustrations were included along with keys for identification of subfamilies, genera, and species. Bernhauer, with Cameron, named 74% of the species in the decade.

Several important scientists began working during the decade. Among the notables were Blackwelder, Seevers, Steel, and Tottenham. Blackwelder's first article on the Staphylinidae, in 1934, was a discussion about the morphology of the prostheca. In 1936 he published the first comparative morphology for the family. He began taxonomic work on the family the same year with a study of *Tachyporus*. In 1939, he presented a revision of the generic classification of the Paederini. This work was an unillustrated key that omitted many genera, and a list of genera with some species assigned to genus along with their type species designations. In 1943 he published his massive study of the West Indian Staphylinidae; this work included keys and descriptions for the genera and species for the region. The monograph is still the only general coverage for the islands, but the Aleocharinae were not included. He described 209 species in that study, 82% of the species he named. His study of the Antillean fauna was his last specimen-based publication, the remainder was bibliographic and nomenclatural. From 1944 to 1947 Blackwelder published the voluminous "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" in five parts. A sixth part, the bibliography, appeared in 1957. This was the first and only list of beetles for the region, although it is now sadly out of date. The staphylinid section was published in 1944. In 1952 he published the landmark work for which he is most widely known, "The generic names of the beetle family Staphylinidae . . .". For the first time, the type species and the method of fixation were stated for all genus-group names. When the prevailing use of a generic name conflicted with the nomenclaturally correct one, he always chose the solution that was supported by his reading of the rules of nomenclature. He was criticized, unjustly in our view, for hewing to the published literature. He did so with the full realization that application would (or could) be made to the Commission to overturn some of these decisions. His only recourse for contravening findings in the literature that conflicted with accepted use was application to the Commission; that process was and continues to be a long, drawn-out process. However, acknowledging that there were some errors and misinterpretations, and unfortunate consequences of some decisions, the stabilizing effect of Blackwelder's book on generic names cannot be overstated. The catalog of the type species for staphylinid genera was Blackwelder's swan song for work in the family.

Another North American who impacted study of the family was Seevers, whose work was almost entirely confined to studies of the Aleocharinae. He published his first species of staphylinids in 1937 and the last of 212 in 1978. Among his most important monographs were those on termitophilous and myrmecophilous staphylinids, and his generic and tribal revision of the North America Aleocharinae. The latter, although incomplete when he died, advanced the state of knowledge of the subfamily, which was in desperate straits and is still poorly understood in North America. His work set the stage for current efforts by a number of scientists in North America. Seevers' work on inquilinous aleocharines summarized and extended our knowledge of these groups, proposed hypotheses of ancestral relationships, and prepared the way for prodigious efforts by a student, Kistner, with whom he had close association in the 1950s.

Tottenham concentrated on several genera in the Staphylininae and Aleocharinae from tropical regions of the Old World. He named the first of over 360 species in 1937 and the last in 1962. Although he produced several substantial works on African species, his publications were largely descriptions of new taxa. Among his most influential articles are those discussing nomenclatural problems in the family. Four of these articles were published under the title "Some Notes on the Nomenclature of the Staphylinidae" and a fifth, *The Generic Names of the British Staphylinidae*. . . . Some knotty problems of nomenclature were addressed in these works; in some instances his interpretations conflicted with those of Blackwelder.

Most of Steel's work was on taxa in Australia, New Zealand, and the Pacific region. He named only 69 species, but 30 genera. His descriptions were carefully crafted, accurate, and well illustrated by line drawings. He was particularly interested in larval features and he reared many species. Two of his beautifully rendered works were "A Revision of the Staphylinid Subfamily Proteininae (Coleoptera). Part I" and "The Larvae of the Genera of the Omaliinae (Coleoptera: Staphylinidae) with Particular Reference to the British Fauna".

Other important figures who began publishing during the 1930s include G. Benick, son of L. Benick, the stenine specialist and Koch. Benick concentrated on the Aleocharinae, in which he named 168 species between 1938 and 1991. Koch also described 168 species, most of them from the Mediterranean region, especially North Africa. Among Koch's important titles are his 1934 and 1936 works on the staphylinids of Egypt, and monographs on *Anthophagus* in 1933 and 1934 and *Achenium* in 1937. Jarrige published his first of more than 270 staphylinid species in 1938. He published species from scattered parts of the world but much of his effort was in France, the Mediterranean region, and islands in the Indian Ocean. Lea, beginning in 1895, described over 260 species from Australia and nearby islands, and published his last staphylinid species in 1931. Wasmann also ceased publishing new staphylinids the same year.

In the New World tropics, two people, Bierig and Borgmeier, picked up the cudgel and began publishing on the family in the 1930s. Bierig, the more prolific of the two, lived and worked first in Cuba, then Costa Rica. In a series of short articles that appeared between 1931 and 1943, he published nearly 160 species and 34 genera. Most of his articles included stunning habitus illustrations. The species were all from the Neotropical region, usually Cuba, Costa Rica, or Panama. Borgmeier also confined his activities to the Neotropical region but worked with inquilinous species of staphylinids. He named over 90 species and 35 genera between 1930 and 1961.

1940–1959. During the years of World War II there was a dramatic decline in publications on staphylinids; only 1830 species were named, the greatest dip since the 1890s. Bernhauer, a titan for 49 years, published a mere 314 species; his last article appeared in 1947. One of his articles on Peruvian staphylinids, first published in 1941 and mostly destroyed during the war, was republished in 1951. His contributions to staphylinid studies were enormous. He published hundreds of articles and thousands of species, and built an immense collection of mostly identified species—one of the most constantly consulted accumulations of staphylinids in the world. Cameron, whose work on India was completed in 1939, published a series of shorter articles on species of other parts of the Oriental region. By the end of the decade he had turned his attention to the fauna of sub-Saharan African. During the 1940s Cameron added 741 species. Blackwelder's work on the West Indian fauna was published in 1943. Cameron, Bernhauer, and Blackwelder named 70% of the species during the 1940s. Paulian published the most complete tome yet on larval staphylinids in 1941. Tottenham's list of generic names of British staphylinids, which stated the type species designation for all the genus-group names of the region, was published in 1949. Included in that work was one of two checklists of British staphylinids published during the decade. The other list was *A Check List of British Insects* by Kloet and Hincks (1945). Neither list cited bibliographic references. Seevers published his first article on a small group of species associated with mammals; he designated this group the Amblyopininae, which has since been reduced to a subtribe of the Staphylinini. Fagel, who was the second of three authors of a 1928 list of species collected in Belgium and was to become important in the treatment of the African staphylinid

fauna, began publishing alone in 1945. His early work was confined to Europe. In 1948, at the tender age of 17, Smetana published his first article on staphylinids.

The 1950s, with over 2659 named species, ushered in a resurgence of work along with some important investigators, several of whom are still publishing. The long careers of several contributors ended. Blackwelder's inventory of type species was published in 1952; he published nothing on staphylinids after that. Cameron, who added mightily to the family, ended the decade with 524 species but published no more after 1959. Wendeler, who began working in 1920, published his last article on staphylinids the same year. Hatch, in his multivolume work, *The Beetles of the Pacific Northwest*, published the volume on the Staphylinidae in 1957. In it he described or redescribed the species and genera of northern California, Oregon, Washington, and southern British Columbia. It was only the second regional study of the family in North America. L. Benick, who added so much to the Steninae, published his last article in 1952.

Coiffait published his first species of staphylinid in 1939 but, after a hiatus during the 1940s, his work on the family really commenced in the 1950s. During his career, which lasted until 1987, he named over 1770 species and 159 genera. Much of his early work concentrated on small soil or cave dwelling species, many of which lacked or had vestigial eyes. That interest led to his magnificent 1959 book "Monographie des Leptotyphlites," a work that put the group on the map. In it he covered all the known species and genera, proposed a classification, discussed the morphology, described his specialized collecting techniques, and set the stage for work by others. When he started in 1952 there were only 53 nominal species of leptotyphlines and there are now 514 valid species (622 available). Coiffait added 324 names. Most species are known from Europe or its environs; he described the first species from such far-flung locales as Chile, the United States, and South Africa. Most of his following work was less comprehensive; he described many species in many short articles, mostly on the western Palaearctic fauna. Among his notable works are his 1968 "Les Staphylinidae (sensu lato) du Chile" (coauthored with Francisco Saiz), and 1969 "Les *Leptobium* de la région paléarctique occidentale". But the work for which he will be long remembered and which casts a long shadow is his stupendous "Coléoptères Staphylinidae de la région Paléarctique occidentale". The first part was published in 1972 and the last in 1984. The Leptotyphlinae, Xantholininae, Staphylininae, Paederinae, and Euaesthetinae were included in five volumes. His "western" Palaearctic region extended from the Atlantic Ocean and North Africa eastward to Lake Baikal and Mongolia. In this mammoth work he described or redescribed and published keys to 122 genera and 2258 species of the region, gave a general statement of distribution for each species, and allocated the genera to subfamilies and tribes. The introductory first volume included discussions of comparative adult and larval morphology, and general comments on staphylinid distribution, habitats, and collecting techniques.

Fagel was another whose work began earlier but whose career came to fruition in the 1950s. His first two species were from England and Belgium, published respectively in 1946 and 1948. Beginning in 1950, the preponderance of his new species descriptions were of African taxa. He started slowly with many short articles emphasizing new species of the Belgian Congo. In a series of short publications he discussed most of the sub-Saharan species of *Stilicus* (= *Rugilus*) and related genera. In 1955 he began to publish more substantial works on African species; many of them emphasized the fauna of national parks in the Belgian Congo. These treatments included the Osoriinae in 1955, 1959, and 1969, the Paederini in 1958 and 1959, Pinophilini in 1963, *Scopaesus* in 1973, Cryptobiina in 1977, and Procirrina in 1971. He also continued to publish shorter articles on the family. His work was largely descriptive, included illustrations and keys for identification, and it changed the face of staphylinid taxonomy in tropical Africa. He named 80 genera and over 1250 species; his last article was published in 1978.

Smetana named his first staphylinid in 1948 but his work was launched in earnest in 1952 with several articles on *Gabrius*. Initially his work was published as short articles. In 1958, at 27, he published a book on the staphylinids of Czechoslovakia, yet another work in the panoply of classic European faunal studies. In 1963, 1964, and 1965 he published four articles on North American staphylinids. His 1967 move to Canada heralded a new era for his work. Although he continued to publish short articles, in Canada it became possible for him to produce large monographic

studies. Among those treatments are revisions of the North America *Quediina* in 1971, *Xantholinini* in 1982, and *Philonthina* in 1995. In the latter study, Smetana examined about 100,000 specimens of 208 species. These three studies dramatically altered our understanding of the North American Staphylininae. His work on the *Quediina* continues in temperate and cool montane regions of Asia, with long monographs on the species of the Himalayan region in 1988, Taiwan in 1995, and an ongoing series of short papers on the *Quediina* of China begun in 1995.

Kistner published his first new staphylinid species, a paederine, in 1955. His 1958 landmark study of "The evolution of the *Pygostenini*" drew attention to an enigmatic group of inquilinoid beetles. That work launched his continuing elucidation of myrmecophilous and termitophilous Aleocharinae that has so far resulted in over 100 articles and more than 500 described species. To understand the evolution of inquilinity, Kistner has employed many methods of investigation. His work has contributed to a better understanding of the glandular systems of inquilines as well as the evolution of the groups. Kistner also worked on the *Euaesthetinae*.

Last worked primarily with tropical African, southeast Asian, and New Guinean taxa; beginning in 1950, he named more than 580 species. Early in his career he published a series of articles on *Zyras* and related genera; most of his work at the end dealt with the staphylinid fauna of New Guinea. He named his last species in 1993. In Japan, Adachi, who began in 1935, published his last new species of staphylinid in 1955. As Adachi's career with staphylinids was ending, Nakane and Sawada were beginning their work. They started in 1954, were still publishing in the 1990s, and concentrated on the fauna of Japan. Sawada described the first and only known Japanese species of the *Leptotyphlinae* in 1971, and published articles on the *Aleocharinae* that were characterized by numerous detailed illustrations, use of chaetotaxy, and a search for new characters.

In the 1950s about 2660 species were named, two-thirds by Cameron, Fagel, Coiffait, Scheerpeltz, and Tottenham. In this decade monographic and revisionary works were beginning to appear more frequently. These works encompassed greater geographical regions, included large numbers of specimens, were often carefully and densely illustrated, discussed details of intraspecific variation, included keys for identification, and often discussed phylogenetic relationships. In North America, where the fauna was poorly known but significant collections were housed, and fieldwork to gather new specimens from widely scattered areas was easily accomplished, the emphasis was on revisionary studies. A similar tendency is evident in Europe today, where accomplished and knowledgeable young specialists are studying the family. In contrast to Europe, where many new investigators are now beginning their studies, North Americans are finishing their careers and few are replacing them.

1960–1999. In the 1960s 2397 species were named; 72% were added by Coiffait, Fagel, Scheerpeltz, Puthz, Last, and Kistner. Unlike the eras of Fauvel and Sharp, or Bernhauer and Cameron, when one or two authors dominated descriptions of taxa, after the 1950s and '60s the mission was more widely undertaken. Seevers published his pair of volumes on termitophilous and myrmecophilous staphylinids in 1957 and 1965. Campbell published his first article on staphylinids in 1968, and during the next 27 years published revisions of North American *Micropeplinae*, *Oxyporinae*, the genera of the *Tachyporinae*, and some genera of the *Omaliinae*. Herman published a two-part revision of the paederine genus *Orus* in 1965. He followed this with revisions of other paederine groups, such as the *Cylindroxystina* and New World *Dolicaonina*, and revisions of the genera of the *Pseudopsinae* were completed. For the *Oxytelinae*, Herman revised the generic classification and the North American *Bledius* (in four parts). Kasule published articles with keys for identification using larval characters in 1966, 1968, and 1970. Puthz began publishing in 1963. He picked up the *Steninae* and *Megalopsidiinae* where L. Benick left off. With the exception of his analysis of the *Steninae* of Africa in 1971, most of his work has been published in hundreds of short papers: an extraordinary body of work. Each year, indeed each month, he continues to hone, refine, and revise, his (and our) understanding of the *Steninae*, *Megalopsidiinae*, and *Euaesthetinae*, correcting his errors and those of others, and discovering new species. Of the 1325 species he named through early 1999, 923 are in the *Steninae*. Of the species currently

listed as valid in the Steninae and the Megalopsidiinae, he has named 39% for each. In 1964, Lohse, who began describing new staphylinids in 1953, published the staphylinid section (excluding the Aleocharinae) of *Die Käfer Mitteleuropas* which was issued in parts under the editorship of Freude, Harde, and Lohse. The section on the Aleocharinae, also written by Lohse, appeared in 1974. Each genus was described and illustrated by a line drawing habitus, and the species of the region were presented in a key. This continuously updated series deeply influences young European coleopterists, some of whom are inspired to become specialists on one group or another. The second highly influential faunistic work to appear in this decade was the staphylinid section of Horion's *Faunistik der mitteleuropäischen Käfer* in 1963, 1965, and 1967.

With a deluge of new investigators in the three decades starting with 1970, many important treatises appeared and more than 10,000 species-group names were added to our lists. In the 1970s, 3423 species were added, 72% of them by Coiffait, Fagel, Jarrige, Kistner, Last, Pace, Puthz, and Scheerpeltz. Between 1970 and 1999 more than 30 Europeans began working on staphylinids while only 9 began in North America, 6 in Japan, 3 in China, and 2 in Korea. Nearly all these individuals continue to publish.

Pace is a potential rival to Bernhauer for the record of the greatest number of new species described. He described his first three species of Leptotyphlinae in 1973, and by 1998 he had named more than 2300 species (about 93 species per year). Bernhauer's rate was 107 per year; Cameron's was 75. Pace's work is characterized by a small habitus of most species along with illustrations of genitalic features. He has published many long and short articles. Most of them are on the Aleocharinae, and most treat the subfamily from selected regions of the world. In 1989 he produced a monograph on *Leptusa* and in 1996 he published the Leptotyphlinae section for the series *Fauna d'Italia*.

Throughout the last 30 years, along with the increase in the number of described species, there have been a multitude of landmark or otherwise compelling studies. The following only touches the highlights of an intense and developing effort to revise the Staphylinidae of many parts of the world. The task is being carried out by many investigators, who in turn inspire others to join the drive. Many revisions cited in the following paragraphs are ongoing studies that are being published in parts.

Among the articles of note during the 1970s are Binaghi's revision of *Scotonomus* in 1970, and the 1972 treatise on the Xantholininae by Bordoni in the ongoing series *Fauna d'Italia*. In that book Bordoni discussed morphology, fossils, ecology, behavior, and distribution of staphylinids. Bordoni also revised the Italian *Xantholinus* in 1972, and is engaged in ongoing studies of that genus. He revised the Italian *Quedius* in parts in 1973, 1974, and 1976 and has an ongoing revision of the Xantholinini of eastern Asia started in 1996 and 1997. Ullrich published a monograph of *Tachinus* and a revision of the species of the genus in Mongolia in 1975. In 1973 Tikhomirova published her morphology, ecology and phylogeny of the family; that work also included a checklist of the species in the former Soviet Union. In 1968 she published a study of Jurassic fossils of Kazakhstan. Greenslade, in three articles, produced a treatise on the *Priochirus* of the Solomon Islands in 1971 and 1972. In 1975, Hammond published a report on the Oxytelini of Ceylon, and in 1976 a review of *Anotylus*. The staphylinid section in Pope's 1977 revision of "Kloet and Hincks, A check list of British Insects. Coleoptera and Strepsiptera" was the result of research by Hammond. Shibata published a checklist of staphylinids for Taiwan (1973), and Japan (1976, 1977, 1983, 1984, 1985), along with many articles describing the faunas of Japan and Taiwan. Topp (1978) published a key to the larvae of the family.

In North America, Frank published revisions of *Erichsonius* (1975) and *Neobisnius* (1981), a catalog for *Paederus* in 1988, and a key and descriptions for subfamilies based on larval features (1991). Hoebeke published revisions of North America *Xenodusa* and the Falagriini in 1976 and 1985. Klimaszewski produced revisions of the Gymnusini and Deinopsini in 1979, and *Aleochara* in 1984. Moore's *A Catalog of the Staphylinidae of America north of Mexico* (with Legner) appeared in 1975. In 1964, Moore wrote a key to the subfamilies of the Nearctic region. Over the years he discovered a number of unusual North American staphylinids including

*Manda*, *Giulianum*, *Vicelva*, and *Ecbletus* and published many articles on other North American genera.

Boháč published a three part review of the Paederinae of Czechoslovakia in 1985 and 1986 and the staphylinid section of Jelínek's *Checklist of Czechoslovak Insects IV (Coleoptera)* in 1993. Fascinating studies of the chemical defense systems of staphylinids were reported by Dettner and colleagues, beginning in the 1980s and continuing today. Lecoq published revisions of Madagascan species of the Pinophilini in 1986, part of the Paederini in 1993, and *Astenus* in 1996; Orousset worked on the Euaesthetinae of the same region in 1988. Orousset also published a revision of Neotropical *Stenaesthetus* in 1990, and over the years has published a number of articles on the leptotyphlines and euaesthetines of Corsica. In 1985 Outerelo and Gamarra published a key to the higher taxa and genera of the Staphylinidae of the Iberian Peninsula. Rougemont's revision of *Stiliderus* appeared in two parts in 1986, and in 1996 he published a review of the Australian species of the Stilicina. Tóth's review of the family for Hungary was published in five parts, between 1982 and 1993. Uhlig published the first parts of an ongoing revision of *Erichsonius* in 1988. The omaliine section of *Fauna d'Italia* was written by Zanetti (1987), whose ongoing analysis of *Eusphalerum* began in 1980. Gusarov has published articles on the staphylinids of the Caucasus and is currently studying the Athetini of North America. In Japan, Ito began publishing on *Nazeris* in 1985; many articles on that revision have appeared under the title "Notes on the species of *Nazeris*". Naomi (1987–1990) published his 11-part comparative morphology of the family, the first such work since Blackwelder's 1936 study. Naomi, in addition to his three part revision of the Xanthopygina of Japan in 1982 and 1983, has worked on revisions of many other genera from Japan and actively pursues studies of the Steninae. In North America, Ashe published a generic revision the Gyrophaenina in 1984. He also published on the structural features and phylogenetic relationships among larval Gyrophaeninae in 1986, the phylogeny and revision of genera and subtribes of Bolitocharina in 1992, and (with Newton) larval Trichophyinae and phylogeny of the tachyporine group of subfamilies in 1993. In 1982 Newton published a revised concept of the Pseudopsinae. Thayer produced her study of *Metacorneolabium* in 1985. In a contribution to the stabilization of family-group names, Newton and Thayer published their nomenclatural analysis in 1992. They described (1995) a new subfamily, Protopselaphinae, and presented an analysis of its relationship to other subfamilies, along with eight new species and hypotheses of phylogenetic relationships of the Omaliine group of subfamilies.

In the 1990s a number of people began working. Assing and Wunderle published a revision of the Habrocerinae in 1995, and Assing has been publishing a revision of *Othius* in parts, eight thus far, the first of which appeared in 1995. He has also published work on *Geostiba*, *Autalia*, and a variety of other genera. Cuccodoro published parts of a revision of *Megarthus* beginning in 1995, and also ongoing; some parts were coauthored with Löbl. Löbl and Calame revised the Dasycerinae. Drugmand, in a series of articles appearing from 1992 to 1995, revised the Afrotropical Cryptobiina. Frisch started working on a revision of *Scopaeus*; several parts have appeared beginning in 1994. M. Hansen published two articles in 1997 on the phylogeny and evolutionary trends in staphyliniform beetles. Kocian published a revision of the western Palaearctic *Ischnosoma* in 1997. Z.-L. Li revised the *Tachinus* of Japan in two parts in 1995, and coauthored revisions of the Japanese species of *Bolitobius*, *Bryophacis*, and *Lordithon*. Ryvkin revised the Steninae of the Caucasus and published a study of Mesozoic fossil staphylinids from the Transbaical region in 1990. Schillhammer wrote a 1997 revision of the Oriental species of *Gabrius*, and has ongoing work with *Gabrius*, *Philonthus*, and other genera of the Palaearctic and Oriental regions. Schülke, working on ongoing revisions of *Tachyporus* and *Bolitobius*, published the first parts in 1991 and 1992, respectively. In the early 1990s, Staniec began publishing a continuing series on the immature stages and biological observations of species in various genera. Zerche published a monograph on the Palaearctic Coryphiini (1990), revisions of the Hadronathini and *Deliphrosoma* (1991), *Hygrogeus* (1992a), and the *Metopsia* of the western Palaearctic region (1998). He has ongoing work in *Oxypoda* and *Pseudopsis*. Ahn revised *Diaulota*, *Tarphiota*, *Thinusa*, and *Liparocephalus* (1996 and 1997), and *Amblopusa* and *Rothium* (with



Ashe in 1996 and 1997). In 1996 Downie and Arnett published keys and brief characterizations of the staphylinids of northeastern North America. In 1998 Newton and Thayer (Ballard et al., 1998) were coauthors of the first article employing DNA characters to determine phylogenetic relationships in the family. In 1999 Ryabukhin published a catalog of the staphylinids (excluding the Aleocharinae) of northeastern Asia and thereby summarized the knowledge for this remote, poorly known region. Solodovnikov published articles on species from the Caucasus near the end of the decade Smetana and Davies (2000) published a synoptic review of the north-temperate subtribes of the Staphylinini and the genera near *Staphylinus*, and introduced new concepts based largely on novel characters.

**FOSSILS.** *Oxyporus blumenbachii*, the last species described by Gravenhorst (1806), was the first fossil staphylinid to be described. The most recently named fossil was from Baltic amber (Zerche, 1999). Between these dates, 173 fossil species in 83 genera have been placed in the family; 41 of the genera are extinct. The only extinct subfamily of staphylinids was named by Heer (1847) for the monotypic genus *Protactus*, which he placed in a new family, "Protactiden" (= Protactinae), in the "Brachelytren". He described a second species of *Protactus* in 1862; both are from Oligocene deposits.

Ten species have been named from amber deposits, and one from copal. Gravenhorst's *Oxyporus blumenbachii* was one of six species described from Baltic amber; the others were placed in *Bembicidiodes* (Schaufuss, 1888), *Pseudolestea* (Schaufuss, 1890), *Stenus* (L. Benick, 1943a), *Lathrobium* (Abdullah and Abdullah, 1968), and *Adinopsis* (Zerche, 1999). Three species, in *Oxypoda*, *Paracyptus*, and *Palaeopsenius*, have been described from amber of Chiapas, Mexico (Seevers, 1971). One species of *Stenus* comes from amber of Bezonnais, France (Schlüter, 1978). The horizons in which these deposits were found include Oligocene/Miocene (Chiapas), Eocene/Oligocene (Baltic), and Upper Cretaceous (Bezonnais). (See Evenhuis, 1994, for dates of deposits discussed here and elsewhere in this section.) Hope (1837) described a species of *Osoorius* from copal; he cited no locality but the specimen is presumably from Holocene deposits. As yet no species have been named from Dominican amber (Oligocene/Miocene), but several are being described from deposits found in New Jersey (Upper Cretaceous). Spahr (1981) listed 39 extant genera from amber deposits, but no species were named.

About 94% of the extinct species are from impression or compression fossils; 80% of these are from the Oligocene, Jurassic or Jurassic/Cretaceous, or the Postpliocene (table 2).

About a quarter of the compression fossils are from the Mesozoic. The Jurassic and Jurassic/Cretaceous species are from deposits in Turga and Unda (Ryvkin, 1990a) and the Lake Baikal region in Russia (Ryvkin, 1985), Karatau, Kazakhstan (Tikhomirova, 1968), Laiyang (Zhang, 1988; Zhang et al., 1992) and Liaoning, China (Lin, 1976), and Manlay, Mongolia (Tikhomirova, 1980). The Cretaceous impression fossils are from Magadan, Russia (Ryvkin, 1988).

All but one of the remaining compression fossils are from the Cenozoic and most of those are from the Oligocene. Specimens from the Eocene are from deposits on the Green River, Wyoming/Colorado, and White River, Utah/Colorado, USA (Scudder, 1876, 1878, 1890, 1900). The Oligocene fossils are from Florissant, USA (Scudder, 1890, 1900; Wickham, 1912, 1913, 1913a), Aix-en-Provence, France (Heer, 1856; Giebel, 1856; Oustalet, 1874), Rott, France/Germany (Heyden and Heyden, 1866), and Brunstadt, France (B. Förster, 1891). The Miocene fossils are from Oeningen, Switzerland (Heer, 1847, 1862) and Shanwang, Shandong, China (Hong, 1984; Zhang, 1989; Zhang et al., 1994). The Pliocene fossils are from Castle Eden, Britain (Lesne, 1926), Lava Camp Mine, Alaska (J. Matthews, 1970), and Willershausen, Germany (Gersdorf, 1976). The Postpliocene species are from Scarboro or Toronto, Ontario (Scudder, 1876, 1890, 1895, 1900a) and Sweden (Mjöberg, 1904).

**SUMMARY.** The first species of staphylinid, *Staphylinus hirtus* (= *Emus hirtus*), was described by Linné in 1758. Since then 623 authors have proposed more than 43,700 nominal species in the family. Fifteen other authors have named only genera. About 55% of the nominal species were proposed by ten individuals, who published more than 1000 species each during their careers.

TABLE 2  
Summary of Species Described as Fossils

Genus	Horizon											
	J	J/K	K	Eo	E/O	OI	O/M	Mi	Pli	PP	Ple	Ho
<b>Aleocharinae</b>												
<i>Adinopsis</i>	—	—	—	—	1	—	—	—	—	—	—	—
† <i>Aleocharopsis</i>	—	—	—	—	—	2	—	—	—	—	—	—
<i>Atheta</i>	—	—	—	—	—	1	—	—	—	—	—	—
<i>Gymnusa</i>	—	—	—	—	—	—	—	—	—	1	—	—
<i>Gyrophæna</i>	—	—	—	1	—	—	—	—	—	—	—	—
<i>Homalota</i>	—	—	—	1	—	—	—	—	—	—	—	—
<i>Hygronoma</i>	—	—	—	—	—	1	—	—	—	—	—	—
<i>Oxypoda</i>	—	—	—	—	—	—	1	—	—	—	—	—
† <i>Palaeopsenius</i>	—	—	—	—	—	—	1	—	—	—	—	—
† <i>Paracyptus</i>	—	—	—	—	—	—	1	—	—	—	—	—
<b>Micropeplinae</b>												
<i>Micropeplus</i>	—	—	—	—	—	—	—	—	3	—	—	—
<b>Olistherinae</b>												
† <i>Anicula</i>	1	—	—	—	—	—	—	—	—	—	—	—
<b>Omalinae</b>												
<i>Acidota</i>	—	—	—	—	—	—	—	—	—	1	—	—
<i>Anthophagus</i>	—	—	—	—	—	1	—	—	—	—	—	—
† <i>Archodromus</i>	2	—	—	—	—	—	—	—	—	—	—	—
<i>Arpedium</i>	—	—	—	—	—	—	—	—	—	1	—	—
† <i>Daiodromus</i>	—	1	—	—	—	—	—	—	—	—	—	—
† <i>Eophyllodrepa</i>	1	—	—	—	—	—	—	—	—	—	—	—
<i>Geodromicus</i>	—	—	—	—	—	1	—	—	—	1	—	—
† <i>Globoides</i>	2	—	—	—	—	—	—	—	—	—	—	—
† <i>Mesodeliphrum</i>	1	—	—	—	—	—	—	—	—	—	—	—
† <i>Morsum</i>	1	—	—	—	—	—	—	—	—	—	—	—
<i>Olophrum</i>	—	—	—	—	—	—	—	—	—	4	1	—
<i>Omalium</i>	—	—	—	—	—	1	—	1	—	—	—	—
† <i>Porrhodromus</i>	1	—	—	—	—	—	—	—	—	—	—	—
† <i>Prodaia</i>	—	1	—	—	—	—	—	—	—	—	—	—
† <i>Pseudolestea</i>	—	—	—	—	1	—	—	—	—	—	—	—
<b>Osoriinae</b>												
<i>Osorius</i>	—	—	—	—	—	—	—	—	—	—	—	1
† <i>Sinolispinodes</i>	—	—	—	—	—	—	—	1	—	—	—	—
<b>Oxyporinae</b>												
<i>Oxyporus</i>	—	—	—	—	1	1	—	1	—	1	—	—
<b>Oxytelinae</b>												
<i>Bledius</i>	—	—	—	2	—	4	—	1	—	1	—	—
<i>Deleaster</i>	—	—	—	—	—	1	—	—	—	—	—	—
† <i>Megalymma</i>	—	2	—	—	—	—	—	—	—	—	—	—
† <i>Mesoxytelus</i>	2	—	—	—	—	—	—	—	—	—	—	—
† <i>Morda</i>	—	1	—	—	—	—	—	—	—	—	—	—
<i>Oxytelus</i>	—	—	—	1	—	3	—	1	—	—	—	—
<i>Platystethus</i>	—	—	—	—	—	2	—	—	—	—	—	—
† <i>Turgaphloeus</i>	1	—	—	—	—	—	—	—	—	—	—	—
<b>Paederinae</b>												
<i>Achenium</i>	—	—	—	—	—	1	—	—	—	—	—	—
<i>Cryptobium</i>	—	—	—	—	—	—	—	—	—	2	—	—
† <i>Erinnys</i> (see <i>Lithoplanes</i> )	—	—	—	—	—	—	—	—	—	—	—	—
<i>Lathrobium</i>	—	—	—	—	—	2	—	5	—	7	—	—
† <i>Paleolobrathium</i>	—	—	—	—	1	—	—	—	—	—	—	—
<i>Lithocharis</i>	—	—	—	—	—	2	—	—	—	—	—	—
† <i>Lithoplanes</i>	—	—	—	—	—	2	—	—	—	—	—	—
† <i>Miolithocharis</i>	—	—	—	—	—	1	—	—	—	—	—	—

TABLE 2  
Continued

Genus	Horizon											
	J	J/K	K	Eo	E/O	Ol	O/M	Mi	Pli	PP	Ple	Ho
<b>Paederinae (continued)</b>												
<i>Medon</i>	—	—	—	—	—	—	—	1	—	—	—	—
<i>Paederus</i>	—	—	—	—	—	1	—	—	—	—	—	—
<i>Sunius</i>	—	—	—	—	—	1	—	—	—	—	—	—
<b>Phloeocharinae</b>												
<i>Triga</i>	—	—	—	—	—	1	—	—	—	—	—	—
<b>Piestinae</b>												
† <i>Abolescus</i>	1	—	—	—	—	—	—	—	—	—	—	—
<i>Prognathus</i>	—	—	—	—	—	1	—	—	—	—	—	—
<b>Protactinae</b>												
† <i>Protactus</i>	—	—	—	—	—	—	—	2	—	—	—	—
<b>Staphylininae</b>												
<i>Acylophorus</i>	—	—	—	—	—	1	—	—	—	—	—	—
<i>Algon</i>	—	—	—	—	—	—	—	1	—	—	—	—
† <i>Cretoquedius</i>	—	—	1	—	—	—	—	—	—	—	—	—
<i>Heterothops</i>	—	—	—	—	—	1	—	—	—	—	—	—
† <i>Laasbium</i>	—	—	—	—	—	2	—	—	—	—	—	—
† <i>Laostaphylinus</i>	2	—	—	—	—	—	—	—	—	—	—	—
<i>Leistotrophus</i>	—	—	—	1	—	—	—	—	—	—	—	—
<i>Leptacinus</i>	—	—	—	—	—	5	—	—	—	—	—	—
† <i>Mesostaphylinus</i>	2	—	—	—	—	—	—	—	—	—	—	—
<i>Philonthus</i>	—	—	—	—	—	8	—	—	—	1	—	—
<i>Quedius</i>	—	—	—	—	—	5	—	—	—	1	—	—
<i>Staphylinus</i>	—	—	—	—	—	9	—	—	—	—	—	—
<i>Xantholinus</i>	—	—	—	—	—	3	—	—	1	—	—	—
<b>Steninae</b>												
<i>Stenus</i>	—	—	2	—	1	4	—	—	—	—	—	—
<b>Tachyporinae</b>												
† <i>Abscondus</i>	2	—	—	—	—	—	—	—	—	—	—	—
<i>Bolitobius</i>	—	—	—	—	—	4	—	—	—	—	—	—
† <i>Cuneocharis</i>	—	1	—	—	—	—	—	—	—	—	—	—
† <i>Hesterniasca</i>	1	—	—	—	—	—	—	—	—	—	—	—
† <i>Mesoporus</i> (see <i>Ryvkinus</i> )	—	—	—	—	—	—	—	—	—	—	—	—
† <i>Mesotachinus</i>	3	—	—	—	—	—	—	—	—	—	—	—
† <i>Mesotachyporus</i>	—	—	1	—	—	—	—	—	—	—	—	—
<i>Mycetoporus</i>	—	—	—	—	—	1	—	—	—	—	—	—
† <i>Ryvkinus</i>	—	1	—	—	—	—	—	—	—	—	—	—
<i>Tachinus</i>	—	—	—	—	—	1	—	1	—	—	—	—
† <i>Tachyporoides</i>	1	—	—	—	—	—	—	—	—	—	—	—
<i>Tachyporus</i>	—	—	—	—	—	2	—	—	—	—	—	—
† <i>Undiatina</i>	—	1	—	—	—	—	—	—	—	—	—	—
<b>Trigonurinae</b>												
† <i>Kovalevia</i>	1?	—	—	—	—	—	—	—	—	—	—	—
† <i>Trigunda</i>	—	1	—	—	—	—	—	—	—	—	—	—
<b>Incertae sedis</b>												
† <i>Bembicidiodes</i>	—	—	—	—	1	—	—	—	—	—	—	—
† <i>Protostaphylinus</i>	1	—	—	—	—	—	—	—	—	—	—	—
† <i>Sulcelytrinus</i>	1	—	—	—	—	—	—	—	—	—	—	—
† <i>Tunicopterus</i>	1	—	—	—	—	—	—	—	—	—	—	—
Totals	28	9	4	6	6	76	3	15	4	21	1	1

† Refers to extinct genera.

E/O, Eocene/Oligocene; Eo, Eocene; Ho, Holocene; J/K, Jurassic/Cretaceous; J, Jurassic; K, Cretaceous; Mi, Miocene; O/M, Oligocene/Miocene; Ol, Oligocene; Ple, Pleistocene; Pli, Pliocene; PP, Postpliocene.

TABLE 3  
**Authors of 100 or More Species**

Author	Species	Genera	Author	Species	Genera
Bernhauer	5251	342	Watanabe	223	5
Cameron	4136	195	Seevers	215	42
Pace	2707	208	Heer	207	9
Sharp	2315	145	Broun	198	10
Fauvel	1851	96	Schubert, K	189	4
Casey	1805	248	Wollaston	186	6
Coiffait	1775	159	Fairmaire	183	9
Scheerpeltz	1405	181	Naomi	176	5
Puthz	1325	2	Levasseur	175	22
Fagel	1255	80	Hatch	173	9
Erichson	908	46	Rougemont	171	0
Last	586	8	Luze	169	10
Kraatz	562	69	Koch	168	13
Smetana	538	19	Benick, G	168	0
Kistner	531	97	Bordoni	167	17
Eppelsheim	485	1	Bierig	159	34
Stephens	466	25	Orousset	157	5
Rey	407	116	Campbell	154	14
Motschulsky	394	44	Thomson	146	70
Benick, L	389	3	Assing	140	6
Tottenham	363	18	Sawada	134	20
Mulsant	361	109	Mannerheim	130	21
Gravenhorst	330	14	Horn	125	6
LeConte	294	14	Reitter	121	26
Jarrige	276	13	Klimaszewski	121	4
Herman	271	11	Zerche	116	15
Lea	264	5	Sahlberg, J	109	3
Wasmann	259	96	Solsky	107	3
Blackwelder	256	59	Schillhammer	101	4
Wendeler	243	4	Lohse	100	1
Lecoq	240	6			

Eighty-five percent of the species were named by 61 authors, each of whom named more than 100 species (table 3). By the end of the 18th century, 310 species had been named. A hundred years later that number had multiplied by nearly forty to 12,346. When the last world catalog and its supplements (1910–1934) were published, 23,132 species-group names had been proposed. Sixty six years later, at the threshold of the third millennium, nearly 20,000 more species have been named.

The number of genus-group names has grown from one (*Staphylinus*), in 1758, to 6 in 1799, to 1040 in 1899, and to 3867 in 1999. The family was named in 1802. Eleven other family-group names followed in rapid succession in 1815 (Leach), 1821 (Fleming), and 1835 (W. S. MacLeay). There are now 32 subfamilies. One subfamily is extinct (Heer, 1847). The most speciose subfamily is the Aleocharinae with about 27% of the species and the smallest are the Empelinae, the Neophoninae, and the Solieriinae each with one species (table 4).

The majority of staphylinid publications have proposed names for species and genera. However the most consequential have been, and continue to be, those publications that synthesize, bringing together all we know, and stabilize the names. These works may be regional and cover the entire family or subfamily, or may revise a genus for a region or for the world. These syntheses have the greatest capacity for stimulating further study and are platforms for advancement of the field.

TABLE 4  
Summary of Subfamilies

Subfamily	Genera	Species	Subordinate names	Available names
Apateticinae	2	24	3	29
Dasycerinae	1	17	4	22
Empelinae	1	1	0	2
Euaesthetinae	26	724	95	845
Glypholomatinae	2	8	2	12
Habrocerinae	2	22	2	26
Leptotyphlinae	42	513	68	623
Megalopsidiinae	1	164	25	190
Micropeplinae	6	80	24	110
Microsilphinae	1	4	2	7
Neophoninae	1	1	0	2
Olisthaerinae	2	3	4	9
Omalinae	124	1431	540	2095
Osoiriinae	105	2058	261	2424
Oxyporinae	1	100	35	137
Oxytelinae	48	2000	654	2702
Phloeocharinae	7	53	11	71
Piestinae	8	107	19	134
Protactinae†	1	2	0	3
Proteininae	11	189	45	245
Protopselaphinae	1	8	0	9
Pseudopsinae	4	49	5	58
Solieriinae	1	1	1	3
Staphylininae	282	6642	2046	8976
Steninae	2	2109	927	3038
Tachyporinae	39	1519	542	2100
Trichophyinae	1	15	3	19
Trigonurinae	3	11	2	16
Incertae sedis†	6	6	0	12
[Aleocharinae] <sup>a</sup>	[1740]	[12,182]	[2193]	[16,115]
[Paederinae] <sup>b</sup>	[225]	[5962]	[1181]	[7368]
[Pselaphinae] <sup>c</sup>	[1103]	[8415]	?	[9518+]
[Scaphidiinae] <sup>d</sup>	[45]	[1287]	?	[1332+]
Total	3845	45,707	8694	58,240+
In this catalog	731	17,861	5320	23,919

<sup>a</sup> Unverified checklist of names through 1997 by Herman (ms).

<sup>b</sup> To be published with generic revision of subfamily (Herman, in prep.).

<sup>c</sup> Newton and Chandler, 1989: 1.

<sup>d</sup> Löbl, 1997a: vii.

After Linné began the group, the single most important work published was arguably Erichson's *Genera et species Staphylinorum*. It was the first, only, and probably last summary of everything known about the family. Though most of the family-group names presented by Erichson had been proposed by others, he elaborated the higher classification and distributed the known genera and species among these groups; and he published the first keys to tribes (= subfamilies) and genera.

A few of the many influential regional family-level treatments include those published by Stephens (1832–1835, 1839) for Britain, Erichson (1839a) for part of Germany, Heer (1839–1841) for Switzerland, Kraatz (1856–1857, 1859) for Germany and the East Indies, Fauvel (1868–1876) for France, Sharp (1883–1887) for Mexico and Central America, Fowler (1888) for

Britain, Ganglbauer (1895) for central Europe, Reitter (1909) for Germany, Cameron (1930–1939) for India, Porta (1949–1959) for Italy, Hatch (1957) for northwestern North America, Hansen (1951–1969) for Denmark, Palm (1948–1972) for Sweden, and Coiffait (1972–1984) for the western Palaearctic. The importance of such compilations cannot be overemphasized. They permit people to study and refine in great detail the fauna of a region and, in part, may help explain why staphylinids are well known in Europe but feebly understood in most other parts of the world, including North America.

Recently, as more collections have accumulated from around the world and as the number of species has increased, the taxonomic scope of synthetic studies has been scaled down to the generic or subfamilial level, and studies are usually regional. Greater efforts are being made to provide comparative descriptions and diagnoses, keys, illustrations that document characters, details of the geographic distribution, and to discuss phylogenetic relationships. More groups are being studied on a worldwide basis or at least on a broad geographic scale, such as Palaearctic, western Palaearctic or North American, etc. As we are increasingly able to acquire collections from poorly collected regions of the world, it is important that we continue to establish new baselines and to meld taxa from newly explored regions into the existing fabric with monographic, revisionary, and synthetic studies.

However efforts to increase our knowledge of the group are not evenly distributed. In spite of all the resources in North America, there is currently a dearth of new coleopterists training to do “classical” systematics. This deficit is particularly acute for the Staphylinidae: currently only one North American investigator (Hanley) is being trained to study the family. Certainly this deficiency is due in part to the spectacular emergence of the use of molecular characters, but there are also elements of history and approach. In Europe there is a long and illustrious history of the production of regional identification manuals; in the New World there are almost no such books. In Europe, the authors of such manuals include some of the greats: Stephens, Heer, Kraatz, Fauvel, Mulsant and Rey, Redtenbacher, Seidlitz, Ganglbauer, Reitter, Johansen, Palm, Smetana, Lohse, Coiffait. Such manuals continue to be produced today, for example those by Tóth for Hungary, and by Bordoni, Zanetti, and Pace for groups in Italy. These regional manuals inspire and stimulate budding young coleopterists. In North America, on the other hand, there are only manuals by Blatchley, Hatch, and Arnett and Downie; the latter is an update and geographical expansion of Blatchley’s manual. Most identifications must be done from the primary literature, which is not easily available to most novices, particularly young ones. In Europe there is a long tradition of mentorship where young coleopterists start to collect and identify species. As a result, European coleopterists develop life-long interests and expert knowledge. Some go on to be professional coleopterists; others support themselves by other means but continue an intense avocational study of beetles that may result in learned publications. In North America, where monographic studies are labeled as “old fashioned”, there is often a “bandwagon” approach to systematics. The promoters of a new technique promise that their approach will resolve all quandries in the field. Bandwagons more often simply siphon off scholarly individuals who have the aptitude for careful, meticulous work—to the detriment of revisionary study. Also, in North America there is little long-term, nonprofessional interest in beetles (except in Quebec, thanks to the support of “L’Association des entomologistes amateurs du Québec”). The cost of publication in North America may deter many nonprofessionals from publishing. In Europe many journals publish papers without charges, and even offer free reprints, whereas the same service is lacking in North America. At the moment it seems unlikely that monographic studies by North Americans will resume on a large scale.

## BIOGRAPHICAL SKETCHES

The following section includes short essays on authors who contributed significantly to the knowledge of the Staphylinidae. Those who published only a few simple taxonomic papers or who contributed only to the faunistics of the group are not included. Those with an interest in the family or an intention to publish (but no publication as of this writing) were omitted. The decision to include or exclude an author is obviously subjective and may be disputed in a few cases; however careful consideration was given to each marginal case.

The authorship of this section was divided between the two coauthors. Smetana researched and wrote most of the sketches of the deceased workers; each of those contributions ends with his initials "[A.S.>". Herman wrote the sections for the living workers and for a few of the deceased workers. Any living staphylinidologist who is not included is an oversight on Herman's part and apologies are offered.

It is hoped that the information contained herein will be of interest to users of the Catalog. The desire to learn something about the lives of earlier naturalists might help us to understand them as human beings and make their scientific actions more comprehensible. In this context, it seems worth noting that in the past the group of authors who significantly contributed to the knowledge of Staphylinidae (also true for many other insect families) tended to be nonprofessionals with a distinct prevalence of medical doctors, lawyers, and clergymen.

Current workers supplied their own biographical information. Most of the data for deceased investigators were extracted from published sources. For the latter, abbreviated references (i.e., without titles) to most publications with biographical and bibliographical information are cited following their sketches. However, a few references used throughout the text are referred to simply by the name of the author and the year of publication, or by the title, year of publication, and the author(s). They are listed following the biographies on page 159.

## ACKNOWLEDGMENTS

The following colleagues helped to search for biographical data, or provided biographical information for authors for whom biographies were never published. Others provided other help or information. We thank them for their assistance or permission. We also thank all our colleagues who provided the biographical information used for their respective biographies. Without help from all these individuals this chapter would have been less complete.

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Edward Johnson, Staten Island Institute of Arts and Sciences, Staten Island, New York, USA, provided biographical notes and the photograph of Howard Notman. We thank the Institute for permitting the use of Notman's previously unpublished picture.

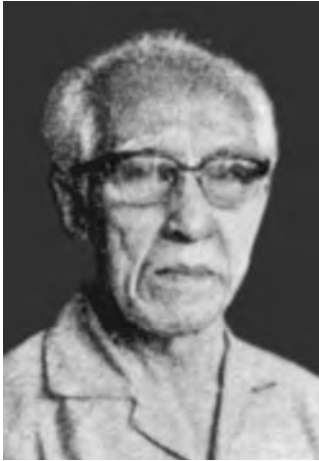
C. Kutzscher, Deutsches Entomologisches Institut, Eberswalde, Germany, lent portraits of F. Baudi di Selve, F. Eichelbaum, C.A.A. Fauvel, J. H. Hochhuth, E.A.H. Kiesenwetter, and G. Luze.

Robert Orth, Moreno Valley, California, USA, sent the obituary, biographical information, and photograph for Ian Moore.

Volker Puthz, Schlitz, Germany.

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*Tsunamitsu Adachi*

**Adachi, Tsunamitsu.** Adachi was born on September 15, 1901, in Japan and died there on December 2, 1981.

Adachi served in the military during 1921–1922. In 1925 he entered the Tokyo University of Agriculture as an elective student. He became an assistant in 1932 and an Associate Professor in 1949 at the same university. In 1954 he resigned as Professor at the Tokyo University of Agriculture and accepted the post of Professor at the Toyo University. In 1972, he resigned from this post and became a temporary lecturer. In 1976 he retired and left the Toyo University.

He published 75 papers, most of them on entomology. Twelve of them dealt with the family Staphylinidae, and the last, published in 1957, was the first catalog of the family Staphylinidae of Japan. Adachi described only 11 species of Staphylinidae from Japan, one each in the genera *Coprophilus*, *Deleaster*, *Sepedophilus*, and *Oxyporus*, two in *Lathrobium* and *Paederus*, and three species in *Scopaeus*. [A.S.]

SOURCES: • *Group for Celebrating the 70th Anniversary of Professor Tsunamitsu Adachi* (1972): 177–181 [with bibliography, portrait]. • *Journal of the Toyo University General Education, Natural Science*, No 20 (1977): 103 [author unknown, with bibliography, portrait].



*Kee-Jeong Ahn*

**Ahn, Kee-Jeong.** Ahn, of Korea, was born on October 21, 1961. His interest in the Staphylinidae was stimulated by his mentor, J. S. Ashe, during his postgraduate studies at the University of Kansas, Lawrence, Kansas. The animals of special interest to him are the intertidal species of the family, particularly those in the Aleocharinae. Ahn published revisions of *Tarphiota*, *Thinusa*, *Pontomalota*, and *Rothium*, reviews of *Liparocephalus* and *Diaulota*, and coauthored an analysis of the phylogeny of the aleocharine tribe Liparocephalini. His research includes phylogenetic analyses of the Myllaenini, Pronomaeni, Masurini, and Diglotini. It is among his long-range goals to study the Aleocharinae of eastern Asia and to continue working on phylogenetic, biogeographical, and evolutionary questions concerning the intertidal taxa. He has authored or coauthored at least 10 species and one genus.



*James Steve Ashe*

**Ashe, James Steve.** Ashe, of the USA, was born on February 23, 1947. He became interested in staphylinids while working on a master's degree at Appalachian State University in North Carolina. His adviser suggested that he investigate the biology and host relationships of aleocharines that live on fresh mushrooms, which he did for two years. Later he pursued a doctoral degree in Texas, where he studied boll weevil migratory activity. When his adviser left the university after one year, Ashe left Texas and went to the University of Alberta to study staphylinid systematics.

Ashe's primary taxonomic interest has been the Aleocharinae. His work includes a generic revision and phylogeny of the Gyrophaenina in which he incorporated larval characters, a generic revision and phylogeny of the Bolitocharina, and taxonomic studies of, for example, *Tachiona* and *Gansia*. His interest in larval features and behavioral phenomena is reflected in a number of his publications on topics such as construction of

egg and pupal chambers, larval chaetotaxy, subsocial behavior, host relationships with mushrooms, mouthpart modification in connection with fungivory, and evolution of the aleocharine aedeagal parameres. His taxonomic and biological investigations of the staphylinine tribe Amblyopinini elucidated the relationships of the species to their mammalian hosts. His co-authored work on larval Trichophyinae led to a phylogenetic hypothesis of the relationships in the tachyporine groups of subfamilies. Ashe and colleagues have produced a database of images of aleocharine staphylinids. His long-range goals include making the Aleocharinae more accessible to researchers and providing the framework for a phylogeny of the genera and tribes of the subfamily. To this end, he is currently working on an illustrated guide to identification of the aleocharine genera of North America north of Mexico and on phylogeny of the major lineages of the subfamily. He has described or coauthored at least 33 species and 8 genera.



*Volker Assing*

**Assing, Volker.** Assing, of Germany, was born on November 24, 1956. Assing began his scientific work with quantitative ecological studies in the heathlands of northern Germany. He realized how little was known not only about the ecology of staphylinids, but also about their taxonomy, and decided to do something about it. Despite his wide taxonomic interests in the family, his focus is on the Steninae, Xantholinini, Paederinae, Habrocerinae, and especially the Aleocharinae. Although much of his work is with taxa of the Palaearctic region, he also works with some taxa on a worldwide basis. Two of his many works to date include his continuing revision of the genus *Othius*, of which eight parts are published, and his revision (with P. Wunderle) of the Habrocerinae. He has published taxonomic works on *Stenus*, *Lathrobium*, *Emplenota*, *Polystomota*, *Triochara*, *Skenochara*, *Xenomma*, *Geostiba*, *Leptusina*, *Euryalea*, *Pseudocallea*, *Ocyota*, *Autalia*, *Myrmecopora*, *Zoosetha*, *Poromniusa*, *Ilyobates*, and *Calodera*, among others. Assing's long-range goals include bionomic studies in the family and revisions of groups that urgently need them. He has published or copublished at least 140 species and 6 genera.

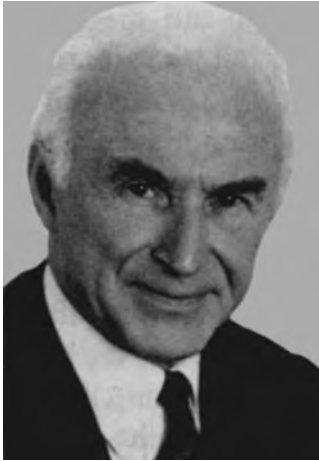


*Flaminio Baudi di Selve*

**Baudi di Selve, Flaminio.** Baudi was born in Savigliano (Piemonte), Italy, in 1821 and died on June 26, 1901, in Genola, Italy.

At age 21, Baudi went to Torino to study at the university with such eminent naturalists as Bonelli and Gené. He soon found himself much attracted to entomology, and in 1848 published, together with Truqui, the classical volume *Studi entomologici*, in which he described numerous new species of Staphylinidae. His relationship with Truqui eventually developed into a long-lasting friendship. Baudi's interest in Staphylinidae continued for some time, but eventually he concentrated on other groups of Coleoptera, mainly the Heteromera. He also was involved in the study of the coleopterous fauna of Piemonte, his native area of Italy, and in 1889 published a catalog of the beetles of the region.

Baudi was quite active in public life and was respected for his modesty and honesty. Before his death, he donated his



Georg Benick

Coleoptera collection to the R. Museo Zoologico di Torino. Baudi described 84 species in the Staphylinidae. [A.S.]

SOURCES: • *Bulletin de la Société entomologique de France* (1901): 293 [anonymous]. • *Bollettino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino* 16 (1901): 1–6 [by L. Camerano, with bibliography]. • *Bollettino della Società entomologica italiana* 34 (1902): 118–119 [anonymous]. • *Entomologische Jahrbücher* 12 (1903): 252 [anonymous]. • *Index Litteraturae Entomologicae* (1928): 51 [by W. Horn and S. Schenkling]. • *Index Litteraturae Entomologicae Serie II* (1963): 214 [by W. Derksen and U. Scheiding]. • *Memorie de la Società entomologica italiana* 48 (1969): 841 [by C. Conti].

**Benick, Georg.** Benick was born in Lübeck, Germany, on July 2, 1901, the son of Ludwig Benick, the renowned *Stenus* specialist, and died there on January 11, 1992.

Through the influence of his father, Benick was exposed to the study of beetles from his earliest years. Although he chose a career in law, he nevertheless continuously worked on beetles. Benick obtained his education in Lübeck and after he graduated from the Katharineum (*gymnasium*) in 1921, he studied law, first at the university in Tübingen and then in Kiel. After receiving his law degree, he joined a large law firm in Lübeck in 1927 and eventually specialized in transport law.

Benick was fortunate to survive the Second World War as a clerk of a trucking company, first in Lübeck and from 1944 in Hamburg. In Hamburg, he met Lohse and their regular meetings eventually developed into a long-lasting, close friendship.

Benick inherited from his father the love of nature and entomology, so it was quite natural for him to devote all his spare time to this beloved discipline. He also learned from his father the basics of scientific work, as well as the know-how of fieldwork. They both had an excellent knowledge of the beetle fauna of northern Germany, which was developed by countless joint excursions that resulted in an extensive beetle collection of the area. Not surprisingly, Benick was attracted to Staphylinidae, and quite in line with his personal confidence, he soon specialized in the most difficult aleocharine genus *Atheta*. His first paper on that genus, containing the description of *Atheta ermischii*, appeared in 1934. Thereafter, many articles followed, as Benick quickly became a frequently sought-after expert on the genus. He was famous for his ability to determine the specimens with confidence, using only a hand lens, that was replaced by a stereoscopic microscope only in the latter part of his life. Benick's bibliography is unavailable at present, but he published about 60 papers, most of them on *Atheta*, but also on other aleocharine genera, such as *Meotica*, in addition to other groups of Staphylinidae. He described 168 species of Staphylinidae.

Benick was a prototypical gentleman and always wore a suit, even while collecting in the field, which I can confirm from my own experience during a collecting trip to the Ratekauer Moor (Sphagnum bog) near Lübeck, undertaken together with him and Lohse in October 1966. On a few square meters, we were able to collect all specialized, tyrphobiont staphylinids known from that bog, i.e., *Stenus kiesenwetteri*, *Lathrobium rufipenne*, *L. gracile*, *Acylophorus wagenschieberi*, and *Tachyporus trans-*

*versalis*. Benick remained remarkably active until close to his death, as documented by a collecting excursion he undertook in the summer of 1991, the year before his death at age 90!

After his death, Benick's collection of Staphylinidae went to the Museum in Geneva, Switzerland, while the general, local "nordelbische" Coleoptera collection was donated to the Naturhistorisches Museum der Hansestadt Lübeck, Germany. [A.S.]

SOURCES: • *Entomologische Blätter, Krefeld* 77 (1981): 1–5 [by G. A. Lohse, with portrait]. • *Verhandlungen des Vereines für naturwissenschaftliche Naturforschung Hamburg* 41 (1995): III–V [by W. Ziegler, with portrait].

**Benick, Ludwig.** The elder Benick was born in Grieben (Mecklenburg), Germany, on November 15, 1874. He died on March 29, 1951, in Lübeck.

Benick was a teacher at several schools in Lübeck and eventually became a lecturer at the local Teachers College. He soon became associated with the "Naturhistorisches Museum am Dom zu Lübeck". Thanks to his broad knowledge of general biology, which included both zoology and botany, he was eventually appointed as the custodian at this museum in 1920. In 1946, on the occasion of his 72nd birthday, he was awarded the degree *doctor honoris causa* by the Christian-Albrecht University in Kiel, in recognition of his achievements in the fields of both education and biology, including coleopterology.

Benick made enormous contributions to the knowledge of the staphylinid subfamilies Steninae and Megalopsidiinae. His papers on these groups formed a solid foundation that allowed rapid progress in the understanding of the taxonomy and phylogeny of these two subfamilies, which peaks now with V. Puthz. Benick published 182 scientific papers, most of them on Coleoptera, particularly the Staphylinidae. A substantial work, "Pilzkäfer und Käferpilze", dealing with ecological aspects and interactions of beetles with mushrooms was published shortly after his death in 1952 (*Acta Zoologica Fennica* 70: 1–250). He described 389 species, mostly in the genus *Stenus*, and 3 genera in the Staphylinidae. [A.S.]

SOURCES: • *Lübekische Blätter* (1951): 113–114. • *Entomologische Blätter, Krefeld* 47 (1951): 49–54 [by O. Scheerpeltz, with bibliography, portrait]. • *Schriften des Naturwissenschaftlichen Vereines für Schleswig-Holstein* 26 (1952): 1 [by E. Schermer]. • *Verhandlungen des Vereines für die naturwissenschaftliche Heimatforschung* 31 (1954): XV–XVI [by K. Sokolowski, with bibliography]. • *Philippia* 8 (1997): 1–12 [by V. Puthz, with bibliography].

**Bernhauer, Max.** Bernhauer, the son of a clerk, was born on September 24, 1866, in Mohelnice (Müglitz, a birthplace shared with the genius coleopterist Edmund Reitter) in the Czech Republic (north-central Moravia). He died on March 13, 1946, in Horn, Austria.

Bernhauer obtained his education in Olomouc in Moravia (Czech Republic) and later went to the University in Vienna, Austria, where he obtained the title *doctor juris* in 1889. Bernhauer was professionally active as a notary, first in Vienna, then



Ludwig Benick



Max Bernhauer as a young man



Max Bernhauer later in life

in Stockerau and Grünburg, and finally (from 1912 until his death) in Horn (not far from Vienna).

Bernhauer was interested in nature in his early years and started to collect beetles during his university studies in Vienna, Austria. He became acquainted with several famous Viennese coleopterists, such as Ganglbauer, Luze, Spaeth, and others. It was Ganglbauer, in particular, who gave Bernhauer incentive and direction for his future scientific activities.

Bernhauer soon turned his attention to the family Staphylinidae and his first two papers appeared in 1898. He soon developed into one of the leading researchers on this family. His papers became indispensable to anyone studying the family, and his large collection became, and still is, an endless source of information on Staphylinidae. Early in his career Bernhauer published some analytical papers on Aleocharinae, including a monograph of the Palaearctic species of the genus *Leptusa* (1900), a treatment of the tribe Aleocharini of the Palaearctic region (1901, 1902), and a treatment of the "Tribus Leptocharina" (1903). These became standard references and identification tools for many years to come. Later, Bernhauer concentrated on describing new species and only rarely offered anything more in his papers. As the leading staphylinidologist, rivaled only by Cameron in some zoogeographic regions, Bernhauer must have been swamped by an endless flow of material collected in various parts of the world on numerous expeditions by many collectors. These samples contained a multitude of new species, which he obviously had barely enough time to describe. In 1910 Bernhauer, in coauthorship with K. Schubert and O. Scheerpeltz, became heavily involved in producing the world catalog of the Staphylinidae within the Junk-Schenkling *Coleopterorum Catalogus*. By 1926 this treatment of the 12,740 species of the family known at that time was finished. Scheerpeltz later produced a supplementary volume, containing corrections and additions inclusive 1932, which brought the number of known staphylinid species to 19,909 (see also under Scheerpeltz). The catalog served for decades as the indispensable, widely used "data base" on Staphylinidae. Bernhauer published 285 papers, of which few were coauthored. Bernhauer described 5,251 species and 342 genera in the Staphylinidae. His collection, containing the types of most taxa he described, was sold shortly after his death to the Field Museum of Natural History, Chicago, Illinois, where it is still housed. [A.S.]

SOURCES: • *Koleopterologische Rundschau* 5 (1916): 73–81 [by F. Rambousek, with incomplete bibliography containing some mistakes, portrait]. • *Koleopterologische Rundschau* 22 (1936): 187 [by F. Heikertinger, with portrait]. • *Arbeiten über die morphologische und taxonomische Entomologie aus Berlin-Dahlem* 3 (1937): 301 [anonymous]. • *Entomologische Blätter, Krefeld* 33 (1937): 15 [anonymous]. • *Entomologist's Monthly Magazine* 82 (1946): 160 [by C. M. Jarvis]. • *Zentralblatt für das Gesamtgebiet der Entomologie* 1 (1946): 95 [by K. E. Schedl]. • *Koleopterologische Rundschau* 31 (1948): 2 [anonymous]. • *Entomologische Blätter, Krefeld* 50 (1955): 235 [anonymous]. • *Index Litteraturae Entomologicae Serie II* (1963): 259 [by W. Derksen and U. Scheiding, with partial bibliography]. • *Philippia* 4 (1980): 248–261 [by V. Puthz, bibliography only].

**Bierig, Alexander.** Bierig was born at Karlsruhe, Germany, in 1884, as the last of four children of Ludwig Georg Phillipp, shoemaker, and his wife Josephine Mayer. He died on May 17, 1963, in San José, Costa Rica.

Bierig went to the *Grammarschool* in Karlsruhe from 1890 to 1899. Thereafter he studied for two years at a school for graphic arts and for four years at the Academy of Arts in Karlsruhe. After finishing his studies, Bierig worked for three years in Berlin. In 1908 he married Katherine Mathilde Postweiler and the couple moved to Paris, where Bierig illustrated scientific books and gave private classes. At the beginning of the First World War they had to return to Karlsruhe. After the war, during the difficult times in Germany (1919), Bierig accepted a proposition of the Russian emigrant family Mennikov to accompany them to Cuba. In Havana Bierig found work as a graphic artist, taught drawing and natural sciences at the German School, and also ran a private Art School.

Bierig became friends with F. Nevermann, the “father” of Costa Rican entomology. In 1938, while on a collecting trip with Nevermann in Costa Rica, he was seriously wounded in a hunting accident that was fatal to Nevermann. Bierig returned to Costa Rica in 1939 to stay for good. He soon became Professor of Entomology at the University of Costa Rica in San José. He retired from the University in 1954 and continued his affiliation as an honorary member of the University Council.

Bierig’s interest in coleopterology started during his stay in Paris, where he developed interest in ground beetles (Carabidae). Back in Karlsruhe, he published a paper in 1918 (*Societas Entomologica* 33: 13–15) dealing with some Carabini, describing a new subspecies of *Carabus glabratus* and *Carabus cancellatus*. However, it was only after he moved to Cuba that his involvement with entomology became a significant part of his life and career, and that his interest turned to rove beetles. Between 1931 and 1940, he published 31 papers dealing with this family, describing over 159 new species and 34 genera. While in Costa Rica, he also published one article dealing with the Pselaphidae (now included in Staphylinidae). However, most of Bierig’s publications as a professional entomologist dealt with the biology and control of insects injurious to tropical crops.

During the late years of Bierig’s life, and particularly after his death, his collection (about 26,000 specimens) and library suffered considerable damage due to the tropical climate and lack of proper maintenance. However, both were rescued when they were purchased in 1966 by The Field Museum of Natural History in Chicago, where they remain. [A.S.]

SOURCES: • *Bulletin Field Museum of Natural History* 37 (1966): 6 [anonymous]. • *Philippia* 8 (1998): 209–215 [by V. Puthz, with bibliography, portrait]. • *Collectiones entomologicae* (1990): 40 [by G. Friese and R. Gaedike].

**Blackburn, Thomas.** Blackburn was born at Islington, near Liverpool, England, on March 16, 1844, and died on May 28, 1912, at Woodville, near Adelaide, Australia.

Blackburn was ordained a deacon by the Bishop of Manchester in 1869, and the following year he was transferred to Honolulu, where he collected insects of all orders. After going



Alexander Bierig



Thomas Blackburn



Richard Elliot Blackwelder

to Australia, he took charge as rector of St. Thomas' at Port Lincoln in 1882, and in 1886 he was appointed rector of St. Margaret's at Woodville for the rest of his life.

His first published note was in conjunction with his brother, J. B. Blackburn; it was a list offering various Lepidoptera in exchange for Noctuidae and it appeared in *The Entomologist's Weekly Intelligencer* in 1860. After the *Intelligencer* ceased publication, the two Blackburns published and edited *The Weekly Entomologist*, which after two years gave place to the present *Entomologist's Monthly Magazine*, of which Blackburn was one of the original editors. Apparently through the influence of C. O. Waterhouse of the British Museum, Blackburn soon diverted his attention from the Lepidoptera to the Coleoptera.

In Australia Blackburn worked on most families of beetles at various times, but eventually he dedicated himself primarily to Scarabaeidae. He became the foremost Australian coleopterist, who, together with his two predecessors, W. J. MacLeay and F. P. Pascoe, established a solid foundation for the knowledge of the Australian Coleoptera. He described 3,069 Australian beetle species. Staphylinidae was not his favorite family; consequently he described only about three dozen Australian taxa (almost all at the specific level), mostly during his early years in Australia, from 1888 to 1895. In 1895, Blackburn also described, in a joint paper with David Sharp, a few species of Hawaiian Staphylinidae, which he collected while stationed in the Hawaiian Islands (see above). He described 95 species and 3 genera in Staphylinidae. The types of almost all the staphylinids he described are apparently deposited in the British Museum (Natural History), London. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 48 (1912): 219 [anonymous]. • *Entomological News* 23 (1912): 436 [anonymous]. • *Transactions of the Royal Society of Australia* 36 (1912): V–XI, [by A. M. Lea, with bibliography, portrait; followed by a list of species described by Blackburn (pages XIII–XL) with the deposition of types, at that time.]. • *Proceedings of the Entomological Society of London* (1912): CLXVIII [by F. D. Morice]. • *Russkoe Entomologicheskoe Obozrenie* 13 (1913): 639 [by Semenov-Tianshansky]. • *Bibliography of Australian Entomology 1775–1930* (1932): 23–26 [by A. Musgrave with bibliography]. • *Proceedings of the Royal Society of Queensland* 60 (1949): 71–72 [anonymous]. • *Index Litteraturae Entomologicae Serie II* (1963): 290–291 [by W. Derksen and U. Scheiding, with bibliography].

**Blackwelder, Richard Elliot.** Blackwelder, of the USA, was born on January 29, 1909, and died on January 20, 2001. By the time he was working on his doctoral degree at Stanford University with the guidance of the well-known morphologist G. F. Ferris, Blackwelder was interested in the Staphylinidae. It was at Stanford that he completed his classic *Morphology of the Coleopterous Family Staphylinidae*, published in 1936. During subsequent years he published his monograph on the West Indian Staphylinidae (1943), a checklist of beetles for the West Indies, Mexico, Central, and South America (1944–1947, 1957), and *The Generic Names of the Beetle Family Staphylinidae* (1952). In spite of whatever deficiencies these three works have,

they are standard references for study of the family and, as yet, have not been replaced. He published a few shorter articles revising the North American species of *Tachyporus*, the generic classification of the Paederini, the species of *Trigonurus*, and the tribal and subtribal classification of part of the Osoriinae. In these works he named 256 species and 59 genera. Although he was not well known as a collector, he collected in Panama in 1931, and on various islands of the West Indies for 21 months from June 1935 through March 1937. He collected about 50,000 specimens in the West Indies and treated 91 genera and 468 species in his monograph of the species of the region. His work on generic names included about 2,500 names, and, for the first time, stated the type species of each genus along with the method and source of fixation. His checklist of Latin America beetles included more than 178,000 nominal species. After graduating from Stanford, Blackwelder was a Bacon Traveling Scholar for the Smithsonian (1935–1938), an Assistant Curator at the American Museum of Natural History (1938–1940), and an Assistant and Associate Curator at the Smithsonian Institution (1940–1954). He then left the museum world to begin his teaching career at St. John Fisher College in New York State (1956–1958), and finally moved to Southern Illinois University (1958–1977), where he remained until retirement. After he left the Smithsonian he never again worked on the Staphylinidae. He was active in the Society of Systematic Zoology from its formation through at least the late 1960s.

**Boháč, Jaroslav.** Boháč, from the Czech Republic, was born in 1952. In the course of his ecological studies he found staphylinids to be among the most interesting and diverse beetles in terms of the number of species and life-strategies. He thinks staphylinids, which are little known ecologically, are in some cases more sensitive bioindicators of environmental change than carabids. He is particularly interested in the taxonomy of the Paederinae and Staphylininae and in all staphylinids ecologically. His long-range goal is to develop methods for using staphylinids (and other epigeic invertebrates) as bioindicators of landscape deterioration. He published a series of articles summarizing the taxonomy of the Paederinae for Czechoslovakia; the work includes keys, descriptions, illustrations, and distributions for each species. He has also published a number of articles describing new species, giving larval or pupal features, or making taxonomic changes. He has published 16 species.

**Bordoni, Arnaldo.** Bordoni, from Italy, was born on July 13, 1938. He first became interested in the Staphylinidae as a result of his many contacts with Tottenham, Fagel, and Jarrige and due to the encouragement and influence of his mentor, Henri Coiffait. Coiffait, who had high regard for Bordoni, left him his enormous microfilm collection of staphylinid literature. When Bordoni became interested in the family, he was the first student of the group in Italy since Gridelli. He is particularly interested in the Xantholinini, Paederinae, Steninae, and Omaliinae, with an emphasis on *Lesteva*, *Geodromicus*, and *Deliphrosoma* in the latter subfamily and he wants to revise all the species of the Xantholinini of the world. He recently completed a revision

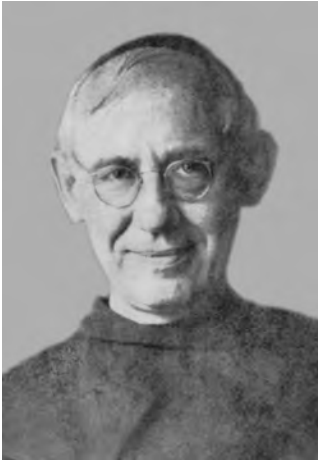


Jaroslav Boháč



Arnaldo Bordoni





Thomas Borgmeier

of the xantholinines of southeast Asia in which he has described hundreds of new species and dozens of new genera. Next, he plans to study the xantholinine faunas of Japan, China, Australia, and the Polynesian region. Bordoni has published many articles on the Palaearctic Xantholinini, has written the Xantholininae volume for the *Fauna d'Italia*, and has written revisions of Italian *Quedius* and Palaearctic species of *Medon* and *Geodromicus*. In 1973 he described the only troglotic staphylinid known from Italy, and through the years has published many articles on a variety of other species and genera. Through 1997 he described 163 species and 16 genera.

**Borgmeier, Thomas.** Borgmeier was born in Bielefeld (Westfalen), Germany, on October 31, 1892. He died on May 11, 1975, in Rio de Janeiro, Brazil.

Borgmeier attended the *gymnasium* in Bielefeld, and after graduation (1910), he went to Brazil and joined the Franciscan Order of Friars Minor in 1911. He studied philosophy in Curitiba from 1912 to 1914 and theology in Petropolis from 1915 to 1918. He became interested in entomology while a student in Petropolis, while observing the habits of ants. In 1917, he met and befriended Hermann von Ihering, the founder of the Museo Paulista in São Paulo. Through the generosity of a wealthy industrialist in Rio de Janeiro, Borgmeier acquired von Ihering's large reprint library on ants and a binocular microscope, and began his entomological studies. In 1922, through Dr. A. Neiva, Borgmeier obtained approval to pursue a career in entomology from the Franciscans. In 1923 he became an adjunct research scientist in the National Museum in Rio de Janeiro and moved to the Museum in 1924. In 1928 he went to São Paulo as an assistant in entomology in the new Instituto Biologico. In 1933 he returned to Rio de Janeiro to become the head of the entomological section of the Instituto de Biologia Vegetal in the Botanical Garden. In 1931 Borgmeier founded the international journal, *Revista de Entomologia*, which he edited and published until 1951, when financial difficulties ended its publication. He then started the series of entomological monographs *Studia Entomologica* which became a journal in 1958. Around 1973, due to serious health and eyesight problems, Borgmeier retired from his entomological activities to seek refuge in the ancient St. Anthony's monastery in the city of Rio de Janeiro.

During his lifetime, Borgmeier published 243 papers, dealing mostly with taxonomy and biology of the dipteran family Phoridae and of the ants (including a large monograph of the Ecitonini of the Neotropical Region). While studying the phorids and ants, Borgmeier inevitably became interested in the study of myrmecophilous and some termitophilous beetles, particularly in ecitophilous Staphylinidae, Pselaphidae, and Histeridae. About 20 of his papers deal with this topic; about 91 species and 35 higher taxa in Staphylinidae are described in them. [A.S.]

SOURCES: • *Revista de entomologia Rio de Janeiro* (1946): 476–480 [by T. Borgmeier, with bibliography]. • *Revista de entomologia Rio de Janeiro* 20 (1949): 1–2 [by J. D. Hood, with portrait]. • *Studia Entomologica* 14 (1971): 349–368 [by T. Borgmeier, with bibliography]. • *Studia Entomologica* 18 (1975): 1–2 [by W. W. Kempf]. • *Studia Entomologica* 19

(1976): 1–37 [by W. W. Kempf, with portrait]. • *Beiträge zur Entomologie* 27 (1977): 329 [by K. Rohlfien]. • *Proceedings of the Entomological Society of Washington* 80 (1978): 141–144 [by W. W. Wirth, W. H. Robinson, and W. W. Kempf, with portrait]. • *Beiträge zur Entomologie* 35 (1985): 375 [by R. Gaedike].

**Broun, Thomas.** Broun was born in Edinburgh, Scotland, on July 15, 1838. He died on August 24, 1919, in Auckland, New Zealand. Both his father and an uncle (Captain Thomas Broun) were reputable naturalists and they undoubtedly influenced him in his interest in natural sciences.

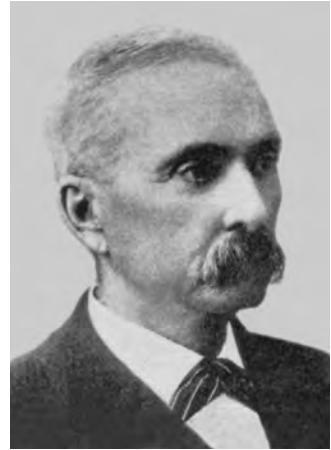
Broun joined the army at the age of 16, during the Crimean War. After the war he accompanied his regiment to Burma and later to India, where he stayed during the entire period of the Indian Mutiny. He retired from the army in 1862, married, and emigrated to New Zealand in 1863. When the Maori War broke out, he was commissioned as a Captain, served the entire war and was promoted to the rank of Major.

Immediately after the Maori War, Broun started to work actively in New Zealand entomology, devoting himself almost exclusively to Coleoptera. In 1890, he was appointed Government Entomologist, a post which he held for several years. In 1880 the Colonial Museum and Geological Survey in Wellington published his *Manual of New Zealand Coleoptera*, which contained 1,140 species. Supplementary parts appeared between 1881 and 1893. These publications increased the number of known New Zealand Coleoptera to 3,979. In Staphylinidae, Broun described 198 species and 10 genera. The types of the staphylinid taxa described by him are deposited in the British Museum (Natural History), London; some may be in Auckland. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 55 (1919): 264 [anonymous]. • *Proceedings of the Entomological Society of London* (1919): XC [by J. J. Walker]. • *Entomological News* 31 (1920): 149 [anonymous]. • *Transactions and Proceedings of the New Zealand Institute* 52 (1920): IX–X [by T. F. Cheesman, with portrait]. • *Smithsonian Miscellaneous Collections* 84 (1930): 402–403 [by L. O. Howard, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1963): 374 [by W. Derksen and U. Scheiding, with bibliography].

**Bruch, Carlos.** Bruch was born in 1869 in München, Germany. He died on July 3, 1943, in Vicente López (provincia de Buenos Aires), Argentina.

From his early years Bruch was interested in natural sciences. Following the wishes of his father, he interrupted his secondary education at the age of 14 and joined his father's business to learn graphical procedures that were rapidly improving at the time. Then in October 1887, at age 18, he reluctantly followed his father to Argentina. In December 1887, he acquired a job fulfilling the photographic and reproduction needs of the newly built, Museo de La Plata. Bruch brought to Argentina his collection of insects, upon which the entomological section of the Museum was established. Although he was self-taught, he eventually became the head of the section, and in 1906 he was named



Thomas Broun



Carlos Bruch



Hubert Bruge



Lars Brundin

professor of zoology at the Universidad de La Plata; his courses of entomology and zoogeography were very popular. In 1915 he was awarded the title of *doctor honoris causa* in natural sciences. After his retirement, he was named Honorary Academician and Honorary Head of the Department of Zoology by the Museum.

Bruch's entomological research and his publications cover a wide variety of insect groups, and, within the Coleoptera, many families. In Staphylinidae, he contributed significantly to our knowledge of the myrmecophilous and termitophilous species. He described 27 species and 15 genera in Staphylinidae. [A.S.]

SOURCES: • *Revista de la Sociedad Entomológica Argentina* 9 (1937): 18–21 [by C. A. Lizer y Treles, bibliography only]. • *Revista de la Sociedad Entomológica Argentina* 12 (1943): 48–50 [by M. Birabén]. • *Anales de la Sociedad Científica Argentina* 137 (1943): 169–183 [by C. A. Lizer y Treles]. • *Revista de la Sociedad Entomológica Argentina* 12 (1943): 71–91 [by C. A. Lizer y Treles, with bibliography, portrait]. • *Revista Entomológica, Rio de Janeiro* 14 (1943): 528–529 [by C. Mello Leitão]. • *Revista del Museo de La Plata. Sección Oficial* [1943] (1944): 107–132 [by M. Birabén, with bibliography and portrait]. • *Zentralblatt für das Gesamtgebiet der Entomologie* 1 (1946): 63 [by K. Schedl]. • *Curso Entomológico* 1 (1947): 41–42 [by C. A. Lizer y Treles].

**Bruge, Hubert.** Bruge, from Belgium, was born on May 5, 1922. About 15 years ago he retired from teaching biology in high school and zoology at the Free University of Brussels and bought a country house with a 20 acre garden outside of Brussels. He became interested in the insect fauna on this plot of land and was surprised to discover there about 250 species of staphylinids, about a quarter of the fauna of the country. Among them were two species unknown in Belgium. Those discoveries kindled his interest in the family. Because of his age, he elected to limit his studies to the Belgian fauna. He encouraged collectors throughout the country to seek staphylinids. During the last 15 years he has determined about 80,000 Belgian staphylinids, including 40 species that are new to the country. In 1992, in collaboration with D. Drugmand and G. Haghebaert, a catalog of the Belgian staphylinids was begun. His primary interests remain field observations and the study of the ethology of species, particularly those in the Aleocharinae.

**Brundin, Lars.** Brundin was born on May 30, 1907, in Torstuna, Sweden, the son of J.A.Z. Brundin, a respected, well-known teacher and amateur lepidopterist. He died on November 18, 1993, in Stockholm, Sweden.

Brundin graduated from the *gymnasium* at Växjö (not far from Linné's birthplace) in 1925 and in the same year he entered the Lund University, specializing in entomology. His professor was Simon Bengtsson, one of C. G. Thomson's favorite disciples. It is a good guess that Bengtsson, well aware of Thomson's affection for Aleocharinae, influenced Brundin's first choice of the target group for his systematic studies. While at the Lund University, Brundin worked as an assistant at the Entomological Museum where Bengtsson was the head. During the sum-

mers of 1927 and 1928, Brundin surveyed the insect fauna of Abisko in Swedish Lapland, and during the five subsequent summers, the beetle fauna of the nearby Torneträsk area. This activity resulted in his Ph.D. thesis “Die Koleopteren des Torneträskgebietes”, defended and published in 1934. In this he demonstrated his wide knowledge of the northern beetle fauna, as well as his already developed interest in Staphylinidae.

In 1936 Brundin received a scholarship at the Fresh Water Institute in Drottningholm near Stockholm and started his career as a limnologist and famous chironomid taxonomist. He stayed at the Institute for 20 years and pursued his studies on Palaearctic Aleocharinae and European Chironomidae. Several remarkable works in both fields resulted. In 1957 he was appointed professor and the head of the Entomology section of the Museum of Natural History in Stockholm, a post he held until his retirement in 1973. In 1969 he was elected a member of the Royal Swedish Academy of Sciences and in 1984 he received the Linnaeus-medal in gold. He was the chairman of the Entomologiska Föreningen i Stockholm (Entomological Society of Stockholm) from 1952 until 1977.

Brundin undertook many chironomid collecting trips that led him to many areas of the world, including Canada and the United States in 1957. Unfortunately, during his foreign trips Brundin rarely collected anything other than chironomids.

The staphylinid subfamily Aleocharinae was Brundin's focal point during his early career and it is unfortunate (from our egoistic point of view, of course) that he eventually entirely abandoned the group for chironomids. His first paper, describing a new species of *Gnypeta sellmani* from Torneträsk area, appeared in 1929. A number of revisions of Palaearctic species belonging to different *Atheta*-groups followed, the last one (on *Dimetrota*) appearing in 1953. His last paper on *Atheta* seems to be the one published in *Norsk Entomologisk Tidsskrift* in 1954.

Carl H. Lindroth described Brundin, in an homage presented to him at his 60th birthday, as an ardent, sporty, self-disciplined researcher and analytical thinker with a God-given talent for drawing, an unusual working capacity, and a keen, sharp eye. [A.S.]

Brundin described 42 species and 2 genera in Staphylinidae.

SOURCES: • *Opuscula Entomologica* 32 (1967): 179–181 [by C. H. Lindroth, with portrait]. • *Utveckling och forskning vid Naturhistoriska riksmuséet. Stockholm* (1989): 57–66 [by Kronstedt and Tornbjörn]. • *Cladistics* 9 (1993): 357–367 [partly by L. Brundin, with portrait]. • *Entomologisk Tidsskrift* 116 (1995): 1–12 [English translation of Brundin's essay in *Cladistics* (see above), with portraits]. • In: *Chironomids: From Genes to Ecosystem* [E. Cranston, ed.], Melbourne (1995?): I–VI [by E. J. Fittkau, with bibliography, portrait].

**Cameron, Malcolm.** Cameron was born in 1873 and died on October 31, 1954, in London.

Cameron obtained his M.D. degree at the London Hospital and entered the British army as a naval surgeon. During his active service, which included the Boer War, the Battle of the Falkland Islands (during the First World War), and the East



Malcolm Cameron



John Milton Campbell

African Campaign, he collected Coleoptera at various locations. After the First World War he was posted to Admiralty for two years, but he chose to retire after two years (in 1920) with the rank of Surgeon-Commander, and devoted the rest of his life to entomology. He went to the Indian Forestry Research Institute in Dehra Dun and collected staphylinids extensively in the foothills of the Himalaya.

Due to a lung illness, he returned in 1925 to London via Switzerland and began the work on his largest contribution to the knowledge of the Staphylinidae. His five-volume treatment of this family in the series *The Fauna of British India* has become a standard manual and reference work for India and neighboring countries. Cameron authored 206 additional papers, most of them on Staphylinidae, that were published in a large number of journals worldwide. In general, Cameron's most important contribution concerns the staphylinid fauna of the Oriental region, although he also published on taxa from the Palaearctic and other zoogeographic regions. He described over 4,000 taxa in Staphylinidae. His collection, containing some 55,000 specimens, was bequeathed to the British Museum (Natural History), London. The curated part includes about 35,000 specimens representing 9,200 species, of which 2,230 are represented by holotypes and 1,064 by paratypes.

Cameron described 4,136 species and 195 genera in Staphylinidae. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 90 (1954): 290 [by E. B. Britton]. • *Proceedings of the Royal Entomological Society of London* (C) 19 (1955): 68 [by P. A. Buxton]. • *Beiträge zur Entomologie* 5 (1955): 666 [by H. Sachtleben]. • *Entomologische Blätter, Krefeld* 52 (1956): 97 [by G. Schmidt]. • *Publicações culturais da Companhia de diamantes de Angola* 48 (1959): 111–112 [by A. De Barros Machado]. • *Philippia* 5 (1986): 301–310 [by V. Puthz, with bibliography].

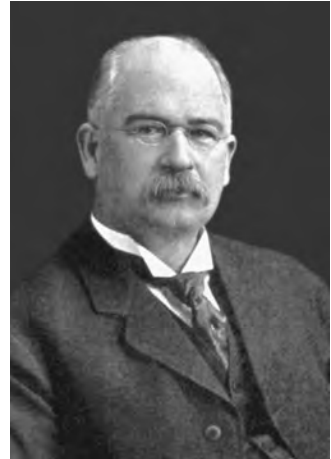
**Campbell, John Milton.** Campbell, who spent most of his professional career in Canada, was born in the USA on December 19, 1935. His doctoral work at the University of Illinois was a revision of a genus of Alleculidae. After finishing his doctorate, he worked for the University of Kentucky, but was stationed in Guatemala (1964–1966), where he studied the ecology and control of the Coffee Leaf Miner. He began working on the Staphylinidae in August 1966 after he was hired by the Biosystematic Research Institute in Ottawa, which had advertised specifically for someone to study the family. He started with the group knowing almost nothing, but went on to contribute many revisionary studies. Among them are revisions of the New World Micropeplinae and Oxyporinae, the North American species of the omaliine genera *Haida*, *Pseudohaida*, *Acidota*, *Olophrum*, *Arpedium*, *Porrhodites*, and *Orochares*, and the tachyporine genera *Tachinus*, *Tachinomorphus*, *Sepedophilus*, *Tachyporus*, *Coproporus*, *Mycetoporus*, *Ischnosoma*, *Bryoporus*, *Bryocharis*, and *Lordithon*. Before retiring in 1993, he had begun publishing on Asian genera. He published a number of shorter articles to update previous works or describe interesting new genera or species. Campbell described 154 species and 14 genera.

**Casey, Thomas Lincoln.** Casey was born in West Point, New York, USA, on February 19, 1857, the son of General Thomas Lincoln Casey and Emma Weir. He died on February 3, 1925, in Washington, D.C., USA. The microscope Casey used during his long entomological career was buried with him.

Casey graduated with high honors from the United States Military Academy in 1879. His army duties led him to Long Island, Virginia, Mississippi, Texas, California, and South Africa. At all these locations Casey used every opportunity to collect beetles. In addition to the material he collected, he enlarged his collection through generous purchases, so it eventually became one of the most remarkable private collections. At the same time, he kept building his coleopterological library with the idea that it would become self-sufficient. His collection and library were so extensive that Casey had to rent two apartments, one for his collection and library, and the other for his residence.

Coleopterology was not Casey's only scientific activity. In earlier years, as a young lieutenant, he was quite successful in theoretical and applied astronomy. Much has been written (see sources below) about Casey's coleopterological activities and his contribution to the knowledge of the North American beetle fauna. His very keen sense for detailed observations and his philosophy that even slight differences observed on a specimen justified assignment to a different species opened him to plenty of criticism. On the other hand, there is no doubt that Casey contributed enormously to the knowledge of North American Coleoptera, particularly in the family Staphylinidae. Before Casey's work, only a small fraction of North American species had been described, particularly in Aleocharinae, Steninae, etc., and knowledge of the family was seriously lagging behind that of the Palaearctic region. After Casey's work, there was a much better idea about the composition of the Nearctic fauna. Casey's collection of Coleoptera was bequeathed to the National Museum of Natural History (United States National Museum at the time of Casey's death), Washington, D.C. The collection contains almost 117,000 specimens, representing over 19,000 named forms, and over 9,200 holotypes. A sizeable portion of these are holotypes of species belonging to Staphylinidae. Casey published 77 papers between 1884 and 1924. About 20 of them deal at least partially with the Staphylinidae and some are major contributions. He described 1,805 species and 248 genera in Staphylinidae. [A.S.]

SOURCES: • *Bulletin of the Brooklyn Entomological Society* 9 (1914): 72 [by F. Grinnell]. • *Catalogue of the Coleoptera of America, North of Mexico* (1920): 375–376 [by C. W. Leng, bibliography only]. • *Pan-Pacific Entomologist* 2 (1925): 90–91 [by F. E. Blaisdell]. • *Entomologist's Monthly Magazine* 61 (1925): 136 [by G. C. Champion]. • *Entomological News* 36 (1925): 97–100 [by C. W. Leng, with bibliography]. • *Natural History* 25 (1925): 206–207 [by C. W. Leng]. • *Proceedings of the Entomological Society of Washington* 27 (1925): 41–43 [by E. A. Schwartz and W. M. Mann, with portrait]. • *Entomological News* 37 (1926): 175–179, 198–202 [by M. H. Hatch, with bibliography]. • *History of Entomology* (1931): 565–567 [by E. O. Essig, with portrait]. • *Fragments of Entomological History* (1931):



Thomas Lincoln Casey



*Marcello Cerruti*



*George Charles Champion*

175–176 [by H. Osborn, with portrait]. • *Smithsonian Miscellaneous Collections* 94 (1935): 1–15 [by L. L. Buchanan, with bibliography, portrait]. • *Coleopterist's Bulletin* 1 (1941): 67–68 [by R. H. Arnett]. • *Index Litteraturae Entomologicae Serie II* (1963): 445–446 [by W. Derksen and U. Scheiding, with partial bibliography]. • *American Entomologists* (1971): 260–264 [by A. Mallis, with portrait].

**Cerruti, Marcello.** Cerruti was born on October 9, 1908 in Roma, Italy, where he died on August 28, 1978.

Cerruti's keen interest in nature and insects became focused on beetles after the young Cerruti met in 1928 Paolo Luigioni, a well known Italian naturalist of that time, who studied Coleoptera and Hymenoptera. Under his guidance Cerruti started to survey the beetle fauna of the massifs of the Appennines (Italy), and learned the principles of scientific work. Cerruti eventually became fascinated by the mountains and was an active alpinist, and in 1935 a member of the Club Alpino Italiano.

Before and just after the Second World War, Cerruti was actively studying immature stages of beetles, particularly those of Carabidae and Staphylinidae. Later, influenced by his friendship with S. Patrizi, Cerruti became interested in the fauna of caves and eventually also in the palaeontology of man, as demonstrated by his membership in the Istituto Italiano di Paleontologia Umana. Together with Patrizi and his other friend, H. Henrot, he took part in a speleological expedition to Sardinia and summarized some results, as well as the results of other cave explorations, in numerous publications. He also undertook, together with Henrot, fieldwork in Cyprus and, on several occasions, in various areas of Greece. During all his explorations Cerruti also collected Hymenoptera (but he never published on them); his sizeable collection of Hymenoptera is housed at the Istituto di Entomologia dell'Università di Torino. Most of his collection of Coleoptera is deposited at the Istituto Nazionale di Entomologia, Roma.

Cerruti published 42 papers, about 10 of them dealing with Staphylinidae, several of them dealing with the immature stages. He described 5 species in Staphylinidae. [A.S.]

SOURCES: • *Fragmenta Entomologica, Roma* 15 (1979): 1–6 [by E. Colonnelli and A. Vigna Taglianti, with bibliography, portrait]. • *Entomologische Blätter, Krefeld* 78 (1982): 47 [by W. H. Lucht].

**Champion, George Charles.** Champion was born in Walworth (London), England, on April 29, 1859, as son of a clock- and watchmaker. He died on August 8, 1927, in Horsell, Woking, Surrey, England.

Champion became interested in beetles early in his life. While in his late twenties, he became associated with Frederick DuCane Godman and Osbert Salvin, who engaged him to collect for *Biologia Centrali-Americana* in Central America. Champion eventually also became involved with the series as a contributor and subeditor. His achievements in this area are described in the obituary published in the *Entomological News* and in the *Entomologist's Monthly Magazine* (see below).

Champion published over 420 papers during his career, but only a few of them were on the Staphylinidae. They dealt with the species collected by his son H.G.C. Champion in India. Most of them were published under the running title "Some Indian Coleoptera" in the *Entomologist's Monthly Magazine*, of which Champion was an editor from 1891 until the time of his death. There were at least 23 papers in this sequence and about 11 of them included the descriptions of about 84 species and 4 genera of Staphylinidae. [A.S.]

SOURCES: • *Entomologist* 60 (1927): 215–216 [anonymous]. • *Entomological News* 38 (1927): 326–328 [by R. P. Calvert]. • *Proceedings of the Entomological Society of London* 2 (1927): 103 [by J. E. Collin]. • *Entomologist's Record and Journal of Variation* 39 (1927): 131 [by H. J. Turner]. • *Nature, London* 120 (1927): 415 [by J. J. Walker]. • *Proceedings of the Linnean Society of London* (1927): 111–112 [by J. J. Walker]. • *Entomologist's Monthly Magazine* 63 (1927): 197–203 [by J. J. Walker, with portrait]. • *Centennial History of the Entomological Society of London* (1933): 54 [by A. Neave]. • *Fragments of Entomological History* (1937): 146 [by H. Osborn]. • *Index Litteraturae Entomologicae Serie II* (1963): 456–460 [by W. Derksen and U. Scheiding, with partial bibliography].

**Cho, Young Bok.** Cho was born in Korea on August 6, 1959, and became interested in staphylinids through his work with the Silphidae, which he studied as part of his Master's degree program. He has been collecting Korean staphylinids since 1984 and by now has a well-developed collection. He is interested in the Staphylininae and the Paederinae, particularly those in Korea and in Far Eastern Asia. Currently he is working on genera of the Staphylininae of Korea. He has published articles on the Korean species of *Gabronthus*, *Neobisnius*, *Erichsonius*, the Quediini and *Osorius*, and has described six species.

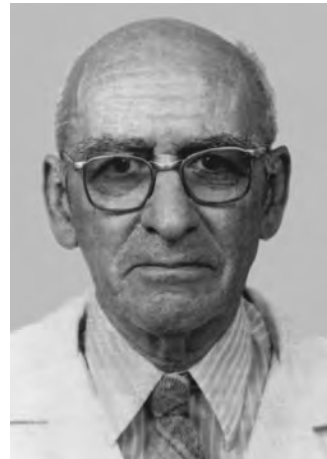
**Ciceroni, Alessandro.** Ciceroni, of Italy, has been publishing on staphylinids since 1990, beginning with an article on *Atracus*. He also published a revision of the Italian *Leptacinus*, co-authored an article on *Megalinus*, and was a contributor to the staphylinid part of the *Checklist delle specie della Fauna Italiana*. He has described one species.

**Coiffait, Henri.** Coiffait was born in Moutiers-au-Perche (Orne), France, on June 28, 1907. He died on May 21, 1989, in Toulouse, France.

Coiffait developed an interest in coleopterology very early and by 1939 he had already accumulated an important general collection of French beetles. During the war years he became interested in speleology and that eventually became an important part of his scientific career, as documented by the fact that, of his 280 publications, 57 deal with the cavernicolous fauna. After the Second World War he held the post of the *Attaché de Recherches* at the CNRC laboratory at Moulis (Ariège) and after 1958 he was associated with the Faculté des Sciences de Toulouse, eventually as the *Maître de Recherches*. He received the Dolfuss Prize in 1959. He acted as editor of the *Annales de Spéléologie* after the establishment of the journal in 1959. In



Young Bok Cho



Henri Coiffait





*Giulio Cuccodoro*

1970 he founded the journal *Nouvelle Revue d'Entomologie*, and the first issue appeared in 1971. Coiffait's largest and most important contribution, "Coléoptères Staphylinidae de la région paléarctique occidentale", appeared subsequently as several supplements to this journal from 1972 to 1984.

Coiffait made an enormous contribution to the knowledge of Staphylinidae. He was one of the authors whose research, in one way or another, profoundly affected the taxonomy of the family (except for Aleocharinae), particularly in the subfamilies Leptotyphlinae, Paederinae, and Staphylininae. His paper "Monographie des Leptotyphlites", published in 1959, established a solid foundation for the entire school of subsequent authors studying this family of indigenous staphylinids. In his work, Coiffait relied heavily on the structures of the male genitalia, and paid insufficient attention to either previously published works or the International Code of Zoological Nomenclature. Consequently, many taxa that he established were subsequently criticized and disputed. His most important contributions to the knowledge of Staphylinidae were his papers dealing with the west Palearctic fauna. Coiffait published 280 papers, in which he described 1,899 species-level taxa, and 178 generic-level taxa of Coleoptera (families Carabidae, Leiodidae, and Staphylinidae), but the vast majority of them in Staphylinidae (1,775 at the species level, 158 at the generic level). Coiffait's collection (containing 799 holotypes, 5,020 paratypes, and 1,907 species) is housed in the Muséum National d'Histoire Naturelle in Paris, France. A list of type specimens contained in this collection was published in the *Bulletin de la Société d'Histoire naturelle de Toulouse* 125 (1986): 127–142. [A.S.]

SOURCES: • *Bulletin de la Société d'histoire naturelle de Toulouse* 18 (1990): 7 [by P. Cassagnou, with portrait]. • *Nouvelle Revue d'Entomologie* (N.S.) 7 (1990): 5–57 [by J. Orousset, with bibliography, portrait]. • *Mémoires de Biospéléologie* 18 (1991): 307–314 [by C. Juberthie and J. Orousset, with bibliography].

**Cuccodoro, Giulio.** Cuccodoro, of Switzerland, was born on April 12, 1963. He became interested in staphylinid studies due to his association with Ivan Löbl. The groups of major interest to him are the Pselaphinae and the proteinine genus *Megarthus*; his research includes taxonomic, phylogenetic, biogeographic, and behavioral studies. He has been working on a revision and phylogeny of *Megarthus* and, as of 1998, had published articles revising the species of the Afrotropical, North American, New Guinean, and Palearctic regions including Japan. He has also discussed the phenomenon of "water loading" behavior in *Megarthus* and a few other genera. One goal is an analysis of the taxonomy and phylogeny of the Pselaphinae of the Oriental region. Through 1998 he had described 52 species.

**Curtis (Ruricola), John.** Curtis was born in Norwich, England, on September 3, 1791, and died on October 6, 1862, in London.

Curtis showed an interest in natural objects from his earliest years. He was sent to school at Norwich at the age of four. During his school years he demonstrated unusual talent for draw-

ing, particularly flowers. He also started to collect butterflies, and made some excursions in the vicinity of Norwich with friends. These excursions awoke in him a love for entomology that lasted his entire life. At the age of 16 Curtis started to work in the office of a solicitor, but this employment did not last very long, since he was not interested in pursuing a law career. He met Mr. S. Wilkin, who had a large collection of insects, and for some time he stayed with him as a curator of his collection. Since Mr. Wilkin was often consulted by many eminent naturalists of that time, Curtis soon became acquainted with celebrities such as Kirby, Hooker, Lindley, and others. By that time he had also become quite a competent illustrator.

In 1819 Curtis went to London and was introduced, as a friend of Kirby, to Sir Banks, Leach, and many other leading scientists of the day. His outstanding abilities in the field of scientific illustration soon led to engagements with the Linnean, Horticultural and other societies. At about that time, Curtis started his work on the *British Entomology*, and the first part appeared in 1824. He continued this work without interruption until 1839, when the final part (16) appeared. The 769 color plates illustrating the 16 volumes were considered by the entomological community "unsurpassed by any entomological illustrations in existence". During his work on *British Entomology*, Curtis also published *A Guide to an Arrangement of British Insects* (1829). Both *British Entomology* and the *Guide* were in direct competition with similar works of Stephens that appeared more or less simultaneously (see under Stephens for details). It comes, therefore, as no surprise that there was a great deal of animosity between these two eminent British entomologists. Fortunately, they were eventually able to settle their differences before Stephens' death in 1852. In 1841 Curtis became the editor of the entomological part of the journal *Gardener's Chronicle*. He wrote over 100 popular illustrated articles for this journal, mostly on pest insects. These articles were signed "Ruricola".

The two Curtis publications mentioned above became important for the taxonomy of Staphylinidae, as well as for many other beetle families, mainly as sources of early type species designations. But they also created some problems and disputes as to the authorship of many genera (Curtis versus Stephens, see above). Curtis described 18 species and 8 genera in Staphylinidae. [A.S.]

SOURCES: There are many biographies/obituaries of Curtis, therefore only selected ones are given here. A detailed listing may be found in Evenhuis (1997). • *Proceedings of the Entomological Society of London* (1862): 122–125 [by F. Smith]. • *Proceedings of the Entomological Society of London* (1863): XXXV–XLI [anonymous]. • *Annales de la Société Entomologique de France* (4)3 (1863): 525–540 [by J. O. Westwood]. • *Entomological News* 8 (1897): 75 [by V. L. Kellog]. • *Smithsonian Miscellaneous Collections* 84 (1930): 44, 207, 218–220, 232, 271 [by L. P. Howard, with portrait]. • *Centennial History of the Entomological Society of London* (1933): 139–140 [by A. Neave]. • *Index Litteraturae Entomologicae* (1928): 224–229; (1929): 1388 [by W. Horn and S. Schenkling, bibliography only]. • *John Curtis and the Pioneering of Pest Control* (1974): 121 pp. [by G. Ordish]. • *Literatura Taxonomica*



John Curtis (*Ruricola*)



Patrick Dauphin

*Dipterorum* (1997): 164–167 [by N. L. Evenhuis, partial bibliography only].

**Dauphin, Patrick.** Dauphin was born on March 17, 1948, in Bordeaux, France. He decided to study staphylinids because they are so numerous when collecting and because there are so many species. His principal interests include the western Palearctic Proteininae and Steninae and some genera of the Aleocharinae. At the moment he is working on the *Phloeopora*. He has published a number of articles on the staphylinids of France and has reported on the taxonomy and distribution of such genera as *Proteinus*, *Metopsia*, *Stenus*, *Phloeopora*, *Autalia*, and *Lispinus*. He has described three species.



Konrad Dettner

**Dettner, Konrad.** Dettner, of Germany, was born on December 22, 1951. He became interested in staphylinids as a schoolboy, when he made excursions with beetle specialists. He noted that staphylinids were rarely collected by his companions. Later he became interested in the bionomics and chemistry of staphylinids. He currently studies the defensive chemistry of staphylinid beetles (and other beetles), particularly species of the Oxytelinae, Piestinae, Omaliinae, Staphylininae, and Paederinae (especially *Paederus*). His publications on defensive secretions include morphology of the glands that produce the chemicals and the chemistry and activity of the secretions, the use of chemicals and glandular data for taxonomy, the evolution of chemical defense, the hemolymph toxins in *Paederus*, and the biosynthesis of defensive secretions. Among his long-range plans are the elucidation of the process by which maternal hemolymph toxin is transferred to the offspring in *Paederus* and the process of iridoid biosynthesis in staphylinids.

As an interesting aside, in a letter Dettner pointed out that Linné noted chemical defense behavior by species of Staphylinina in a diary notation dated June 5, 1732, and may have been the first to so record the phenomenon.



Didier Drugmand

**Drugmand, Didier.** Drugmand, of Belgium, was born on August 30, 1961. As a young student, Drugmand was interested in soil mites, but was lured away by an agronomist who showed him a collection of thousands of undetermined beetles and invited him to study them instead. These beetles turned out to be staphylinids. Soon thereafter he prepared and identified a collection of Belgian Staphylinidae. His taxonomic interests include the Leptotyphlinae, Staphylininae, and the Cryptobiina of the Paederinae; his primary geographical interests lie in the Palearctic and Afrotropical regions. He has published a series of articles revising the classification of the Afrotropical species of the paederine subtribe Cryptobiina and presenting a phylogenetic and biogeographic analysis of the group. Drugmand has also published a number of articles on the Belgian and/or western Palearctic species of Staphylininae (*Heterothops*, *Quedius*, *Philonthus*, *Xantholinus*, *Gabrius*, *Neobisnius*, and *Ocypus*), an *Atlas des Staphylinini* . . . of Belgium and Luxembourg, and a list of the Belgian Paederinae with notes on their distribution, habitat, and phenology. He has developed a web-site for the Staphylinidae, and plans to study the Cryptobiina of Asia, prepare

a book on the natural history of the family, study the historical biogeography of the endemic Staphylinidae of western Europe, and write a fauna of the European Staphylinini to be presented as a CD-ROM. He has named 27 species and 5 genera.

**Dvořák, Miroslav.** Dvořák, of the Czech Republic, was born on January 4, 1926. He became involved in the Staphylinidae through his interest in myrmecophilous faunas. The groups of particular importance to him are the Zyrasini of the world and the Palaearctic Staphylinini. He has published articles on both groups and has described 12 species.

**Eichelbaum, Felix.** Biographical data for Eichelbaum seem to be entirely missing. Eichelbaum was a medical doctor by profession. His papers on Staphylinidae dealt mostly with adult morphology (particularly mouth parts, terminal abdominal segments, etc.), as well as with larval morphology within his studies of beetle larvae. Nevertheless, he described 63 species and 15 genera in Staphylinidae. In 1909 he published a catalog of the genera of Staphylinidae that included the references, synonyms, number of species, and geographical distribution for each genus, as well as references to the immature stages, if known. His collection of Staphylinidae, some insects from "East-Africa" and his collection of beetle larvae went to the Zoological Museum in Hamburg in 1919. [A.S.]

SOURCE: • *Abhandlungen und Verhandlungen des Naturwissenschaftlichen Vereins in Hamburg, Supplement 9* (1967): 263 [anonymous].

**Eppelsheim, Eduard.** Eppelsheim was born in Dürkheim (Pfalz), Germany, on May 19, 1837. He died on June 6, 1896, in Germersheim (Pfalz), Germany.

Eppelsheim graduated from the *gymnasium* in Speyer in 1855, and went to the universities in Würzburg and Tübingen, where he obtained his medical degree in 1861. He practiced family medicine in several German towns. During the 1871–1872 war, Eppelsheim was named head of a military hospital in Königsbach and received several valuable military decorations for his performance.

Eppelsheim was keenly interested in natural sciences from his early years and he soon focused on Coleoptera, particularly on the family Staphylinidae. He became, along with Kraatz and Fauvel, one of the best experts. In addition to the staphylinids, Eppelsheim studied and published on other small beetles, such as the curculionid genera *Apion* and *Gymnetron*. Eppelsheim's main contribution to the knowledge of Staphylinidae concerns the Palaearctic fauna, including that of the eastern portion of this zoogeographical region. Toward the end of his career, he also studied and published on staphylinids of India, particularly those of the mountains of northern India (the Himalaya). Eppelsheim published almost 60 articles on the Staphylinidae and Curculionidae. He described 485 species and one genus in Staphylinidae. After Eppelsheim's death his collection was bought by the Naturwissenschaftliches Museum in Vienna and is still housed there. It contains the types of most staphylinid taxa Eppelsheim described. [A.S.]



*Miroslav Dvořák*



*Felix Eichelbaum*



*Eduard Eppelsheim*



Wilhelm (Guillaume)  
Ferdinand Erichson

SOURCES: • *Entomological News* 7 (1896): 256 [anonymous]. • *Insektenbörse* 13 (1896): 165 [anonymous]. • *Wiener Entomologische Zeitung* 15 (1896): 208 [anonymous]. • *Deutsche Entomologische Zeitschrift* (1897): 366–367 [by L. Heyden, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1963): 686–687 [by W. Derksen and U. Scheiding, with bibliography].

**Erichson, Wilhelm (Guillaume) Ferdinand.** Erichson was born on November 26, 1809, in Stralsund, Germany, the son of Senator Erichson. He died on November 18, 1849, in Berlin, Germany.

Erichson graduated from the *gymnasium* in Stralsund. In October 1828 he entered the university in Berlin and after four years he obtained on December 7, 1832, the title *Doktor der Medizin und Chirurgie*. Two years later, on April 14, 1834, he was licenced as a “practitioning physician and wound healer”. Erichson became deeply involved in entomological studies during his university years. His first two entomological papers (“*Monographia generis Meloes*” [with J. F. Brant], 1831, and “*Genera Dytyceorum*”, 1832) were published while he was still studying medicine. In 1837 Erichson obtained the degree “*Doctor der Philosophie*” from the University in Jena. In May, 1838 he obtained the title *Privatdocent* from the philosophical faculty of the University in Berlin, and in 1842 he was named adjunct professor. His lectures concentrated on entomology and helminthology.

There is no doubt in my mind that Erichson was a genius and one of the most important, if not the most important, entomologists of all times. I cannot but compare his scientific impact, and to a great extent also his fate, to that of Mozart in music. They both made an enormous impact in their respective fields, but they both died very young. We are left to guess what would have happened had they both lived longer lives. Erichson’s achievements during his short life (he died when not quite 40 years old!) were quite exceptional, as was the way he was immediately recognized and respected by the scientific community. His entomological achievements include, in addition to work on many families of Coleoptera, work on Hymenoptera, Neuroptera, Hemiptera, Strepsiptera, Thysanoptera, Thysanura, Siphonaptera, as well as on Arachnida and Myriapoda. His contributions are summarized in his obituary by F. Klug (see below). Erichson also participated in Agassiz’s *Nomenclator zoologicus* and started the series *Naturgeschichte der Insecten Deutschlands*, which was later continued by Schaum, Kraatz, and Kiesenwetter. One of Erichson’s most important works, one that greatly contributed to his recognition, was his monograph *Genera et Species Staphylinorum Insectorum Coleopterorum Familiae*, which clearly showed his genius. In it he treated 1,573 species and elaborated a classification of the family (divided into 11 “Tribes”: Aleocharini, Tachyporini, Staphylinini, Paederini, Pinophilini, Stenini, Oxytelini, Piestini, Phloeocharini, Omaliini, and Proteinini). His divisions have withstood the test of time with flying colors and are generally still valid today. His was the first higher group classification to include all the known species. Even the great Kraatz, in his

treatment of Staphylinidae in the series *Naturgeschichte der Insecten Deutschlands* (1856), fully accepted Erichson's classification and characterized it as follows: "Die Classification der Staphylinen durch Erichson hat alle übrigen vor ihm gemachten Versuche so weit hinter sich zurückgelassen, dass eine nähere Besprechung der letzteren hier um so weniger am Orte ist, als sich eine ausführliche Darstellung derselben in den *Genera et Species* (pp. 22–26) findet, auf welche noch einmal zurückzukommen kein Grund vorhanden ist."

Erichson published about 45 papers (many of them substantial), of which "Die Käfer der Mark Brandenburg" and the "Genera et Species Staphylinorum" represent substantial improvements of the knowledge of the family Staphylinidae. Erichson described 908 species and 46 genera in Staphylinidae. His collection of Staphylinidae, containing the types of most taxa he described, is deposited at the Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany. [A.S.]

SOURCES: • *Stettiner Entomologische Zeitung* 11 (1850): 33–36 [by I.C.F. Klug]. • *Stettiner Entomologische Zeitung* 17 (1856): 61–62 [by C. A. Dohrn, with portrait]. • *Forstwissenschaftliches Schriftsteller-Lexicon* 1 (1874): 165–167 [by J.T.C. Ratzeburg]. • *L'Abeille* (Les entomologistes et leurs écrits) 20 (1882): 43–45 [by S. A. Marseul]. • *Index Litteraturae Entomologicae* (1928): 322–325 [by W. Horn and S. Schenkling, with bibliography]. • *Bibliography of Australian Entomology 1775–1930* (1932): 82–83 [by A. Musgrave]. • *Essays on the History of Neotropical Dipterology* 1 (1971): 110 [by N. Papavero].

**Fabricius, Johann Christian.** Fabricius was born in Tondern, Denmark, on January 7, 1745, as the son of a Danish physician. He died on March 3, 1808, in Kiel, Germany.

Fabricius was educated at the Universities of Copenhagen, Denmark, and Uppsala, Sweden. He was a student of Linné at the latter university.

Fabricius made his living as a professor at the universities in Copenhagen, Denmark, and in Kiel, Germany. His professorships at both Copenhagen and Kiel had the title Professor in Natural History, Economy and Finance. It is interesting to learn that natural history was at that time justifiable only in connection with economy! Fabricius' real love and interest was in the study of insects, particularly insect systematics, for which he obtained a solid foundation while he was a student of Linné in Uppsala. Fabricius went far beyond Linné's system by basing his genera on natural rather than artificial characters. As explained in his book *Philosophia entomologica*, artificial characters are useful only to determine species, whereas natural characters help to show relationships. This idea, along with the almost 10,000 species of insects that he added to the 3,000 named by Linné, and his use of mouthparts for the first time to distinguish the "classes" of insects, are undoubtedly his most important contributions to insect systematics. Little wonder he was sometimes called the "Linnaeus of Insects" (see Tuxen, 1967 in sources below).

Forced by unfavorable circumstances at the two above-mentioned universities, Fabricius became a great traveler throughout



*Johann Christian Fabricius*

his life, mostly to study the collections of other entomologists. This enabled him to become acquainted with most of the naturalists and to study all the important collections of that time. He traveled extensively throughout Europe, including several trips to London, England, and Paris, France. In 1778 he went to Norway (and published a book on his travels there: *Reise nach Norwegen*, Hamburg, 1779), and in 1786 to St. Petersburg, Russia.

Extensive literature discusses the writings of Fabricius and I refer the reader to the references given below. Relevant to the present essay is Fabricius' contribution to the advancement of the knowledge of the Staphylinidae. While Linné, in his *Systema Naturae* in 1758, established the genus *Staphylinus* (containing 19 species) that later gave rise to the family name Staphylinidae, Fabricius split off two genera: *Oxyporus* and *Paederus*. Fabricius' act was the beginning of the break-up of *Staphylinus* and the recognition and separation of clusters of related species of rove beetles.

Fabricius described 77 species and 2 genera in Staphylinidae. The most important collection on which Fabricius based his descriptions was made by O. R. Sehested and N. T. Lund, two of his students in Copenhagen. That collection, containing about a third of the Fabrician types, is deposited in the Zoological Museum in Copenhagen. In the 1830s some duplicates were exchanged with other museums (e.g., London and Berlin). After his death, Fabricius' own collection went to the Zoological Museum in Kiel, Germany. In 1950, it was transferred to the Zoological Museum in Copenhagen, where it is kept on permanent loan. Zimsen's book, *The Type Material of J. C. Fabricius* (Copenhagen, 1964), is indispensable for anybody who needs to deal with the types of Fabricius. [A.S.]

SOURCES: Only selected biographies and obituaries for Fabricius are included here, because so many have been published. Extensive listings can be found in Gilbert (1977) and in Evenhuis (1997). • *Annales de la Muséum d'Histoire naturelle, Paris* 11 (1808): 393–404 [by P. A. Latreille]. • *Kieler Blättern* 1 (1819): 88–117 [autobiography]. • *Transactions of the Entomological Society of London* 4 (1845): I–XVI [by T. W. Hope, with portrait (English translation of the 1819 autobiography published in Danish)]. • *Index Litteraturae Entomologicae* (1928, 1929): 334–336, 1395 [by W. Horn and S. Schenkling, bibliography only]. • *History of Entomology* (1931): 623–625 [by E. O. Essig]. • *Zoologischer Anzeiger* 136: 344–350 [by S. L. Tuxen]. • *Annual Review of Entomology* 12 (1967): 1–14 [by S. L. Tuxen, with portrait]. • *Litteratura taxonomica Dipteriorum (1758–1930)* (1997): 242–250 [by N. L. Evenhuis, with partial bibliography, portrait].

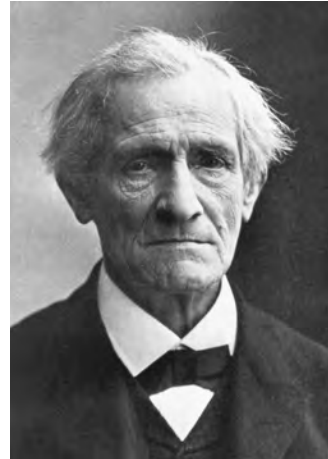
**Fagel, Gaston.** Fagel died in July, 1973, in Brussels, Belgium. No other biographical data seem to be available.

Fagel was originally a shoe salesman (personal communication by the late Rey DeRuelle, a technician at the former Entomology Research Institute, Ottawa, Canada, who knew Fagel personally while living in Belgium). Fagel eventually became associated with the Institut royal des Sciences naturelles de Belgique in Brussels and published many substantial papers on the

Afro-Tropical Staphylinidae, particularly on those belonging to the subfamilies Paederinae and Osoriinae.

Fagel started to publish papers dealing with the beetles of Belgium in 1934 under a serial title *Contribution à la connaissance des Coléoptères de Belgique*. The first papers were on Histeridae and Carabidae, but later on many of them dealt with Staphylinidae. In 1950, by that time interested only in Staphylinidae, he started another series of papers under the running title *Contribution à la connaissance des Staphylinidae*. The last paper (to the best of my knowledge) was contribution 116, published posthumously in 1976 dealing with the species of *Geodromicus* from Anatolia. Fagel described 1,255 species and 80 genera in Staphylinidae. [A.S.]

SOURCES: • *Entomologische Blätter, Krefeld* 71 (1975): 177 [by G. Schmidt]. • *Annales de la Musée royal de l'Afrique Centrale, Serie in-8, Sciences Zoologiques*, No. 219 (1977): 1–2 [by P. Basilewsky].



Léon Fairmaire

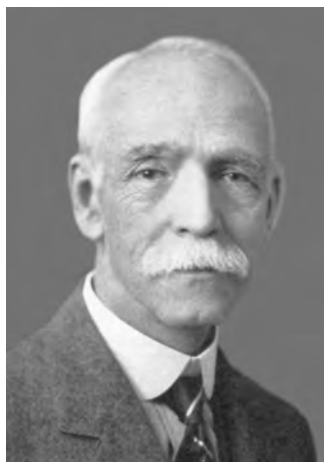
**Fairmaire, Léon.** Fairmaire was born in Paris, France, on June 20, 1820, in a family of English origin and died there on April 1, 1906.

Fairmaire received an education in law. The 1848 war ruined his family and Fairmaire therefore entered public service to secure financial support. He retired in 1878 as the Director of the Saint-Louis hospital in Paris.

Fairmaire was an active member of the Société Entomologique de France and served as an adjunct treasurer, as the president, and eventually as the honorary president from 1893 until his death. The majority of Fairmaire's papers contain isolated descriptions of taxa. One of his few analytical publications was the treatment of Coleoptera in *Faune Entomologique Française*, published in 1854 (together with Laboulbène). Unfortunately, only the first volume was published, but it contains the Staphylinidae with descriptions of new species. Quite a few of these ultimately turned out to be junior synonyms. Fairmaire also collaborated with Jacquelin du Val on the work *Genera des Coléoptères d'Europe* and with Germain on the beetle fauna of Chile. Fairmaire published slightly over 450 papers, most of them on Coleoptera, and quite a few dealing with faunas of distant exotic areas, such as Polynesia, Madagascar, Chile, Australia, and so on. Fairmaire described 183 species and 9 genera in Staphylinidae. His collection is deposited at the Muséum National d'Histoire Naturelle, Paris. [A.S.]

SOURCES: • *Deutsche Entomologische Zeitschrift* (1906): 11 [anonymous]. • *Entomologist's Monthly Magazine* 42 (1906): 141 [anonymous]. • *Insektenbörse* 23 (1906): 117 [anonymous]. • *Deutsche Entomologische Zeitschrift* (1906): 11 [by W. Horn]. • *Bulletin de la Société entomologique de France* (1906): 73–74 [by P. Lesne]. • *Annales de la Société entomologique de France* 76 (1907): 529–558 [by A. Leveille, with bibliography, portrait]. • *Revue Russe d'Entomologie* 6 (1907): 384 [by A. P. Semenov]. • *Münchener koleopterologische Zeitschrift* 3 (1908): 393 [by K. Daniel]. • *Index Litteraturae Entomologicae* (1928): 337–340 [by W. Horn and S. Schenkling, bibliography only, to 1863]. • *Bibliography of Australian Entomology 1775–1930* (1932): 88–89 [by A. Musgrave]. • *Index Litteraturae Entomo-*





Henry Clinton Fall

*logicae Serie II* (1965): 3–11 [by W. Derksen and U. Scheiding-Göllner, bibliography only, to 1900].

**Fall, Henry Clinton.** Fall was born in Farmington, New Hampshire, USA, on December 25, 1862, son of Orin Tenney Fall and Mary Ann Hayes. He died on November 14, 1939, in Tyngsboro, Massachusetts.

Fall received his education in public schools in Dover and at Dartmouth College, Massachusetts. He taught mathematics and physics in Chicago until 1889. Due to health problems, he moved to California, and eventually resumed teaching there, first in Pomona and then at the Pasadena High School. He retired in 1917 and went back to Massachusetts, making his home in Tyngsboro, in a house in which his old friend and mentor, F. Blanchard, had lived.

Fall became interested in natural history early in his life and his interest turned to Coleoptera when he was about 15 years old. He started to build his Coleoptera collection and soon began to publish on beetles. His first paper appeared in 1893; the complete list of his papers on Coleoptera contains 144 titles.

Fall's collection, combined with the Liebeck Collection, which came to Fall in the 1930s, contained almost a quarter of a million specimens (including some Lepidoptera and other insects). Included were almost 15,000 identified species of Coleoptera from America north of Mexico. Fall left his entire collection and related materials to the Museum of Comparative Zoology at Harvard University, Cambridge, Massachusetts. It is kept there in the LeConte-Fall room; in recognition of the importance of Fall and his collection, a new department was established, to be presided over by a Fall Curator of Coleoptera (P. J. Darlington, Jr. was the first one). Fall was one of the most eminent and recognized North American coleopterists. He was in contact with practically all coleopterists of his time, and kept encouraging and helping the younger adepts of coleopterology, some of whom later became recognized experts (e.g., Fenyés and Darlington, Jr.). His importance was widely acknowledged: he was a fellow of the American Association for the Advancement of Science (1927) and a fellow of the American Academy of Arts and Science (1930), and in 1929 he received the honorary degree of Doctor of Science from Dartmouth College.

Fall described 1,484 species of beetles during his life, most of them in families other than Staphylinidae. Nevertheless, the number of species he described in Staphylinidae stands at 67 and he described 1 genus. [A.S.]

SOURCES: • *History of Entomology* (1931): 625–627 [by E. O. Essig, with bibliography and photograph]. • *Fragments of Entomological History* (1937): 234 [by H. Osborn, with portrait]. • *The Leng Catalogue of Coleoptera of America North of Mexico, Fourth Supplement* (1939): 72 [by R. E. Blackwelder]. • *Science* 90 (1939): 609 [by T.D.A. Cockerell]. • *Entomological News* 51 (1940): 51 and 106 [both anonymous]. • *Psyche* 47 (1940): 45–54 [by P. J. Darlington, Jr., with bibliography, portrait]. • *Pan-Pacific Entomologist* 16 (1940): 1–3 [by E. G. Linsley]. • *Annals of the Entomological Society of America* 33 (1940): 217–218 [by C. E. Mickell]. • *Journal of the New York Entomological Society* 48 (1940): 33–36 [by J. D. Sherman]. •

*Great Basin Naturalist* 1 (1940): 62 [by V. M. Tanner]. • *Časopis Československé Společnosti Entomologické* 43 (1946): 89 [by K. Kult]. • *Fragments of Entomological History, Part II* (1946): 81–82 [by H. Osborn, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1965): 12 [by W. Derksen and U. Schiding-Göllner, with bibliography until 1900]. • *American Entomologists* (1971): 266–269 [by A. Mallis, with portrait].

**Fauvel, Charles Adolphe Albert.** Fauvel was born in Caen, France, on October 14, 1840, and died there on January 4, 1921. Other biographical data do not seem to be available.

Fauvel was an advocate by profession, but he must have dedicated most of his time to entomology, since his output of papers was enormous and included a great number of larger monographic works and catalogs. He was considered by many one of the great naturalists and preeminent entomologists of his era. He was the reigning world expert on the family Staphylinidae, but he also had a profound knowledge of the Palaearctic Coleoptera and was interested in any other aspects of entomology. By the year 1900, he had published at least 246 papers, mostly on Coleoptera, particularly Staphylinidae, but some dealt with other orders, such as Lepidoptera. One of his major works, still frequently used, is his *Faune gallo-rhénane* (unfortunately unfinished). Other major works are the five editions of the *Catalogue des Staphylinides de la Barbarie, Les Staphylinides de l'Australie et de la Polynésie* (1877), *Les Staphylinides de Moluques et de la Nouvelle Guinée* (1879–1880), and *Faune Analytique des Coléoptères de la Nouvelle-Calédonie* (1903–1907). In 1882 Fauvel founded, in Caen, the journal *Revue d'Entomologie* and edited it through 28 volumes until 1910. In 1910, without warning the subscribers or contributing authors, he abruptly stopped publication of his journal, discontinued all connections, withdrew entirely from scientific and public life, and stayed in seclusion until his death in 1921. One can only speculate what kind of dramatic event or tragedy compelled him to ruin his scientific career and entire life.

Fauvel was apparently a difficult person, judging from the comment by Peyerimhoff (see below): “Comme il arrive souvent, la brusque indifférence qu’il avait marquée—ou qui l’avait atteint—pour la vie et les relations scientifiques. . . .” This is obviously also the reason why his death was only briefly announced in a few entomological journals and his enormous contribution to entomology in general, and to the knowledge of Staphylinidae in particular, was never honored the way it should have been.

Fauvel described 1,851 species and 96 genera in Staphylinidae. His collection of Staphylinidae is housed at the Institut Royal des Sciences naturelles de Belgique, Brussels. In this context, a curious note can be found on page 115 in *Collections Entomologicae* (see below): “Insekten an Frl. Blanche Rancin/Caen”. I was unable to find any follow up or explanation of this note. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 57 (1921): 161 [anonymous]. • *Bulletin de la Société entomologique de France* (1921): 57–58 [by J. Sourcouf]. • *Bulletin de la Société Normande de Entomologie, Caen* 1 (1925): 1–22 [by H. Buysson,



Charles Adolphe Albert Fauvel



*Adalbert Fenyes*

with incomplete bibliography]. • *Index Litteraturae Entomologicae* (1928): 347 [by W. Horn and S. Schenkling, bibliography only, until 1863]. • *Société entomologique de France, Livre du Centenaire* (1932): 57 [by P. M. Peyerimhoff]. • *Index Litteraturae Entomologicae Serie II* (1965): 23–28 [bibliography until 1900 only]. • *Les entomologistes français 1750–1950* (1987): 80–82 [by J. Lhoste]. • *Collectiones entomologicae* (1990): 115 [by G. Friese and R. Gaedike].

**Fenyes, Adalbert.** Fenyes was born in Arad, Rumania (in Hungary at that time), on November 17, 1863, a son of Carolus Fenyes, an attorney. He died on February 22, 1937, in Pasadena, California, USA.

Fenyes earned his medical degree with honors from the university in Vienna, Austria. As a physician, he was at the Court of Emperor Franz Josef in the Army Reserve. In 1893 he went to Cairo, Egypt, where he practiced medicine for several years. While in Egypt, he met his first wife, originally from New York, whom he married in Florence, Italy. While making a world tour with her, they stopped in Pasadena, and as it sometimes goes, they never left.

Fenyes was always interested in nature, and during his early years his main interest was ornithology. But even before coming to North America, he already had some entomological experience. Fenyes started to collect beetles, both in the USA and abroad (Mexico), and managed to put together a large general beetle collection as well as an impressive library; both were housed in a fireproof building erected for this purpose.

Around 1905, Fenyes started his study of the subfamily Aleocharinae of Staphylinidae, and within 10 years he was a recognized authority on the group. He was asked to prepare a manuscript on the group for Wytzman's *Genera Insectorum* that eventually was published between 1918 and 1921. While working on this manuscript, Fenyes also published 15 shorter papers on the group. He completed the manuscript for a monograph of the North American Aleocharinae, containing 766 colored figures, but, perhaps because it was so large, it was never published. In the late 1920s, Fenyes left the field of entomology and concentrated on his practice as a physician and on other hobbies. It is interesting that Fenyes was the first physician in Pasadena to use an X-ray machine in his office.

Fenyes' large collection of Coleoptera and his library and all manuscripts were purchased after his death by The California Academy of Sciences, San Francisco; they are still housed there. The specialized collection of Aleocharinae contains 19,000 specimens representing some 1,800 species. Fenyes described 64 species and 13 genera in Staphylinidae. [A.S.]

SOURCES: • *Pan-Pacific Entomologist* 13 (1937): 145–147 [by H. C. Fall, with photograph]. • *Arbeiten über morphologische und taxonomische Entomologie* 4 (1937): 352 [by W. Horn]. • *The Leng Catalogue of Coleoptera of America North of Mexico, Fourth Supplement* (1939): 72 [by R. E. Blackwelder]. • *Pan-Pacific Entomologist* 18 (1942): 17–22 [by R. E. Blackwelder, with bibliography]. • *Index Litteraturae Entomologicae Serie II* (1965): 33 [by W. Derksen and U. Scheiding-Göllner, with bibliography].

**Filatova, Lyudmila Dmitrievna.** Filatova, of Russia, was born on July 20, 1941. She became interested in the Staphylinidae as a university student when she was studying the fauna, ecology, and distribution of the family in the Primorye Territory; she continued her work on the group in postgraduate school. She has published some taxonomic articles and has described four species, but much of her work is ecological. An example of her ecological work is a publication on approaches for the comparison of staphylinid communities in different habitats. She wants to write a book on the Staphylinidae of the southern part of the Russian Far East that will include keys and descriptions, as well as ecological and distributional data. She would like to see a journal devoted to the study of staphylinids published.



*Lyudmila Dmitrievna Filatova*

**Frank, J. Howard.** Frank, of the USA, was born in England on April 13, 1942. He became interested in the Staphylinidae as a graduate student engaged in a research project on the role of predators in regulating a winter moth population. The work required that he assess the abundance of about 60 species of staphylinids at his study site and learn which ones, either as adults or larvae, fed on the winter moth. To do so, he had to learn to identify adults and rear larvae. His experiences with that study led him to continue studies on the family. His non-staphylinid work is concerned with questions of the biological control of pest species. Although he is primarily interested in ecological and behavioral questions about the Staphylinidae, he has published a diversity of articles on the family including taxonomic, natural history, and summary articles. His summary articles include the parasites of staphylinids, an index to taxa and review of *Paederus*, the natural history and medical importance of *Paederus*, a discussion of the use of trend lines for estimation of numbers of species, and a review of cocoon spinning and the defensive function of the median gland of larval aleocharines. He has published revisions of the New World species of *Erichsonius*, *Neobisnius*, and the Caribbean species of *Oligota*. He has authored or coauthored articles on *Cafius*, *Philonthus*, *Quedius*, *Myrmecosaurus*, *Proteinus*, *Heterota*, *Coenonica*, *Charoxus*, and *Cubanotyphlus*, among other genera. He is currently studying the life cycle and behavior of species of *Charoxus*. His long-range projects include a faunal study of the Staphylinidae of Florida, another for Jamaica, and a revision of the Neotropical Paederina. He has described 33 species and one genus of Staphylinidae.



*J. Howard Frank*

**Frisch, Johannes.** Frisch, of Germany, was born on June 14, 1966. He started collecting beetles at age 13, and for many years studied the central European beetles in general, but was inspired to pursue an interest in the Staphylinidae by Volker Puthz. Lohse's *Die Käfer Mitteleuropas* was important in his early knowledge of the Staphylinidae because it quickly permitted him to learn to identify staphylinids. In 1993 he collected a species of *Scopaeus* in Greece that he thought was undescribed. Aided by Puthz, Frisch contacted the important museums of Europe to study the types of the western Palaearctic region, thereby initiating his studies of the genus *Scopaeus*. In 1994 he described his first six species of the genus, and has continued



*Johannes Frisch*



*Purificación Gamarra Hidalgo*

his studies of the group. He has published articles revising the species of the western Palaearctic region, and in 1999 published revisionary articles on some species from Madagascar and Anatolia. His work is characterized by beautiful, detailed aedeagal illustrations. Currently he is working on revisions of *Scopaeus* from the Oriental and Ethiopian regions, and is completing study of the Indian species. His immediate goal is to revise and present phylogenetic and biogeographic analyses of the Old World *Scopaeus*. Later he plans to study the New World species of the genus. As of 1999 he had described 21 species.

**Gamarra Hidalgo, Purificación.** Gamarra, of Spain, was born on May 4, 1956. She became interested in the Staphylinidae during her postgraduate studies of the aleocharine fauna of the Guadarrama Sierra in Spain. She concentrates on systematic studies of the Aleocharinae of the Iberian Peninsula, cave-dwelling aleocharines, and the edaphic fauna of the pselaphine genus *Mayetia*. She has also published articles on several other genera in other subfamilies and, as of 1995, has described at least eight species. Her publications include studies of the Aleocharinae of the Sierra de Guadarrama, *Encephalus*, and cavernicolous staphylinids of the Canary Islands.



*Ludwig Ganglbauer*

**Ganglbauer, Ludwig.** Ganglbauer was born in Vienna, Austria, on October 1, 1856, the older of two sons. He died there on June 5, 1912.

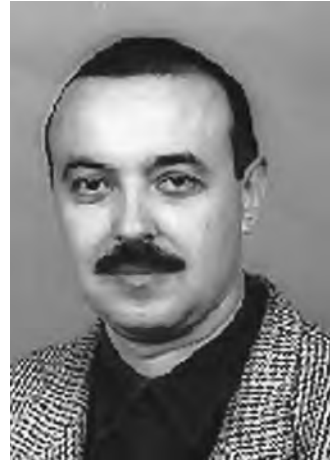
Ganglbauer was expected by his father to study law, but by age 6 he had already become interested in plants and beetles. His interest in beetles lasted a lifetime. Ganglbauer graduated from the Schottengymnasium in Vienna in 1874, and after obtaining a teaching diploma from the university (Zoologie und Botanik) he briefly taught at the K. K. Akademisches Gymnasium in Vienna. He never really cared for teaching because it distracted him from his own studies. Therefore, a few years later, he was quite pleased to accept the post of an assistant at the Wiener Hofmuseum, one of the centers of European entomology at that time, with responsibility for the Coleoptera collection. The museum is now known as the Naturhistorisches Museum in Vienna. Ganglbauer immediately buried himself in the study of Coleoptera and by 1881 published his first articles (dealing with Oedemeridae and Cerambycidae); they immediately gained him recognition. In 1898 he was named the *Kustos* in the zoology department, in 1904 he became the head of the Zoological Department, and in 1906 he was named the Director of the department. In this position, he was given the title *Regierungsrat* in 1908. Almost at the same time, he was also elected to the "korrespondierenden Mitglied der Kaiserlichen Akademie der Wissenschaften in Wien". He was also named an honorary member of numerous entomological societies throughout Europe and elsewhere (e.g., Société Entomologique d'Égypte).

In 1881 Ganglbauer was one of the founders (together with Reitter, Mik, Löw, and Wachtl) of the journal *Wiener Entomologische Zeitung*, and he served as one of its editors until 1884. At about that time Ganglbauer started his major work *Die Käfer von Mitteleuropa*. It was originally meant to be a new edition of Redtenbacher's *Fauna Austriaca*, but was soon changed to

an independent, modern work. The first volume of Ganglbauer's work (Caraboidea) was published in 1892, the second volume (Staphylinoidea, part 1) in 1895, the third volume (Staphylinoidea, part 2, and Clavicornia) in 1899, and the first part of the fourth volume (Dermestidae, Byrrhidae, Nosodendridae, Georyssidae, Dryopidae, Heteroceridae, Hydrophilidae) in 1905. Due to Ganglbauer's untimely death, this, unfortunately, remained unfinished. Despite this, this series became one of the most important works ever published on European, particularly central European, beetles, and established for Ganglbauer an everlasting monument. Ganglbauer was without any doubt one of the greatest European coleopterists, one of the classics, who was respected by everybody due to his vast knowledge of Coleoptera and experience. His outstanding qualities are best documented by the way he presented the family Staphylinidae in his *Käfer von Mitteleuropa*. Ganglbauer was not a specialist in this family, although he published some shorter papers, containing mostly descriptions of new species. Nevertheless, his treatment of the family in the series was outstanding and showed a great deal of knowledge and taxonomic wisdom. It became one of the main reference publications on the family, and it is still frequently consulted. Ganglbauer described 43 species and 26 genera in Staphylinidae. [A.S.]

SOURCES: • *Entomological News* 23 (1912): 435–436 [anonymous]. • *Entomologische Rundschau* 1 (1912): 99 [anonymous]. • *Entomologist's Monthly Magazine* 48 (1912): 217–218 [anonymous, with portrait]. • *Wiener Entomologische Zeitung* 31 (1912): 194 [anonymous]. • *Rovartany Lapok* 19 (1912): 122–123 [by E. Csiki]. • *Entomologische Blätter, Krefeld* 8 (1912): 196 [by W. Hubenthal]. • *Proceedings of the Entomological Society of London* (1912): XLXII–CLXIII [by F. D. Morice]. • *Deutsche Entomologische Zeitschrift* (1912): 474–475 [by H. Soldanski, with portrait]. • *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien* 62 (1912): 417–435 [by F. Spaeth, with bibliography, portrait]. • *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien* 62 (1912): 185–187 [by F. Steindachner]. • *Horae Societatis Entomologicae Rossicae* 12 (1912): XCV–XCIX [by A. Semenov Tian-Shansky, with portrait]. • *Jahresheft des Vereines für schlesische Insektenkunde* (1913): XXV–XXVI [by R. Pittrich]. • *Wiener Entomologische Zeitung* 32 (1913): 1–15 [by F. Spaeth, with bibliography, portrait]. • *Biologischer Kalender* 1 (1914): 358–359 [anonymous]. • *Wiener Entomologische Zeitung* 33 (1914): 131–139 [by F. Heikertinger]. • *Koleopterologische Rundschau* 23 (1937): 93–110 [by F. Heikertinger]. • *Index Litteraturae Entomologicae Serie II* (1965): 114–116 [by W. Derksen and U. Scheiding-Göllner, bibliography to 1900 only].

**Gildenkov, Mikhail Yurievich.** Gildenkov, of Russia, was born on November 22, 1961. From about age 8 he was interested in insects and collected Coleoptera and Lepidoptera. By 1985 he was focused on the Staphylinidae and at present his efforts are directed to the Oxytelinae, particularly *Carpelimus*, *Thinodromus*, and *Ochtheophilus*. His early work was confined to the area near Smolensk, Russia, but expanded to include *Carpelimus* and *Thinodromus* for the Palaearctic region and he has begun



Mikhail Yurievich Gildenkov



Johan Ludwig Christian  
Gravenhorst

working on the African fauna of these genera. Gildenkov published his first articles in the early 1990s and most of them have been on *Carpelimus*. He plans studies of the Palearctic representative of other genera such as *Ochtheophilus*, *Oxytelus*, and *Anotylus*. He has described nine species.

**Gravenhorst, Johan Ludwig Christian.** Gravenhorst was born in Braunschweig, Germany, on November 14, 1777. His father owned a beer and vinegar brewery and was rather wealthy; he died when his son was only 10 years old. Gravenhorst died on January 17, 1857, in Breslau (now Wrocław, Poland).

Gravenhorst was educated at the Katharinen-Gymnasium in Braunschweig. One of his teachers was Hellwig, who was responsible for Gravenhorst's interest in entomology and collecting insects. When Gravenhorst entered the Collegium Carolinum, he studied with Knoch, another renowned entomologist. Despite his interest in natural sciences, Gravenhorst decided on a career in law and entered the university in Helmstadt to pursue law studies. However, he could not abandon his other interests; he also enrolled in natural history courses and took regular excursions to the countryside. Since his father left him enough money to live on, Gravenhorst eventually decided to follow his heart, and in 1799 entered the university in Göttingen. There he studied general zoology, mineralogy, and botany with Blumenbach, Meyer, and Hoffmann, and also met Illiger and Hausman. In 1801 Gravenhorst returned to the university in Helmstadt, defended his dissertation "Conspectus Historiae Entomologiae, Imprimis Systematum Entomologicorum", and acquired the degree of *Doctor philosophiae et magister liberalium artium*. After that he returned to Braunschweig and devoted all his time to entomology. He studied the collections of Hellwig, Knoch, Hoffmannsegg, Illiger, and Zinken to accumulate data for his *Coleoptera Microptera Brunsvicensia* (published in 1802). In 1802 Gravenhorst went to Paris to study the collections and to meet Cuvier, Olivier, Latreille, and others, but he returned the same year to Braunschweig. He was able to purchase a considerable zoological collection, previously owned by the watchmaker Mauerhoff in Hannover (often mentioned in Fabricius' works) and by the surgeon Lampe in Hannover. He became a *Privatdocent* at the university in Göttingen. In 1806 he published his *Monographia Coleopterorum Micropterorum* that made him well known among the entomologists of that time. He worked on the second, entirely reworked edition of this work until 1840, when his work was made redundant by the publication of Erichson's *Genera et Species Staphylinorum*. In 1809 Gravenhorst became an extraordinary professor at the faculty of philosophy, and the second director of the zoological museum in Göttingen. The following year he accepted the position of ordinary professor of natural history and the director of the Botanical Garden in Frankfurt a.O. The university was transferred in 1811 from Frankfurt to Breslau and Gravenhorst followed. In 1814 he sold his rich zoological collections (for a guaranteed annual income transferable to his widow) to the university in Breslau, and founded thereby the zoological museum that continued to grow under his directorship. He started to work on the hymenopteran

family Ichneumonidae and produced many publications on the group up to 1829. In 1830 he traveled to Prague, Vienna, and Trieste, where he made many observations of sea animals, which he later published. In 1841–1842, Gravenhorst was seriously ill and he never fully recovered, although he continued to publish until 1851 and delivered his lectures at the university until the summer of 1856.

Gravenhorst was one of the most renowned naturalists of his time. He received many honors from government institutions and universities, and was a member or honorary member of at least 21 natural history societies in Germany, France, Italy, and England. His two early staphylinid publications (1802, 1806), made Gravenhorst one of the important pre-Erichsonian authors. The two publications, and the type material connected to them, are resources frequently consulted even now, particularly by anybody working on the European fauna. Gravenhorst later published a few papers on Staphylinidae, two of them dealing with the genus *Staphylinus*, and another one on the genus *Quedius*. He described 330 species and 14 genera in Staphylinidae. [A.S.]

SOURCES: There are numerous biographies, obituaries, or brief biographical notes for Gravenhorst, so only selected ones are given here. A detailed listing may be found in Evenhuis (1997). • *Jahresberichte der Schlesischen Gesellschaft für vaterländische Kultur, Breslau* (1857): 111–115 [by K. Letzner]. • *L'Abeille* (Les entomologistes et leurs écrits) 26 (1889): 259–261 [by S. A. Marseul, with bibliography] • *Index Litteraturae Entomologicae* (1928): 452–453 [by W. Horn and S. Schenkling, bibliography only].

**Gridelli, Edoardo.** Gridelli was born in Trieste, Italy, on April 5, 1895, and died there on March 15, 1958.

Gridelli developed an interest in entomology during his middle school years. After graduation, he enrolled in the University of Graz, Austria, but his studies were interrupted by the First World War. After the war, he continued his studies at the Padova University, Italy, where he obtained, in December 1919, a degree in natural sciences. He first worked as an assistant at the Zoological Institute of the Padova University, but soon, for family reasons, he moved back to Trieste. In 1922 he acquired the position of the Curator at the famous Museo Civico di Storia Naturale Giacomo Doria in Genova. This position gave Gridelli the opportunity to study worldwide collections of Coleoptera, particularly specimens from Africa, Asia, and Australia. Together with some notable Italian entomologists of that time, such as Capra, Doderò, Invrea, and Solari, Gridelli was very active in the Italian Entomological Society. In 1928 he accepted the post of the Curator at the Museo di Trieste and in 1945 he became its Director, replacing Giuseppe Müller. In 1945 he also took a teaching post at the Università di Trieste. In 1950 Gridelli was named an ordinary academic at the Accademia Nazionale Italiana di Entomologia, based in Firenze. In 1951 he became a free docent in entomology, and later in the same year also in zoology. In 1957 he was awarded the order of *Cavaliere Ufficiale al merito della Repubblica*. In 1956 Gridelli suffered a heart attack from which he never fully recovered and, in 1958, he succumbed to a serious heart and kidney insufficiency.



*Edoardo Gridelli*





Felix Edouard Guérin-  
[Méneville]

Gridelli published about 110 scientific papers, almost all dealing with Coleoptera. Most of his research was done on the families Staphylinidae and Tenebrionidae. His papers on these families belong to the classical literature that is still widely consulted. In Staphylinidae, he studied mainly the members of some genera of the tribe Staphylinini, such as *Philonthus*, *Gabrius*, and *Quedius*, and later he also turned his attention to the members of the tribe Xantholinini. In both groups he provided the groundwork for using the aedeagus to distinguish species, as well as the importance of the sclerites of the male genital segment in Xantholinini. Gridelli described 92 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: • *Bollettino della Società adriatica di scienze naturali, Trieste* 49 (1958): 1–18 [by U. D'Ancona, with bibliography]. • *Studi trentini di scienze naturali, Trento* 35 (1958): 291 [by U. D'Ancona]. • *Bollettino della Società entomologica italiana* 88 (1958): 33 [by W. Horn and I. Kahle]. • *Atti della Accademia Nazionale Italiana di Entomologia* 6 (1958): 29–44 [by J. Müller, with bibliography, portrait]. • *Memorie della Società Entomologica Italiana* 38 (1959): 5–16 [by J. Müller, with bibliography, portrait]. • *Entomologische Blätter, Krefeld* 55 (1959): 280 [by G. Schmidt]. • *Annali del Museo Civico di Storia Naturale Genova* 71 (1960): 433–449 [by F. Invrea, with bibliography and photograph]. • *Opuscula Entomologica* 25 (1960): 59 [by C. H. Lindroth]. • *Atti del Museo Civico di Storia Naturale Trieste* 22 (1960): 7–23 [by R. Mezzena, with bibliography, portrait]. • *Memorie della Società entomologica italiana* 48 (1969): 928 [by C. Conci].

**Guérin-[Méneville], Felix Edouard.** Guérin-Méneville was born in Toulon, France, on October 12, 1799. He died on January 26, 1874, in Paris.

Guérin-Méneville was an eminent French naturalist and artist. Prior to 1836 he was known as F. E. Guérin; in 1836 he founded the Société Cuvierienne and changed his surname to Guérin-Méneville. He established the *Magasin de Zoologie* and *Revue et Magasin Zoologique* and was the cofounder of the Société Entomologique de France. His early career was dedicated to insect systematics, but later he switched to economic entomology. He taught zoology at the Collège de France in Paris.

Guérin-Méneville was a prolific author, certainly the most prolific French author of that era, with over 400 publications covering many aspects of invertebrate zoology. He became famous for his encyclopedic publication *Iconographie de Règne Animal de G. Cuvier*, published in seven volumes between 1829 and 1844, which included 450 color plates. He wrote many systematic papers on Coleoptera, some of them (including the *Iconographie*) containing Staphylinidae. For his achievements, he received the decoration of the Légion d'honneur in his home country, as well as many other accolades from many other countries. Guérin-Méneville described 24 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: Many Guérin-Méneville biographies and obituaries were published; therefore only selected ones are given here. Extensive listings can be found in Evenhuis (1977). • *Annales de la Société entomologique de France* (5) 4 (1874): 5–8

[by A. Chevrolat]. • *Bulletin de la Société entomologique de France* (5) 4 (1874): XIV–XVI [by C. E. Leprieur]. • *L'Abeille* (Les entomologistes et leurs écrits) 21 (1885): 75–100 [by S. Marseul, bibliography only]. • *Index Litteraturae Entomologicae* (1928): 470–488, 1401–1402 [by W. Horn and S. Schenkl, bibliography only]. • *Bibliography of Australian Entomology* (1932): 133–135 [by A. Musgrave]. • *Zoologische Buchillustration* (1967): 181–182 [by C. Nissen].

**Gusarov, Vladimir.** Gusarov, of Russia, was born on March 7, 1966. Captivated by beetles from childhood, his attention was drawn to staphylinids by a professor during his undergraduate studies. His interests include the entire Russian fauna of the family, the Paederinae of the Palaearctic and Oriental Regions, *Sepedophilus*, and the Athetini. His current studies are concentrated on the Athetini of North America and their relationship to the Eurasian fauna. Gusarov has published a number of articles on the Russian staphylinid fauna, made a detailed study of the Crimean staphylinid fauna, and has published many taxonomic changes, distributional records in Russia and central Asia, or new species in a variety of genera of the Paederinae, Staphylininae, Oxytelinae, Omaliinae, Proteininae, Tachyporinae, and Aleocharinae. He has named 21 species.



Vladimir Gusarov

**Gyllenhal, Leonhard.** Gyllenhal was born in Algustorp, Westgothland, Sweden, on December 3, 1752. He died on May 13, 1840, in Hoeberg, Sweden.

In 1769, at the age of 17, Gyllenhal entered the University of Uppsala. There he studied natural history with Linné who apparently influenced his decision to specialize in entomology. In 1772 he interrupted his studies, entered the army, and served until 1799. When he retired from the army as a major, he met Paykull, the renowned Swedish entomologist and naturalist, who rekindled Gyllenhal's interest in entomology. Gyllenhal supported Paykull in publishing his *Fauna svecica*. Later he started to work on his own work *Insecta svecica*, of which only four volumes dealing with Coleoptera were published between 1810 and 1827. Gyllenhal's treatment of the family Staphylinidae in this publication became one of the early classical works, which is still consulted by anybody studying staphylinid taxonomy and nomenclature. Gyllenhal also collaborated with Schönherr on his important weevil publication "Genera et species Curculionidum". He described 57 species in Staphylinidae.

Gyllenhal was a Chevalier of the Royal Order of Wasa, a member of the Royal Swedish Academy of Sciences in Stockholm, and a member of several other learned societies. His collection went to the Museum at Uppsala, Sweden. [A.S.]

SOURCES: • *Considérations générales sur la classe des insectes* (1823): 266 [by A.M.C. Duméril]; • *Revue and Magazine de zoologie* 3 (1840): 224 [anonymous]. • *Stettiner Entomologische Zeitung* 1 (1840): 111–112 [anonymous]. • *Revue d'entomologie* 5 (1840): 351 [by G. Silbermann]. • *Taxidermy with the Biography of Zoologists* (1840): 208 [by W. Swainson]. • *Kungliga Svenska Vetenskaps-Akademiens Handlingar* (1842): 239–245 [anonymous, with bibliography]. • *L'Abeille* (Les entomologistes et leurs écrits) 21 (1883): 74 [by S. A. Marseul]. •



Leonhard Gyllenhal



Peter Hammond



Rodney Hanley

*Bulletin of the Brooklyn Entomological Society* 8 (1913): 70 [by R. P. Dow]. • *Insecta* 4 (1914): 35–36 [by F. Guitel, with photograph]. • *Supplementa Entomologica* 12 (1926): 56 [by W. Horn]. • *Index Litteraturae Entomologicae* (1928): 493 [by W. Horn and S. Schenkling, bibliography only]. • *History of Entomology* (1931): 642–643 [by E. O. Essig, with photograph]. • *Bibliography of Australian Entomology 1775–1930* (1932): 137 [by A. Musgrave].

**Hammond, Peter.** Hammond, of the United Kingdom, was born on February 17, 1941. As a child living in rural England, under the strong influence of his mother who taught him the local wild flowers, he was enchanted by plants, animals, and natural history. He moved from flowers through many groups of plants and animals, including worms, mollusks, millipeds, etc. In part because he had no mentor, he learned these groups on his own by collecting and trying to identify them with the various handbooks on the British fauna. His attention was ultimately diverted to beetles because they were varied, numerous, speciose, and could be collected in England at nearly any time of the year. Over the years he learned to identify most British beetles by sight and managed to amass an enormous fund of knowledge on the distribution, habitats, behavior, and bionomics of British beetles. He focused on staphylinids for the same reasons he chose beetles and because, as a bonus, they were thought to be a challenging group. He was hired at the British Museum (Natural History) to study staphylinids; he has since moved on to address general questions concerning biotic diversity. He has published a number of scholarly and important articles on staphylinids, including several articles on *Anotylus* and others on *Platystethus*, *Brathinus*, *Camioleum*, *Stylogymnusa*, the type material of Motschulsky, Stephens, and Marsham, “peg-setae”, and wing-folding mechanisms in Coleoptera. In recent years, most of his attention has been committed to general questions of diversity and ecology. A few of his long-range goals in the Staphylinidae include continuation of his work on the Oxytelinae and an examination of the delicate, elegant beetles of the genus *Palaminus*. He has collected extensively in many parts of the world, including Europe, Africa, Madagascar, India, Malaysia, Indonesia, China, Japan, Australia, New Zealand, and North, Central, and South America. He joined the staff of The Natural History Museum, London, in 1968. He has named 12 species and 1 genus.

**Hanley, Rodney.** Hanley, of the USA, was born on May 3, 1968. He began his studies of the family when his graduate school adviser, Michael Goodrich, introduced him to species of *Oxyporus*. After that initiation, he wrote or coauthored (with Goodrich) articles on the taxonomy and various aspects of the natural history of North American species of the genus. Although he continues to explore the Oxyporinae, his attention is currently focused on a generic revision of the Hoplandriini. His long-term goals include continued studies of the Aleocharinae, a world revision of the Oxyporinae, and the integration of computer and database use, including World Wide Web development, with studies of the Staphylinidae.

**Hansen, Viktor.** Hansen was born in Copenhagen, Denmark, on August 29, 1889, and died there on March 6, 1974.

In 1907 Hansen entered the Metropolitanskolen in Copenhagen and in 1913 obtained his law degree. He entered the Justitsministeriet in 1915 and eventually became a superior judge in 1941, a post he held until his retirement in 1959. He had an excellent reputation as a lawyer. Hansen was a keen tennis player and pursued this sport until he was 82 years old!

Hansen started to collect beetles as a teenager and joined the Entomologisk Forening in Copenhagen in 1905. In 1907, at the age of 18, he published his first paper in *Entomologiske Meddelelser*, treating some Coleoptera species new to the Danish fauna. Eventually he published more than 100 papers dealing with almost all Danish beetle families. His encyclopedic knowledge of Danish beetles is best documented by the fact that he contributed, alone or a few times with coauthors, 23 volumes of Coleoptera to the series *Danmarks Fauna*, an enormous undertaking that eventually filled more than 5,000 pages! The Staphylinidae are treated in volumes 57–59, and in the supplementary volume 78 (1969). As with the other families, the treatment of each genus included an excellent habitus drawing of at least one species. The work made Hansen a nestor of Danish coleopterology, well known and respected beyond the borders of Denmark. His achievements were also recognized academically. He received an honorary medal from the Entomologisk Forening in Copenhagen in 1949, on the occasion of his 60th birthday, and in 1950 he was awarded the degree *doctor honoris causa* from the Københavns Universitet. He also received honorary medals from the Dansk Naturhistorisk Forening and from the Entomologisk Forening in Stockholm, and he became a corresponding member of the Norsk Entomologisk Forening, Entomologisk Forening in Helsinki, and of the Naturwissenschaftliche Gesellschaft in Hamburg.

Hansen was also an excellent and eager collector, who made no fewer than 4,300 collecting trips during his lifetime, as well as a keen observer who always included biological data in his treatments of species. He described two species in Staphylinidae. [A.S.]

SOURCES: • *Opuscula Entomologica* 24 (1959): 165–166 [by C. H. Lindroth, with photograph]. • *Entomologisk Tidsskrift* 90 (1969): 134–136 [by T. Palm]. • *Videnskabelige Meddelelser fra Dansk naturhistorisk forening i Kjøbenhavn* 137 (1974): 143–148 [by F. Bangsholt, with photograph]. • *Entomologiske Meddelelser* 42 (1974): 97–108 [by S. L. Tuxen, with bibliography and photograph]. • *Entomologische Blätter, Krefeld* 71 (1975): 177 [by G. Schmidt].

**Hatch, Melville Harrison.** Hatch was born in Detroit, Michigan, USA, on November 25, 1898. He died on January 19, 1988, in Winslow near Seattle, Washington, USA.

Hatch's interest in natural sciences started while at Detroit Central High School, where he belonged to the Biology Club. Hatch received his Ph.D. degree from the University of Michigan in 1925. His early interests were in the beetles of Michigan, particularly the aquatic family Gyrinidae. His first paper "A Preliminary List of the Coleoptera of the Cranberry Lake Region,



Viktor Hansen



Melville Harrison Hatch



Yasuhiko Hayashi



Oswald Heer

New York" appeared in 1924. He was a teaching assistant at the University of Michigan through 1926, then for a year he held the post of instructor at the University of Minnesota. In the fall of 1927, he went to the University of Washington as an assistant professor and took over the teaching of entomology from Trevor Kincaid. He was promoted to full professor in 1941. In 1962 he became the Curator of Entomology at the newly renamed Burke Museum, and he kept that post for a time after retiring from teaching in 1969. He also served as the editor of the journal *The Biologist* from 1959 through 1967. Around the mid-1970s Hatch gave up active involvement with entomology, permitted his Coleoptera collection to be moved to Oregon State University, Corvallis, and for his last 10 years he lived in the convalescent center in Winslow on Bainbridge Island near Seattle.

Hatch's entomological and zoological interests were manifold. He published more than 170 papers covering many beetle families, terrestrial isopods, and greenhouse fauna, and also discussed the works of Darwin and the history of Darwinism, the Egyptian scarabs, and the history and philosophy of science. In 1948, while he was chair of the Zoology Department of the University of Washington, Hatch began to write his magnum opus, *The Beetles of the Pacific Northwest*, which earned him a prominent place in the history of North American entomology. The last (fifth) volume appeared in 1971, 18 years after the publication of the first in 1953. Rove beetles are included in some of Hatch's articles; however, it is his treatment of this family in *The Beetles of the Pacific Northwest* (volume 2, 1957) that puts Hatch on the list of notable North American staphylinidologists. He was the first in North America to extensively use the male copulatory organ as a distinguishing taxonomic character at the species level. Since the staphylinid fauna of the Pacific Northwest was at that time inadequately known, he described many new species on this basis. Many of these new species proved to be junior synonyms; nevertheless Hatch's enormous contribution brought the knowledge of the staphylinid fauna of the Pacific coast to a modern level. Hatch described 173 species and 9 genera in the Staphylinidae. [A.S.]

SOURCES: • *Scarabogram*, University of Washington, Seattle (N.S.) No. 95 (1988): 1–2. [by R. Crawford]. • *Coleopterists Bulletin* 47 (1993): 112 [by E. C. Becker].

**Hayashi, Yasuhiko.** Hayashi, of Japan, was born in 1939. His interest in staphylinids began when he was a teenager. He is broadly interested in the family and has published articles on, among other genera, *Oxyporus*, *Deleaster*, *Proteinus*, *Tachinus*, *Agleosus*, *Cyrtothorax*, *Eucibdelus*, *Hesperosoma*, *Philonthus*, and *Lathrobium* of Japan, Taiwan, and mainland Asia. His long-range goal is a restructuring of the generic and tribal classification of Staphylininae, a project on which he is currently engaged. He has described 42 species and 3 genera.

**Heer, Oswald.** Heer was born in Matt, Switzerland, on August 31, 1809. He died on September 27, 1883, in Lausanne, Switzerland.

Heer received his basic education from his father, a priest in the small mountain village of Matt. The wonderful nature of the

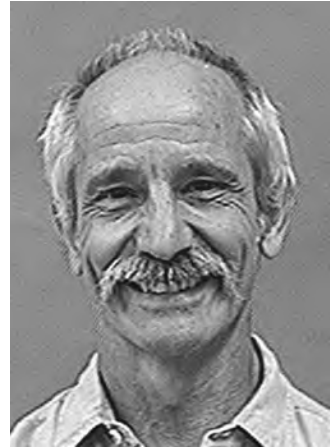
Alps around his native village awakened Heer's interest in natural sciences, particularly in botany and entomology.

In 1828 Heer entered the University in Halle to study theology. There he met the renowned naturalists and entomologists Burmeister, Germar, Schaum, and others, which actually determined his future course. He followed his father's wish to become a priest, and after successfully completing the theology examination, he received his ordination in 1831 in St. Gallen. He also pursued his real interests, and in 1832 accepted the post of curator of the enormous, private Escher-Zollikofer Collection in Zürich. In 1834 he became a free docent of botany and entomology at the newly established university in Zürich; in 1835 he was appointed professor for special botany. He stayed at this university his entire life.

The high points of Heer's scientific career were his palaeontological publications (both botanical and zoological). However, his few larger works dealing with Coleoptera, particularly his *Fauna Coleopterorum Helvetica*, although covering only a portion of the order (but including Staphylinidae), are classical publications still consulted today. Heer described 177 species (including 13 fossil) and 9 genera (including 1 fossil) in Staphylinidae. [A.S.]

SOURCES: Many biographies and obituaries have been published about Heer; therefore only selected ones are given here. Extensive listings can be found in Gilbert (1977) and particularly in Evenhuis (1997). • *Schriften der Physikalisch-ökonomischen Gesellschaft zu Königsberg* 25: 25–26 [by A. Jentsch, bibliography only]. • *American Journal of Science* 28 (1884): 61–69 [by A. Gray]. • *Revue d'Entomologie* 2 (1883): 287–288 [by A. Fauvel]. • *Science* 2 (1883): 583–586 [by S. H. Scudder, with photograph]. • *Verhandlungen der Schweizerischen Naturforschenden Gesellschaft* 66 (1883): 165–190 [by K. Schröter]. • *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 6 (1884): 694–697 [by G. Schoch, with bibliography]. • *Leopoldina* 21 (1885): 47–49 [by A. Jentsch, bibliography only]. • *Festschrift der Naturwissenschaftlichen Gesellschaft Zürich 1746–1896* (1896): 88–89 [by F. Rudio, bibliography only]. • *Index Litteraturae Entomologicae* (1928): 530–532 [by W. Horn and S. Schenkling, partial bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1965): 289 [by W. Derksen and U. Scheiding-Göllner, partial bibliography only].

**Herman, Leander (Lee).** Herman, of the USA, was born on October 6, 1939. His work on staphylinids began in graduate school, which he entered with the intention of studying the ecology and behavior of beetles; he was also interested in genetics and morphology. Herman switched to beetle systematics at the urging of the cicadellid specialist, David Young, who also suggested staphylinids, because the group was difficult, poorly known, and had few people working on it. At the time, in the United States, there were only three workers active on the family. After spending a year in Iran collecting beetles and mammalian ectoparasites, he returned to graduate school to pursue systematic studies of staphylinids. His first project was the revision of a paederine genus. He then began work on the Oxytelinae,



Leander (Lee) Herman



*Johann Heinrich Hochhuth*

first with a generic revision of the group, then a revision of the North American species of *Bledius*. Most of his subsequent efforts have been directed to revisionary studies of various genera in the Paederinae and Pseudopsinae. He is currently working on a generic revision of the Paederinae and on revisions of several paederine genera. He is the cofounder, with R. T. Allen, of the current incarnation of the Coleopterists Society which publishes *The Coleopterists Bulletin*. He has published about 271 species and 11 genera.

**Hervé, Pierre Aimé.** Hervé, of France, was born on October 7, 1908 and died February 25, 1997 in Toulon, France. An engineer by profession, he was an amateur coleopterist and studied the Staphylinidae of France for most of his life. He specialized in soil-dwelling species, particularly those of *Mayetia* and *Leptotyphlus*. His many articles are characterized by meticulous illustrations of critical structures. He named 28 species in the Leptotyphlinae and others in the Pselaphinae.

**Hochhuth, Johann Heinrich.** The place and date of birth of Hochhuth are not known. He died (of cholera) on June 17, 1872 in Kiev, Ukraine.

Hochhuth obtained his training in botany and zoology in Vienna. In 1834, on the recommendation of Professor Ventsel, he was called from Vienna to Kremenets (western Ukraine) to a position of assistant to the chief gardener of the botanical garden there. While transporting plants from Kremenets to Kiev, Hochhuth made contacts at the zoological cabinet in Kiev and eventually became a taxidermist there. In 1839, on recommendation and request of Professor Traufetter, Hochhuth became the chief gardener of the newly established botanical garden in Kiev, and on July 1, 1863, he became the head of the tree nursery there. On September 23, 1850 the emperor Alexander Nikolae-vich (Alexander II) visited the botanical garden in Kiev and awarded Hochhuth a gold medal for his achievements in the development of the botanical garden. Hochhuth eventually became the Director of the Botanical Museum and Garden and held this post until his death.

In addition to his botanical achievements, Hochhuth also worked actively as an coleopterist, and Staphylinidae were his favorite group. He published less than 10 papers on Coleoptera, but some of them contributed substantially to the knowledge about several areas of Ukraine and Russia. Two of his papers are particularly important for Staphylinidae: *Die Staphylininen-Fauna des Kaukasus und Transkaukasiens* (1849), and *Beiträge zur näheren Kenntniss der Staphylinen Russlands* (1862). The latter paper was translated into French and published in *L'Abeille* in 1867. Hochhuth described 107 species and 1 genus.

Hochhuth's collection is housed in the collections of the National Scientific Museum of Nature of the National Academy of Sciences in Kiev, Ukraine. Some types are also in the Institute of Zoology in Kiev. [A.S.]

SOURCES: [NOTE: The references for this section were supplied by A. Solodovnikov]. • *Universitetskije izvestija* [Historical note about the botanical garden of St. Vladimir's University, in Russian] (1864): pages not known [by Rogovich]. • *Bulletin de la*

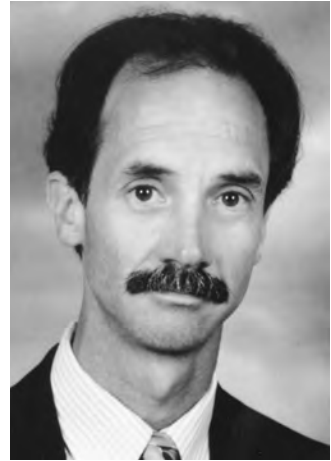
*Société imperiale des naturalistes de Moscou* 46 (3), *Séances* (1872): 17 [by T. A. Passengouth]. • *L'Abeille (Les entomologistes et leurs écrits)* 24 (1887): 192 [by S. A. Marseul, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 559 [by W. Horn and S. Schenkling, partial bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1965): 331 [by W. Derksen and U. Scheiding-Gölner, partial bibliography only].

**Hoebeke, E. Richard (Rick).** Hoebeke, of the USA, was born on April 6, 1949. His work on staphylinids began in graduate school with a revision of the myrmecophilous aleocharine genus *Xenodusa*. He later revised the Falagriini of North America north of Mexico. He has published taxonomic articles on *Aleodorus*, *Autalia*, *Lypoglossa*, and *Thamiaraea*. The main focus of his research is the Aleocharinae, but he has also published taxonomic work on *Rugilus*. One of his special interests is the detection and documentation of adventive Staphylinidae in North America. This attention has led to articles documenting the introduction of species of *Oxypoda*, *Coprophilus*, *Rugilus*, and *Sunius* into North America, and will doubtless lead to discovery and verification of others. His long-range goals include taxonomic study of genera of the Athetini, continuation of his revision of the New World Falagriini, and a revision of the New World species of *Rugilus*. He has described 11 species.

**Horion, Adolf.** Horion was born in Hochneukirch (county Grevenbroich), Germany, on July 12, 1888, the second of seven children born to Jakob Horion and his wife Maria Cäcilia (born Pesch). He died on May 28, 1977, in Überlingen am Bodensee, Germany.

After graduating from the *gymnasium* in Rheydt, Horion studied at the universities in Bonn and Freiburg i.Br. On August 11, 1911, he was ordained a minister. He performed church services at several locations in Germany until 1938, when he retired to be able to devote all his energy to the study of the faunistics of European beetles. He was an active collector, keen observer, and an excellent organizer of data on beetles obtained by his own activities, as well as by studying the collections of other European coleopterists. His serious coleopterological work started in 1927 under the direction of Professor Carl Bosch (Heidelberg), who supported Horion's faunistic studies until his death in 1940.

After his retirement, Horion lived in Düsseldorf (1938–1942), where, due to the war, he lost his first Coleoptera collection; fortunately his extensive library and other material survived. By the end of 1942 he had moved to Überlingen-Bodensee to live with his sister Cäcilia Arnold. At about the same time Horion published, with Bosch's support, the first volume of his *Faunistik der deutschen Käfer* (Vienna, 1941). It eventually became the famous, classical series (the title was changed, starting with volume two, to *Faunistik der mitteleuropäischen Käfer*) that contributed immensely to the knowledge of the faunistics and systematics of central European Coleoptera. The Second World War interrupted the publication of this series, but it was resumed in 1949 with the second volume, which was published in Frankfurt a.M. by Vittorio Klostermann. Further volumes followed, thanks to the generous financial support of Dr. h. c. Georg Frey



*E. Richard (Rick) Hoebeke*



*Adolf Horion*





George Henry Horn

(Tutzing b. München), of the Deutsche Forschungsgemeinschaft and others. Horion died before he was able to complete the series. I treasure the last published volume (12) dealing with the Cerambycidae, with Horion's dedication written in 1976 in his 88th year! The Staphylinidae (including Aleocharinae) are treated in volumes 9–12, and along with many other families, the current excellent knowledge of the faunistics and systematics of the middle European Staphylinidae is based on this treatment. In addition to his *Faunistik*, Horion also published numerous papers in various journals. He was at one time the editor of the journal *Entomologische Blätter*, and after the Second World War he briefly published his own journal *Koleopterologische Zeitschrift*.

Horion's enormous contribution to coleopterology and his encyclopedic knowledge of the European beetles were widely recognized by all active coleopterists of that time; he was often called the nestor of the central European coleopterology, and was referred to as the "Altmeister Horion". His achievements were recognized officially. He was a honorary member of many societies, in 1941 he was awarded the Fabricius-Medal, and in 1954 he received the degree *doctor honoris causa* from the university in Tübingen, Germany. Horion described three species and one genus in the Staphylinidae. [A.S.]

SOURCES: • *Naturwissenschaftliche Rundschau* 7 (1954): 524 [anonymous]. • *Entomologische Arbeiten aus dem Museum Georg Frey* 5 (1954): 746 [by E. Haaf]. • *Entomologische Blätter, Krefeld* 54 (1958): 1–3 [by E. Jünger, with portrait]. • *Mitteilungen der deutschen entomologischen Gesellschaft* 17 (1958): 37–38 [by G. Schmidt, with portrait]. • *Opuscula Entomologica* 24 (1959): 150 [by C. H. Lindroth]. • *Mitteilungen der deutschen entomologischen Gesellschaft* 22 (1963): 43–44 [by K. Delkeskamp]. • *Nachrichtenblatt der bayerischen Entomologen* 12 (1963): 105–106 [by H. Freude, with portrait]. • *Entomologische Blätter, Krefeld* 59 (1963): 69–71 [by V. Richter, with portrait]. • *Zeitschrift für angewandte Entomologie* 52 (1963): 101–102 [by V. Richter, with portrait]. • *Entomologische Blätter, Krefeld* 74 (1978): 129–131 [by J. Illies and W. Lucht, with portrait]. • *Entomologisk Tidskrift* 99 (1978): 69–70 [by C. H. Lindroth, with portrait]. • *Entomologische Blätter, Krefeld* 75 (1979): 1–4 [by E. Jünger]. • *Entomologische Blätter, Krefeld* 74 (1979): 134–139 [by W. Lucht, bibliography only]. • *Mitteilungen der deutschen Gesellschaft für allgemeine und angewandte Entomologie* 2 (1980): 63–64 [by J. Illies].

**Horn, George Henry.** Horn was born in Philadelphia, Pennsylvania, USA, on April 7, 1840, to parents of German origin; his father was a drugstore proprietor. He died on November 24, 1897, in Beesley's Point, New Jersey, USA.

Horn graduated from high school in 1858, already interested in natural sciences, particularly entomology. He entered the University of Pennsylvania and received his medical degree in 1861. He served as a surgeon with the California Volunteers in the infantry from 1862 to 1866. This job gave him an opportunity to collect insects throughout California and also in Arizona and New Mexico. He returned to Philadelphia in 1866 to resume a practice and he soon became a noted authority in obstetrics. In

December 1866 he was elected President of the American Entomological Society and on December 26 presented to the Philadelphia Academy of Natural Sciences the first results of his natural history work during his four years in California. Being a bachelor, he was able to devote all his spare time to the study of the beetles. His talent, sharp eye for recognizing subtle characters, and perseverance made him more successful in entomology than in his professional career. When he died in 1897 he had published 265 papers and described 154 new genera and 1,682 species. Almost all his work was devoted to the North American fauna. In Staphylinidae, he described 125 species and 6 genera.

Horn published his first article on Coleoptera in 1860 while still a student in medical school. The paper attracted the attention of LeConte and was actually the start of a collaboration and close friendship between these two outstanding North American coleopterists. Horn brought the knowledge of North American Coleoptera, established previously by Say and particularly LeConte, one step higher. He took the route of publishing revisionary papers (obviously influenced by LeConte), mostly entitled "Synopsis. . . ." As with many other beetle families, Horn's papers on some staphylinid groups, such as *Quediini* (1878), *Staphylinus* and related genera (1879), or *Philonthi* (1884) became indispensable to anybody working on these groups; they are still consulted.

Horn was an honorary member of numerous entomological societies, both in Europe and North America; he was associated as Professor of Entomology with the University of Pennsylvania (but he never taught the subject); and, at the time of his death, he was the librarian and one of the secretaries of the American Philosophical Society. On December 26, 1896, Horn suffered a serious stroke, which prevented him from further work. After his death, Horn's collection and library were bequeathed to the American Entomological Society and later transferred to the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, where they are still housed, together with the LeConte collection. [A.S.]

SOURCES: Many biographies and obituaries were published; therefore only some are given here. Extensive listings may be found in Gilbert (1977). • *Proceedings of the Academy of Natural Sciences Philadelphia* 49 (1897): 505–510, 515–518 [by E. J. Noland]. • *Transactions of the American Entomological Society* 25 (1898): I–XXXVII [by P. P. Calvert, with bibliography by S. Henshaw and photograph]. • *Science* 7 (1899): 73–77 [by J. B. Smith]. • *Index Litteraturae Entomologicae* (1928): 577 [by W. Horn and S. Schenkling, partial bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1965): 354–358 [by W. Derksen and U. Scheiding-Göllner, bibliography from 1866 only].

**Hromádka, Lubomír.** Hromádka, of the Czech Republic and born in 1931, has been interested in nature from his youth. His interest in and work on the Staphylinidae has focused on *Stenus* and *Philonthus*, with most of his work concentrated on the former. He also has an affinity for *Gabrius*, *Cafius*, *Remus* and *Quedius*; he plans studies of Palearctic species of the latter genus. He has described 62 species.



Lubomír Hromádka



*Ulrich Irmeler*

**Irmeler, Ulrich.** Irmeler, of Germany, was born on December 21, 1946. His interest in staphylinids was stimulated by collecting beetles as a youth, and his attraction to Neotropical staphylinids commenced after doing research in Manaus, Amazonas, Brazil. Most of his published work is on soil ecology and conservation; one of his ecological articles discusses the habitat changes and fluctuation in abundance of soil beetles living in inundation forests of the central Amazonian region. The time available for his taxonomic studies of the Staphylinidae is confined to the weekends. Nevertheless, he has produced a significant number of taxonomic articles on Neotropical staphylinids, the first of which, on *Platyprosopus*, appeared in 1977. Since then he has published taxonomic articles on *Bledius*, *Xenopygus*, *Neolindus*, *Holotrochus*, *Mimogonia*, *Aneucamptus*, *Thoracophorus*, *Lispinus*, and *Neolosus*. One of his long-range goals is to publish a checklist and generic key for the Neotropical Osoriinae. He has named 86 species and 1 genus.



*Gunnar Israelson*

**Israelson, Gunnar.** Israelson was born on August 4, 1910, in Hedemora, Sweden, and died on February 19, 1999, in Oskarstroom, Sweden.

As a schoolboy and through "gymnasium" he was interested in flowering plants. During his university studies, under the influence of limnologists, he turned his attention to algae, particularly to those in lotic environments of fast-flowing streams. He published several articles on algae and his Ph.D. thesis on "The freshwater Florideae of Sweden" was published in 1942.

After his doctoral studies, he moved with his family to Hässleholm, a small town in southern Sweden, where he was a teacher at the local gymnasium. He became interested in beetles by accident. One early summer evening as he crossed the town square, he almost stepped on a large beetle. He picked it up but didn't know what it was, then realized that he just did not know much about beetles, and decided to change that, since he was the head biology teacher at the gymnasium. Thereupon he met Sven Palmqvist, a printer by profession, and a skillful, self-taught coleopterist who spent his vacations in Hässleholm. Palmqvist had been working on an inventory of the beetle fauna of the region, and by the time he and Israelson met, the list had reached about 500 species. When, because of infirmities, Palmqvist was forced to reorganize his vacations, it fell upon Israelson to continue the inventory. Israelson selected a small plot of suitable land with a radius of about 10 km near the town of Hässleholm. Many novelties were successively recorded in *Natur i Göinge*. By 1986 the number of species had reached 2,250. He collected indiscriminately, not especially favoring staphylinids. In numerous trips to various parts of Denmark, Sweden, and Norway and into the Arctic archipelago from 1946 to 1980 he accumulated about 4,000 species of beetles. From 1964 to 1991 he made numerous excursions to the Canaries, Madeiras, and Azores, where he collected thousands of beetles, which are now deposited in the Naturhistoriska Riksmuseet. Israelson published a number of articles on the beetle fauna of Macaronesia. In the Staphylinidae he named 10 species and 1 genus.

SOURCES: Israelson's son.

**Ito, Tateo.** Ito, of Japan, was born on May 26, 1943. During childhood, he and his brothers collected beetles, including staphylinids, in and near Osaka. As his knowledge of beetles increased, he realized that little was known about staphylinids despite their abundance in large towns such as Osaka City. This dearth of information led to his study of the family. Within the family he concentrates on the Asian Oxytelinae, Staphylininae, and Paederinae, particularly those that live in or near Japan. An important on-going investigation is his work on the genus *Nazeris*. He has described nearly half of the species in the genus (plus six subspecies) and has studied most of the others. He plans to study all the species of *Nazeris* and to present phylogenetic and biogeographic analyses of it. He has also published taxonomic work on *Stillicoderus*, *Lobrathium*, *Ochtheophilum*, *Astenus*, *Platydracus*, *Othius*, *Oxytelopsis*, *Anotylus*, and *Oxytelus*. He has described 79 species.



Tateo Ito

**Janák, Jiří.** Janák, of the Czech Republic, was born on June 2, 1958. His interest in the Staphylinidae was stimulated by his collaboration with J. Boháč and inspired by the works of A. Smetana. His main interests are the Xantholinini, Diochini, and Platyprosopini of the world, and the Staphylinidae of the Malagasy subregion. He is currently studying the Madagascar species of *Oedichirus* and *Typhloleleupius*, and the staphylinid fauna of Réunion. The genera on which he has published taxonomic works include *Oedichirus*, *Xantholinus*, *Octavius*, and *Stenaesthetus* and the anophthalmic species of *Lathrobium* from a region of Romania. He has named 23 species.



Jiří Janák

**Jansson, Anton.** Jansson was born in Örebro, Sweden, on December 3, 1880, and died there on July 11, 1963.

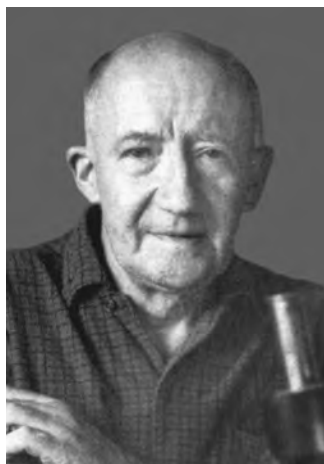
After receiving his high school diploma in 1902, Jansson worked from 1917 until 1933 as a journalist and secretary of the redaction of the paper *Nerikes Allehanda*. Later he was affiliated with two other newspapers in his home town, *Örebro Dagblad* and *Örebro-Kuriren*.

Jansson was an entomological polyhistor and, in addition, had a wide range of humanistic and cultural interests. In 1944, in recognition of his achievements in entomology, he received the degree *doctor honoris causa* from the University in Uppsala. The brunt of his entomological work is in Scandinavian Microhymenoptera, particularly in the families Proctotrupidae and Chalcididae. However, during the earlier part of his career, Jansson also published on Hemiptera and aculeate Hymenoptera, as well as on Coleoptera. In 1921 he published a broad paper "Die Insekten-, Myriapoden- und Isopodenfauna der Gotska Sandön". His interest in Coleoptera persisted, and between 1921 and 1952, he published 43 contributions with the running title "Coleopterologiska Bidrag". These contributions are of a faunistic-taxonomic nature, and many of them deal with members of Staphylinidae. He also published some joint papers with O. Sjöberg dealing with staphylinids, one of them containing the description of *Proteinus apicidens*. Jansson described 13 species and 1 genus in Staphylinidae. [A.S.]

SOURCES: • *Opuscula Entomologica* 20 (1955): 99–100 [by C. H. Lindroth, with photograph]. • *Entomologisk Tidskrift* 76



Anton Jansson



Jean Jarrige

(1955): 73–77 [by T. Nyholm, with portrait]. • *Norsk Entomologisk Tidsskrift* 10 (1956): 63 [by A. Strand]. • *Notulae Entomologicae* 43 (1963): 154 [anonymous]. • *Opuscula Entomologica* 28 (1963): 162 [by C. H. Lindroth]. • *Entomologisk Tidskrift* 84 (1963): 297–306 [by T. Nyholm, with bibliography].

**Jarrige, Jean.** Jarrige was born in Bezons near Paris, France, on October 21, 1904. He died in Paris on June 8, 1975.

Jarrige worked as an inspector for the company Eclairage, Chauffage et Force Motrice (from 1946 le Gaz de France). He was devoted to entomology from his early years and eventually became a remarkable amateur staphylinidologist who made substantial contributions to knowledge of the family. He was also an exceptional collector, always actively collecting in the surroundings of Paris and presenting his results and observations at the meetings of the Société des Sciences naturelles de Seine-et-Oise, and later at the Groupe de Coléoptéristes Parisiens. At age 20 he joined the Société entomologique de France, where he met Sainte-Claire Deville, de Peyerimhoff, and Méquignon, who certainly influenced him to undertake the study of staphylinids. His need to study the collections at the Muséum National d'Histoire Naturelle led him to Professor Jeannel, who opened the doors of the Muséum's Laboratoire d'Entomologie to him. Jarrige was very active in this laboratory and named innumerable species from various parts of the world. After the Second World War he started, following Paulian, to study the fauna of Madagascar and its neighboring islands, and published numerous papers on various groups. Along with his research, he always tried to keep the important *Catalogue raisonné des Coléoptères de France* by Sainte-Claire Deville up to date.

Jarrige was the Officier des Palmes académiques and Attaché au Muséum National d'Histoire Naturelle. In the latter function, he helped many staphylinidologists to locate the types of the species described by older, mainly French authors, and made them available for study. Jarrige also served as one of the presidents of the Société Entomologique de France, and was replaced in this function by Villiers in 1969.

Jarrige published about 95 notes and papers on beetles between 1924 and 1978, almost all on the Staphylinidae. Some of them, such as the joint paper with Jeannel (*Biospeleologica*, 1947) are substantial. His last paper (1978), dealing with the Staphylinidae of the Andringitra Range in central Madagascar, was published posthumously. Jarrige's collection of Staphylinidae, declared a "monument historique", was acquired in 1977 by the Muséum d'histoire naturelle in Paris and is housed there. His general collection of Coleoptera, as well as his library, went to Jacques Chassain.

Jarrige described 276 species and 13 genera in Staphylinidae. [A.S.]

SOURCES: • *Bulletin de la Société entomologique du France* 80 (1975): 295 [anonymous]. • *L'Entomologiste* 31 (1975): 230–232 [by G. Ruter]. • *L'Entomologiste* 43 (1987): 129–138 [by J.-C. Lecoq and J. Orousset, with bibliography and photograph]. • *Les entomologistes français 1750–1950* (1987): 205 [by J. Lhoste].

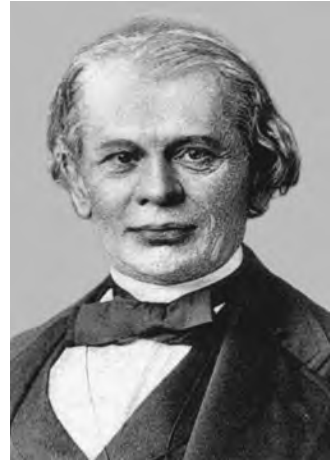
**Kashcheev, Vitaly Alexandrovich.** Kashcheev, of Kazakhstan, has published several articles on staphylinids of Central Asia, particularly of Kazakhstan and Mongolia. Most of his work has been directed toward the Oxytelinae, particularly the genus *Bledius*. Among the genera in which he has described new species are *Bledius*, *Coprophilus*, *Deleaster*, *Eugenius* [= *Eppelsheimius*], *Ochthephilus*, *Oxytelus*, *Platystethus*, *Medon*, *Ochthephilum*, *Falagria*, *Sepedophilus*, and others. He has described 31 species and 2 genera.

**Kiesenwetter, Ernst August Hellmuth.** Kiesenwetter was born in Dresden, Germany, on November 5, 1820, and died there on March 18, 1880.

Kiesenwetter graduated from the *gymnasium* in Bautzen and went on to study law at the university in Leipzig until 1843. He pursued law as a career and eventually became the *Geheimer Regierungsrat* at the Ministry of the Interior in Dresden in 1871.

Kiesenwetter became interested in entomology during his high school years and during his university years in Leipzig and, influenced by professor Kunze and Dr. R. Sachse, his interest turned to beetles. He was also supported and directed by Dr. Schaum, who eventually became the professor of entomology at the University of Berlin. Other eminent entomologists of that time, such as Dohrn and Maerkel, also played an important role in Kiesenwetter's entomological life. The first of Kiesenwetter's papers were published in the early 1840s, most of them in *Stettiner Entomologische Zeitung*. He also started to take collecting trips to various parts of Europe (e.g., Greece and Spain) and worked up the collected material in follow-up papers that covered a wide range of coleopteran families, including the Staphylinidae. Three of his early papers, published in 1843, 1844, and 1846, dealt with this family. The first one treated the myrmecophilous staphylinids Kiesenwetter collected in the nests of two *Formica* species. The second one presented the staphylinid fauna of the surroundings of Leipzig, and the third paper was a treatment of the species of the genus *Anthophagus*. Most of the new species described in these works are still valid. In addition to about 80 papers published in various journals, Kiesenwetter was involved in publishing the series *Naturgeschichte der Insecten Deutschlands*, started by Dr. W. Erichson and continued by H. Schaum, G. Kraatz, and himself. Kiesenwetter contributed several large sections to this series, some in coauthorship with other workers, such as Schaum. Kiesenwetter described 91 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: • *Entomologische Nachrichten* 6 (1880): 150–151 [anonymous]. • *Entomologist's Monthly Magazine* 16 (1880): 280 [anonymous]. • *Naturae Novitates* 7 (1880): 62 [anonymous]. • *Naturalist, London* 2 (1880): 208 [anonymous]. • *Nature* 21 (1880): 538 [anonymous]. • *Entomologist* 13 (1880): 120 [by E. A. Fitch]. • *Leopoldina* 16 (1880): 67–70 [by H. T. Kirsch, with bibliography]. • *Deutsche Entomologische Zeitschrift* 24 (1880): 323–336 [by G. Kraatz, with bibliography and photograph]. • *L'Abeille* (Les entomologistes et leurs écrits) 18 (1880): 123–124 [by S. A. Marseul]. • *American Entomologist* 3 (1880):



Ernst August Hellmuth  
Kiesenwetter



William Kirby



Jakov Davydovich Kirshenblat

150 [by C. V. Riley]. • *Zoologischer Anzeiger* 3 (1880): 126 [by G. F. Westermann]. • *L'Abeille* (Les entomologistes et leurs écrits) 21 (1883): 63–71 [by S. A. Marseul, bibliography only]. • *Kunst, Wissenschaft, Technik: Beilage zu Bautzener Nachrichten* (1927): nr. 22 [by K. Jordan]. • *Index Litteraturae Entomologicae* (1928): 628–630 [by W. Horn and S. Schenkling, partial bibliography only]. • *Deutsche Entomologische Zeitschrift Iris* 57 (1943): 1–27 [by E. Möbius]. • *Index Litteraturae Entomologicae Serie II* (1965): 474–476 [by W. Derksen and U. Scheiding-Göllner, bibliography only].

**Kirby, William.** Kirby was born in Witnesham Hall, Suffolk, England, in September 1759. He died on July 4, 1850 in Barham near Ipswich, England.

Kirby was educated for the clergy. After graduating from the Caius College, Cambridge, in 1781, he acquired the rectory of Barham in 1796, and efficiently conducted his ministry for 68 years. At the same time he was deeply involved in the study of insects, and eventually became known as the father of entomology in England.

Kirby wrote many entomological papers, including some encyclopedic works that made him famous. After Kirby met Spencer, fairly late in his life (he was already 48 years old), the two started to work on *An Introduction to Entomology . . .* that appeared in four volumes between 1816 and 1826. The work became so popular that there were seven editions, and it was translated into German and Dutch. Of particular importance for North American entomologists is Kirby's treatment of insects for Richardson's *Fauna Boreali-Americana, or the Zoology of the Northern Parts of British America* (volume 4, published in 1837). In this volume, Kirby divided the Coleoptera into 13 primary groups and described or redescribed 343 taxa of Coleoptera (in addition to taxa of other orders). Staphylinidae (as Brachyptera) are treated on pages 82–95, and included 9 genera and 15 species.

Kirby's library was unfortunately sold in an auction in 1850, but his collection, including his handwritten notebooks, are in the Entomological library at the Natural History Museum (London). Both are essential for correct recognition of the syntypes of many Stephen's species (see Hammond, *Entomologist's Gazette* 23 [1972]: 129–135).

Kirby described 11 species and 1 genus in Staphylinidae. [A.S.]

SOURCES: Many biographies and obituaries for Kirby were published, therefore only selected ones are given here. Extensive listing may be found in Gilbert (1977) and in Evenhuis (1997). • *Geschichte, Systematik und Literatur der Insektenkunde* (1836): 101–105 [by J. N. Eiselt]. • *Zoologist* 8 (1850): 2886–2889 [by E. Newman, with bibliography]. • *Life of W. Kirby, rector of Barnham* (1852) [by J. Freeman, with bibliography and photograph]. • *L'Abeille* (Les entomologistes et leurs écrits) 26 (1888): 247–251 [anonymous, bibliography only]. • *Canadian Entomologist* 47 (1915): 384–386 [by F.J.A. Morris]. • *Index Litteraturae Entomologicae* (1928): 631–634 [by W. Horn and S. Schenkling, bibliography only]. • *History of Entomology* (1931): 670–672 [by E. O. Essig, with partial bibliography and photograph].

**Kirshenblat, Jakov Davydovich.** The date of birth of Kirshenblat is not known. He was born in Tbilisi, Georgia, the son of a physician. He died on October 20, 1980 in Chernovtsy, Ukraine.

Kirshenblat graduated from the biological faculty of Leningrad (now St. Petersburg) State University and from the therapeutic faculty of the First Medical Institute in Leningrad. After graduate studies he worked at the hospitals and medical scientific institutions of Leningrad. During the Second World War he served in the army and survived the blockade of Leningrad. After the war Kirshenblat got a position as the chief of the department of endocrinology at the Otto's Institute for Obstetrics and Gynecology in Leningrad. There he combined scientific research with medical practice. From 1954 to 1980 he was working at the Medical Institute in Chernovtsy (Ukraine) as a chief of the department of normal physiology.

Kirshenblat started to do scientific work as a graduate student. He already had wide biological and medical interests: zoology, physiology of reproduction, neural regulation of the endocrine glands, diagnostics, and therapy of endocrine diseases. He published more than 140 papers and 3 monographs. In 1938 he got the Candidate of Biology degree (equivalent to Ph.D. degree in biology), and in 1952 the degree of Doctor of Science. He invested a lot of time in teaching and advising medical students, published two textbooks for medical institutes, and advised 16 postgraduates in medical sciences.

In addition to medical interests, Kirshenblat was also interested in taxonomy of Staphylinidae. He published 12 papers on Staphylinidae, containing descriptions of new taxa (he described 29 species), faunal records and surveys, and regional taxonomic reviews (*Paederus* of the fauna of the former USSR, and *Ontholestes* of the Palaearctic region). He had special interest in nidicolous staphylinids (two papers). Kirshenblat is the author of the identification keys to the Staphylinidae of the European part of the former USSR, published in 1965 by the Zoological Institute in Leningrad (now St. Petersburg) within the series *Keys of Insects of European Russia*.

Kirshenblat's collection of Staphylinidae, including the types of the taxa he described, is housed in the collection of the Zoological Institute of the Russian Academy of Sciences in St. Petersburg. [A.S.]

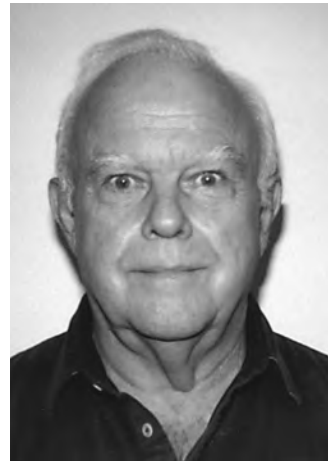
SOURCE: • *Problemy endokrinologii* 27 (1981): 88 (author?).

**Kishimoto, Toshio.** Kishimoto, of Japan, was born on December 1, 1971. He has been interested in beetles from childhood. On entering university he began studies in entomology and soon became fascinated by staphylinids. His main interest is in the Aleocharinae, particularly those of east Asia; he is currently working on the Gyrophaenina and Falagriini of the region. His long-range goals include establishing a framework of classification for the Aleocharinae and clarification of the east Asian staphylinid fauna. He has described one species and coauthored another.

**Kistner, David Harold.** Kistner, of the USA, was born on July 30, 1931. His interest in the Staphylinidae began when he was about 16 and collecting insects in the Great Smoky Mountains National Park with the chief naturalist, where he encountered



*Toshio Kishimoto*



*David Harold Kistner*





*Jan Klimaszewski*



*Carl (Carlo) Koch*

many staphylinids flying about. That embryonic interest grew when the Field Museum in Chicago acquired the Bernhauer staphylinid collection at a time when he was in almost daily contact with C. Seevers. When Kistner began searching for a doctoral research project Seevers suggested a revision of the Pygostenini. Since the group included both myrmecophiles and termitophiles, it appealed to the eminent termite specialist, A. E. Emerson, with whom Kistner was studying. Most of his research career has been devoted to elucidating the taxonomy, phylogeny, evolution, and behavior of staphylinid inquilines associated with ants, particularly army ants, and termites. With regard to behavior, he is particularly interested in the mechanisms for integrating staphylinids into ant and termite colonies. These mechanisms are based on morphological, behavioral, and chemical mimicry, and he is currently publishing extensive data on the topic. His interest in the coevolution of social insects and their inquilines has resulted in numerous articles. Kistner's curiosity has always kept him in the forefront of new techniques for understanding the groups and phenomena that interest him. Long ago he investigated the histology of glandular systems of the inquilines and the importance of the systems to their survival, tried numerical and phylogenetic techniques to elucidate relationships, and is currently exploring the use of DNA sequence data to test relationships. Kistner has traveled widely, particularly in tropical regions, and amassed an enormous collection of myrmecophilous and termitophilous staphylinids. He believes his Old World collections (of inquiline staphylinids) is 10 times greater, both in number of species and specimens, than the total of all other such collections combined. He has published extensively on the myrmecophilous and termitophilous taxa of the Old and New World tropics. He has published nearly 200 articles on staphylinids and has described (or codescribed) about 530 species and 97 genera.

**Klimaszewski, Jan.** Klimaszewski, of Canada, was born in Poland on August 23, 1950. He was motivated to study the Staphylinidae by Smetana during his first visit to Canada in 1973. He is interested in the Aleocharinae, and his work has resulted in revisions of the Gymnusini and Deinopsini and revisionary studies of many species of *Aleochara* from many parts of the world. He has also published an article on the cave-dwelling aleocharines of eastern North America, and was a coauthor of a revision of the Aleocharinae of the Arctic region of North America. He has also published taxonomic articles on the Myllaenini, *Platandria*, *Polylobus*, *Haploglossa*, *Autalia*, and *Pseudomniophilia*. He has published 121 species and 4 genera.

**Koch, Carl (Carlo).** Koch was born in Vienna, Austria, on January 5, 1904, and died on February 23, 1970, in Windhoek, Namibia.

Koch studied at the universities in Vienna, Paris, Pavia and Monaco; in 1960 he received his Ph.D. from the Ludwig-Maximilians-Universität in München, Germany. He was the conservator at the Museo Entomologico P. Rossi di Duino in Trieste, Italy (1929–1937), and from 1937 to 1948 he was associated with the Museum G. Frey in München (Germany). In 1948

he accepted a position as curator of Coleoptera in the Transvaal Museum in Pretoria, and later was the founder and director of the Namib Desert Research Station in Gobabed near Swakopmund, Namibia.

During the earlier part of his career, Koch studied Staphylinidae and Anthicidae, but later turned his attention exclusively to the Tenebrionidae and to ecological aspects of the desert fauna. He was a fellow of the Royal Entomological Society and Royal Geographical Society in London, and the Royal South African Society. He was also a standing member of the International Congresses of Entomology.

Between 1932 and 1941 Koch published almost 30 papers on Staphylinidae, the major ones dealing with the genus *Anthophagus* (1934), *Achenium* (1937), *Bledius* (1938), and some Paederinae (1938–1939). Another set of his papers dealt with scientific results of various expeditions, one of them (1936) included a key to the world species of the *Cafius*. The total number of his publications, many of them monographic, reaches about 175.

Koch described 16 species and 13 genera in Staphylinidae. [A.S.]

SOURCES: • *New Scientist* 43 (1969): 150–151 [anonymous]. • *Entomologische Arbeiten aus dem Museum G. Frey* 21 (1970): 1–2 [by G. Frey, with portrait]. • *Memorie della Società entomologica italiana* 49 (1970): 153–155 [by G. Marcuzzi]. • *Proceedings of the Royal Entomological Society London* (C) 35 (1971): 53 [by J. E. Hinton]. • *Miscellanea Zoologica* 3 (1972): 107–108 [by F. Español].

**Kocian, Matúš.** Kocian, of the Czech Republic, was born in 1969. He has had an interest in the Staphylinidae since childhood. He is engaged in studies of the Tachyporinae of central Europe, the Bolitobini of Europe, and *Ischnosoma*, *Mycetoporus*, and *Bryophacis* of the world. He has published revisionary studies on *Ischnosoma* of the western Palaearctic, illustrations and descriptions of the aedeagus of the central European species of *Lordithon*, and larval descriptions of *Sepedophilus bipustulatus* and *Habrocerus capillarcornis*. Long range, he wants to write a monograph for *Ischnosoma* of the world and a revision of the European *Mycetoporus*. He has described seven species.

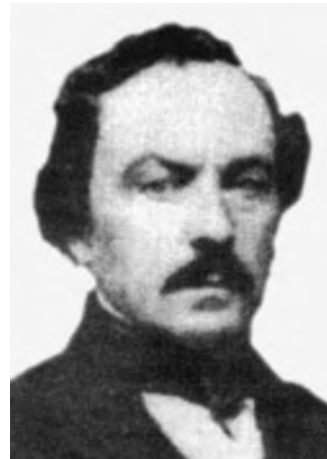
**Kolenati, Friedrich Anton.** Kolenati was born in Prague, now Czech Republic, on April 12, 1812. He died on June 17, 1864 in Ovčárna pod Pradědem, now Czech Republic.

As a young boy Kolenati was already interested in natural sciences. He studied medicine at the university in Prague; he obtained his diploma in 1836 and practiced medicine for a short time, but privately studied bats and insects.

Kolenati spent several years (1842–1846) in Russia, first in St. Petersburg, where he became the assistant of zoology at the Academy of Sciences. From St. Petersburg he took long trips to southern Russia, including the Caucasus; it is not without interest that he reached the summit of Kazbek (5,047 m) in August 1844. During these explorations he accumulated over 30,000 insect specimens in addition to other rich natural history material. He worked up most of the entomological material while in St. Petersburg and treated the rest after his return to Prague.



Matúš Kocian



Friedrich Anton Kolenati



Horst Korge

In 1848 he became a private docent of special and medico-pharmaceutical zoology, botany and crystallography at the University in Prague. He also founded the natural history club Lotos, which existed until 1945.

Kolenati published many papers covering a wide range of natural sciences, his travels, etc. Results of his entomological explorations of the Caucasus were summarized in the series *Meletemata entomologica*, of which eight issues were published in St. Petersburg and in Moscow from 1845–1858. The third fascicle (with three color plates), published in 1846 in St. Petersburg, contained the Staphylinidae (as Brachelytra). In this paper, Kolenati described 33 new species and varieties, some still valid. [A.S.]

SOURCES: • *Zoologické Listy* 13 (1964): 284–285 [by J. Geisler]. • *Vesmír* 43 (1964): 347 [by J. Němec]. • *Lidé a země* 14 (1965): 51–55 [by F. M. Žampach]. • *Práce odboru přírodních věd Vlastivědného Ústavu v Olomouci* 5 (1965): 1–27 [by I. Flasar, with bibliography, portraits].

**Korge, Horst.** Korge, of Germany, was born on July 15, 1930. His interest in zoology began in childhood with observations made in his family's garden. Later he concentrated on faunistic surveys of the beetles of the "Mark Brandenburg" (Germany), and still later became interested in the beetle fauna of Asiatic Turkey. His interest in Turkey resulted in a substantial paper on species of the region. Many of his taxonomic articles have been on *Quedius*, but he also published on *Stenus*, *Bryoporus*, *Ochtheophilum*, *Scopaeus*, and *Xantholinus*. He has described 60 species and 3 genera.

**Kraatz, Ernst Gustav.** Kraatz was born in Berlin, Germany, on March 13, 1831. He died there on November 2, 1909.

Kraatz obtained his basic education in Berlin. He became interested in insects early and, luckily, his father was quite supportive of his son's interests. The young Kraatz started with butterflies, but soon turned his attention to beetles, an affection that lasted his entire life. He started to build his beetle collection by active collecting, by making exchanges with several eminent entomologists, such as Dohrn, Kiesenwetter, etc., and by buying specimens from insect dealers. In this way, he managed to expand his collection to 3,000 species by the end of 1848, when he was only 17! This was certainly a convincing confirmation of his excellent organizational talents, dedication, and perseverance, qualities that were so important to his career. In 1849, when only 18 years old, he also published his first paper "Bemerkungen über Myrmekophilen" in *Stettiner Entomologische Zeitung*; the paper contains data about several species of Staphylinidae.

From 1850 to 1853 Kraatz studied law at the universities in Heidelberg and Bonn, but without real commitment. Eventually, in October 1853, after Dohrn's intervention, his father allowed him to terminate his law studies and to take zoology at the university in Berlin. While at the university, staphylinids were Kraatz's prime interest and he made considerable progress in treating the Staphylinidae for the series *Naturgeschichte der Insecten Deutschlands*. Schaum, who was one of Kraatz's teach-

ers (medical zoology and entomology) insisted that Kraatz gets his doctoral degree before the publication of the book, so that his name on the title page would be preceded by “doctor”! Kraatz eventually gave in, submitted his doctoral thesis “Genera Aleocharinorum”, and obtained his degree on May 25, 1856 (the thesis was published in 1857 in *Linnaea Entomologica* 11: 1–43).

Kraatz became a member of many learned societies, the first one being the Entomologischer Verein zu Stettin. As it sometimes happens, a problem with Kraatz’s membership diploma eventually led to a complete breakdown of the relationship between Dohrn (who introduced him) and Kraatz. In October 1856 Kraatz was one of the founding members of the Entomologischer Verein in Berlin, and a year later became its president and editor of the *Berliner Entomologische Zeitschrift*; he continued to serve in these capacities until 1880. In 1875, he managed to push through his suggestion to rename the journal *Deutsche Entomologische Zeitschrift*. In 1881 Kraatz terminated his involvement with the Entomologischer Verein in Berlin. Typical for him, he immediately founded the Deutsche Entomologische Gesellschaft, and served for 25 years as president, and as editor of the *Deutsche Entomologische Zeitschrift*.

One of Kraatz’s dreams was the establishment of the Deutsches Entomologisches Nationalmuseum; he worked on this for many years starting in 1871. He finally succeeded in 1904, when the Museum was established in Berlin, in a house that Kraatz bought for this purpose. Shortly before Kraatz’s death, approval was granted to build a museum building, and this establishment later became the well-known Deutsches Entomologisches Institut. Following Kraatz’s wish, expressed shortly before his death, the urn containing his ashes was placed on the cabinet containing Staphylinidae, his favorite group. In 1905 the Prussian government honored Kraatz by bestowing on him the title Professor, in recognition of his services to entomology.

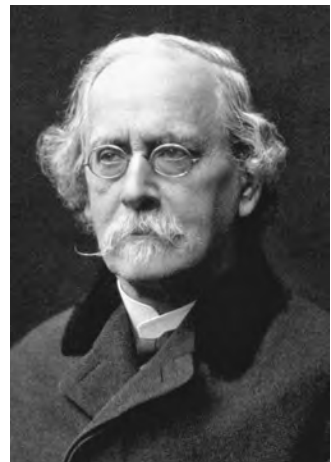
Kraatz was one of the eminent entomologists of his era, a man of strong personality and determination, who had many followers, but also quite a few enemies. His harsh criticism of the works of Motschulsky and Walker (see, e.g., in *Berliner Entomologische Zeitschrift*, 7: 215–220) and his ongoing feud with the former author are well known. During his lifetime, Kraatz published an incredible 1,393 papers covering a wide range of beetle families; even considering the fact that many of them are short notes of one page, this is quite impressive. Kraatz’s works on Staphylinidae, one of his preferred families, reflect his exact, meticulous taxonomic approach. Many of them (e.g., his treatment of the family in the series *Naturgeschichte der Insecten Deutschlands* [see above], or his paper “Staphylinen-Fauna von Ostindien, insbesondere der Insel Ceylan” [1859]) belong to the classical works on the family and are still regularly consulted.

It was really unfortunate that a man like Kraatz was hit toward the end of his life by the gradual loss of eyesight that developed into virtual blindness—the worst possible fate for any practicing entomologist!

Anybody interested in learning more about Kraatz should read the book by W. Horn, listed below. It was printed in Berlin



*Ernst Gustav Kraatz  
as a young man*



*Ernst Gustav Kraatz  
later in life*



Theodor (Bohdan) Krása

by A. W. Schade and distributed free to members of the Deutsche Entomologische Gesellschaft. It also contains a list of Coleoptera described by Kraatz; in Staphylinidae it includes 554 species and 69 new genera. [A.S.]

SOURCES: • *Prof. Dr. Gustav Kraatz . . .* (1906): 1–120 [by W. Horn, with bibliography by R. Zang and several portraits]. • *Entomologische Rundschau* 26 (1909): 132–133 [anonymous, with portrait]. • *Entomologische Blätter, Krefeld* 5 (1909): 237–239 [by W. Hubenthal]. • *Revue Russe d'Entomologie* 9 (1909): 341–342 [by Semenov Tian-Shansky]. • *Jahresberichte des Vereins für schlesische Insektenkunde* 3 (1910): XXIII–XXV [by R. Dittrich]. • *Deutsche Entomologische Zeitschrift* (1910): 109–112 [by W. Horn]. • *Entomologist's Monthly Magazine* 46 (1910): 21–11 [by “K. J.”]. • *Index Litteraturae Entomologicae* (1928): 660–663 [by W. Horn and S. Schenkling, partial bibliography only]. • *Bibliography of Australian Entomology 1775–1930* (1932): 181 [by A. Musgrave]. • *Index Litteraturae Entomologicae Serie II* (1965): 518–535 [by W. Derksen and U. Scheiding-Göllner, partial bibliography only]. • *Beiträge zur Entomologie* 17 (1967): 375–387 [by A. Köppen].

**Krásá, Theodor (Bohdan).** Krásá was born in Dobříš near Prague, Czech Republic, on January 14, 1875. He died on March 10, 1961, in Vrané n.Vlt. near Prague.

Krásá graduated from the *gymnasium* in Příbram and studied law at the university in Vienna and at Charles University in Prague. He moved with his family to Vrané n.Vlt. and worked as a postal accountant. His keen interest in nature, fully supported by his father, soon turned mainly to entomology, particularly to various aspects of coleopterology. In 1899 he joined the Physiocratic Society in Prague, where he became acquainted with and influenced by the eminent Czech entomologists of that time, Dr. O. Nickerle, Dr. K. Skalitzky, Dr. K. Rodt, and F. Hennevoğl. After the Czech Entomological Society was founded in 1904, he immediately joined the Society.

Krásá lived almost his entire life in Vrané n.Vlt. This area was, at that time, one of the prime areas for collecting insects, especially rare myrmecophilous species, in the surroundings of Prague. Krásá was known for his outstanding success as a collector, based on his ability to observe and recognize the often minute bionomical details that are essential for discovering rare species. Krásá became particularly famous for his collecting abilities and knowledge of myrmecophilous beetles, mainly of the families Staphylinidae and Pselaphidae. As a young student, Krásá led the famous Erich Wasmann to a site near his home to collect rare species of *Myrmoecia*. This apparently brought Wasmann to his knees in prayer to God for the privilege! In addition to Staphylinidae, Pselaphidae, and Scydmaenidae, Krásá also knew some other beetle families well.

Krásá published only 20 papers on Coleoptera, and those on Staphylinidae dealt mostly with Aleocharinae and with the genus *Stenus*. After Krásá's death, his collection (containing the types of most species he described) remained in the hands of his oldest son, who, during his father's life, was interested in coleopterology. Unfortunately, Krásá's collection (still in Vrané n.Vlt.?) is not presently accessible and is apparently in a very

poor condition. Recently, after the death of Krása's oldest son, some specimens from his collection including the types, were offered for sale, purchased, and placed in the hands of various specialists (e.g., *Stenus*). Krása described 10 species and 1 genus in Staphylinidae. [A.S.]

SOURCES: • *Acta Societatis Entomologicae Čechosloveniae* 42 (1945): 19–21 [by L. Heyrovský, with bibliography, portrait]. • *Živa* (Prague) 9 (1961): 146 [by L. Heyrovský]. • *Bohemia centralis* 7 (1978): 90–91 [by Z. Kolečka]. • *Zprávy Československé Společnosti Entomologické při ČSAV* 21 (1985): 216–217 [by Z. Kolečka].

**Lacordaire, Jean Théodore.** Lacordaire was born as a son of a medical doctor, in Recey sur Durce (Côte d'Or), France, on February 1, 1801; he died there on July 18, 1870.

Lacordaire originally studied law, but he never pursued a law career. As a young man he traveled several times to South America (1824–1832), and explored Argentina, Uruguay, some provinces of Brazil, Chile, and eventually Cayenne, where he stayed for two years. He brought back to France a large collection of insects and began to work it up with encouragement from such eminent French naturalists as Cuvier, Latreille, Dejean, and Boisduval. When the post of professor of zoology at the University of Liège became vacant, Lacordaire accepted it, extended it later to include comparative anatomy, and eventually became the rector of the university.

Lacordaire became famous mainly due to his *Introduction à l'entomologie, . . .* (1834–1838), and his monumental series *Histoire naturelle des Insectes. Genera des Coléoptères* (1854–1863). His contribution to the study of Staphylinidae came through his joint work with Boisduval (Lacordaire was the author of the Coleoptera), *Faune entomologique des environs de Paris* (1835). In this book Lacordaire described a number of species and a few genera. In the Staphylinidae, Lacordaire described 73 species and 3 genera. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 7 (1870): 89–90 [anonymous]. • *Petites Nouvelles Entomologiques* 2 (1870): 107 [anonymous]. • *Berliner Entomologische Zeitschrift* 14 (1870): VIII–IX [by G. Kraatz]. • *Éloge de Jean-Théodore Lacordaire* (1870): 275 pp. [by E. Morren, with bibliography, portrait]. • *American Entomologist* 2 (1870): 270 [by C. V. Riley]. • *Proceedings of the Entomological Society of London* (1870): XLIV–XLVII [by A. R. Wallace]. • *Annales de l'Académie Royale de Belgique* 38 (1872): 139–160 [by E.C.A. Candèze, with bibliography, portrait]. • *Mémoires de la Société Royale des sciences de Liège* 3 (1873): XXI–XL [by E. Morren, with bibliography, portrait]. • *L'Abeille* (Les entomologistes et leurs écrits) 20 (1882): 11–14 [by S. A. Marseul, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 678–679 [by W. Horn and S. Schenkling, bibliography up to 1863 only]. • *Bibliography of Australian Entomology 1775–1930* (1932): 184 [by A. Musgrave]. • *Index Litteraturae Entomologicae Serie II* (1965): 565 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Essays on the History of Neotropical Dipterology* 1 (1971): 133–134 [by N. Papaverò]. • *Les entomologistes français 1750–1950* (1987): 60–61 [by J. Lhoste].



Jean Théodore Lacordaire



*Horace Rupert Last*

**Last, Horace Rupert.** Last was born in Walthamstow, Essex, United Kingdom, on August 15, 1908, the elder of two sons of Emily and Rupert Last, a signalman on the London and North Eastern Railway. He died on April 4, 1995, in London.

Last worked in the tea industry, and referred to himself as a “buyer of second-hand teas”. His interest in natural history developed very early, but his involvement in Coleoptera, and particularly in the family Staphylinidae, developed with the encouragement of Dr. Malcolm Cameron and William O. Steel. Last’s main contributions to the study of Staphylinidae are his papers dealing with the African species of the genus *Zyras* and allied genera (mostly published from the late 1950s to the late 1970s), and, from the late 1960s, his papers on various staphylinid groups of New Guinea (Steninae, Paederinae, Staphylininae [*Hesperus*, *Philonthus*, etc.], Tachyporinae and Aleocharinae). He also made a lasting contribution to the knowledge of British Staphylinidae through many taxonomic and faunistic papers. He published 154 papers and short notes and in Staphylinidae he described 586 species and 4 genera and 4 subgenera (all of *Zyras*). His first two published papers (1933 and 1938) dealt with Lepidoptera. Last’s collection, including the types, is housed in the Manchester Museum, United Kingdom. Holotypes of many species were placed in the British Museum (Natural History), London. [A.S.]

SOURCE: • *Entomologist’s Monthly Magazine* 132 (1996): 77–86 [by J. Cooter, with bibliography by C. Johnson and photograph].

**Latreille, Pierre André.** Latreille was born on November 29, 1762, in Brive (Corrèze), France, as an illegitimate child of the general Jean Joseph Sahuguet d’Amarzit, baron d’Espagnac. He died on February 6, 1833, in Paris, France.

Latreille’s life was eventful and turbulent. His mother, without any resources, left the baby boy at the entrance of the church La Gaillarde in Brive. He was found by peasants and baptized as Pierre-André, and it was not until 1813 that his name Latreille was officially approved by the tribunal of Brive. Latreille’s biological father died in 1783, but before his death he made all the necessary financial arrangements to provide his son with a proper education. The family d’Espagnac followed the wishes of the father, and so the young Latreille entered the seminar in Limoges, was ordained as a priest in 1786, and returned to Brive. Even then he was deeply interested in natural sciences, and in entomology in particular. Three years later, after refusing to accept the ideals of the revolution, he was sentenced with 78 other priests by the tribunal in Bordeaux to deportation, or possibly to drowning in the river Gironde, and went to prison to await the sentence. Lhoste (1987, see below) tells an interesting story about how a specimen of *Necrobia ruficollis*, and a lucky chance during Latreille’s stay in the prison, apparently saved his life. As the story goes, one day the prison doctor entered Latreille’s cell and found him observing intently a small insect, an occupation he found quite unreasonable. He approached Latreille and asked him for an explanation. Latreille answered: “C’est un insecte rare. Je regrette de ne pouvoir le confier à des mains dignes de l’apprécier.” The doctor asked

again, why he is so much interested in this little insect. Latreille answered: "Je suis Latreille, condamné à mourir en Guyane, avant de terminer mes études sur le genera des insectes créé par Fabricius". By lucky chance, the doctor told the story to Baron Bory Saint-Vincent who, while momentarily supporting the revolution, was interested in natural sciences and published later several works of his own. Using his influence, he stopped the fulfillment of Latreille's sentence.

It was not until 1794 that Latreille was freed. Two years later he published his *Précis des caractères génériques des Insectes, disposés dans un ordre naturel*, the authorship of which, in keeping with the tenor of the times, was cited as "le Citoyen Latreille". This publication earned Latreille the support of Lamarck, who arranged a contract for him to work at the Muséum de Paris for 4. 20 francs a day as an *aide-naturaliste*. This contract was regularly renewed, again thanks to his protector Lamarck. It was not until 1805 that Latreille's position was made permanent. Latreille remained in his *aide-naturaliste* position until 1820, through some very turbulent times, with vital support from Olivier. During this period Latreille published his monumental works *Histoire naturelle, générale et Particulière des Crustacés et des Insectes* (1802–1805), *Genera Crustaceorum et Insectorum secundum ordinem naturalem in familias disposita, iconibus exemplisque plurimis explicata* (1806–1809), *Considérations générales sur l'ordre naturel des animaux composant les classes des Crustacés, des Arachnides et des Insectes avec un tableau méthodique de leurs genres disposés en familles* (1810), the chapter on insects in Cuvier's *Régne Animal* (1817), and others. In 1820 Latreille replaced the ailing and almost blind Lamarck at the Muséum. After Lamarck's death in 1829, a separate chair (apparently for the first time in the world) was created for entomology by splitting the original chair of zoology of insects, worms and microscopic animals. The chair was given to Latreille in 1830, and he stayed in this position until his death in 1833. He succeeded Olivier into the Académie des Sciences de Paris, became the professor at the Muséum d'histoire naturelle in Paris, and the professor of zoology at the veterinary school in Alfort. In 1832 he founded the Société Entomologique de France.

Latreille became one of the most celebrated entomologists of his time. Much has been published about his importance, which is discussed in the references mentioned below. As far as the Staphylinidae are concerned, Latreille created the name of the family in his *Histoire Naturelle . . .* (as "Staphylinæ; staphyliniæ" (Vol. 3 [1802])). Later (Vols. 9 and 10 [1804]) he divided the family into 14 genera identical to those presented by Gravenhorst in his *Coleoptera Microptera Brunsvicensia* (1802), and even followed Gravenhorst in dividing the genus *Staphylinus* into four "families". In his treatment of the Staphylinidae (as "Les Brachélytres, Cuv.") in Cuvier's *Régne Animal* (1817), Latreille deviates from Gravenhorst's treatment in *Monographia Coleopterorum Micropteriorum* (1806) by recognizing some genera Gravenhorst dropped (e.g., *Astrapæus*), and by adding some genera (e.g., *Coprophilus*). Latreille described 17 species and 6 genera in the Staphylinidae. [A.S.]



Pierre André Latreille





Arthur Mills Lea

SOURCES: There is a long list of Latreille's biographies and obituaries, therefore only some selected ones are given here. Detailed listings may be found in Gilbert (1977) and particularly in Evenhuis (1997). • *Bulletin de la Société entomologique de France* 2 (1833): XVIII–XXXI [by E. Geoffroy-St.-Hilaire]. • *Bulletin de la Société entomologique de France* 4 (1835): XXIII–XXIX [by C. A. Walckenaer]. • *Bibliographie entomologique . . .* 1 (1836): 225–235 [by A. Percheron, with bibliography, portrait]. • *Bibliotheca Entomologica* 1 (1862): 451–456 [by H. A. Hagen, bibliography only]. • *Bulletin de la Société entomologique de France* (1907): 230–232 [by P. Lesne]. • *Index Litteraturae Entomologicae* (1928): 690–695 [by W. Horn and S. Schenkling, bibliography only]. • *Boletín de la Sociedad Brasileira de Entomologia* 1 (1958): 7–18 [by M. Carrera, with portrait]. • *Essays on the History of Neotropical Dipterology* 1 (1971): 43–45 [by N. Papavero]. • *Les entomologistes français 1750–1950* (1987): 48–51 [by J. Lhost].

**Lea, Arthur Mills.** Lea was born in Sydney, New South Wales, Australia, on August 10, 1868. He died on February 29, 1932, in Adelaide, Australia.

Lea commenced his professional career in 1891, when he joined the Department of Agriculture in New South Wales, working as an assistant entomologist to A. S. Olliff (then Government Entomologist of the state). In 1895 he was appointed Government Entomologist of Western Australia, and worked mainly with plant pests. In 1911 he became Entomologist in the South Australian Museum and stayed in this position until he died. He was a lecturer in forest entomology at the University of Adelaide (1912–1924), and in 1924–1925 he functioned as the economic entomologist for the government of Fiji. He collected extensively in Australia, Lord Howe Island, Norfolk Island, Fiji, the Malayan Peninsula, Java, Borneo, Celebes, and New Caledonia.

Lea became one of the most celebrated Australian entomologists, not only because of his outstanding work in the field of economic entomology and pest control, but also due to his contribution to the systematics of Australian Coleoptera, contained in numerous papers published in various Australian journals. In Staphylinidae, he described 264 species and 5 genera. [A.S.]

SOURCES: • *The Sydney Morning Herald*, April 2, 1932 [by H. J. Carter]. • *Records of South Australian Museum* 4 (1932): 411–432 [by H. M. Hale, with bibliography, portrait]. • *Transactions and Proceedings of the Royal Society of South Australia* 56 (1932): 1–2 [by H. M. Hale, with portrait]. • *Biography of Australian Entomology, 1775–1930* (1932): 188–196 [by A. Musgrave, with bibliography]. • *Australian Museum Magazine* 4 (1932): 342 [by A. Musgrave]. • *Proceedings of the Linnean Society of New South Wales* 57 (1932): III [by T.G.B. Osborn]. • *Entomologist's Monthly Magazine* 68 (1932): 119 [by J. J. Walker]. • *Victorian Naturalist* 49 (1932): 15–18 [by F. E. Wilson, with portrait]. • *Arbeiten über physiologische und angewandte Entomologie aus Berlin-Dahlem* 1 (1934): 305 [by W. Horn]. • *Records of South Australian Museum* 12 (1956): 92–94 [by H. M. Hale, with portrait].

**LeConte, John Lawrence.** LeConte was born in New York City, USA, on May 13, 1825, to a Huguenot family of French descent. His father, Major John Eatton LeConte, was a naturalist and published papers on botany and zoology, including Coleoptera. LeConte died on November 15, 1883, in Philadelphia, Pennsylvania, USA.

After graduating from Mt. St. Mary's College in Emmetsburg, Maryland, LeConte entered the College of Physicians and Surgeons in New York City and obtained his diploma in 1846, but he never really practiced medicine. He traveled extensively, visiting many areas of North America, partly while still a student, collecting large numbers of beetles. He was a lieutenant-colonel and medical inspector in the United States Army during the Civil War, and from 1878 until his death, Assistant Director of the United States Mint in Philadelphia. However, since he was financially independent, he actually devoted most of his time to coleopterology. He was the first president of the Entomological Society of Philadelphia and served in this capacity for the duration of this society; he was also the president of the American Entomological Society for a period of sixteen years (1859–1860, 1870–1883). Shortly after his father's death in 1860, LeConte married Helen C. Grier, and they had one son, Robert. From 1869 to 1872 LeConte lived with his family in Europe, where he studied important insect collections.

LeConte entered the coleopterological scene in North America when, unlike in Europe, very little was known about the insects of the entire North American continent. There was hardly anything more than scattered descriptions of species by some European authors (in Staphylinidae, e.g., Gravenhorst, Erichson), and by North Americans like Melsheimer, Say, Harris, Ziegler, LeConte Senior, etc. LeConte published his first paper on Coleoptera ("Descriptions of Some New and interesting Insects Inhabiting the United States") in the *Boston Journal of Natural History* in 1844, when he was only 18 years old and still a medical student. From that moment he never stopped and eventually published over 180 papers, describing thousands of species (the figures vary from 4,739 to almost 6,000) and hundreds of higher taxa. At the time of his death, LeConte was the author of almost half of the species known from North America. His writings include scores of synoptic tables for many groups and many monographic works, such as *Classification of the Coleoptera of North America, Part I* (1861) and *Part II* (in collaboration with G. H. Horn, 1883), and many others. He also published in two volumes the collected writings of Thomas Say as *American Entomology by Thomas Say*. The enormous contribution of LeConte to North American coleopterology was not only the vast number of taxa he described but, perhaps even more important, his effort to present synoptic treatments of higher taxa, and thereby introduce system and order into what was previously mostly disorder. He provided a solid base for future coleopterological studies in North America and is justly considered by many as the most important of the classical North American coleopterists.

In Staphylinidae, as in most other beetle families in North America, LeConte's work facilitated progress by subsequent



*John Lawrence LeConte*



*Jean-Claude Lecoq*



*Louis Levasseur*

authors and raised the level of knowledge to a state that allowed comparison to the fauna in Europe.

LeConte described 294 species and 14 genera in Staphylinidae. [A.S.]

SOURCES: Many biographies and obituaries of LeConte have been published. Only some are given here. A detailed listing may be found in Gilbert (1977). • *Science* 2 (1883): 783–786 [by G. H. Horn, with portrait]. • *Psyche* 4 (1883): 107–110 [by C. V. Riley]. • *Bulletin of the Brooklyn Entomological Society* 6 (1883): III–IX [by F. G. Shaupp, bibliography only]. • *Deutsche Entomologische Zeitschrift* (1884): 228–240 [by G. Kraatz]. • *Transactions of the American Entomological Society* 11 (1884): I–XXVIII [by S. H. Scudder, with portrait]. • *Journal of New York Entomological Society* 22 (1914): 185–191 [by R. P. Dow]. • *Index Litteraturae Entomologicae* (1928): 701–705 [by W. Horn and S. Schenkling, bibliography only, to 1863]. • *History of Entomology* (1931): 680–685 [by E. O. Essig, with portrait]. • *Pioneer Century of American Entomology* (1936): 155–163 [by H. B. Weiss]. • *Index Litteraturae Entomologicae Serie II* (1965): 591–594 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *American Entomologists* (1971): 242–248 [by A. Mallis].

**Lecoq, Jean-Claude.** Lecoq, of France, was born in 1937. When he was about 12 or 13 he met Jean Jarrige, who gave him a taste for entomology and beetles. Some years later he caught and retained the “bug” for staphylinids. The groups of principal interest to him are the Paederinae, Staphylininae, Steninae, and Osoriinae. Madagascar is his region of particular focus, but he is also involved with study of taxa of France and other parts of the Palaearctic region. He teaches chemistry at Pierre and Marie Curie University in Paris and works part time on his staphylinid investigations. Many of his publications have dealt with the Paederinae of Madagascar; eventually he wrote a series of three major articles on the Paederinae of Madagascar. He has published on the Staphylininae and Paederinae of the Mascarene Islands, and the Staphylinidae of the Comoro Islands. More recently he described species of the Osoriinae, and *Philonthus*. He plans to continue his studies of the Staphylinidae of Madagascar. As of this writing he has described 240 species and 6 genera.

**Levasseur, Louis.** Levasseur was born on May 25, 1919. He died on May 31, 1981, in Paris, France.

Levasseur was from his early years interested in natural sciences, but chose a career in municipal administration in various parts of Paris. At the same time he studied beetles, concentrating on the family Staphylinidae, and managed to build a substantial Palaearctic collection. After 1960, he regularly received staphylinid specimens from tropical Africa; therefore he devoted all his time to the study of this material and eventually became an expert on this area. His work was interrupted by serious illness for almost 10 years, and then in 1981 forever.

Levasseur published 20 papers on Staphylinidae, in which he described 175 species and 22 genera. His collection is deposited in the Muséum National d’Histoire Naturelle, Paris. [A.S.]

SOURCES: • *Annales de la Société Entomologique de France* (N.S.) 18 (1982): 428–431 [by C. Girard and J. F. Menier, with portrait]. • *Entomologische Blätter, Krefeld* 81 (1985): 111 [by W. Lucht].

**Li, Li-Zhen.** Li, of China, born on October 26, 1956, began studying staphylinids because the family is large and poorly known, and there are so many undescribed species. He is primarily interested in the Tachyporinae and other small subfamilies, particularly those of the Palearctic and Oriental regions. He hopes to study the Staphylinidae of China in detail, and author or coauthor articles on the staphylinid fauna of the country. Among his publications are a revision of the Japanese species of *Tachinus* along with articles on some species of *Ischnosoma*, *Lordithon*, *Bolitobius*, *Bryophasis*, and *Carphacis* from Japan, and *Tachinus* from the Himalaya. He has described 31 species.



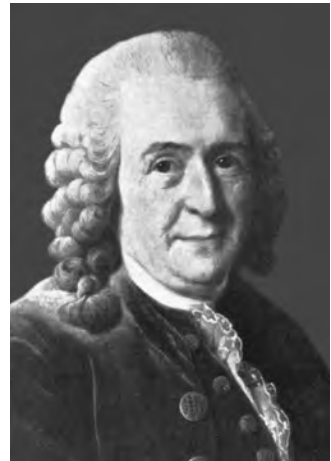
Li-Zhen Li

**Linné (Linnaeus), Carl.** Linné was born in Raashult (province of Smaaland), Sweden, on May 23, 1707. He died on January 10, 1778, in Hammarby near Uppsala, Sweden.

There is a tremendous amount of literature describing, discussing, and evaluating Linné's life, his publications, and his importance to the development of natural sciences. There is no need to go into all these details here; a copious listing of references may be found in Evenhuis (1997: 471–473).

The Latinized form Linnaeus is often used in the literature. However, his true and correct name, Carl Linné, should be used. It was customary to Latinize the names of the authors of scientific papers at those times, but that does not mean that the name has to be used in the Latinized form. We do not do it for other authors, e.g., for Nordmann, who used the name "Nordmannus" when publishing his *Symbolae ad monographiam Staphylinorum* in 1837.

Linné obtained his basic education in Växiö, and in 1727 he went to the University in Lund, where he found a great resource for learning in the library of Professor Kilian Stobaeus. Soon he moved to the university in Uppsala and, under the protection of two famous scientists, Olof Rudbeck and Aulus Celsius, began to publish his revolutionary botanical papers that made him famous. He lived in Rudbeck's house, and worked as a teacher of Rudbeck's sons. Not yet having his degree and being half teacher and half student, he decided to go to a foreign university. In 1735 he left for Holland, heading for the small town of Hardewijk (Gelderland) and its university favored by medical students. He passed the examinations on the day of his arrival, and on June 24 of the same year, he received the degree Doctor Medicinae, after he defended his thesis "De hypothesis nova de februm intermittentium causa". After that, Linné decided to stay in Holland for some time and entered the university in Leyden where he again found the protection of two influential scientists, J. F. Gronovius and I. Lowson. In addition, he became a private doctor to G. Clifford, who owned a botanical and zoological garden between Leyden and Haarlem. Here Linné published (in 1735) a small manuscript in *Hortus Cliffortianus* that presented a new system of classification that was destined to cause a revolution in biological sciences—the *Systema Naturae*.



Carl Linné (Linnaeus)



Ivan Löbl

By the end of 1737, Linné decided to return to Sweden via Paris, where he met numerous naturalists, such as Réamur and others. He arrived in Sweden in 1738, and decided to work as a practicing doctor in Stockholm, since he could not get a teaching job at any university. He soon became known as a specialist and finally started to have a good income, which enabled him to marry (in 1739) Sarah Elisabeth Moraeus, who had patiently waited for him while he was abroad. In the same year Linné founded the Svenska Vetenskap Akademien and was its first president. When Rudbeck died in 1740, Linné applied for the vacant chair of botany and anatomy at the University of Uppsala. His rival Nils Rosen won; therefore Linné applied and won the chair of practical medicine that became vacant due to the retirement of Roberg. Eventually the two swapped chairs with the approval of the authorities of the University of Uppsala. This finally gave Linné the opportunity to fully apply and develop his abilities as a scientist and a teacher. Thanks to his fame, he was able to assemble a group of bright students who traveled to many distant areas of the world, bringing back collections of plants and animals to enrich subsequent editions of *Systema Naturae*.

Linné made the University of Uppsala the most famous center of natural history in Europe at that time. However, he was getting older and was troubled by several health problems. Therefore, his son, C. Linné Jr. (born on January 20, 1741), substituted for him in the botany chair and three years later he permanently replaced his father. After Linné's death, Linné Jr. decided to sell his father's collections. Several offers were made, including one by the Empress Catherina of Russia, who was willing to purchase the collections for an unlimited price. Despite this offer, the collections went to a rich British gentleman, James Edward Smith, for 900 guineas (Linné Jr.'s herbarium was excluded). After Smith's death, the collections were purchased by the Linnean Society of London.

Linné became the father of biological systematics and nomenclature. His contribution to staphylinidology was the erection of the genus *Staphylinus* with 19 species in 1758. It was this generic name on which the family name was based. The genus was split into several genera by Fabricius and others. [A.S.]

**Sources (selected):** • *Mémoires de la Société des sciences de l'Agriculture et des Arts de Lille* 1 (1831): LXI, 1–37 [by A.L.A. Fée, with bibliography, portrait]. • *Eminent Naturalists* (1886): 1–33 [by T. Greenwood, with portrait]. • *Linnaeus, Story of His Life* (1923) [by B. D. Jackson, with portrait]. • *Index Litteraturae Entomologicae* (1928): 735–740 [by W. Horn and S. Schenkling, bibliography only]. • *History of Biology* (1935): 203–218 [by E. Nordenskiöld]. • *Linnaeus* (1957) [by A. H. Uggla]. • *Complete Naturalist* (1971), 256 pp. [by W. Blunt]. • *Essays on the History of Neotropical Dipterology* (1971): 1–13 [by N. Papavero]. • *Litteratura Taxonomica Dipteroorum 1758–1930* (1997): 471–483 [by N. L. Evenhuis, with partial bibliography, portrait].

**Löbl, Ivan.** Löbl, of Switzerland, was born in Czechoslovakia on May 20, 1937. He collected beetles and butterflies from age 12 and became interested in staphylinids through the influence

of his friend, Aleš Smetana. His attention is now centered on the Scaphidiinae and Dasycerinae of the world and the Pselaphinae of Eurasia. He has published 173 articles, most of them on the Staphylinidae, including over 100 on the Scaphidiinae. He has published on many genera of scaphidiines and has revised or written major articles on the species of Nepalese Himalaya, Thailand, Northeastern India and Bhutan, northwestern India and Pakistan, China, New Guinea, and Australia, and on the genera *Scaphisoma* and *Caryoscapa* among many other scaphidiine genera. He revised the Dasycerinae of the world and wrote a much-needed catalog of the Scaphidiinae. He plans to publish a phylogeny of the genera of the Scaphisomatini, and revise the genera *Baeocera* and *Scaphidium*. As a result of his many collecting trips and his contacts with other collectors, he has built a large and important collection of Staphylinoida at the Muséum d'histoire naturelle, Geneva. He has described more than 850 species and 23 genera, of which 639 species and 13 genera are scaphidiines and 166 species and 9 genera are pselaphines; the remainder are in other groups of the family.



Gustav Adolf Lohse

**Lohse, Gustav Adolf.** Lohse was born in Hamburg-Uhlenhorst, Germany, on December 27, 1910, as the son of Elfriede and Gustav Lohse, a Hamburg art dealer. He died on April 30, 1994, in Hamburg.

Lohse was a dentist by profession. He developed a keen interest in beetles early in his life and coleopterology ultimately became an essential part of his life. After publishing short faunistic notes starting in 1938 mostly in Hamburg's journal *Bombus*, he developed into an accomplished taxonomist and published dozens of important papers on many beetle groups. He became a widely recognized, outstanding expert on all central European beetle groups and the driving force behind the series *Die Käfer Mitteleuropas*, a modern replacement of the famous *Fauna Germanica* by Reitter. Without him, the series would never have been successfully concluded. In 1977 he was awarded the degree *doctor honoris causa* by the University of Hamburg for his outstanding accomplishments in the field of systematic entomology, and in 1980 the Deutsche Entomologische Gesellschaft honored him, for the same reasons, with the precious Fabricius-Medal. From 1954 until 1991, Lohse was editor of the coleopterological journal *Entomologische Blätter*, published in Krefeld, Germany.

Lohse's enormous contribution to the knowledge of Staphylinidae is in general threefold. 1) His numerous papers on central European staphylinids, particularly on Aleocharinae, together with his personal influence, helped to build a distinctive central European group of staphylinidologists that exists today. 2) His papers on world species of *Lesteva* provided a solid base for further study of this difficult genus of Omaliinae. 3) In the latter part of his career, after several working trips to Ottawa, Canada, he published several important papers dealing with North American Aleocharinae, particularly those of arctic and Holarctic distributions.

Lohse published 282 coleopterological papers and notes, and in Staphylinidae he described 119 species, 6 subspecies and 5 genera. Lohse's collection of Staphylinidae (including all types)



*Emanuel Lokay, Jr.*



*Gottfried Luze*

is housed in the Muséum d'histoire naturelle, in Geneva, Switzerland. [A.S.]

SOURCES: • *Entomologische Nachrichten und Berichte* 38 (1994): 213–214 [by B. Klausnitzer, with portraits]. • *Mitteilungen des Internationalen entomologischen Vereines E. V. Frankfurt a.M.* 19 (1994): 214 [by B. Klausnitzer]. • *Entomologische Blätter, Krefeld* 90 (1994): 153–166 [by F. Kohler]. • *Entomologische Blätter, Krefeld* 90 (1994): 129–152 [by M. Uhlig and L. Zerche, with bibliography by U. Lohse and L. Zerche]. • *Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg* 11 (1995): 149–150 [by R. Abraham]. • *Bulletin et Annales de la Société royale Belge d'entomologie* 130 (1995): 310 [by H. Bruge]. • *Koleopterologische Rundschau* 65 (1995): 237–250 [by G. Vukovits]. • *Wiadomosci Entomologiczne* 15 (1997): 117–118 [by A. Mazur].

**Lokay, Emanuel, Jr.** Lokay was born in 1853. He died on October 6, 1928, in Prague, Czech Republic.

Lokay was the son of Emanuel Lokay, Sr., who was a technician and assistant to Professor J. E. Purkyně and an active coleopterist. It is not surprising that Lokay Jr. inherited an interest in beetles from his father and remained faithful to this interest his entire life. Lokay studied medicine and received his M.D. degree from the university in Prague, and served for a long time as a senior health officer of Prague. Although coleopterology was his hobby, he was soon recognized as one of the prominent coleopterists, notable for his talent as a collector and observer in the field. Staphylinidae and Pselaphidae were in the foreground of his interests, and in the early 1900s he belonged to the staphylinidological school that then existed in Bohemia (see more under Roubal).

Lokay published 18 papers on beetles; he described 17 species in Staphylinidae. His collection, including Staphylinidae, is housed in the Entomology Department, National Museum in Prague, Czech Republic. [A.S.]

SOURCES: • *Časopis Československé společnosti entomologické* 25 (1928): 127–130 [by J. Obenberger, with bibliography, portrait]. • *Zprávy Československé společnosti entomologické při ČSAV* 22 (1986): 260–262 [by Z. Kolečka]. [NOTE: In Gilbert (1977: 231) under the entry “Lokay, Emanuel” both Lokay Sr. and Jr. are mixed together. Only the obituary by Obenberger refers to Lokay Jr.]

**Luze, Gottfried.** No biographical data on Luze, except for the year of his birth (1857), seem to be available.

Luze apparently lived most of his life in Vienna, Austria. He started to publish papers on Staphylinidae in 1900, the first one being a revision of the European and Siberian species of the genus *Tachinus*. Similar monographic, as well as numerous smaller papers, on various groups and genera followed in a rapid succession, e.g., *Tachyporus* (1901), on Bolitobiini (1901), Omaliinae, e.g., *Anthophagus* and *Hygrogeus* (1902), *Geodromicus* and *Lesteva* (1903), *Olophrum* (1905), and several other genera (1906). Almost all his papers were published in the *Verhandlungen der zoologisch-botanischen Gesellschaft in Wien*; their appearance abruptly ended in 1911, when his last

paper with the description of *Philonthus (Rabigus) auropilosus* was published. His only non-staphylinid paper dealt with the immature stages of *Cantharis abdominalis* and was published in the *Berliner Entomologische Zeitschrift* (1902).

In some of his papers, Luze thanked many of the contemporary Viennese and Austrian coleopterists, including Bernhauer (“meinem lieben Freunde Dr. Bernhauer”), so it seems unusual that not even a short note about Luze’s death appeared.

Luze published a total of 34 papers, in which he described 169 species and 10 genera in Staphylinidae. His collection went via Moczarski-Breit-Winkler to Scheerpeltz and was incorporated in his collection. [A.S.]

**Arribálzaga, Félix Lynch.** Lynch Arribálzaga was born in Buenos Aires, Argentina, on April 3, 1854. He died there, by suicide, on April 10, 1894.

Lynch Arribálzaga, together with his brother Enrique, received his elementary education from his parents at his father’s estate in Baradero, Province of Buenos Aires. Further education was provided by a German teacher, L. Rasp. Later, he entered an English School in Buenos Aires and the Colégio Nacional. After his father’s death in 1872, he worked in a bank while taking lessons in mathematics and in drawing. Eventually he entered the University and took engineering courses. The civil war in 1874 forced him to emigrate temporarily to Paraguay. He had already started to study the entomological writings of Latreille, Lacordaire, Blanchard, and others, and, together with his brother Enrique, started to study entomology and to build an insect collection. He met two outstanding naturalists, E. L. Holmberg and H. Burmeister, who helped him by giving him access to the collections and the library of the Museo Nacional de Historia Natural in Buenos Aires. He also had excellent relations with the director of the La Plata Museum, F. P. Moreno, as well as with C. Bruch. Lynch Arribálzaga married in 1877 and moved back to Baradero to run his mother’s estate. Later he established his own farm, and in his spare time he continued his entomological work. During the political crisis in 1889–1890 he sold his properties and, disappointed, he traveled through Argentina until 1894. Before his death, he gave his library and entomological collections to the Museo Nacional de Historia Natural in Buenos Aires.

Lynch Arribálzaga was primarily a dipterist, but his interest in Staphylinidae is documented by his monographic treatment in *Los Estafilinidos de Buenos Aires*, published in 1884. Of the 58 genera and 118 species included, 71 species and 11 genera were new. The monograph triggered critical comments by Fauvel (*Revue d’Entomologie* 6 [1887]: 230–234; *Revue d’Entomologie* 7 [1888]: 24–25) and Kraatz (*Deutsche Entomologische Zeitschrift* 29 [1885]: 149–151). [A.S.]

SOURCES: • *Anales de la Sociedad Científica Argentina* 37 (1894): 161–163 [by E. L. Holmberg]. • *Entomological News* 6 (1895): 32 [anonymous]. • *Deutsche Entomologische Zeitschrift* 1907: 231 [by W. Horn]. • *Entomologisches Wochenblatt* 24 (1907): 60 [by C. Schaufuss]. • *Revista de la Sociedad Entomológica Argentina* 2 (1928): 5–12 [by E. E. Dallas, with bibliography, portrait]. • *Revista chilena de historia natural* 32

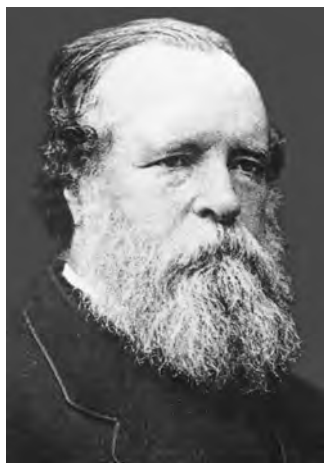


*Félix Lynch Arribálzaga*





Václav Machulka



William John Macleay

(1928): 409–412 [by C. E. Porter, with portrait]. • *Revista Argentina de Entomologia* 1 (1936): 54 [by E. Gemignani]. • *Index Litteraturae Entomologicae Serie II* (1965): 678 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Essays on the History of Neotropical Dipterology* 2 (1975): 335–337 [by N. Papavero].

**Machulka, Václav.** Machulka was born in Prague, Czech Republic, on October 30, 1889, and died there on June 20, 1949.

Machulka obtained his degree in chemistry at the Technology University in Prague. He worked at various institutes of the Department of Health in Prague, and for some time (1923–1934) also at an agricultural research institute in Košice in eastern Slovakia.

Machulka was an eminent Czech amateur coleopterologist, respected by the coleopterological community in Prague. He was an exceptionally good collector, famous for his targeted usage of the sifter in collecting terricolous beetles. His main interests were the families Staphylinidae, Pselaphidae, and Scydmaenidae. Most of his publications dealt with the latter two families, but he also made a significant contribution to the knowledge of the Staphylinidae, particularly to the subfamily Aleocharinae of central Europe. During the Second World War, when traveling even within the country was difficult, he concentrated, as did many others, on collecting within Prague. This effort brought many surprising records, including the discovery of two new genera and species of aleocharines, *Bohemiellina paradoxa* and *Pragensiella magnifica*, described in 1941 from within the city limits. Both genera are still valid. Machulka was also interested in the genus *Stenus*; his last paper, published in the year of his death, dealt with a new species of the subgenus *Hypostenus* from Bohemia.

Machulka published about 40 papers, almost all on the taxonomy and faunistics of the three families mentioned above. He described eight species and two genera in Staphylinidae. His collection, including the types, is housed in the Entomological Department of the National Museum in Prague, Czech Republic. [A.S.]

SOURCES: • *Acta Societatis Entomologicae Čechosloveniae* 46 (1949): 183 [anonymous]. • *Acta Societatis Entomologicae Čechosloveniae* 47 (1950): 3–6 [anonymous, with incomplete bibliography, portrait]. • *Entomologische Blätter, Krefeld* 46 (1950): 159–160 [by K. Všetěčka, not “Vlestečka” as printed, and repeated by Gaedike (*Beitr. Ent.* 35, 1985: 392)]. • *Entomologische Blätter, Krefeld* 50 (1955): 237 [by G. Schmidt].

**Macleay, William John.** Macleay was born in Wick, Caithness-shire, Scotland, on June 21 (not July 21) 1820. He died on December 7, 1891 in Sydney, Australia. In later life he did not use the name John.

Macleay arrived at Sydney, Australia, with his cousin **William Sharp Macleay**, in 1839 when he was only 19 years old. He was first involved in sheep farming. Gradually he rose to distinction by occupying himself with the promotion of public works, and eventually served as a member of the Legislative Assembly of New South Wales until 1874. He founded the Entomological

Society of New South Wales (he was the first president of it), as well as the Linnean Society of New South Wales. Most of his entomological papers were published in the journals of these two societies. In 1874 he organized, at his own expense, a scientific expedition to New Guinea. For his merits, particularly the patronage of science in Australia, he was knighted in 1889.

Macleay contributed significantly to the knowledge of the Australian Staphylinidae. He described 60 species and 2 genera, all in one paper dealing with insects from Gayndah, published in the *Transactions of the Entomological Society of New South Wales* in 1873.

The older cousin of Macleay, William Sharp Macleay (1792–1865) also described a few taxa in Staphylinidae; he is the author of the subfamilies Omaliinae and Steninae, published in 1825 in his *Annulosa Javanica*. [A.S.]

SOURCES: • *Proceedings of the Entomological Society of London* (1891): LI [by F. D. Godman]. • *Proceedings of the Linnean Society of New South Wales* 6 (1891): 707–716 [by W. A. Haswell]. • *Entomologist's Monthly Magazine* 28 (1892): 26 [anonymous]. • *Leopoldina* 28 (1892): 52 [anonymous]. • *Zoologischer Anzeiger* 15 (1892): 72 [anonymous]. • *Jahrbuch für Naturwissenschaften* 7 (1892): 537 [by M. Wildermann]. • *Journal of the Linnean Society of New South Wales (Macleay Memorial Volume)* (1893): XII–LI [by J. J. Fletcher]. • *Australian Zoologist* 6 (1930): 199 [by A. Musgrave]. • *Bibliography of Australian Entomology 1775–1930* (1932): 212–213 [by A. Musgrave, with bibliography]. • *Proceedings of the Linnean Society of New South Wales* 67 (1942): IX–XV [by A. Walkom]. • *Proceedings of the Royal Society of Queensland* 69 (1949): 71 [anonymous]. • *Proceedings of the Linnean Society of New South Wales* 83 (1958): 197–202 [by A. A. Abbie]. • *Index Litteraturae Entomologicae Serie II* (1968): 22–23 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Beiträge zur Entomologie* 34 (1984): 180 [by R. Gaedike and O. Smetana]. • *Proceedings of the Linnean Society of New South Wales* 113 (1992): 3–14 [by D. S. Horning].

**Mäklin, Friedrich Wilhelm.** Mäklin was born in Joutseno parish (SE Finland, at the southern shore of the Lake Saimaa, near the Russian border) on May 26, 1821. He died on January 8, 1883 in Helsinki, Finland.

Mäklin studied zoology at the university in Turku with C. R. Sahlberg. He became *filosofie kandidat* in 1849, *filosofie licentiat* in 1853, and docent of zoology in 1855, at a time when Nordmann was still Professor. In 1859 he was named an assistant (“extraordinary”) professor and after Nordmann’s death in 1866, Mäklin in 1867 competed with Malmgren for his position. He won and replaced Nordmann, although both the officials and students preferred Malmgren. Mäklin was apparently a pedantic, difficult person, as demonstrated by his continuous conflicts and sometimes vicious attacks on J. R. Sahlberg (see there). He was also an outspoken opponent of Darwin’s theories.

Mäklin did not publish extensively. From his early years he was interested in the northern beetle fauna, and Staphylinidae was his favorite family. In his first paper, published in 1845, he described three new species of Staphylinidae. The following



William Sharp Macleay



Friedrich Wilhelm Mäklin



William M. Mann

year he published a fairly extensive paper on myrmecophilous beetles of Finland, with the Staphylinidae dominating. His treatment of the genus *Mycetoporus* of Finland appeared in 1847. His dissertation dealing with the *vikarierande former* of the northern beetles was published in Helsinki in 1855; it was translated into German by Osten-Sacken and published in the *Stettiner Entomologische Zeitung* in 1857; Kraatz (see below) criticized some aspects of it.

Mäklin's most important contribution to the knowledge of Staphylinidae came out of his collaboration with Mannerheim on the beetles collected by the Russian naturalists in the Russian possessions in North America around the middle of the nineteenth century. Mäklin worked up the Staphylinidae and his contribution constituted the first steps towards the knowledge of the rove beetles of western North America. Mäklin described 97 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: • *Acta Societatis Scientiarum Fennicae* 14 (1883): 1–16 [anonymous]. • *Entomologische Nachrichten, Dresden* 9 (1883): 56 [anonymous]. • *Psyche* 4 (1883): 39 [anonymous]. • *Leopoldina* 19 (1883): 55 [anonymous]. • *Zoologischer Anzeiger* 6 (1883): 80 [anonymous]. • *Wiener Entomologische Zeitung* 2 (1883): 48 [by E. Bergroth]. • *Revue d'Entomologie, Caen* (1883): 48 [by A. Fauvel]. • *Deutsche Entomologische Zeitschrift* 27 (1883): 396–397 [by G. Kraatz]. • *American Naturalist* 17 (1883): 424 [by C. V. Riley]. • *Entomologisk Tidskrift* 4 (1883): 6–8, 51–52 [by O. T. Sandahl, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 780–781 [by W. Horn and S. Schenkling, bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1968): 26 [by W. Derksen and U. Scheiding-Göllner, bibliography only].

**Mann, William M.** Mann was born in Helena, Montana, USA, on July 1, 1886. He died on October 10, 1960, in Washington, D.C., USA.

Mann attended Staunton Military Academy in Virginia and later studied entomology at Washington State College and Stanford University, where he received his B.Sc. in 1911. Afterwards he studied at Harvard University, Cambridge, where he received his Ph.D. in 1915. From 1917 to 1925 he served as an ant specialist in the U.S. Bureau of Entomology, and in 1925 he became the director of the National Zoological Park in Washington, D.C.

Mann became involved with the Staphylinidae through his work on ants and termites, and described myrmecophilous and termitophilous members of the family in articles published mostly in the 1920s. Mann's collection of ants and associated insects is kept at the Museum of Comparative Zoology, Cambridge, and the United States National Museum, Washington, D.C. Mann described 46 species and 16 genera in Staphylinidae. [A.S.]

SOURCES: • *Psyche* 66 (1959): 55–59 [by E. O. Wilson, with bibliography, portrait]. • *Studia Entomologica* 4 (1961): 547–549 [by W. W. Kempf]. • *Proceedings of the Entomological Society of Washington* 63 (1961): 69–73 [by T. E. Snyder, with bibliography, portrait]. • *American Entomologists* (1971): 377–378 [by A. Mallis, with portrait].

**Mannerheim, Carl Gustav von.** Mannerheim was born on the estate Willnas near Lemo, county Åbo, Finland, on August 10, 1797. He died on October 9, 1854 in Stockholm, Sweden. Motschulsky (see below) indirectly gave 1800 as the birth year of Mannerheim and Horn and Schenkling the year 1804. However, these dates are incorrect (see Saalas; Gaedike and O. Smetana below)

Mannerheim came from one of the most distinguished families in Finland. He was trained to enter government administration and pursued that career. He was first a clerk and later a secretary of the Chancellor in St. Petersburg. He then became the Governor of Läne Vaasa and Viipuri regions of Finland, but he was not the Governor of Finland, as is often stated (e.g., Essig, 1931, see below). The Governor of Finland was Carl Gustaf Emil Mannerheim (1867–1951); Mannerheim was his grandfather. Mannerheim eventually became the president of the Imperial *Hofgericht* in Wiborg (now Vyborg in Russia). He received several distinguished honors; he was also a member of many learned scientific societies.

Despite his political career, Mannerheim was from his youth very interested in natural sciences, particularly in entomology. He was quite successful in this field and eventually became one of the most celebrated entomologists of his time. He studied at the University in Turku, Finland, under C. R. Sahlberg, and was a regular participant in Sahlberg's entomology lectures and his field excursions with students (see under C. R. Sahlberg).

Later, Mannerheim accompanied Sahlberg on an extended trip to Sweden, where they met many Swedish entomologists, such as Boheman, Fallén, Zetterstedt, Gyllenhal, and others. The two became good friends and exchanged many letters over the years, discussing both professional and personal matters.

Mannerheim was a prolific writer and he published some 50 papers, almost all of them on Coleoptera. He published the results of the study of the beetle specimens collected by Russian naturalists in the Russian possessions in North America around the middle of nineteenth century (see also under Mäklin). Before Mäklin took over the Staphylinidae, it was Mannerheim who described the first species of the family from the Pacific coastal areas of North America (1843, 1846). In 1830, fairly early in his career, Mannerheim published an important paper "Précis d'un Nouvel Arrangement de la Famille des Brachélytres, de l'Ordre des Insectes Coléoptères". He divided the family into six sections called "Tribus", and described many new genera and species, most of them still valid today. Mannerheim's system was viewed favorably by Erichson in his *Genera et Species Staphylinorum* (1839). Mannerheim described 130 species and 21 genera in the Staphylinidae. [A.S.]

SOURCES: • *Taxidermy, with Biography of Zoologists* (1840) [by E. Swainson]. • *Proceedings of the Entomological Society of London* (1854): 54 [by E. Newman]. • *Etudes Entomologiques* 4 (1855): 5–7 [by V. I. Motschulsky]. • *Acta Societatis Scientiarum Fennicae, Supplementum* (1855): 1–24 [by A. Nordmann]. • *L'Abeille* (Les entomologistes et leurs écrits) 24 (1887): 170–173 [by S. A. Marseul, with bibliography]. • *Bulletin of the Brooklyn Entomological Society* 9 (1914): 98–99 [by R. P. Dow].



Carl Gustav von Mannerheim



Munetoshi Maruyama

• *Finska Tidsskrift* 87 (1919): 76–100 [by J. R. Sahlberg]. • *Index Litteraturae Entomologicae* (1928): 786–788 [by W. Horn and S. Schenkling, bibliography only]. • *History of Entomology* (1931): 698–700 [by E. O. Essig]. • *Annales Entomologici Fennici* 20 (1954): 53–59 [by U. Saalas, with portrait]. • *Beiträge zur Entomologie* 34 (1984): 181 [by W. Gaedike and O. Smetana].

**Marshall, Thomas.** The place and date of birth of Marshall is not known. He died on November 26, 1819, in London, England.

Marshall was one of the seven founding members present at the inaugural meeting of the Linnean Society on February 26, 1788. He served as the first secretary (1788–1798), and as a treasurer (1798–1816) of the Society.

Marshall published only 10 entomological papers, 9 of them published in the *Transactions of the Linnean Society*. The tenth work, *Coleoptera Britannica* [also *Entomologia Britannica*], treating British Coleoptera and published in 1802, became important and is still frequently consulted for taxonomic and nomenclatorial purposes.

Marshall's collection was one of the most important collections in London at that time. It was sold by auction in September 1819, about two months before his death, but some representative specimens went via J. F. Stephens to the British Museum (Natural History), London. The collection was offered in 115 lots. The cabinet of British insects, described in the *Coleoptera Britannica*, was offered separately as one lot. The microscope and sundries were also offered. Marshall described 40 species in Staphylinidae, most of which are synonyms today. [A.S.]

SOURCES: • *Proceedings of the Linnean Society of New South Wales* 45 (1921): 570, 571, 574, 575 [by J. J. Fletcher]. • *Proceedings of the British Natural History Society* 8 (1976): 92–93 [by C. Mackechnie-Jarvis].

**Maruyama, Munetoshi.** Maruyama, of Japan, was born on April 30, 1974. His interest in beetles began in early childhood; he focused on the taxonomy of staphylinids as an undergraduate at the suggestion of Shun-Ichiro Naomi. Much of his work and interest is directed towards the Palaearctic and Oriental Aleocharinae, particularly the Aleocharini, Lomechusini, and Myllaenini, and the evolution of myrmecophilous aleocharines. Presently he is studying the Japanese species of the Lomechusini and the myrmecophilous species of other tribes. He has published revisions of *Aspidobactrus* and the Japanese species of *Tetrabothus*, both aleocharine genera, and several shorter articles including a coauthored description of a new species of *Scaphidium*. He has authored or coauthored five species.

**Matsumura, Shonen.** Matsumura was born on March 5, 1872, and died on November 7, 1960, at the age of 88. He was the first man from Japan to describe species of Staphylinidae and is considered the father of Japanese entomology. He was interested in insects as a boy and was trained in entomology at Sapporo Agri-

culture College (now the Faculty of Agriculture of the Hokkaido University). Following his graduate course he was appointed Assistant Professor in the college in 1896. In 1898 he published *Nippon Konchugaku (Entomology of Japan)* and in 1899 was ordered by the government to Germany to advance his knowledge of entomology. In Europe he studied with H. J. Kolbe in Germany and G. Horváth of Hungary. After his return to Japan in 1902 he was appointed Professor. Much of his work was on Hemiptera and Lepidoptera, but he published on most orders of insects. He was an energetic and eager entomologist who published more than 240 articles and 35 books in the field, but who also published many articles pertaining to religion, nations, physical culture, and so on. He published his monumental, illustrated, 12 volume, *Thousand Insects of Japan* between 1904 and 1921. He also accumulated the largest collection of insects ever made in Japan; the collection was deposited at the Entomological Institute of the Hokkaido University. He traveled to England, Germany, Hungary, Italy, USA, Canada, USSR, China, and Indonesia for his entomological studies and research or to attend conferences. Throughout his life he was much interested in sports, particularly track and baseball, in fishing and billiards, and was a master of the bamboo flute. He named four species of staphylinids.

SOURCES: • *Insecta Matsumurana* 24 (1961): 1–3 [by T. Uchida and C. Watanabe]. • *Kontyû, supplement* 25 (1967): 79–80 [by H. Hasegawa]. • *Memorias S. Matsumura* (1968?) 385 pp. [anonymous, with bibliography, portrait].

**Moore, Ian.** Moore was born in 1914 in San Francisco, California, USA, and died on August 9, 1983, in Fontana, California.

Moore published his first papers in 1954 and his last, in 1985, in coauthorship with Andrews (on seashore and intertidal beetles). Most of Moore's work dealt with the North American fauna. He concentrated on Staphylinidae, particularly those species inhabiting sea beaches and intertidal zones (his studies also included beetles of other families occurring in these habitats). Moore's articles covered many groups of Staphylinidae and many of them were reviews of certain groups or genera. In the latter part of his career, starting in the early 1970s, he was associated with the Division of Biological Control of the University of California, Riverside. From then on, about half his papers were published jointly, usually with E. F. Legner (as junior author), and occasionally with others (e.g., R. E. Orth). Some major publications come from that time, such as *Bibliography (1758 to 1972) to the Staphylinidae of America North of Mexico* (1974), *Keys to the Genera of Staphylinidae of America North of Mexico . . .* (1974), *A Catalogue of the Staphylinidae of America North of Mexico* (1975), and *An Illustrated Guide to the Genera of the Staphylinidae of America North of Mexico* (1979).

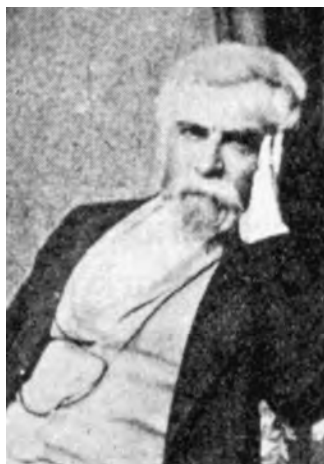
Moore described 33 species and 9 genera in the Staphylinidae. His collection is deposited in the Canadian National Collection of Insects at the Agriculture and Agri-Food Canada, Central Experimental Farm, Ottawa. [A.S.]



Shonen Matsumura



Ian Moore



*Viktor Ivanovich Motschulsky*

**Motschulsky, Viktor Ivanovich.** Motschulsky was born in St. Petersburg, Russia, on April 11, 1810. He died on June 5, 1871, in Simferopol, Russia.

Motschulsky was an extraordinary, enigmatic man: adventurous, daring, strong-minded and dedicated. He frequently ignored conventional approaches. For example, his oft used method of mounting beetles by sprinkling them from small pill boxes onto a piece of paper covered with gum arabic, and after the glue dried, cutting the small pieces of paper with scissors, or driving thick pins obliquely through larger beetles was apparently his trademark and endlessly irritated his colleagues and exchange partners. Also the casual, in many respects, superficial way he presented his findings, including the descriptions of genera and species, was disagreeable to many of his colleagues in western Europe, particularly the contemporary German authors. It is therefore not surprising that Motschulsky was constantly clashing with Kraatz, who was similarly strong-minded and dedicated, but who was precise and organized. His problems with Kraatz were aggravated by the conflict concerning the Staphylinidae collected by Nietner in Ceylon, and forwarded by Nietner to Kraatz. Motschulsky's arrogance, his possessiveness of specimens that went through his hands, his rough treatment of the specimens, and his drive to describe new genera and species at any cost certainly did not help in his dealings with his colleagues. The two great Russian entomologists of that time, Fischer von Waldheim and Mannerheim, stood at Motschulsky's side; however after they died, Motschulsky ended up almost without sympathizers. Motschulsky's personality and behavior were without doubt a reflection of a creative mind that could not be bothered with convention and minute details. Also some of his scientific ideas, although not necessarily correct, such as his proposal of a new classification system of Coleoptera based on their way of life, also showed a touch of genius. At any rate, Motschulsky's name was one of the best known in entomological circles of that time. More recently, Motschulsky's greatness and enormous contribution to the knowledge of beetles is surfacing after a reassessment of his publications based on the study of his types, or what remains of some of them.

Motschulsky trained as a youth for military service, but at the same time he was intensely interested in collecting insects, particularly beetles. During the early 1830s he served as a lieutenant in the Caucasian region, and from there he made extensive trips that included Asia Minor, Armenia, and Kazakhstan. He was wounded by a cannon projectile during the Polish uprising, resulting in the significant loss of hearing. Apparently because of this, he was transferred to general staff and entrusted with communication services.

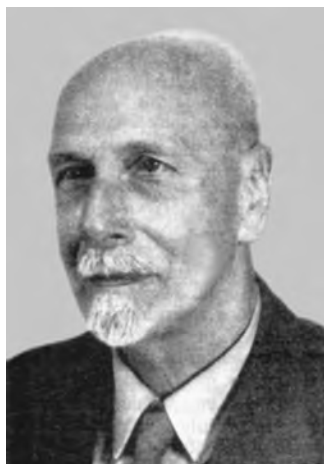
Motschulsky was a restless traveler. In 1836 he traveled through Europe, in 1839–1840 across Siberia, in 1847 he was again in the steppes of Kazakhstan. In 1849 he moved to St. Petersburg, and from there he undertook a long trip that led him again through Europe and south across the Mediterranean Sea to Egypt. From there he returned to Europe, visited Paris and London, and then Vienna, Prague, and Berlin before he returned to St. Petersburg. Next he traveled in 1853 to North America for

the New York World Exhibition, supported by the Economical Society in St. Petersburg. He managed to get all the way south into Panama. In 1855, after his retirement (1852), he undertook his last major trip through Europe, passing through Berlin and Basel en route to Trieste, and through Warszawa on his way back to St. Petersburg. During all these trips, in addition to meeting fellow entomologists and studying collections, he relentlessly collected insects, particularly beetles. There were rumors that Motschulsky was involved in intelligence service, and that most of his extended trips were government financed. These rumors were never confirmed, but Horn (see below) presented a rather convincing case in support of that view. In 1862, after some personal and professional difficulties in St. Petersburg, as well as in Dresden where he tried to settle down with his daughter, Motschulsky moved to Simferopol in Krim (southern Russia). He died there some nine years later. He bequeathed his main collection to the Société Imperiale des naturalistes de Moscou (today it is at the Zoological Museum, Moscow University, Moscow) and most of his spare collection, as well as part of his library, to St. Petersburg.

Motschulsky was a prolific writer. The list of his publications contains almost 90 items; however, some (e.g., his *Études Entomologiques*, are multiple listings; therefore his total output was actually much greater. He described a large number of genera and species, mostly of Coleoptera, from all parts of the vast Russian Empire, including the Caucasus, Far East, and Central Asia, and from North America, particularly California. In 1869–1870, he published a list of *Genres et espèces d'insectes, publiés dans différents ouvrages par Victor Motschoulsky* (as a supplement to *Horae Societatis Entomologicae Rossicae*, Vol. VI). The list contains, in addition to 88 pages of names in Coleoptera, also names in “Dermatoptères, Orthoptères, Neuroptères, Hyménoptères, Hémiptères, Homoptères, Lépidoptères, Diptères, Aptères, Myriapodes, Larves et Chenilles, Insectes contenus dans le succin, and even Arachnides”. The Staphylinidae are represented by 394 species and 44 genera. [A.S.]

SOURCES: • *Horae Societatis Entomologicae Rossicae* 6 (1869–1870): 1–118 [by V. I. Motschulsky, bibliography only (NOTE: This publication is often incorrectly attributed to Solsky [e.g., Carpenter, 1945; Gilbert, 1877; Gaedike and O. Smetana, 1984: 192]. At the end of the publication [p. 118], there is a footnote: “Nota. Nous avons jugé indispensable d’ajouter cette table, pour faciliter l’usage du catalogue. L’orthographe des noms est partout conservée telle, que nous l’avons trouvée dans le manuscrit qui nous fut envoyé par son auteur M. Motschoulsky. . . . Le catalogue embrasse les ouvrages de son auteur jusqu’à 1867 inclusivement.” From this note it is clear that Motschulsky is the author of the publication. The “Redaction” only added the “Table alphabétique des genres” [pp. 105–118]. Solsky was at that time the editor of *Horae* . . . , thus the attribution of the paper to him by some biographers and bibliographers.]. • *Horae Societatis Entomologicae Rossicae* 9 (1871): XVIII [anonymous]. • *Proceedings of the Entomological Society of London* (1871): LII [by A. R. Wallace]. • *Stettiner Entomologische*





*Josef (Giuseppe) Müller*

*Zeitung* 33 (1872): 73 [by C. A. Dohrn]. • *Entomologist* 6 (1872): 56 [by E. Newman]. • *L'Abeille* (Les entomologists and leurs écrits) 24 (1887): 164–170 [by S. A. Marseul, with bibliography]. • *Insektenbörse* 22 (1905): 4, 14 [by A. Becker]. • *Bulletin of the Brooklyn Entomological Society* 9 (1914): 99–101 [by R. Dow]. • *Entomologische Mitteilungen* 16 (1927): 1–9, 93–98 [by W. Horn]. • *Index Litteraturae Entomologicae* (1928): 841–845 [by W. Horn and S. Schenkling, bibliography only]. • *History of Entomology* (1931): 712–715 [by E. O. Essig, with portrait]. • *Bibliography of Australian Entomology 1775–1930* (1932): 231 [by A. Musgrave].

**Müller, Josef (Giuseppe).** Müller was born in Zara, Dalmatia (now Croatia), on April 24, 1880. He died on September 21, 1964, in Trieste, Italy.

Müller obtained his basic education at the *gymnasium* in Zara. After graduation he moved to Graz, Austria, studied philosophy at the Graz University, and obtained his degree in 1902. At about that time he met Ganglbauer, who profoundly influenced Müller's entomological future. After graduation from the University, Müller went to Trieste, Italy, which already had several natural history establishments: a Natural History Museum, Società Adriatica di Scienze Naturali, a botanical garden, and a small zoological station for marine biology in St. Andrea. Müller joined the Società Adriatica and soon established an entomological section of the society. The intention was to extend Ganglbauer's work *Die Käfer von Mitteleuropa* for the *Gebieten des österreichischen Küstenlandes* with the cooperation of coleopterists working in the area, who became members of this entomological section. One of the goals was a survey of the "Karst" areas around Trieste and on the Balkan Peninsula. The outbreak of the First World War brought work to a halt and Müller was drafted into military service. He first served at a small malaria station in Albania, but was soon transferred to Vienna to work in a bacteriology laboratory under Professor R. Doerr. He worked on the biology of *Pediculus humanus* (the importance of this species in the epidemiology of typhus had just been discovered) and on several microbiological assignments. After the war Müller returned to Trieste, became first the *Konservator* and later the director of the Triester Naturhistorisches Museum and the attached botanical garden. Under his direction the museum flourished, especially the entomological department, and so did Müller's scientific work. He published many encyclopedic works, such as *Catalogo dei Coleotteri della Venezia Giulia*, works on carabids, monograph of ants, etc., and a large number of smaller papers covering almost all families of beetles. In addition, he was actively working on the systematics of reptiles and became instrumental in rebuilding the station in St. Andrea into the famous Triester Aquarium that opened October 31, 1933. During the years 1930–1938 Müller led two expeditions to Ethiopia and the Red Sea that brought rich material to the Museum. In 1941 Müller retired as the director of the Museum, but for some time headed the Institute of Phytopathology in Trieste. In 1953 he published the second volume of the well-known series *I Coleotteri della Venezia Giulia*, a

large work of almost 700 pages dealing with phytophagous beetles (the first volume [*Adephaga*] was published in 1926).

Müller was one of the eminent European entomologists and naturalists of the era between the two world wars, a man with a remarkably developed “taxonomic sense”, allowing him to deal successfully with even the most difficult groups. His 243 publications deal mostly with beetles and many are classical treatments of particular groups. Müller’s serious involvement with the Staphylinidae dates back to 1923, when he started to publish articles dealing with *Staphylinus*. This series of papers was published over 20 years (1923–1943); Müller soon became a recognized expert on the group. He was the first to extensively use the aedeagus for distinguishing the species and particularly subspecies. Müller described 61 species or subspecies and 5 genera in Staphylinidae. [A.S.]

SOURCES: • *Koleopterologische Rundschau* 33 (1955): 2–14 [by G. Pilleri, with bibliography]. • *Il Piccolo, Trieste* (1955) [by G. Pilleri]. • *Il Piccolo, Trieste* (1956) [by A. Pittoni]. • *Entomologische Blätter, Krefeld* 56 (1960): 73–74 [by C. Demelt, with portrait]. • *Bollettino della Società entomologica italiana* 94 (1964): 113 [by C. Demelt]. • *Natura, Milano* 55 (1964): 264–267 [by R. Mezzena, with portrait]. • *Bioloski Glasnik, Anexes* 18 (1965): 1–6 [by R. Radovanovic]. • *Memorie della Società entomologica italiana* 45 (1966): 135–148 [by F. Invrea, with bibliography, portrait]. • *Atti della Accademia Nazionale italiana di entomologia Rendiconti* 16 (1968): 21–39 [by F. Capra, with bibliography]. • *Memorie della Società entomologica italiana* 48 (1969): 967 [by C. Conti].

**Müller, Otto Friedrich.** Müller, the son of a court trumpet player, was born in Copenhagen, Denmark, on March 11, 1730, and died there on December 26, 1784.

Müller studied theology, zoology, and botany. He also was an accomplished trumpet player, and he supported his studies with his musical talents. In 1773, he became financially independent by marriage and devoted his time exclusively to science.

Müller’s publications cover various fields of natural history. Only his *Fauna Insectorum Fridrichsdalina . . .* (1764), and particularly his *Zoologiae Danicae prodromus . . .* (1776) are of importance for the taxonomy and nomenclature of Coleoptera. All members of Staphylinidae in these two publications were treated as *Staphylinus*. Some of his species are still valid today but quite a few others have not been synonymized and their status remains doubtful, especially since Müller’s collection was apparently destroyed when the English fleet shelled the city of Copenhagen in 1801 (however, some doubt that Müller’s private collection of insects ever existed). He named 21 species in the family. [A.S.]

SOURCES: Many biographies of Müller were published; only some are given here. Extensive listings may be found in Evenhuis (1997). • *Entomologiske Meddelelser* 15 (1922): 58–67 [by K. L. Henriksen, with portrait]. • *Index Litteraturae Entomologicae* (1928): 849–850 [by W. Horn and S. Schenkling, partial bibliography, only entomology]. • *History of Biology* (1935): 426–427 [by E. Nordenskiöld].



Otto Friedrich Müller



*Etienne Mulsant*

**Mulsant, Etienne.** Mulsant was born in Mornant, Département du Rhône, France, on March 2, 1797. He died on November 4, 1880, in Lyon, France.

Mulsant obtained his education at the colleges in Belley, Roanne, and Tournon. After graduation he first worked at a commercial establishment. At that time (1830) he published his first paper: "Lettres à Julie sur l'entomologie . . .", which was a discussion of different groups of insects (interspersed with short pieces of his own poetry) in the form of letters written to the young lady who eventually became his wife. Later Mulsant went to Lyon to join his parents, and eventually became the curator of the library of the city of Lyon and the professor of natural history at the lycée in Lyon. He held these two posts his whole life, while at the same time proceeding tirelessly with his entomological studies. In addition to his entomological work, Mulsant also published on ornithology (including a paper on humming birds) and on general natural history. He was an honorary member of the Société entomologique de France, and a corresponding member of the Académie des Sciences.

Mulsant was one of the most eminent and prolific European coleopterists (although he also published on Heteroptera) of the nineteenth century. The list of his entomological publications contains almost 250 items, in addition to a long list of his contributions to the series *Histoire naturelle des Coléoptères de France* (some in coauthorship with Rey—see under Rey), *Histoire naturelle des Punaises de France* (in coauthorship with Rey), and eight volumes of *Opuscules entomologiques*.

Mulsant treated the Staphylinidae, in coauthorship with Rey, in nine volumes of the *Histoire naturelle des Coléoptères de France* between 1872 and 1878. Four additional volumes were published solely by Rey between 1880 and 1883 (see under Rey). The meticulously executed, detailed descriptions of all taxa in these treatments are well known to anybody seriously involved in the taxonomy of the family. The series became a standard reference for a long time.

Mulsant described in Staphylinidae 361 species (almost all in coauthorship with Rey, 1 in coauthorship with Godard, and 1 by himself) and 109 genera (in coauthorship with Rey). [A.S.]

SOURCES: There are many biographies and obituaries for Mulsant; only some are presented here. Extensive listings may be found in Gilbert (1977). • *Annales de la Société entomologique de France* (5) 10 (1880): 403–412 [by M. J. Félicissis-Rollin]. • *Annuaire Entomologique* 9 (1881): 108–113 [anonymous]. • *L'Abeille* (Les entomologistes et leurs écrits) 20 (1882): 20–39 [by S. A. Marseul, bibliography only]. • *Mémoires de l'Académie des sciences, belles-lettres et arts de Lyon* 25 (1883): 259–309 [by A. Locard, with bibliography, portrait]. • *Index Litteraturae Entomologicae* (1928): 852–861 [by W. Horn and S. Schenkling, bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1968): 157–160 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Les entomologistes français 1750–1950* (1987): 67–70 [by J. Lhoste].

**Münster** (also **Munster**), **Thomas Georg.** Münster was born in Kristiania, Norway, on March 1, 1855. He died on March 10, 1938, in Oslo, Norway.

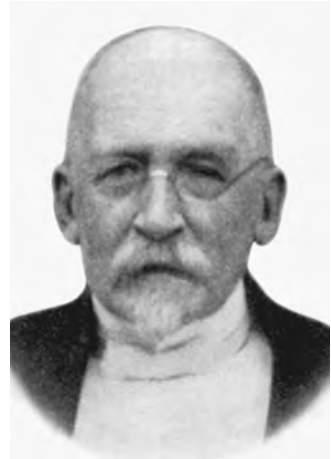
Following the family tradition, Münster took his degree in mining geology at the university in Kristiania. He worked for some time in the metallurgical laboratory of the Kongelige Frederiks Universitet in Oslo, and later for the Norwegian geological survey, where he was responsible for the geological mapping of the country. At the same time he pursued a career with the Kongsberg Silver Mine, where he ended up as a mint-master. He left Kongsberg in 1906, when he was appointed the superintendent of mines of the Finmarken (1906) and Östand (1911) districts. He retired in 1918.

Münster was one of the early, widely respected, Norwegian entomologists who provided the groundwork for Norwegian coleopterology. In 1904, Münster was one of the founders of the Norsk Entomologisk Forening, and in 1920, as one of the initiators of the journal *Norsk Entomologisk Tidsskrift*, he became the main editor of it. He became honorary member of the Norsk Entomologisk Forening, the Svensk Entomologisk Föreningen, and the Finnish Entomological Society in Helsinki.

Münster published 72 papers, mostly dealing with various beetle families of the northern fauna. Numerous papers included Staphylinidae, e.g., the Norwegian *Quediini* (1923), members of the genera *Atheta* (1923, 1932), *Arpedium* (1933), *Olophrum* (1935, 1936), etc. He described 16 taxa at the specific level and one taxon at the generic level in Staphylinidae. His large collection of beetles and library went in 1918 to the Universitets Zoologiska Museum in Oslo, and his spare collection (mainly Norwegian species) to the museum in Bergen. [A.S.]

SOURCES: • *Norsk Entomologisk Tidsskrift* 3 (1935): 359 [anonymous, with portrait]. • *Bulletin de la Société entomologique de France* 43 (1938): 105 [anonymous]. • *Koleopterologische Rundschau* 24 (1938): 121 [anonymous]. • *Entomologiske Meddelelser* 20 (1938): 188 [by V. Hansen, with portrait]. • *Notulae Entomologicae* 18 (1938): 70–72 [by W. Hellén, with portrait]. • *Arbeiten über morphologische und taxonomische Entomologie aus Berlin-Dahlem* 5 (1938): 186 [by W. Horn]. • *Annales Entomologici Fennici* 4 (1938): 187 [by E. Kangas]. • *Norsk Entomologisk Tidsskrift* 5 (1938): 49–53 [by R. Natvig, with bibliography, portrait]. • *Entomologica Scandinavica* 11 (1980): 41–43 [by A. Løken, with bibliography].

**Naomi, Shun-Ichiro.** Naomi, of Japan, was born on October 31, 1955. He dedicated himself to studying the family after he realized the group was unfamiliar to amateur entomologists because the species were so difficult to identify. He is interested in the Steninae, Megalopsidiinae, Piestinae, Osoriinae, Tachyporinae, and Trichophyinae of the eastern Palaearctic region. One of his major contributions is a series of 11 articles on the comparative morphology of the Staphylinoidea. He has published many articles on the Steninae of the eastern Palaearctic, particularly Japan. He has also published taxonomic articles on *Anisolinus*, *Amichrotus*, *Phytolinus*, *Velleius*, *Ocypus*, *Siagonium*, *Trichophya*, *Thinobius*, and *Megalopinus*, has revised the Xanthopygina and Leptochirini, and the genera *Piestoneus*, *Nacaeus*, *Lispinus*, *Neolosus*, and *Sepedophilus* of Japan, and has worked on the Osoriinae of Japan. One of his goals is to



Thomas Georg Münster



Shun-Ichiro Naomi



*José Luis Navarrete-Heredia*



*Alfred Francis Newton*

write checklists of the Steninae and Tachyporinae of Japan. He has described 176 nominal species and 5 genera.

**Navarrete-Heredia, José Luis.** Navarrete-Heredia, of Mexico, was born on January 28, 1964. His interest in staphylinids was initiated by his work on beetles associated with mushrooms and his interactions with Campbell and Smetana during a visit to Ottawa in 1988. That interest was cemented a year later due to discussions with Newton and Thayer while visiting the Field Museum. He is pursuing studies of the taxonomy and ecology of the Oxyporinae, Scaphidiinae, Staphylininae, and Tachyporinae of the Neotropics, particularly Mexico. He has published a general discussion of the Staphylinidae of Mexico, articles on *Sepedophilus*, *Styngetus*, and *Oxyporus*, along with an article on the natural history of two species of *Philonthus*. He is working on a guide for identification of the staphylinid genera of Mexico and a revision of *Glenus*. He hopes to revise or review the Neotropical genera of the Philonthina and Xanthopygina and is interested in working with *Philonthus* and *Belonuchus* of the region. He has described two species.

**Newton, Alfred Francis.** Newton, of the USA, was born on September 11, 1944. He collected beetles as a teenager and became interested in the family in graduate school because the group was large, diverse, and seemed challenging, the species were easily collected in a standardized fashion for surveys and ecological studies, and, at the time, there were few others working on them. He is interested in the entire family but particularly the Staphylininae, Osoriinae, and various smaller subfamilies. Much of his work is focused on elucidating the higher classification and phylogenetic relationships within the Staphylinidae. His published work includes annotated (coauthored) catalogs of the genera (with their type species) of the Pselaphinae and the Scydmaenidae, a catalog of the family-group names of the Staphylinidae and the current classification, and the description of the single genus and all the species of a new subfamily (the Protopselaphinae). He has contributed to understanding of fungivory and to distributional patterns in the south temperate regions. He has published on genera in a number of subfamilies and has often included a general discussion of the classification or position of the genus in the subfamily or some other general phenomenon. One component of his work is the integration of adult and larval characters into the classification. His long-range goals include continuation of the refinement of the higher classification and understanding of the phylogeny of the Staphylinidae, further work on the biogeography of the south temperate fauna, and completion of a various species-level studies. He is currently completing (with others) a guide to the staphylinid genera of Mexico, a revision of the New World *Platydracus*, and a review of the suprageneric classification of the Osoriinae. His skill as a collector and his collaboration with others has resulted in a collection of more than a million adult and larval Staphylinidae and he has built the world's largest larval collection of the family. He has described 1 species and 2 genera and coauthored 14 other species and 2 more genera.

**Nordmann, Alexander.** Nordmann was born in Rantasalmi (county Wiborg), Finland, on May 24, 1803, of a Germanized Finnish family. He died on June 25, 1866, in Helsingfors, Finland.

Nordmann studied at Åbo and from there he went to Berlin, where he became a student of Rudolphi. While in Berlin, he wrote his work *Mikroskopische Beiträge* in which he for the first time brought attention to parasitic Crustacea and Trematoda. The work attracted attention and he was given a professorial chair in Odessa. While there, he explored the extinct and recent fauna of southern Russia and published the results in several important publications. In 1849 he was appointed professor to succeed R. F. Sahlberg at the University in Helsingfors, a post he held until his death. Nordmann was not very popular among his colleagues and students at the university, in part because he refused (supported only by Mäklin) to consider any work done on Finnish fauna and flora important. In his old age Nordmann became "an original character", and none of his later work received the recognition of his early work.

Nordmann's contribution to the study of Staphylinidae comes through his early work "Symbolae ad Monographiam Staphylinorum", published in 1837 in St. Petersburg. In this paper he described 89 new species and 17 new genera, and also presented an original division of the family. The paper is still frequently consulted for nomenclatorial and taxonomical purposes. [A.S.]

SOURCES: • *Verhandlungen der Kaiserischen mineralogischen Gesellschaft, St. Petersburg* 6 (1871): 73–80 [by J. F. Brandt]. • *Acta Societatis Scientiarum Fennicae* 9 (1871): 1–40 [by O. E. Hjelt, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 890–891 [by W. Horn and S. Schenkling, partial bibliography only]. • *History of Biology* (1935): 422–423 [by E. Nordenskjöld].

**Normand, Henri.** Very few biographical data for Normand are available. The exact date and place of birth are unknown, as well as the exact date of death, but he likely died between June 24 and September 23, 1959 (judging from the reports of the "séances" in the *Bulletin de la Société entomologique de France* for the year 1959 (volume 64) that include reports of recent deaths of the members. He almost certainly died in Le Kef, Tunisia.

Normand spent almost his entire life in Le Kef, at least partially as a head of a hospital there. He was a life member of the Société entomologique de France since 1895, a Grand-officier de la Légion d'honneur, an Officier d'Académie, and a Chevalier du Mérite agricole.

Normand was an expert on the beetle fauna of North Africa, particularly that of Tunisia. He published many papers dealing with many beetle families. Many of them were parts of two series: Nouveaux Coléoptères de la Faune tunisienne and Contribution au catalogue des Coléoptères de la Tunisie. His last paper was published in 1955. He described 68 species in Staphylinidae. [A.S.]

SOURCES: • *Bulletin de la Société entomologique de France* 64 (1959): 141 [by M. A. Roudier]. • *Collectiones entomologicae, Teil II, Berlin* (1990): 284 [by G. Friese and R. Gaedike].



Alexander Nordmann



Howard Notman



Guillaume Antoine Olivier

**Notman, Howard.** Notman was born in Brooklyn, New York, USA, on April 20, 1881. He died on August 8, 1966, in Topanga, California, USA.

Notman was a man of varied talents whose interests included science, art, and music. He graduated from Harvard Law School in 1903, but he was also an accomplished artist, having studied under Constantin Herzberg at the Brooklyn Polytechnic Institute. His overriding interest, however, was entomology, in which field he was apparently self-taught. His aptitude in entomology was revealed at the age of 15, when in 1896, he captured a rare neuropteran insect, *Neurinia pardalis*, in the Adirondacks. Young Notman sent the specimen to the State Entomologist, along with a colored figure of his own making. This marked the first sighting of this insect in New York State.

Notman had a summer home in the Adirondacks, and much of his collecting was centered in the area around Keene Valley. The rugged surroundings of the Adirondacks also furnished the subject matter for many of his paintings. Notman specialized in beetles and butterflies and by the 1920s his collection contained an estimated 75,000 specimens. He apparently devoted most of his free time during the first three decades of the twentieth century to collecting beetles and publishing descriptions of newly discovered species. In the 1920s he served as the editor of the *Journal of the New York Entomological Society* (1920–1924), and acted as the corresponding secretary of the Brooklyn Entomological Society (1923–1925). He was also a fellow of the New York Academy of Sciences. In 1931, the Notman family moved to Todt Hill on Staten Island, and there Notman kept a close association with the Staten Island Institute of Arts and Sciences. During the 1940s, Notman either lost interest or greatly reduced his beetle collecting activities. In 1948, he donated his entire beetle collection, including the types of the taxa he described (96 species and 10 genera in Staphylinidae) to the Staten Island Institute of Arts and Sciences, where it is still kept today. In the same year, he moved to Topanga, California (his family remained on Staten Island), and lived there until his death in 1966. [A.S.]

**Olivier, Guillaume Antoine.** Olivier was born in Arcs, near Fréjus, France, on January 19, 1756. He died on October 10, 1814, in Lyon, France.

He studied medicine at Montpellier, but at the same time, through his acquaintance with the naturalist P.M.A. Broussonnet, he became interested in natural sciences. Later, with the aid of Broussonnet, he was employed in an economic study of natural products around Paris. He did so well that the wealthy amateur entomologist Gigot d'Orcy engaged him to collect insects in several European countries, which gave him the opportunity to accumulate material for his *Encyclopédie Méthodique*, as well as his encyclopedic work on Coleoptera (see below). During the French Revolution, Olivier was sent on a commercial mission to Persia (the plan to establish the commercial relations with Persia was abandoned while Olivier was there). He spent six years there and eventually returned to France, bringing with him large natural history collections from both European and Asiatic Turkey (Asia Minor), various Mediterranean Islands,

Persia, and Egypt. He proceeded to describe the insects and other animals from these collections. Eventually he was appointed professor of zoology at the Veterinary School of Alfort near Paris, and was elected a member of the Institut de France in 1800. He became one of the most renowned and sought after entomologists of that time. He was also a good friend of Fabricius and a protector of and provider for poor Latreille during the politically unstable, revolutionary period from 1810 until his death in 1814. Apparently Olivier died of an aortal aneurism.

Olivier's most important work is his publication dealing with Coleoptera: *Entomologie, ou histoire naturelle des insectes, avec leurs . . .*, published in six volumes with 363 color plates (1789–1808). He treated the Staphylinidae within three genera: *Staphylinus* (56 species), *Oxyporus* (1 species), and *Paederus* (7 species), essentially following Fabricius in this respect. Oliver named 18 species of staphylinids. [A.S.]

SOURCES: Numerous additional references may be found in Evenhuis (1997). • *Considérations générales sur la classe des insectes* (1823): 258–259 [by A. M. C. Duméril]. • *Taxidermy; with Biography of Zoologists* (1840): 279–281 [by W. Swainson]. • *New General Biographical Dictionary* 10 (1850): 392–393 [by H. J. Rose]. • *Forstwissenschaftliches Schriftsteller-Lexicon* 1 (1874): 389–396 [by J. T. Ratzeburg]. • *L'Abeille* (Les entomologistes et leurs écrits) 22 (1884): 121–124 [by S. A. Marseul]. • *Bulletin of the Brooklyn Entomological Society* 8 (1913): 39 [by R. P. Dow]. • *Bulletin of the Brooklyn Entomological Society* 9 (1914): 9–10 [by R. P. Dow]. • *Insecta* 7 (1917): cover [portrait only, anonymous]. • *Index Litteraturae Entomologicae* (1928): 899–900 [by W. Horn and S. Schenking, bibliography only]. • *History of Entomology* (1931): 719–721 [by E. O. Essig, with portrait]. • *Internationale Entomologische Zeitschrift* 27 (1933): 316 [by E. Ross]. • *Bibliographia Araneorum* 1 (1945): 30 [by P. Bonnet, with portrait]. • *Essays on the History of Neotropical Dipterology* 1 (1971): 187–188 [by N. Papavero]. • *Beiträge zur Entomologie* 34 (1984): 200 [by R. Gaedike and O. Smetana]. • *Les entomologistes français 1750–1950* (1987): 47 [by J. Lhoste].

**Olliff, Arthur Sidney.** Olliff was born in Millbrook, Hampshire, England, on October 21, 1865. He died on December 29, 1895, in Sydney, New South Wales, Australia.

Olliff was employed as a young boy by E. W. Janson to prepare insects, and later did similar work at the British Museum. He became curator and private secretary to Lord Walsingham until he left England for Australia in December 1884, to take the post of the assistant zoologist (entomologist) at the Australian Museum in Sydney. He held this post until 1890, when he was appointed Government Entomologist at the Agricultural Department of New South Wales, a post he still held at the time of his early death.

Olliff's contribution to the knowledge of Staphylinidae lies in his three parts of "A Revision of the Staphylinidae of Australia", published in 1886 (parts 1 and 2) and in 1887 (part 3). In these three papers Olliff provided a basic treatment of Australian Staphylinidae. Combined with contributions by Blackburn, who worked on the Australian members of the family at



Arthur Sidney Olliff





Raimundo Outerelo

about the same time, these were the only treatments of the group for Australia until Lea published his first article on staphylinids the year Olliff died. His treatment was rather conservative at the generic level (he explained his philosophy in the introduction), resulting in very few new genera being described, mostly for quite distinctive taxa. Strangely enough, Olliff never worked on the family again, but this was perhaps due to the fact that he died when only 30 years old. He published 72 papers, but only three dealt with the Staphylinidae. Olliff described 49 species and three genera in Staphylinidae. His collection, including the types, is housed partly in the Australian Museum in Sydney, partly in the British Museum (Natural History), London. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 32 (1896): 66–67 [anonymous]. • *Proceedings of the Entomological Society of London* (1896): XCII [anonymous]. • *Agricultural Gazette of New South Wales* 7 (1896): 1–4 [by F. B. Guthrie, with bibliography]. • *Smithsonian Miscellaneous Collections* 84 (1930): 395–396 [by L. O. Howard]. • *Proceedings of the Linnean Society of New South Wales* 57 (1932): 7 [ex W. W. Froggatt MS]. • *Bibliography of Australian Entomology 1775–1930* (1932): 244–246 [by A. Musgrave, with bibliography]. • *Index Litteraturae Entomologicae Serie II* (1968): 210–212 [by W. Derksen and U. Scheiding-Göllner, bibliography only].

**Orousset, Jean.** Orousset, of France, has worked primarily with the tiny staphylinids of the Euaesthetinae and Leptotyphlinae, particularly species of *Edaphus*, *Octavius*, and *Leptotyphlus*. He also published articles on other genera such as *Phloeocharis* and *Cylindropsis*. He has named 157 species and 5 genera.

**Outerelo, Raimundo.** Outerelo, of Spain, was born on October 13, 1947. He started working on the family during his faunal investigations of the group in the Guadarrama Sierra of Spain. He is broadly interested in the Staphylinidae, particularly those of the Palearctic region. He has published a number of articles on the Leptotyphlinae, an identification guide to the subfamilies and genera of the Staphylinidae of the Iberian Peninsula, along with taxonomic articles on *Quedius*, *Leptacinus*, *Xantholinus*, *Phalacrolinus*, *Scopaeus*, *Domene*, *Oedichirus*, *Lathrobium*, *Phloeocharis*, and *Lusitanopsis*, among other genera. Much of his current work is directed at the edaphic and cavernicolous fauna, particularly the Leptotyphlinae, Osoriinae, and Pselaphinae (*Mayetia*), and his long-range plans are to improve knowledge of the Staphylinidae of the Iberian Peninsula. He has published 27 nominal species.

**Pace, Roberto.** Pace, of Italy, was born on May 7, 1935. He began his work on the Staphylinidae as a result of his studies of the literature at the Museo Civico de Storia Naturale de Verona, the support of S. Buffo, G. Osella, and A. Zanetti, the influence of the works by Coiffait, Smetana, Besuchet, and Jeannel, and the availability of collections held by museums and colleagues. He is primarily interested in and most of his published work has been on the Leptotyphlinae and Aleocharinae. He has concentrated his efforts on the Leptotyphlinae of the Mediterranean region and the Aleocharinae of the Indian, Indomalay, Papuan,

east African, Madagascan, and Neotropical regions, but has published on the taxa of other regions as well. He has published more than 200 articles, many of them major treatments of the fauna of a region. The bulk of his publications have been on the Aleocharinae. A few of his major works include his monograph of the *Leptusa* of the world, his treatment of the Leptotyphlinae of Italy, and the Aleocharinae of the Galapagos, the Mascarenes, and New Caledonia. He also found and described *Crowsoniella relictata*, later assigned to its own family. One of the hallmarks of his work is habitus and genitalic illustration for each species. The number of new taxa he has described is phenomenal. In 1973 he described his first 3 species; since then he has described new species and genera at the average rate of more than 100 taxa per year, with a low of 2 in 1974 and a high of 386 in 1991. Through 1998 he described more than 2,400 species and more than 200 genera. His goal is to make the Aleocharinae more easily identifiable, in part through the publication of carefully prepared illustrations. He hopes that his work will lead to a revision of the generic and tribal classification, which, at the moment, he believes is premature because of the vast amount of undescribed material.



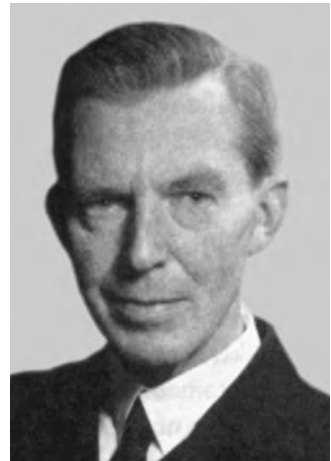
Roberto Pace

**Palm, Thure.** Palm was born on January 30, 1894, in Bellinga near Ystad in southern Sweden, where his father was an estate manager. He died on May 2, 1987, in Malmö, Sweden.

Palm was a blessed coleopterist who managed to stay in excellent physical and mental condition well into his 90s, which allowed him to continue his research work and field activities until near his death. For example, in 1981, when 87 years old, he collected for a month in Malaysia, on Penang Island and in the Cameron Highlands; in 1986, at 92, he wrote to me about his recent collecting in west Africa and in Bulgaria!

Palm's interest in insects started as early as 1912, when he was a student in Ystad. In 1918, after passing an examination, he became the forestry officer in Domänverket and in 1920 an assistant in the Ombergs district. Around 1926, Palm started to seriously study Swedish Coleoptera, particularly those of importance for forestry. In addition to many short contributions, he published two books dealing with the beetles inhabiting the wood and bark of the deciduous trees of northern Sweden in 1951 and of middle and southern Sweden in 1959; these books contain ecological and bionomical data for many members of Staphylinidae. His attention to the faunistic-ecological aspects of coleopterology, his enormous experience and knowledge in the field, and his excellent taxonomical skills were Palm's trademarks. In 1953, he received an honorary doctor degree from the University in Lund for his exceptional achievements. He was one of the most recognized Swedish coleopterists of modern times.

Palm published over 200 papers, many of them dealing with the systematics, faunistics, and ecology of Staphylinidae. He treated the family in an excellent way within the series *Svensk Insektfauna*, published in seven parts between 1948 and 1972. He described 22 species in Staphylinidae. He donated his Coleoptera collection to the University of Lund, where it is still housed. [A.S.]



Thure Palm



Gustaf Paykull

SOURCES: • *Opuscula Entomologica* 29 (1964): 1–3 [by C. H. Lindroth, with portrait]. • *Entomologisk Tidskrift* 103 (1982): 45–49 [by T. Palm]. • *Entomologisk Tidskrift* 105 (1984): 90–92 [by T. Nyholm, with portrait]. • *Entomologische Blätter, Krefeld* 81 (1985): 191 [by W. Lucht]. • *Entomologisk Tidskrift* 108 (1987): 121–122 [by L. Hedström and S. Jonsson, with portrait]. • *Notulae Entomologicae* 67 (1987): 180 [by H. Krogerus].

**Paykull, Gustaf.** Paykull was born in Stockholm, Sweden, on August 21, 1757, the son of the army major Carl Fredrik Paykull and Beata Charlotta Simming. He died on January 28, 1826, in Stockholm.

Paykull received his early education by private tutors. During his youth he stayed temporarily at the estate Hesselby close to Uppsala, where Linné often made his excursions. Paykull's interest in natural history was probably stimulated by these outings with Linné. He also showed interest and talent in classical poetry and literature, and during the 1780s several literary works were written, among them comedies and tragedies written in classical Greek style, as well as translations of Anachraeon, Sappho, and Bion. However, his literary efforts met with rather modest success, and for that reason, it was said, he turned his attention to natural history. After graduation from the University of Uppsala, Paykull embarked on his career in 1779, which in 1796 led him to an appointment as the principal assistant secretary in the federal administration. This position brought him the necessary contacts and made him also a wealthy man.

Paykull discovered early that the "art of collecting" provided him with great amusement, and also was a way of making him a man of respect among his contemporary colleagues. He obviously had a good sense of organization and systematics. That ability, combined with his wealth, enabled him to build up one of the largest private collections of natural objects ever seen in Sweden. During the late 1700s Paykull established contacts with many of the leading entomological authorities, including Fabricius in Kiel, who provided him with insights into higher systematics. Paykull's works accordingly reflected Fabricius' system, particularly in his monographic treatments of Swedish rove beetles, ground beetles, and weevils, which appeared in rapid succession in 1789, 1790, and 1792. The monographic treatment of Staphylinidae was the first of its kind. All three were, in a way, tests for his *Insecta Svecica* (1798–1800), showing somewhat modernized taxonomy and systematic treatment.

At the turn of the century, Paykull traveled several times abroad, often with the aim of enriching his rapidly growing collections of Mammalia, Aves, and Insecta. His correspondents included Latreille, Marsham, Müller, Rossi, and others, and he met Cuvier and Latreille in Paris. At the Mediterranean Sea he made large collections of birds (these were his second favorite group and he described several new species based on specimens he collected), insects, and conchylia. He also went to St. Petersburg and met there the Czar, who presented him with a diamond ring in appreciation of his literary efforts.

Paykull was a member of several scientific and literary societies, and in 1791 he was elected a member of the Swedish

Academy of Sciences. He was a respected authority among his contemporary Swedish colleagues, such as Gyllenhal, Schön-herr, Thunberg, and others. He kept an extensive exchange of specimens, but his passionate drive to collect made him sometimes a less wanted guest in the collections. Some curators spoke of specimens being “paykullarized”, i.e., kept by Paykull for his own collection. This explains, why some types of De Geer are being discovered in Paykull’s collection. His giant collection, mainly birds and insects, was in a separate building at his large estate Wallox-Säby. The larger mammals were kept in the main buildings at several private estates. The collection comprised some 80 large mammals, 1,362 birds, numerous fish preparations, and 8,600 species of insects!

In 1816, Paykull was appointed baronet and two years later, after some arrangements about the royalties, he donated all his collections to the state in favor of creating a center for their keeping in Stockholm. This was the initiation of the Riksmuseum. According to the contemporary witnesses, the transportation of the collection was a spectacular sight. The ship *Amphitrite* needed three trips across Lake Valloxen to complete the evacuation.

After his retirement, Paykull spent his last years at Wallox-Säby, making occasional trips to the Riksmuseum in Stockholm.

Paykull described 51 species in Staphylinidae. [A.S.]

SOURCES: • *Kongliga Vetenskaps-Academiens Handlingar* (1826): 350–356 [anonymous, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 922–923 [by W. Derksen and S. Schenkling, bibliography only]. • *Naturen berättar. Utveckling och forskning vid Naturhistoriska Riksmuseet. Stockholm* (1989): 9–30 [by G. Brusewitz]. • *Sveriges zoologiska litteratur. Kjuge* (1996) [by B. Dal].

**Peyerimhoff de Fontenelle, Paul-Marie.** Peyerimhoff was born in Colmar, France, on October 7, 1873, as the second son of his father Henri, the mayor of Colmar. He died on January 2, 1957.

Peyerimhoff obtained his education at the Collège Saint-Sigisbert in Nancy and later at the Ecole des Eaux et Forêts in the same city, to become a forester. It was in the latter school where he started his entomology work. In 1896 he was named the Garde général des Eaux et Forêts à Senones (Vosges). Around that time, while doing his first survey of the cavernicolous fauna in Basses-Alpes, Peyerimhoff befriended J. Sainte-Claire Deville, an artillery lieutenant in Nice at that time, who eventually became a celebrated French entomologist.

Peyerimhoff was requested by his brother Henri, who was Maître de Requêtes au Conseil d’État, to come to Algeria to serve in various functions attached to the Station de Recherches Forestières du Nord du Afrique. He eventually became the director of this institution in 1935, and served in this capacity until his retirement in 1937. At that time Peyerimhoff was Inspector général honoraire des Eaux et Forêts and also the Officier de la Légion d’honneur. He was, however, recalled to direct the Station de Recherches forestières du Bois de Boulogne à Alger during the war years of 1939–1942. Only in 1950, due to illness, did Peyerimhoff abandon his interests in this station.



Paul-Marie  
Peyerimhoff de Fontenelle



Bertil Robert Poppius



Volker Puthz

Peyerimhoff's scientific output was quite copious and wide ranging. The list of his publications stands at around 350 items. In addition to publications dealing with various aspects of his job as a forester, he published many taxonomic papers dealing predominantly with Coleoptera, papers on biogeography, ecology, phylogeny, and papers on cavernicolous beetles. He contributed immensely to the knowledge of the Coleoptera (including Staphylinidae) of North Africa, including the Sahara (in his treatment of Coleoptera in the series *Mission scientifique du Hoggar* he reported 43 species of Staphylinidae, many of them endemic to central Sahara). He named 80 species and 4 genera of staphylinids. [A.S.]

SOURCES: • *Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences, Paris* 244 (1957): 413–416 [anonymous]. • *Bulletin della Società d'Historie naturelle d'Afrique Noire* 48 (1957): 161–191 [by F. Bernard]. • *Annales de la Société entomologique de France* 127 (1958): 1–8 [by F. Bernard and F. Pierre, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1968): 273 [by W. Derksen and U. Scheiding-Göllner, bibliography only, up to 1900].

**Poppius, Bertil Robert.** Poppius was born on July 28, 1876; he died on November 27, 1916, in Copenhagen, Denmark. Detailed biographical data are not readily available.

Poppius was one of the students of J. R. Sahlberg, who considered him a very capable young man. He worked at the Entomological Museum in Helsinki, first as a volunteer and later as an *Amanuensis*, until he became the custodian at the Zoological Museum in 1912. He held this post until his untimely death in 1916.

Already during his early career, Poppius undertook many extensive collecting trips in the historical Finland, in northern Russia, and Siberia, including a joint trip with the botanist A. K. Cajander to the Lena valley. The rich material of specimens collected during these trips formed a base for his numerous papers dealing with the north Palaearctic beetle fauna, such as "Die Coleopteren des arktischen Gebietes", published in 1910. He had an excellent general knowledge of Coleoptera, and in addition to Staphylinidae, he also published taxonomic papers dealing with Carabidae. His extensive monograph of the ground beetle genus *Cryobius* is probably one of his most recognized works. While at the museum in Helsinki, Poppius was involved with several groups of insects in addition to beetles. Through O. M. Reuter, he became interested in Heteroptera, particularly when Reuter lost his eyesight in his old age, and he published several large monographs on these insects.

Poppius described 41 species and 1 genus in Staphylinidae. [A.S.]

SOURCES: • *Luonnon Ystävä* 20 (1916): 234–236 [by K. M. Lavender, with portrait]. • *Entomological News* 28 (1917): 338 [by E. Bergroth]. • *Entomologist's Monthly Magazine* 53 (1917): 19 [by E. Bergroth]. • *Wiener Entomologische Zeitung* 37 (1918): 178 [anonymous]. • *Bibliography of Australian Entomology 1775–1930* (1932): 258 [by A. Musgrave]. • *Index Litteraturae Entomologicae Serie II* (1968): 307 [by W. Derksen and U. Scheiding-Göllner, bibliography only, up to 1900].

**Puthz, Volker.** Puthz, of Germany, was born on July 9, 1941. Volker became intrigued with staphylinids when he found many species of *Stenus* in a single collection of beetles in debris. He was encouraged by other entomologists at the Deutsche Entomologische Gesellschaft, and by Herbert Franz. He is primarily interested in the Steninae, Megalopsidiinae, and Euaesthetinae of the World and in the history of science, particularly for biology and entomology. His goal is to review all the species and genera of the three subfamilies and to publish catalogs and keys for them. He is currently working on the Steninae of China and the Euaesthetinae of Australia. Through 1998 he has described more than 1,300 species and 2 genera, and has published more than 340 articles including a monograph of the African species of *Stenus*, more than 250 articles on the Steninae, 79 on the Euaesthetinae and 21 on the Megalopsidiinae; these numbers do not include the numerous notes reporting species from various sites. When possible, he has published critical illustrations for all species. Probably the most impressive feature of his work is his continual refinement of the taxonomy and classification. His body of work on the Steninae constitutes a major contribution to the understanding of the group.

**Raitschev, Ivan Miltschev.** Raitschev, of Bulgaria, was born on January 1, 1956. He became interested in the Staphylinidae through one of his professors, Ilko Vassilev. He is especially interested in the species of Bulgaria, and has published a number of articles on species of the country with the goal of making the species of Bulgaria better known. He has named three species.

**Rambousek, František.** Rambousek was born in Liblice near Český Brod, Czech Republic, on April 1, 1886. He died on September 14, 1931 in Prague, Czech Republic.

Rambousek developed his interest in natural history early and he started to collect beetles as a teenager. His attention soon turned to the families Staphylinidae and Pselaphidae, an interest that lasted throughout his entire life. He received his doctoral degree from Charles University in Prague in 1913. He worked briefly as an assistant at the Institute of Zoology of Charles University, and as a teacher at the Academy of Commerce in Prague. In 1916 he was hired by the Research Institute of the Sugar Industry, and established and headed a modern phytopathological section that became internationally known.

Rambousek traveled extensively, not only officially but also privately, to collect beetles, staphylinids in particular. He collected extensively in Europe, particularly in the Balkans, and also in North Africa. He took part in the International Entomological Congress in Ithaca in 1928, and afterwards visited many institutions in the United States of America, and also went to Cuba to study the sugar industry there. Needless to say, he collected staphylinids everywhere he went. Rambousek accumulated a very impressive collection and became a widely recognized expert on the family. However his professional duties in the sugar beet industry consumed a lot of his time and energy, and consequently he did not publish many papers on staphylinids. The list of his publications includes about 27 items, one of



*Ivan Miltschev Raitschev*



*František Rambousek*



Edmund Reitter

them a large book dealing with pests and species beneficial for sugar beets. Rambousek's large staphylinid collection, including the types, is deposited in the Entomological Department of the National Museum in Prague, Czech Republic. He named 43 species and 4 genera of Staphylinidae. [A.S.]

SOURCES: • *Smithsonian Miscellaneous Collections* 84 (1930): 311–312 [by L. O. Howard, with portrait]. • *Acta Societatis entomologicae Jugoslaviae* 5–6 (1931): 5–7 [by M. Gradojevič]. • *Wiener Entomologische Zeitung* 48 (1931): 218–219 [by A. Hetschko]. • *Acta Societatis Entomologicae Cechosloveniae* 28 (1931): 109–111 [by A. Jedlička, with portrait]. • *Ochrana rostlin* 11 (1931): 145–150 [by F. Stanák, with bibliography, portrait]. • *Annales de la Société entomologique de France* 101 (1932): 333–336 [by J. Clermont, with bibliography]. • *Koleopterologische Rundschau* 18 (1932): 65–66 [by O. Scheerpeltz, with partial bibliography].

**Reitter, Edmund.** Reitter was born in Mohelnice (Müglitz at that time) in north-central Moravia, now Czech Republic (he shares this birthplace with Max Bernhauer, see above), on October 22, 1845. His father was a forester; his mother died when he was a small child. Reitter died on March 15, 1920, in Paskov, Moravia, now Czech Republic.

Reitter graduated from the *gymnasium* in Opava. While a student there he met Dr. Richter, who stimulated Reitter's interest in beetles. Following his father's wishes, Reitter went into farming. In 1869 he took a job as farm manager at the country estate of the count Moritz Saint Genois in Paskov, and later he became the exclusive lessee of the large fishing ponds on this estate. In 1871 he married the daughter of the beer brewer on the same estate; however, his wife, after their daughter died shortly after her birth, died in 1873 at the age of only 18 years. Shortly after that, Reitter received the title of the "count's controller of fish ponds". He remarried in 1874, and by that time he occupied himself full-time with entomology. In 1879 he moved to Vienna and started there a specialized business selling insects. His wife stayed temporarily in Paskov, where she gave birth to their son Emmerich in 1880. In 1881 Reitter moved to Mödling, near Vienna, and enlarged his business to include entomological equipment and utensils, as well as entomological literature. His wife and both children followed him there; while in Mödling the family grew by another two daughters. By that time Reitter was already an eminent coleopterologist, and his establishment in Mödling had become a famous meeting place where materials from new collections were accumulated and determined. After his wife's father died in 1890, Reitter's wife insisted on returning to Paskov, and the move was made in 1891. Reitter's business continued to grow in Paskov, so he employed his single sister Maria, his two nieces, and eventually also his son Emmerich. He also received considerable help from Antonín Sequens, a pharmacist and entomologist in Paskov. Reitter's renown grew further, and his house in Paskov became a meeting place of European entomologists, both famous and beginners. Reitter was always ready to help, and his hospitality and generosity in giving away duplicates from his collection were widely known. In addition to his entomological activities, Reitter was active in

public relations, supporting various public associations (firefighters, etc.). His humanitarian orientation was best documented by the fact that he established and financed a small hospital in Paskov for those wounded during the First World War. He received the title *Kaiserlicher Rat* from the Austrian government, and many learned societies named him as an honorary or corresponding member.

After Reitter's death, his wife and the daughters moved to Vienna. His son Emmerich took over Reitter's business, sold the house in Paskov and moved the business to Opava (Troppau).

Reitter's son, Emmerich, was also active entomologically, undertaking some collecting trips abroad and building his own beetle collection (one part is at the Department of Entomology of the National Museum in Prague). He also published the journal *Entomologisches Nachrichtenblatt* from 1927 until the outbreak of the Second World War in 1939. He died shortly before the end of the war (January 2, 1945) in Opava and is buried there. His son, Ewald Reitter, obtained his Ph.D. degree from Charles University in Prague in 1939. After the war he continued to run the entomological business in Opava, and was associated with the Opava Museum. In 1949 he moved to Germany, and later opened his own business with entomological equipment and utensils. The business no longer exists.

Edmund Reitter was undoubtedly one of the geniuses of coleopterology. His friend Ganglbauer considered Reitter to have unequaled ability to find new usable characters on specimens studied many times by others. Reitter decided to pursue a professional entomological career when he was 34 years old in 1879 while he was in Vienna. His enormous drive and productivity is best documented by the following data: by 1892, he had already published 386 papers in 18 journals; by the end of 1902 the number increased to 641 papers; and by 1915 it was 949 papers. The total is just over 1000 titles. There is hardly a family of Coleoptera that Reitter did not touch in his writings. He wrote works like his famous *Fauna Germanica* (five volumes, 1908–1916), that remained for decades THE BOOK on beetles and educated and trained generations of coleopterists in Europe (it has remained so popular even in our modern times that it was reprinted); his series *Bestimmungstabellen der europäischen Coleopteren*, with contributions by Reitter himself and many other specialists that permitted the determination of many groups of beetles (including some Staphylinidae, see below); and his collaboration with Heyden and Weise on the *Catalogus Coleopterorum Europae, Caucasi et Armeniae rossicae* (1891), to name just a few. The Staphylinidae were not Reitter's preferred group, but he contributed substantially to the knowledge of the group through his treatment of the family in *Fauna Germanica*, his treatment of "Othiini" and "Xantholinini" in the series *Bestimmungstabellen der europäischen Coleopteren*, as well as in numerous shorter papers containing descriptions of new species. The total number of taxa Reitter described as new is staggering: 1,062 genera, 6,411 species, and 1,193 varieties and aberrations (the corresponding figures for Staphylinidae are: 147 species, 26 genera).

Reitter also traveled and collected extensively in many European countries (mostly in those that were, at that time, within





Yrjö Olavi Renkonen

the Austro-Hungarian Empire. He was among the first to use the “modern” sifter for collecting ground-dwelling small Coleoptera during his trip to Bosnia and Herzegovina. The technique for using sifters to collect had already been described by Kiesenwetter, but Reitter (together with Kraatz and Weise) improved the techniques and reintroduced its use. Reitter described his recommendations and experiences with the sifter in a separate paper in *Wiener Entomologische Zeitung* 5 (1886): 7–10, 45–56.

Reitter’s original collection (estimated to contain 30,000 Palearctic species in 250,000 specimens, with up to 4,500 primary types and some 10,000 “cotypes”) was sold in 1916 to the Museum in Budapest (today the Hungarian Natural History Museum) where it is still housed. However, many types of species Reitter described went to other museums and it is sometimes difficult to find them. [A.S.]

SOURCES: There are many biographies and obituaries of Reitter; only some are given here. Extensive listing may be found in Gilbert (1977). • *Wiener Entomologische Zeitung* 12 (1893): 1–22, 185–213 [by Ed. Reitter, bibliography only]. • *Wiener Entomologische Zeitung* 22 (1903): 157–170, 181–200 [by A. Hetschko, bibliography only]. • *Wiener Entomologische Zeitung* 34 (1915): 215–218, 221–270 [by T. Wanka and A. Fleischer, with bibliography by A. Hetschko and portrait]. • *Wiener Entomologische Zeitung* 38 (1920): 1–20 [by F. Heikertinger, with bibliography by A. Hetschko and portrait]. • *Wiener Entomologische Zeitung* 41 (1924): 158–159 [by A. Hetschko, bibliography only]. • *Entomologisches Nachrichtenblatt, Troppau* 3 (1929): 38–40 [by A. Hetschko]. • *Entomologische Zeitschrift Frankfurt a.M.* 43 (1929): 1–2 [by O. Meissner, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1968): 382–395 [by W. Derksen and U. Scheiding-Göllner, bibliography only, to 1900]. • *Collectiones entomologicae* (1990): 323 [by G. Friese and R. Gaedike]. • *Vzpomínka na entomologa Edmunda Reitera* (1995): 1–26 [by J. Janáček and R. Šigut, with portrait]. • *Klapalekiana* 31 (1995): 151–152 [by R. Šigut, with portrait].

**Renkonen, Yrjö Olavi.** Renkonen was born on January 13, 1907. He died on December 12, 1959, in Helsinki, Finland.

Renkonen, a high school teacher by profession (at the *Normallyzeum* in Helsinki), studied biology at the university in Turku. His doctoral thesis dealt with the statistics and ecology of the Coleoptera of the “Bruchmoore” in Finland. This paper, and a subsequent similar study on Carabidae and Staphylinidae of a lake border in southwestern Finland, made him a name in beetle ecology. The Staphylinidae were his preferred group and he published numerous papers about their taxonomy and ecology. He described species in *Stenus*, *Lathrobium*, and *Philonthus*, and published an important monograph of the genus *Acrotichis* (Ptiliidae) of Finland. He named eight species of the Staphylinidae. [A.S.]

SOURCES: • *Annales entomologici Fennici* 23 (1957): 2 [anonymous, with portrait]. • *Annales entomologici Fennici* 26 (1960): 109–111 [by P. Kontkanen, with portrait]. • *Opuscula Entomologica, Lund* 25 (1960): 153 [by C. H. Lindroth]. • *Entomologische Blätter, Krefeld* 60 (1960): 73 [by G. Schmidt]. • *Entomologische Blätter, Krefeld* (1964): 73 [by G. Schmidt].

**Rey, Claudius.** Rey was born in Lyon, France, on September 8, 1817, and died there on January 31, 1895.

Rey was financially independent thanks to the family-owned printing shop, which allowed him to direct most of his energy to the study of beetles; he became one of the well-known *maîtres incontestés de l'entomologie lyonnaise*. The family business went bankrupt in 1847, but fortunately one of Rey's uncles owned a vineyard in Morgon (Hyères, southern France) and offered him a job there. Rey accepted and while there he started, around 1848, to collaborate with Mulsant on the series *Histoire naturelle des Coléoptères de France*. In 1852, he returned to Lyon and lived at his brother's residence in Saint-Genis-Laval, while spending most winters in southern France.

Rey's collaboration with Mulsant lasted until Mulsant's death in 1880. Most parts of the *Histoire naturelle des Coléoptères de France* dealing with Staphylinidae were published jointly; however, the last three parts (1882–1884), dealing with Habrocerinae, Tachyporinae, Trichophyinae, Micropeplinae, and Steninae, were written only by Rey. A similar collaboration between Mulsant and Rey existed also with the heteropteran series *Histoire naturelle des Punaises de France* (see also under Mulsant).

In addition to his contributions to the above series, Rey also published many other papers, mostly on Coleoptera, including a series of papers on immature stages of Coleoptera.

Rey described 407 species and 116 genera in Staphylinidae, 48 species and 8 genera by himself, the rest in coauthorship with Mulsant. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 31 (1895): 122–123 [anonymous]. • *Miscellanea entomologica* 3 (1895): 13 [by E. Barthe]. • *Annales de la Société entomologique de France* 64 (1895): 127–130 [by F. Guillebeau, with portrait]. • *Deutsche Entomologische Zeitschrift* 39 (1895): 7–8 [by G. Kraatz]. • *Proceedings of the Entomological Society of London* (1895): LXXII [by R. Meldola]. • *Index Litteraturae Entomologicae* (1928): 989 [by W. Horn and S. Schenklng, bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1968): 406–408 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Les entomologistes français 1750–1950* (1987): 73–74.

**Roubal, Jan.** Roubal was born in Chudenice, Czech Republic, on August 10, 1880. He died on October 23, 1971 in Prague, Czech Republic.

Roubal graduated from the *gymnasium* in Klatovy, Bohemia, and continued his education in natural sciences, mathematics and physics at the university in Prague. In 1905 he left the university to pursue a career as a high-school teacher. He taught from 1909 until 1919 at the *gymnasium* in Příbram, Bohemia. In 1919 he accepted a job as director of the *gymnasium* for girls in Baňská Bystrica, Slovakia. He stayed there until 1938, when, forced by the inclement situation around the outbreak of the Second World War, he returned to Prague to direct for a short time another *gymnasium* there. He retired in 1940 to devote all his energies to the study of beetles, and surprisingly, near the end of his life, to the study of true bugs. This is probably the best documentation of Roubal's unfading energy.



Claudius Rey



Jan Roubal



Guillaume-Marie de Rougemont

Roubal was one of the last European coleopterological poly-hists, developing an impressive, encyclopedic knowledge of the order. Being very outgoing and unselfish, he helped to form dozens of entomologists in the former Czechoslovakia, including the writer of this essay. His extensive library was always open to students and his vast collection was an unending source of material. Roubal was also an exceptionally gifted field observer and collector, and again, many of us benefitted tremendously from his experience and knowledge of collecting methods; it was quite a treat to be able to do fieldwork with him. In addition, Roubal's extensive knowledge of natural sciences in general, literature, music, languages, and architecture (he loved and adored the old Prague) was well recognized. When his love of nature, and his lifelong fight for its preservation, is added, Roubal was simply a man of the kind that is very hard to come by in our modern times.

Within Coleoptera, Roubal's favorite family was the Staphylinidae, particularly the difficult sections of Aleocharinae, such as the genera *Atheta* or *Oxypoda*, and he eventually became a recognized expert on the group. He was in regular contact with many contemporary specialists, such as Kraatz, Bernhauer, J. Müller, Gridelli, Rambousek, and others. When Roubal resided in Příbram (1909–1919), there was an entire staphylinidological school in Bohemia. Members included, in addition to Roubal, Krása, E. Lokay Jr., and Rambousek. The tradition continued even when Roubal moved to Slovakia (he was joined there by Machulka, who resided in Košice), and through the Second World War until now, as documented by such names as M. Dvořák, Likovský, Boháč, Hromádka, Kocián, Štourač, and this writer, who considers himself to be a part of that tradition.

Roubal's scientific output is impressive; he published over 300 papers, most of them entomological and on Coleoptera, covering a wide range of beetle families; some also deal with Heteroptera. His *Katalog Coleopter (brouků) Slovenska a Podkarpatska* (three volumes, 1930–1941) was the first modern, annotated type of catalog offering habitat data and various comments; it pushed the knowledge of the beetle fauna of Slovakia far forward. Also significant are Roubal's ecological papers, dealing with beetle faunas of different types of habitats. He described 82 species and 2 genera in Staphylinidae.

Roubal's extensive collection of beetles is housed in the Slovenské Národné Múzeum, Bratislava, Slovakia. [A.S.]

SOURCES: • *Entomologisches Nachrichtenblatt* (1934): 119–123 [by K. Špaček, with portrait]. • *Entomologisches Nachrichtenblatt* 9 (1935): 38–52 [by K. Špaček, bibliography only]. • *Entomologické Listy* 3 (1940): 40–41 [by E. Jagemann, with portrait]. • *Acta Societatis Entomologicae Čechosloveniae* 47 (1950): 201–210 [by A. Pfeffer, with bibliography, portrait]. • *Acta Societatis Entomologicae Čechosloveniae* 57 (1960): 405–407 [by A. Pfeffer, with bibliography, portrait]. • *Acta entomologica bohemoslovaca* 62 (1965): 315–316 [by L. Heyrovský and P. Štys, bibliography only]. • *Acta entomologica bohemoslovaca* 67 (1970): 429 [by P. Štys, with bibliography]. • *Acta Musei reginaehradecensis A: Scientiae naturales* 12 (1971): 199–200 [by Z. Likovský, with portrait]. • *Biológia, Bratislava* 27 (1972): 173–174 [by L. Korbel]. • *Acta Musei*

*reginaehradecensis* A: *Scientiae naturales* 13 (1972): 133 [by Z. Likovský, bibliography only]. • *Acta rerum naturalium Musei Nationalis Slovackiae, Bratislava* 18 (1972): 161 [by I. Okáli]. • *Sborník jihočeského musea v Českých Budějovicích* 12 (1972): 156–158 [by A. Pfeffer and P. Štys]. • *Entomologische Blätter, Krefeld* 71 (1975): 176 [by G. Schmidt]. • *Acta rerum naturalium Musei Nationalis Slovackiae, Bratislava* 24 (1978): 185–186 [by I. Okáli, bibliography only].

**Rougemont, Guillaume-Marie de.** Rougemont, of the United Kingdom, was born in New York City on October 26, 1945. Interested in beetles from childhood, he was attracted to staphylinids while seeking a group to study when he lived in Ethiopia for several years. While there, he became familiar with Puthz's monograph of the African *Stenus* and so decided to study that genus, with Puthz as his mentor. His travels in Asia in the mid-1970s led him to collect and become interested in other groups. He is interested in most groups of the family but his publications have been mostly confined to the Steninae and Paederinae, particularly those of the Oriental and Palaearctic regions. Although a part-time entomologist, he has described more than 170 species, produced revisions of the genera *Stilicoderus* and *Stiliderus*, and published many articles on the Steninae. He is currently working on an annotated checklist of the Staphylinidae of Hong Kong with descriptions of new species.



*Alexander Sergeevich Ryabukhin*

**Ryabukhin, Alexander Sergeevich.** Ryabukhin, of Russia, was born on November 8, 1955. After returning from two years in the military he began his studies on staphylinid species found in northeastern Asia. He is interested in all subfamilies (except the Aleocharinae) from the region. He is currently working on the groups from the northern Kuril Islands and Kamchatka. He recently published a catalog of the species of Far Eastern Russia and Siberia. He has described eight species in *Lathrobium*, *Micropeplus*, and *Syntomium*, and one genus.

**Ryvkin, Alexandr Borisovich.** Ryvkin, of Russia, began publishing on the Staphylinidae in the mid-1980s. Most of his work has been on *Stenus* and on fossil staphylinids. In 1990 he published an important monograph on the *Stenus* of the Caucasus and in the same year published a long article on Mesozoic fossils of the Transbaical region. He has named 68 species, 15 of which are fossils and 14 fossil genera.

**Sachse, Johann Christian Rudolf.** Biographical data on Sachse are scarce. He was born in 1802 and he died on March 24, 1891, presumably in Leipzig, Germany.

Sachse was a medical doctor who had his private practice in Leipzig. He was a member of the Stettiner Entomologischer Verein and was one of the founding members of the Berliner Entomologischer Verein and the Deutsche Entomologische Gesellschaft. He was, for a long time, in contact with many notable coleopterists of that time, such as Germar, Märkel, Schaum, Kiesenwetter, and Kraatz, who visited him when he was 21 years old. The friendship with Kraatz lasted well into Sachse's old age.



Carl Reinhold Sahlberg

Sachse published only one paper, in 1852 in the *Stettiner Entomologische Zeitung*. In this paper he described 33 species and 1 genus from several subfamilies of Staphylinidae. It was based on specimens collected mostly in North America by Sachse's friend Alexander Gerhard from Leipzig.

Sachse died at nearly 90, almost blind and wheelchair bound. His collection, including the types of most species Sachse described, went to Ernst Brenske from Potsdam. Brenske apparently forwarded the Staphylinidae to Kraatz who incorporated them into his collection. They are now housed in the Deutsches Entomologisches Institut, Berlin (for the list of the types, see Zerche below). [A.S.]

SOURCE: • *Beiträge zur Entomologie* 35 (1985): 97–99 [by L. Zerche].

**Sahlberg, Carl Reinhold.** Sahlberg was born in Eura, Finland, on January 22, 1779. He died on October 18, 1860, in Uusikartano (near Yläne), Finland.

Sahlberg received his education in the *Classis Syntactica* of the school in Pori, and after graduation in 1795 he entered the Academy in Turku (Åbo). He attended mainly the natural history lectures by Hellenius. In 1802 he obtained the degree of *Magister* and in 1804 he became the docent of natural history. At about this time Sahlberg became acquainted with notable Swedish naturalists, such as C. P. Thunberg (University in Uppsala), C. F. Fallén (Lund) and O. Swartz (botanical garden in Stockholm), and also with the German entomologist J. Sturm. He also started his medical studies in Stockholm; in 1810 he wrote a medical dissertation and obtained his medical licence. Eventually he was named, in December 1813, to the position "adjunct of natural sciences and museum inspector" that had recently opened in Turku; he donated considerable numbers of insects from his collection to the museum. He was instrumental in the development of the botanical garden, as well as in the expansion of the zoological collections. In 1816 Hellenius stepped down as the professor at the University and donated his collections to the University. Sahlberg was quite interested in this position, and after he won for the second time a competition with Prytz (the latter also competed for the position Sahlberg obtained in 1813), he was named the professor of natural sciences and economy. In 1827, during the devastating fire that destroyed almost three quarters of the town of Turku, the university lost most of its library and its collections. Shortly after that, it was decided to transfer the university to Helsinki and the official opening took place in the fall of 1828. Sahlberg was named professor of zoology and botany and was expected to obtain new natural history collections and a library for the university, as well as to prepare the ground for the establishment of a new botanical garden. Sahlberg sold the university his insect collections and his herbarium (there was not enough money to buy his library) and eventually managed to build a new botanical garden. In addition to his regular lectures at the university, Sahlberg offered "private" lectures in entomology and botany and took his students for field excursions. Nordmann and Mannerheim were among his students; the latter eventually far surpassed his teacher in the knowledge of

Coleoptera. While in Helsinki, Sahlberg founded the Societas pro Fauna et Flora Fennica.

Sahlberg retired from the university on March 24, 1841 and moved to his estate in Yläne, after he shipped his new collections and the library there. He intended to continue his entomological studies, and in particular to continue to publish his series *Insecta Fennica*; however, he was unable to do so because of eye problems. He also decided to combine his and his son Ferdinand's insect collections. The collections were not well curated after Ferdinand's long journey to South America and his subsequent loss of interest in entomology, until Sahlberg's grandson John took care of them. After John's death, the collections of grandfather, son, and grandson all went to the university in Turku, where they are still housed.

Sahlberg did not publish extensively on entomology, except for his well-known series *Disseratio entomologica Insecta Fennica enumerans*, of which two volumes were published between 1817–1839, totaling over 800 pages. The Staphylinidae are treated on pages 273–434, published from 1827 to 1832; some of the species described as new are still valid today. He described 32 species and 1 genus in the Staphylinidae. [A.S.]

SOURCES: • *Sällskapets pro Fauna et Flora Fennica* (1861): 160–167 [by F. G. Sanmark, with bibliography]. • *Acta Societatis Scientiarum Fennicae* 6 (1861): 1–7 [by L. H. Törnroth]. • *Index Litteraturae Entomologicae* (1928): 1034–1035 [by W. Horn and S. Schenkling, bibliography only]. • *C. R. Sahlberg* (1956), 480 pp. [by U. Saalas, with bibliography, portraits]. • *Anzeiger für Schädlingskunde* 31 (1958): 60–61.

**Sahlberg, John Reinhold.** Sahlberg was born in Helsinki, Finland, on June 6, 1845, as the sixth of eleven children of Reinhold Ferdinand Sahlberg (see below) and Sofia Christina Sahlberg. He died on May 8, 1920, in Helsinki.

Sahlberg had a keen interest in nature and entomology from his early years, not surprisingly, since he was the son and grandson of entomologists and had therefore entomology “in his blood”. He obtained his basic education at the elementary school and then at the *gymnasium* in Turku. After graduation, he entered the university in Helsinki in 1865 to study natural sciences. He became *magister philosophiae* in 1869 and two years later, despite the rough opposition of Mäklin, he was named a docent for zoology at the university. It was not until 1880 that he received his *doctor philosophiae* degree. In 1883 he became an associate professor of entomology, a post he did not leave until 1918 when he became a professor emeritus two years before his death. Among his students were numerous successful entomologists, such as A. Westerlund, Harald Lindberg, W. M. Linnaniemi, R. B. Poppius, R. Frey, Y. Vuorentaus, and W. Hellén, among others.

Sahlberg was a naturalist in the best sense, always keen to learn directly from nature all that was to be learned about insects. His prime interests were Coleoptera and Hemiptera. Sahlberg's extensive collecting trips and expeditions not only covered almost all of Finland, but also led him to Russian Karelia (1869), Russian Lapland (1870), northwestern Siberia (1876), Sweden and Norway (1879 and 1894), Corfu, Palestine, Egypt, etc.



*John Reinhold Sahlberg*



Reinhold Ferdinand Sahlberg

(1895–1896), Caucasus, Transcaspia, and western Turkestan (1896), Italy, Greece, Tunisia, and Algeria (1898–1899), the Balkan Peninsula, Egypt, Syria, Palestine, Asia Minor, etc. (1903–1904). From these expeditions Sahlberg brought back to Helsinki an enormous amount of insect material that was deposited partly in the university collection and partly in his private collection that had been founded and expanded by his grandfather and father (see also under C. R. Sahlberg). Materials from these expeditions were studied by many entomologists, as well as by himself, often in comprehensive publications, such as “*Coleoptera mediterranea orientalia quae in Aegypto . . .*” (1913). Sahlberg also substantially contributed to the knowledge of the beetle fauna (including Staphylinidae) of his native Finland and other northern countries, and published papers dealing with the fauna of northwestern Siberia, as well those of the Mediterranean area and central Asia. Many new species of Staphylinidae were described in these papers, most of them still valid today. His “*Enumeratio Coleopterorum Brachelytrorum Fenniae*” (1876) was the first comprehensive treatment of the family for Finland, and contained many descriptions of unusual or new species. He contributed in particular to the knowledge of the northern species of the genus *Stenus*. Sahlberg described 109 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 56 (1920): 138 [anonymous]. • *Entomological News* 31 (1920): 239 [anonymous]. • *Science* 52 (1920): 216 [by A. G. Bøving]. • *Entomologische Blätter, Krefeld* 16 (1920): 195–199 [by U. Saalas, with portrait]. • *Notulae Entomologicae* 1 (1921): 21–25 [anonymous, with portrait]. • *J. R. Sahlberg* (1960): 620 pp. [by U. Saalas, with bibliography, portraits]. • *Index Litteraturae Entomologicae Serie II* (1972): 3–6 [by W. Derksen and U. Scheiding-Göllner, partial bibliography].

**Sahlberg, Reinhold Ferdinand.** Sahlberg was born in Turku, Finland, on December 23, 1811, one of five children (two of them died early) of Carl Reinhold Sahlberg (see above) and Johanna Sofia Sahlberg. He died on March 18, 1874, in Yläne, near Turku.

Sahlberg studied natural sciences at the university in Helsinki with his father Carl Reinhold Sahlberg, and graduated in 1834 after completing his thesis “*Dissertatio academica novae Coleopterorum Fennicorum species sistens*” (only 12 pages!). As was customary at that time, he also studied medicine and obtained his medical degree in 1840.

In the same year Sahlberg was, after a long wait, named Adjunct in botany and zoology and the museum inspector at the Museum in Helsinki.

Sahlberg was a very capable naturalist and collector. He undertook extensive travels (Dauria, Chile and particularly Brazil) from which he brought back to Helsinki rich natural history materials.

Sahlberg did not publish much on entomology (only about 10 papers, the last published in 1853), and in the latter part of his life he apparently lost all interest in entomology. He is listed here only to complete the history of the Sahlberg family, unique in that the men of three consecutive generations were profession-

ally involved in entomology, two of them contributing to the knowledge of Staphylinidae. He described 19 species and 2 genera in Staphylinidae. [A.S.]

SOURCES: • *R. F. Sahlberg* (1958): 1–255 [by U. Saalas, with bibliography, portraits]. • *Essays on the History of Neotropical Dipterology* 2 (1975): 366–367 [by N. Papavero]. • *Index Litteraturae Entomologicae* (1928): 1035–1036 [by W. Horn and S. Schenkling, bibliography only].

**Saiz, Francisco.** Saiz, of Chile, published six of his first eight articles with Coiffait in the 1960s. His work with Coiffait was highlighted by their “Les Staphylinidae (sensu lato) du Chile” which, excluding the Aleocharinae, covered the family for the country. Saiz’s work was largely restricted to Chile and he published many articles in the 1960s and 1970s but, few, perhaps only one, since. He authored or coauthored 88 species and 19 genera.

**Sawada, Kohei.** Sawada, born in Japan on January 6, 1929, became interested in the Staphylinidae by chance. He is primarily interested in the Aleocharinae of the Holarctic and Oriental regions. He studied a variety of genera of Japan such as *Paraleaster*, *Brachypronomaea*, *Anisolinus*, *Dianous*, *Micropeplus*, *Oedichirus*, *Boreaphilus*, *Quedius*, *Autalia*, *Lobrathium*, *Philonthus*, *Ocypus*, *Megarthus*, and *Parapyxidicerus*. He eventually realized that the Aleocharinae would be an excellent object of study because of their rich diversity and because many related species may coexist in the same collecting site. Beginning in 1970, he wrote a series of articles on the Aleocharinae. He published articles on the Aleocharinae of Shiga Heights, on species of the seashore and intertidal zone, and on methodological research in the taxonomy of the Aleocharinae. He later published a series on *Atheta* and its allies, and *Lio-gluta*. In these studies he introduced the use of chaetotaxy of mouthparts and abdominal terga. Since he obtained satisfactory results, he would like to see the characters used and evaluated by many other workers. He continues his work with species of the marine littoral zone, is re-examining the Wallacea biogeographic zone, and is doing taxonomic studies on soil animals. He would like to produce a natural classification of the Staphylinidae, and to this end, he is searching for characters that have not been used before. As of 1994 he had named more than 130 species and 20 genera.

**Say, Thomas.** Say was born in Philadelphia, Pennsylvania, USA, on July 27, 1787, as the first child of his father Benjamin Say and Ann Bonsall Say. Say’s father, a physician and an apothecary, served in the Pennsylvania legislature and as a representative of Pennsylvania in the U.S. Congress. He was one of the wealthiest men in Philadelphia. Say died on October 10, 1834, in New Harmony, Indiana, USA.

Quite a lot has been published about the life and importance of Say for North American entomology, so there is no need to repeat it here; a detailed listing of the references may be found in Gilbert (1977).

Say obtained his basic education at Friend’s academy, a Quaker school near Philadelphia. He did not like his studies or



Kohei Sawada



Thomas Say



his teachers. He entered the school when he was 12 years old and left at 15, the earliest permissible age for students of that school. He helped his father in the apothecary and collected butterflies and beetles. Philadelphia at that time had a group of prominent naturalists, including botanists Muhlenberg and Barton, and the ornithologist A. Wilson. These men started an association of scientists that eventually became the Academy of Natural Sciences; Say was one of the founders. While really interested in natural history, Say followed his father's wish to continue as a druggist. Eventually, with his father's help, he entered into a partnership with John Speakman, an apothecary who was interested in natural history and who allowed Say to devote his time to the natural sciences. The business went bankrupt after a while, and Say was left without money. He turned his energy entirely to natural sciences, and dealt with his financial problems by living in the Academy and not eating properly. It is believed that he slept in the Academy under a skeleton of a horse. Say's studies were interrupted in 1814 when he had to serve as a private in the First City Troop of Philadelphia, but he never took part in any campaign during the war.

Encouraged by his friend, the ornithologist A. Wilson, Say started to write his work on American entomology in 1816 and published a small part in 1817, but the work had to be suspended for lack of financial resources. He also began to publish papers, on both shells and insects, in the new *Journal of the Academy of Natural Sciences*. In 1817 Say took part in an expedition to Georgia and Florida, and in 1819 he was appointed as a zoologist on Major S. H. Long's expedition to the Rocky Mountains, during which he endured many physical hardships. When he returned to Philadelphia at the end of 1820, Say once again started to publish papers describing insects and shells, mostly collected during these two expeditions. In 1821 he became the curator of the American Philosophical Society, and stayed in this capacity until 1827. In 1822 he was appointed professor of natural history at the University of Pennsylvania, but just one year later he left on his second trip to the West, again with Major Long. From 1821 to 1825 Say presented occasional lectures on zoology in Peale's Museum of art and natural history.

In the winter of 1825–1826, Say and some other scientists left Philadelphia (Say was never to return) for a utopian Quaker commune, New Harmony, on the Wabash River in southern Indiana. Say was the superintendent for literature, science, and education in this community. While there, he married Lucy Way Sistare in January 1827. The usual shortcomings of human nature soon wrecked this community. Say went with Maclure, one of the community's founders, to Mexico; they returned in 1827 but only Say went back to New Harmony because he felt obliged to manage the property. While in New Harmony, Say published most of his entomological and conchological observations in the journal *The Disseminator of Useful Knowledge* (it became *The Disseminator* on June 29, 1830) and in several pamphlets, printed in New Harmony. Some of the pamphlets were reprinted in scientific journals and this created confusion over the dates of many new species that Say described, including those in Staphylinidae (see Y. Bousquet for the details and correct dates). Later, J. L. LeConte collected all Say's papers and

published them, with annotations, in two volumes in 1859 (*The Complete Writings of Thomas Say . . .*).

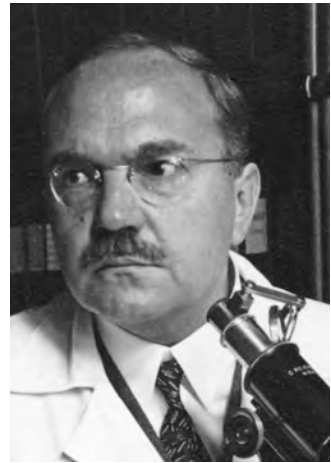
Say had been in poor health ever since he moved to New Harmony, being troubled by stomach disorders, and by dysenteric and fever attacks. He died in Maclure's house in the fall of 1834, at the age of only 47 years. After Say's death, his collection and library were donated to the Academy of Natural Sciences in Philadelphia, and the collection was sent in 1836 to Dr. T. W. Harris in Cambridge, Massachusetts. Unfortunately, it arrived virtually destroyed by dermestids and the rough transportation.

Say is often called "the father of American entomology", and rightly so. Although some give this tribute to Melsheimer, it was Say's work and publications that were comparable to those of eminent European entomologists of that era, such as Dejean, Gravenhorst, Gyllenhal, Mannerheim, and others. Say described 64 species and 2 genera in Staphylinidae, most of them still valid today. [A.S.]

SOURCES: There are many biographies and obituaries for Say; therefore only some are given here. A detailed listing may be found in Gilbert (1977) and Evenhuis (1997). • *American Journal of Science and Arts* 27 (1835): 393–395 [anonymous]. • *Taxidermy; with Biography of Zoologists* (1840): 317–318 [by W. Swainson]. • *American Entomology*, J. L. LeConte editor (1859): VII–XXI [by G. Ord]. • *L'Abeille* (Les entomologistes et leurs écrits) 26 (1889): 265–268 [by S. A. Marseul, bibliography only]. • *Pioneers of Science in America* (1896): 215–222 [by W. J. Youmans]. • *Journal of the New York Entomological Society* 35 (1927): 231–239 [by H. B. Weiss]. • *Index Litteraturae Entomologicae* (1928): 1048–1051 [by W. Horn and S. Schenkling, bibliography only]. • *Say, Early American Naturalist* (1931), 260 pp. [by H. B. Weiss and G.M.T. Ziegler]. • *American Entomologists* (1971), XVII + 549 pp. [by A. Mallis, with portrait]. • *Entomological News* 104 (1993): 1–14 [by Y. Bousquet, partial bibliography only]. • *Litteratura Taxonomica Dipterorum (1758–1930)* (1997): 684–689 [by N. L. Evenhuis, with partial bibliography, portrait].

**Scheerpeltz, Otto.** Scheerpeltz was born in "Stadt-Neugasse" near Olomouc (Moravia), Czech Republic, on July 16, 1888, the son of a court clerk. He died on November 10, 1975, in Vienna, Austria.

After graduating from the *gymnasium* in Opava (Troppau at that time) in 1905, Scheerpeltz followed the wish of his father that he become an engineer, went to Vienna, and enrolled in the *Technische Hochschule*. After his first *Staatsexamen* he accepted a temporary teaching position at the *Schottenfelder Oberrealschule* in Vienna and interrupted his studies at the *Technische Hochschule*, mainly for financial reasons. In 1910 he passed the prescribed teacher's examinations for mathematics and descriptive geometry and in 1919 obtained a permanent position as professor at this school. He remained associated with the school until his retirement from school service in 1945. Scheerpeltz declined several job offers, one of them at the "Vivarium" of the Austrian Academy of Sciences. He was later offered a job by Jeannel at the Institute of Zoology and



Otto Scheerpeltz



*Otto Scheerpeltz later in life*

Speleology of the University in Paris, and at Tokyo University by Esaki. Scheerpeltz turned all these offers down because he could not part with his teaching job or his country.

The security of the permanent teaching job at the *Oberrealschule* allowed Scheerpeltz to pay more attention to the natural sciences, always in his sphere of interests. In 1922 he entered the University in Vienna to study zoology and botany. Despite his heavy teaching load at the *Oberrealschule*, he graduated *summa cum laude* in 1930. Following the advice of his teacher, Prof. F. Werner, he turned his attention during his study years at the university to the beetle family Staphylinidae. Eventually he became, along with Bernhauer and Cameron, one of the world's leading specialists of that family. In 1948 Scheerpeltz was called to join the management of the Naturhistorisches Museum in Vienna as the head of the coleopterological section, and was expected to provide a modern curation of the collection, as well as to reorganize the library. In 1953 he had to step down because of the age regulations, and he was replaced by Dr. F. Janczyk. Even after his retirement, Scheerpeltz continued to work at least part time in the section. At the same time, for a good many years, Scheerpeltz relentlessly continued to build his private collection of Staphylinidae, accompanied by a specialized library, in his apartment in Neustiftgasse 121. The collection eventually became one of the family's largest, containing close to 300,000 specimens, including about 10,000 types, and almost two-thirds of all species known at that time. The collection and library were donated to the Naturhistorisches Museum in Vienna where they remain. The history of this collection and particularly of the associated materials, including parts of the library, was to a great extent influenced by the rather tense and unfortunate period around the end of the Second World War. The collection itself, along with Bernhauer's collection and other collections of the Naturhistorisches Museum, was stored in the underground safe of a large bank in Vienna to protect it from air raids and falling bombs. The collections were removed from the safe in perfect condition at the end of the war in 1945. However, because the underground safe was not large enough, Scheerpeltz chose to move most of his unfinished manuscripts, drawings, microscope slides, and most valuable books, along with valuable family belongings, to a small village in southern Moravia near Znojmo (at that time the place was in Österreich's "Gau Niederdonau") and entrusted them to the care of an entirely trustworthy person. This move, unfortunately, proved to be disastrous. All stored materials were apparently untouched in the house in this little village at the end of the war in 1945. But then, due to the turmoil and problems associated with the removal of German-speaking citizens from the area and arrival of new people, Scheerpeltz's belongings disappeared without a trace and were never recovered. I have tried personally, together with my father, to shed some light on this unfortunate event, but failed to recover any of the materials, or even to find any clues.

In 1936, during his teaching career, Scheerpeltz received the title *Studienrat*. On the occasion of his retirement from his teaching job in 1945, this was upgraded to *Oberstudienrat*. For his merits,

Scheerpeltz was named an honorary member of the Zoologisch-Botanische Gesellschaft in Vienna in 1966. He was honoured at his 70th birthday in 1958 by the “Ehrenkreuz für Wissenschaft und Kunst 1. Klasse” followed by the “Grosses Ehrenzeichen für Verdienste um die Republik Österreich” in 1975.

Scheerpeltz wrote 286 papers, most of them on the taxonomy and other aspects of the family Staphylinidae, or on topics related to collecting, preserving, and mounting specimens, and establishing and curating beetle collections. Thanks to his drawing talents, most of his taxonomic papers are accompanied by excellent drawings, illustrating both general habitus and details, mostly aedoeagi. In these publications, he described 1,405 species and 181 genera in the Staphylinidae. Many of his papers present results of the study of staphylinid specimens collected in different parts of the world either by individuals, or by institutional expeditions (e.g., the large paper on staphylinids collected by the Swedish expedition to Burma in 1934, published in *Arkiv för Zoologi* in 1965). These papers almost became a trademark of Scheerpeltz. In 1933–1934 he published an extensive supplement to the Staphylinidae previously compiled by Bernhauer and Schubert in the series *Coleopterorum Catalogus*; in 1940 he published a key to the Palaearctic genera of Staphylinidae in the series *Bestimmungstabellen europäischer Käfer*, and in 1968 he worked up the Staphylinidae for the series *Catalogus Faunae Austriae*, to name just a few of his larger publications of more general interest. Despite some recent problems and objections concerning his work and publications, Scheerpeltz was and will remain one of the giants of Staphylinidae and his collection will be an essential source of information about the family for a long time. [A.S.]

SOURCES: • *Verhandlungen der zoologisch-botanischen Gesellschaft Wien* 115 (1976): 21–23 [by R. Brunner]. • *Annalen des Naturhistorischen Museums Wien* 81 (1978): 665–678 [by F. Janczyk, with bibliography, portrait (**Note:** A supplement to this bibliography compiled by Dr. H. Schönmann, Naturhistorisches Museum in Vienna, is available upon request, as well as reprints of some of the papers)]. • *Annalen des Naturhistorischen Museums Wien* (B) 88–89 (1987): 431–433 [by H. Schönmann, additions to previous bibliography].

**Schillhammer, Harald.** Schillhammer, of Austria, was born on April 16, 1960. He became interested in staphylinids after viewing an exhibition, designed by Heinrich Schönmann, on the life and work of Otto Scheerpeltz. Schillhammer is interested in the Staphylinini of the Palaearctic, Oriental, and Papuan-Australian regions. He has published a revision of the Oriental species of *Gabrius*, and a number of other articles on *Philonthus*, *Gabrius*, and *Naddia*, as well as several new Asian genera of the subfamily. He is currently working on studies of such genera as *Algon* and *Pammegus*, and on species groups of *Philonthus*. His long-range plans include investigating the diversity of the Australasian *Philonthina* and *Anisolinina*, and eventually he wants to produce a revision of the eastern Palaearctic and Oriental *Philonthus*. As of 1999, he had published over 100 nominal species and 3 nominal genera.



Harald Schillhammer



Jörgen Matthias  
Christian Schiødte



Daniel Schmidt

**Schiødte, Jörgen Matthias Christian.** Schiødte was born in Copenhagen, Denmark, on April 20, 1815. He died on April 22, 1884, in Copenhagen.

Schiødte showed from his early career remarkable abilities for natural sciences; therefore it was not surprising that in 1840 he became *Docent i Zoologi ved Veterinærskolen*, and in 1842 the Underinspecteur at the Kgl. Naturhistoriske Museum in Copenhagen; eventually he became the director of the entomological department of this museum, a post he held until his death. In 1854 he received the position of the titular professor at the University.

Most of Schiødte's work was focused on Coleoptera. His first paper, dealing with Danish species of the carabid genus *Amara* was published in 1836, when he was only 21 years old, and his first volume of *Genera og species af Danmarks Eleutherata* appeared in 1841. He made himself widely recognized, particularly by his series of papers "De metamorphosi Eleutheratorum observationes", dealing with the immature stages of Coleoptera, published in *Naturhistorisk Tidsskrift* (he was the editor of the journal for about 20 years) from 1861 through 1883. Many Staphylinidae were treated in this series. In 1854 Schiødte published a paper describing and illustrating two new termitophilous genera, *Corotoca* and *Spirachtha*. These were the first two genera of the remarkable, physogastric termitophilous staphylinids to be known. The first genus later became the type genus of the subtribe Corotocina, to which the most highly specialized termitophilous Staphylinidae belong.

Schiødte published numerous papers dealing with Staphylinidae, but his most important contributions are those dealing with the immature stages and with the termitophilous species. He described seven species and four genera in Staphylinidae. [A.S.]

SOURCES: • *Deutsche Entomologische Zeitschrift* 28 (1884): 437 [anonymous]. • *Proceedings of the Entomological Society of London* (1884): XXXIX–XL [by W. Dunning]. • *Entomologisk Tidsskrift* 5 (1884): 101–110, 207–208 [by H. J. Hanson, with bibliography]. • *Bulletin de la Société entomologique de France* 5 (1885): 473–480 [by M. J. Bourgeois, with bibliography]. • *Psyche* 5 (1888): 36 [anonymous]. • *Entomologiske Meddelelser* 15 (1926): 226–241 [by K. L. Henriksen, with portrait]. • *Index Litteraturae Entomologicae* (1929): 1069–1071 [by W. Horn and S. Schenkling, bibliography only]. • *Smithsonian Miscellaneous Collections* 84 (1930): 278 [by L. O. Howard, with portrait]. • *Index Litteraturae Entomologicae Serie II* (1972): 47–48 [by W. Derksen and U. Scheiding-Göllner, bibliography only].

**Schmidt, Daniel.** Schmidt, of the USA, was born in 1956. He began studying the group because he was intrigued by the predatory habits of the larvae, and is particularly drawn to the immature stages and natural history of the Nearctic Staphylininae and Paederinae. He has published articles on the immature stages of species of *Erichsonius*, *Neobisnius*, and *Platydracus*. He is currently rearing as many genera of staphylinine and paederines as possible, and would like to see more features of the immature stages used in phylogenetic studies. He is a hog farmer whose avocation is staphylinid beetles.

**Schubert, Karl.** Schubert was born on July 13, 1867, in Berlin, Germany, where he died on September 3, 1911.

Schubert obtained his education for a teaching career in *Präparandenanstalt* in Sommerfeld and in the Seminar in Delitzsch. His first teaching post was in Hochröhlitz i.Th., but in 1892 he obtained a teaching position in Berlin-Pankow and he stayed there until his death. Schubert had a genuine interest in natural sciences and managed to get, through his own effort, a solid general knowledge in the field. He first turned to ornithology, but eventually concentrated on entomology and became an active student of Staphylinidae. He soon was recognized by fellow researchers, as best documented by the fact that he was chosen to prepare the family, together with Bernhauer, for the Junk-Schenkling's *Coleopterorum Catalogus*. He described 103 species and 3 genera in Staphylinidae. His collection of Coleoptera, including Staphylinidae, was transferred in 1912 to the Zoological Museum in Berlin (now Museum für Naturkunde der Humboldt-Universität zu Berlin). [A.S.]

SOURCE: • *Deutsche Entomologische Zeitschrift* (1911): 728–730 [by H. Soldanski, with portrait].



Karl Schubert

**Schülke, Michael.** Schülke, of Germany, was born on August 23, 1960. As a teenager he was a general beetle collector. By 1982 he had restricted his collecting to staphylinids; they attracted him because they were reputed to be taxonomically difficult. His friendship with Lothar Zerche and Manfred Uhlig prompted his taxonomic studies. He works on the Tachyporinae of the world. Much of his work and interests are directed toward *Tachyporus*, *Bolitobius*, and *Carphacis*, and the Palearctic species of *Sepedophilus* and *Thinobius*. He has published parts of anticipated world monographs of *Bolitobius* and *Tachyporus*, a revision of the Japanese species of *Carphacis*, along with articles on *Mycetoporus*, *Tachinus*, *Sepedophilus*, *Ischnosoma*, *Thinobius*, *Lathrobium*, and *Platydomene*, among others. Currently he is studying the Palearctic *Thinobius* and the *Bolitobius* of China, Japan, and Taiwan. He is a telecommunications specialist; staphylinids are his avocation. He has named 43 species.



Michael Schülke

**Seevers, Charles.** Seevers was born on April 19, 1907. He died on December 4, 1965, in Chicago, Illinois, USA. Amazingly, no further biographical data seem to be available.

Seevers was a professor of zoology at Roosevelt University, Chicago, and a Research Associate at the Field Museum of Natural History in Chicago. He was an internationally recognized specialist on the systematics of the subfamily Aleocharinae of Staphylinidae. His contributions include important papers on termitophilous and myrmecophilous Staphylinidae, particularly “A Monograph on the Termitophilous Staphylinidae” (1957), and “The Systematics, Evolution and Zoogeography of Staphylinid Beetles Associated with Army Ants” (1965). Other major papers include a revision of the North American and European members of subtribe “Gyrophaenae”, and “A Generic and Tribal Revision of the North American Aleocharinae”, published posthumously in 1978. Seevers also studied the mammal-parasitizing members of the subtribe Amblyopinina (1944), and in coauthorship with H. S. Dybas he also



Charles Seevers



*David Sharp as a young man*



*David Sharp later in life*

published on the myrmecophilous members of the subfamily Cephaloplectinae (Limulodinae) of Ptiliidae (1943). He described 215 species and 42 genera in Staphylinidae. [A.S.]

SOURCES: • *Studia Entomologica* 9 (1966): 526 [anonymous]. • *Bulletin of the Entomological Society of America* 12 (1) (1966): inside front cover [anonymous].

**Sharp, David.** Sharp was born in Towcester, Northants, England, on October 15, 1840. He died on August 27, 1922, in Brockenhurst, England.

Sharp spent his early years at Stony Stratford, Buckinghamshire, and later moved with his parents to St. John's in the north of London. The philosopher Herbert Spencer resided with the Sharp family for a considerable time, and undoubtedly influenced the young Sharp, offering him assistance and encouragement in his efforts to study natural sciences. Sharp, after an unsuccessful attempt to enter his father's business, decided to study medicine, and eventually graduated from the medical school in Edinburgh in 1866. In 1867 he received an appointment at the Crichton Institution at Dumfries, and subsequently he was entrusted with the medical care of a wealthy patient. This arrangement gave him sufficient time to pursue entomological work, and some of his papers, such as his Revision of *Homalota*, were finished at that time. When the patient died in 1883, Sharp had become sufficiently wealthy to quit active medical practice and to devote himself entirely to entomological work. In 1890 Sharp accepted an invitation to take charge of the insect collections of the University Museum of Zoology in Cambridge. He served in this capacity until 1909 when he retired to a house he had built for himself at Brockenhurst, overlooking one of the most attractive parts of the New Forest. He stayed in this house for the remainder of his life.

Sharp's interest in entomology started during his student years. First he was attracted to Lepidoptera; however, he soon turned his attention to Coleoptera, a fascination that lasted his entire life and made him one of the most prominent coleopterists of his era. Sharp's contribution to the knowledge of Coleoptera is enormous, not only in the number of papers he published, but also in the insight he brought to the treatment of various groups. A complete bibliography for Sharp does not seem to be available; however, the total number exceeds 250. Many of his contributions are large publications, including his treatment of insects, which formed the greater part of volumes 5 and 6 of the *Cambridge Natural History* (1895 and 1899), his paper "On Aquatic Carnivorous Coleoptera or Dytiscidae" (1880–1882), and on the Coleoptera of the Hawaiian Islands (1878–1880). Later publications included the *Fauna Hawaiiensis* (1899, 1908), his contributions to the *Biologia Centrali-Americana* (aquatic beetles, Staphylinidae, most of Clavicornia, some Rhynchophora, Brentiidae, and Bruchidae), the *Catalogue of the British Coleoptera* (1893, with Fowler), *Rhynchophora of Japan* (1896), and "The Comparative Anatomy of the Male Genital Tract in Coleoptera" (1912, with Muir, who was his son-in-law). In addition, Sharp performed enormous service to the international community of entomologists by recording and producing the section of insects for the *Zoological Record* from 1891 to 1920.

Sharp's contribution to the knowledge of Staphylinidae is fundamental, and includes, in addition to contributions mentioned above, his treatment of the group from Japan (1874, 1888, 1889) and from the Amazon Valley (1876), as well as many smaller papers on various members of the family. Anyone working on Neotropical or Palaearctic/Oriental Staphylinidae becomes familiar with Sharp's types, which are so characteristically neatly dissected and mounted on large plates. Sharp described 2,315 species and 145 genera in Staphylinidae.

Sharp was the president of the Entomological Society of London in 1887 and 1888, a fellow of the Royal Society and of the Linnean and Zoological Societies in London, an honorary M.A. of the University in Cambridge, 1 of the 15 honorary members of the Société entomologique de France, and a corresponding member of the American Entomological Society (since 1898), as well as of many other scientific societies.

Sharp's collection of Staphylinidae, including most of the types, is deposited at the Natural History Museum, formerly the British Museum (Natural History), in London. [A.S.]

SOURCES: There are many biographies and obituaries for Sharp, therefore only some are given here. More complete listings may be found in Gilbert (1977) and particularly in Evenhuis (1997). • *Entomologist* 55 (1922): 217–221 [by W. J. Lucas, with portrait]. • *Entomologist's Monthly Magazine* 58 (1922): 234–237 [by J. J. Walker, with portrait]. • *Proceedings of the Royal Entomological Society of London* (B) 95 (1924): XXXVI–XLII [by R.C.L. Perkins]. • *Index Litteraturae Entomologicae* (1928): 1120 [by W. Horn and S. Schenkling, partial bibliography only]. • *Entomologiske Meddelelser* 15 (1936): 464–465 [by S. L. Tuxen]. • *Index Litteraturae Entomologicae Serie II* (1972): 113–119 [by W. Derksen and U. Scheiding-Göllner, partial bibliography only]. • *Bulletin of the Entomological Society of New Zealand* 11 (1992): 4–5 [by G. W. Ramsey and T. K. Crosby, with portrait]. • *Australian Weevils* 3 (1993): 763–766 [by E. C. Zimmerman, with portrait].

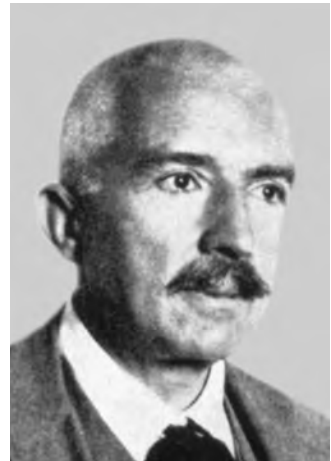
**Shibata, Yasutoshi.** Shibata, of Japan, was born on November 24, 1936. He began studying staphylinids as a university student. At the time there was an older student studying the group but little other work was being done. He is interested in the systematics of all the Staphylinidae of the Palaearctic and Oriental regions. He has published on *Hesperus*, *Othiellus*, *Tympanophorus*, *Amichrotus*, *Thoracostrongylus*, *Quedius*, *Gabrius*, *Stilicoderus*, *Planeboreaphilus*, *Tachinus*, *Oloprinus*, and *Eupiestus*, among others. He published a checklist of the species of Taiwan and Japan (in five parts) and plans to complete a study of the Philonthini of Japan. He has named 28 species and 4 genera.

**Silvestri, Filippo.** Silvestri was born in Bevagna (Perugia), Italy, on June 22, 1873, and died there on June 1, 1949.

Silvestri was educated at the University of Palermo. He was, for some time, an assistant in the Laboratory of Comparative Anatomy of the University of Rome. He also served as the head of the department of Zoology of the Museum in Buenos Aires (1898–1899). In 1904 he was appointed director of the Zoological Station at Portici, and he stayed in this capacity until his



Yasutoshi Shibata

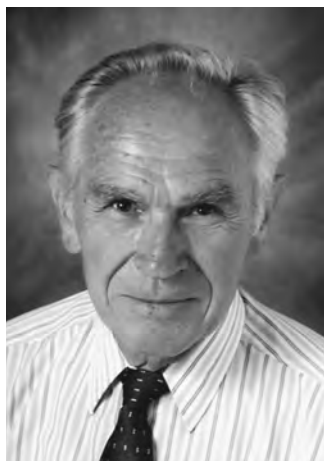


Filippo Silvestri





Oscar Sjöberg



Aleš Smetana

death. Silvestri was one of the most remarkable entomologists of his generation, with a vast output of scientific publications that treated diverse groups of arthropods and included applied entomology. He published 470 papers, of which 320 were on systematics. He established the orders Protura and Zoraptera. He was a member of the Pontifical Academy of Science, the ancient Academy of the Lincei, and a member or honorary member of at least 30 additional academies and societies around the world.

Among other topics, Silvestri was interested in myrmecophilous and termitophilous insects, and it was through this interest that he contributed to the knowledge of the Staphylinidae. He published numerous papers, particularly on termitophilous staphylinids, that contributed substantially to the knowledge of this fascinating group. He described 59 species and 30 genera in Staphylinidae. [A.S.]

SOURCES: There are many biographies and obituaries for Silvestri, so only some are listed here. Detailed listings may be found in Conti (1975, see below) and Gilbert (1977). • *Annuario della Pontifica Accademia delle Scienze* 1 (1937): 674–704 [anonymous, with portrait]. • *Bollettino del Laboratorio di Entomologia Agraria di Portici* 9 (1949): III–XLIX [by G. Russo, with portrait]. • *Bollettino del Laboratorio di Entomologia Agraria di Portici* 9 (1950): XI–XLIX [by G. Russo, bibliography only]. • *Bollettino del Laboratorio di Entomologia Agraria di Portici* 10 (1951): 23–24 [by G. Cotroni, bibliography only]. • *Index Litteraturae Entomologicae Serie II* (1973): 133 [by W. Derksen and U. Scheiding-Göllner, bibliography only, to 1900]. • *Memorie della Società Entomologica Italiana* 48 (1975): 1017 [by C. Conti].

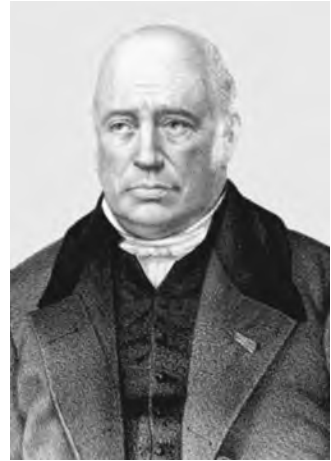
**Sjöberg, Oscar.** Sjöberg was born on October 28, 1885 in Sweden. He died on June 15, 1959, in Falun, Sweden.

Sjöberg was a physician by profession, and coleopterology was his hobby. He served for 30 years as a provincial physician in Los, a small town in the province of Hälsingland. Along with other physicians in many other countries (there must be a primordial link between medicine and entomology), he was a first class coleopterist. His interests included mainly the northern beetle fauna, and he was a recognized specialist of the genera *Epu-raea* and *Meligethes* in Nitidulidae, and of the genus *Atomaria* in Cryptophagidae. In addition, he also studied the northern Staphylinidae and published several papers on them, e.g., a revisionary paper on the genus *Proteinus* (1930), and a paper describing two new members of Aleocharinae from Sweden (1934), etc. Some of his papers were published together with another Swedish coleopterist, A. Jansson. Sjöberg described five species (one of them coauthored with Jansson) in Staphylinidae. [A.S.]

SOURCES: • *Opuscula Entomologica* 20 (1955): 2–3 [by C. H. Lindroth, with portrait]. • *Opuscula Entomologica* 24 (1959): 184 [by C. H. Lindroth].

**Smetana, Aleš.** Smetana, of Canada, was born in Czechoslovakia on April 6, 1931. He became interested in the Staphylinidae because of the genus *Gabrius*. During his early years he was interested in carabids, but at about age 19 he realized that there were too many others working on the group, so he searched for

a more exciting group. Upon dissecting his collection of “*Gabrius nigrutilus*” and finding that there were actually many species included, he immediately switched to the Staphylinidae and never looked back. After earning an M.D. degree, he joined the Institute of Parasitology of the Czechoslovak Academy of Sciences, where he studied and defended his Ph.D. thesis on the taxonomy and bionomics of the Anoplura of Czechoslovakia. He was later involved in research on transmission and circulation of tick- and mosquito-borne viruses. All the while, in concert with his parasitological research, he continued with his systematic studies. He arrived in Canada with the award of a postdoctoral fellowship to work on the Quediini of North America for two years. He returned to Czechoslovakia in 1969 and joined the staff of the National Museum in Prague as a research scientist. He returned to Canada in 1971, and was appointed a research scientist at the Entomology Research Institute in Ottawa with responsibilities for aquatic Coleoptera and the Staphylinidae. He is interested in the Staphylinidae in general and has published taxonomic work on many subfamilies, but his primary interests are the Staphylininae and the Staphylinini of the world with particular emphasis on the Quediina. Prior to his arrival in Canada, Smetana had published more than 100 articles, including his 1958 book on the Staphylinidae of Czechoslovakia. On reaching North America his career as a monographer came to fruition. In addition to a constant stream of shorter articles on staphylinids and monographs for various groups of the Hydrophilidae, he has published major studies on the Quediini, Xantholininae, and Philonthina of North America, the Quediini and Atanygnathini of the Himalayan region and Taiwan, and an ongoing series on the quediines of China. He published his first article on staphylinids in 1948 at age 17; 51 years later Smetana has published over 270 articles, and more than 530 species and 19 genera. Currently he is working on several projects in the Staphylinini, is describing new taxa from material he collects, is an editor and author of the proposed catalog of the Palaearctic Coleoptera, and has returned to the Carabidae as coauthor for a few projects. He plans to continue his work on the Chinese Quediini and eventually produce a synthesis of the group for Southeast Asia.



*Antoine Joseph Jean Solier*

**Solier, Antoine Joseph Jean.** Solier was born in Marseille, France, on February 8, 1792; he died there on November 27, 1851.

Solier was a captain of military engineers. His entomological work included mainly the Adephaga, particularly the Carabidae, and many groups of heteromorous Coleoptera. His only contribution to the knowledge of Staphylinidae was in his treatment of Coleoptera in Gay's *Historia fisica y politica de Chile*, published in 1849, in which he described 56 new species and 14 new genera in the Staphylinidae. [A.S.]

SOURCES: • *Opuscula Entomologica* 1 (1852): 82–94 [by E. Mulsant, with bibliography]. • *Proceedings of the Entomological Society of London* (1853): 52–53 [by J. O. Westwood]. • *L'Abeille* (Les entomologistes et leurs écrits) 20 (1882): 39–42 [by S. A. Marseul, with bibliography]. • *Index Litteraturae Entomologicae* (1929): 1150–1151 [by W. Horn and S. Schenkling, bibliography only].



*Alexey Yurievich Solodovnikov*

**Solodovnikov, Alexey Yurievich.** Solodovnikov, of Russia, was born on December 16, 1970. From childhood he was interested in collecting and drawing the local (Krasnodar) beetles. For his Master's degree he worked on the ecology and biology of the Malachiidae of the northwestern Caucasus. By the time he was in graduate school for a doctoral degree, he was working with A. A. Stekol'nikov and V. Gusarov on the taxonomy and ecology of the staphylinids of the Northwestern Caucasus. Currently he is working on taxonomic and faunal investigations of *Ocyopus*, *Quedius*, *Othius*, and some Paederinae and Omaliinae (for example *Psephidonus* and *Deliphrosoma*) of Russia and adjacent regions (particularly the Caucasus). Solodovnikov is just starting his studies of the family but has published nine articles including a faunal work on the Caucasus and four new species.



*Semen Martynovich Solsky*

**Solsky, Semen Martynovich.** Solsky was born in St. Petersburg, Russia, on July 27, 1831, and died there on February 11, 1879.

Solsky graduated from the St. Petersburg University. From his graduation to his death, Solsky was an officer in the Military Ministry in St. Petersburg, but he actually devoted most of his time to entomology. The order Coleoptera was in the foreground of his interests, but he also studied Lepidoptera and even spiders and some crustaceans. Within Coleoptera, the family Staphylinidae was a special focus of his attention. Of his 28 published entomological papers, 7 were exclusively on Staphylinidae. In addition, data on staphylinid faunas of various parts of the former Russian empire, Mexico, and South America constitute a considerable portion of his other papers dealing with beetles. Among these papers is his widely known contribution on the Coleoptera of Turkestan, which was based on rich material collected by A. P. Fedchenko.

Solsky was known among his contemporaries, both Russian and foreign, not only as an excellent entomologist, but also as an enthusiastic leader of the Russian Entomological Society. Solsky established the library of the Society and he was its first librarian for a long time. He also served as the society's secretary and vice-president, and also as the editor of *Horae Societatis Entomologicae Rossicae*. He had a very nice, generous nature, and was always ready to provide help to anybody interested in entomology.

After a long illness, Solsky died when he was only 48. Solsky's large collection of Coleoptera, originally containing many members of Staphylinidae, is deposited at the Zoological Museum of Moscow University; however the staphylinid portion of the collection, including the types, is now housed at the Zoological Institute of the Russian Academy of Sciences in St. Petersburg. Solsky described 107 species and 3 genera in Staphylinidae. [A.S.]

SOURCES: • *Le Naturaliste* 7 (1879): 56 [anonymous]. • *Horae Societatis Entomologicae Rossicae* 30 (1897): VII–X [by I. Porchinsky, with bibliography and photograph].

**Staniec, Bernard.** Staniec, of Poland, was born July 13, 1960. He became interested in the family during his university biological studies. Beginning in the early 1990s, he published a

number of articles describing the immature stages and discussing the natural history of various species. His particular emphasis is on the Oxytelinae and Staphylininae of central Europe. Much of his work has been centered on genera such as *Aploderus*, *Bledius*, *Oxytelus*, *Platystethus*, *Acylophorus*, *Philonthus*, *Quedius*, *Lathrobium*, and *Aleochara*. Among his goals are description of all preimaginal stages of central European oxytelines and some staphylinines (such as *Acylophorus*, *Atanygnathus*, some *Philonthus*, *Gabrius*, and *Quedius*) with keys to identification. He would also like to describe the life histories of some of the more interesting Staphylinidae of Poland, and to complete the faunistic data concerning the occurrence of some central European staphylinid species.

**Steel, William Owen.** Steel was born in London, England, on September 23, 1917. He died in his sleep on September 5–6, 1969, during an entomological survey in the Isle of Rhum, Scotland.

Steel's studies were cut short by the death of his father, and to help support the family, he took a post as a medical laboratory technician with the Middlesex County Council. Shortly before the outbreak of the Second World War he worked on the development of plastics and after the war, in 1945, he was transferred to the Agricultural Control Section, where he finally had a chance to work with insects, his life-long interest. In 1959 he was appointed a Senior Experimental Officer in the Department of Zoology and Applied Entomology of Imperial College, at the Silwood Park Field Station. At this station his work on the taxonomy of the Coleoptera finally became part of his official duties. Steel was elected to the Royal Entomological Society in 1951 and was a member of the editorial panel of the *Entomologist's Monthly Magazine* from 1961. During his last 8 years, he was closely associated with the Nature Conservancy and organized entomological surveys of the Isle of Rhum and the Cairngorms. He died just before his appointment to a Lectureship in Entomology at the Imperial College at Silwood Park. In addition to entomology, Steel was a recognized national authority on nineteenth-century railway goods stock: he was a joint author of a book on this topic that was in press at the time of his death.

Steel's work on Staphylinidae concentrated mainly on two subjects: taxonomy of the two staphylinid subfamilies Proteininae and Omaliinae, and the rearing and taxonomy of staphylinid larvae. His revision of the subfamily Proteininae, published in 1966, was the first, modern revision of the subfamily, and his paper on the omaliine larvae, published posthumously in 1970, contributed significantly to knowledge about them. Steel also made important contributions to the taxonomy and nomenclature of Xantholinini and Oxytelinae. He published 79 entomological papers, 65 of them on various topics concerning Staphylinidae, containing 69 new species and 30 new genera. His collection is housed in the Natural History Museum, formerly British Museum (Natural History), London. [A.S.]

SOURCES: • *Entomologist's Monthly Magazine* 105 (1969): 145–149 [by T.R.E. Southwood, bibliography and photograph only]. • *Proceedings of the Royal Entomological Society of London* (C) 34 (1970): 63 [by H. E. Hinton].



Bernard Staniec



William Owen Steel



*James Francis Stephens*



*Andreas Strand*

**Stephens, James Francis.** Stephens was born in London, England, on September 16, 1792, and died there on December 22, 1852.

Stephens was a clerk in the Admiralty Office, Somerset House, for many years. In 1818, at the request of the Trustees of the British Museum, and on the recommendation of Leach, the government gave Stephens permission to leave his office temporarily to assist Leach in the arrangement of the insects in the British Museum collection. In 1845 Stephens retired from the Somerset House and started to work at the British Museum.

Stephens devoted most of his life to the study of entomology, and along the way he built the largest, most complete collection of British insects yet assembled, as well as an extensive entomological library. Both the collection and the library were made accessible to anyone for scientific purposes on Wednesday evenings every week.

It is worth mentioning that Stephens was involved in an unsuccessful law suit against James Rennie for alleged piracy of the "Illustrations" in the published *Conspectus of British Butterflies and Moths*. Stephens also had severe clashes and professional fights with his contemporary, John Curtis, but they managed to eventually overcome their bitterness and differences and "it was not an uncommon circumstance to see them both in the insect room at the British Museum discussing entomological matters in friendly communion" (see F. Smith, 1866: 125, cited under Curtis).

The list of Stephens' publications contains about 45 items, some of them extensive, comprehensive works. Three of his publications, *The nomenclature of British insects . . .* (1829), *A systematic catalogue of British insects . . .* (1829), and the *Illustrations of British entomology . . .*, published in two sections (Haustellata and Mandibulata) comprising 11 volumes (1827–1837), became important for the taxonomy and nomenclature of Staphylinidae, as well as for many other beetle families, as sources of early type species designations (see also under Curtis). Stephens described 467 species and 25 genera in the Staphylinidae.

Stephens's entire British collections were purchased by the British Museum in 1853 and are still housed there. [A.S.]

SOURCES: There are many biographies and obituaries for Stephens, therefore only selected ones are given here. A detailed listing may be found in Gilbert (1977) and in Evenhuis (1997). • *Proceedings of the Entomological Society of London* (1853): 45–50 [by J. O. Westwood, with bibliography]. • *Bibliotheca Stephensiana* (1853): 2–10 [by H. T. Stainton]. • *L'Abeille* (Les entomologistes et leurs écrits) 26 (1889): 261–265 [by S. A. Marseul, bibliography only]. • *Index Litteraturae Entomologicae* (1929): 1184–1186 [by W. Horn and S. Schenkling, bibliography only]. • *Proceedings of the British Natural History Society* 8 (1976): 95–96 [by C. Mackechnie-Jarvis, with portrait].

**Strand, Andreas.** Strand was born in Haugesund, on the southwest coast of Norway, on June 11, 1895. He died on February 8, 1980, in Oslo, Norway.

Strand received his education in Haugesund and worked in telegraph services there until 1917, when he moved to Oslo. He

obtained a position with the government Telecommunication Board as an office manager responsible for foreign affairs related to telegraphic services. He retired from this position in 1962.

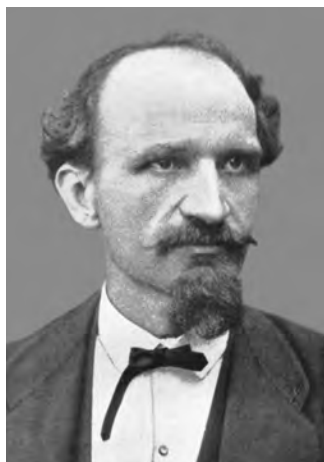
Strand's inclination to natural sciences started during his student years. When he moved to Oslo he became interested, through the influence of Münster and other entomologists, in the study of beetles, an interest that lasted his entire life and made him one of the most eminent Norwegian coleopterists. Most of Strand's work dealt with north European, particularly Norwegian, Coleoptera, but he occasionally published also on material of other provenience. One of Strand's first papers was a contribution to the knowledge of the Norwegian species of *Carabus* (1928), but soon after that papers on Staphylinidae started to appear. The first one treated northern species of *Gyrophaena* (1935), and was followed by a large number of papers on this family, including two papers on the male genitalia of northern species of the genera *Oxypoda* (1966) and *Aleochara* (1968) in coauthorship with Anders Vik, and further publications through 1979 as one of the authors of *Enumeratio Coleopterorum Fennoscandiae et Daniae*. One of his major publications is the book *Nord-Norges Coleoptera*, published by the Troms Museum in 1948; 472 species of Staphylinidae are treated in this book. Strand published 120 papers on beetles and almost all of them were published in *Norsk Entomologisk Tidsskrift*. In recognition of his achievements in coleopterology, Strand received an honorary doctoral degree from the university in Bergen in 1965; he was also an honorary member of several entomological and natural history societies in Norway, Sweden, and Finland. In 1977 he donated his collection and entomological library to the Zoological Museum of the University of Bergen, but all type specimens are now housed in the Zoological Museum, University of Oslo. Strand described 24 species of staphylinids. [A.S.]

SOURCES: • *Entomologisk Tidsskrift* 91 (1970): 1–2 [by T. Palm, with portrait]. • *Fauna Norvegica* (B) 27 (1980): 1–2 [by E. Sundt, with portrait]. • *Entomologica Scandinavica* 11 (1980): 343–347 [by A. Løken, with bibliography]. • *Entomologist's Monthly Magazine* 117 (1981): 174–176 [by C. Johnson, with portrait]. • *Entomologische Blätter, Krefeld* 78 (1982): 48 [by W. H. Lucht].

**Thayer, Margaret Kathryn.** Thayer, of the USA, was born June 14, 1952. She became involved with the Staphylinidae when she found many staphylinids in samples she was sorting. She also had the opportunity to learn about the group under the mentorship of Al Newton. She works with the Omaliinae and related subfamilies from all parts of the world, but is particularly directed toward those with Nearctic and south temperate region distributions. She has authored or coauthored at least 22 articles, including several on resolving nomenclatural problems and contributions to catalogs. She has revised and discussed the phylogeny and biogeography of the species of *Metacoroneolabium*, the phylogeny, habitat, and feeding behavior of *Neophonus*, and sexual dimorphism in the Staphylinidae. She has also coauthored a catalog of the family group names and a higher classification of the Staphylinoida, a revision of *Glypholoma*, and the description of a



Margaret Kathryn Thayer



Carl Gustaf Thomson

new subfamily of staphylinids (Protopselaphinae), including a discussion of its phylogenetic relationship to other subfamilies. She is currently working on phylogenetic and faunal studies of various groups with Austral distributions, a revision of the generic classification of the Omaliinae, and, in collaboration with others, a guide to the genera of the Staphylinidae of Mexico and North America, and a staphylinid phylogeny based on morphology and DNA sequence data. Her aim is to improve understanding of the systematics, phylogeny, and historical biogeography of the family, and particularly of the Omaliinae and related subfamilies. Through 1998 she has described or codescribed 35 species and 2 genera.

**Thomson, Carl Gustaf.** Thomson was born in Mellan-Grefvie (Skaane), Sweden, on October 13, 1824, of an honorable Malmö family of agriculturists Johan Thomson and his wife Christina Hansson. He died on September 20, 1899, in Lund, Sweden.

Thomson received his primary education in Malmö, and in 1848 he entered the university in Lund. He obtained his Ph.D. degree there in 1850, and stayed in various capacities at this university until his death in 1899. He became the assistant at the Lund Zoological Museum in 1853, lecturer in zoology in 1857, assistant in entomology in 1862, and ordinary assistant in entomology in 1864, as well as the holder of an assistantship not attached to a particular branch of study. He was one of the great, renowned entomologists associated with the university in Lund.

Thomson was endowed with a remarkable systematic talent that enabled him to tackle difficult taxonomic problems successfully. His knowledge covered all insects, but he published mainly on Coleoptera and Hymenoptera; most of his papers appeared in his series *Opuscula Entomologica*, after which the entomological journal *Opuscula Entomologica*, published in Lund, was subsequently named. Thomson studied mainly the fauna of his homeland, yet many of his contributions are of significant general impact. He was also an inspirational teacher.

Thomson's most important contributions to the knowledge of Staphylinidae came during the earlier part of his career. In 1858, he published a paper "Försök till uppställning af Sveriges Staphyliner", in which he presented the division of the family into "tribes", and a conspectus of the genera, many of them described as new, and most of which are still valid. Later, he treated the family in his series *Skandinavien Coleoptera* (volumes 1–3, 1859–1861), offering further subdivisions and adding numerous new species in volumes 2 and 3 (1860–1861). In total, Thomson described 146 species and 70 genera in Staphylinidae.

Thomson's main collection of Coleoptera is housed in the Zoological Museum, Lund University. The remaining Coleoptera collection was sold to Germany and is housed in the Zoologisches Museum der Humboldt-Universität, Berlin. [A.S.]

SOURCES: There are many biographies and obituaries for Thomson; only some are given here. Detailed listing may be found in Evenhuis (1997). • *Entomologisk Tidskrift* 21 (1900): 1–16 [by S. Bengtsson, with bibliography, portrait]. • *Index Litteraturae Entomologicae* (1929): 1220–1221 [by W. Horn and S. Schenkling, bibliography only]. • *Opuscula Entomologica* 1

(1936): 80–81 [by N. A. Kemner, with portrait]. • *Opuscula Entomologica* 13 (1948): 50 [by K. Ander]. • *Index Litteraturae Entomologicae Serie II* (1972): 260 [by W. Derksen and U. Scheiding-Göllner, bibliography only]. • *Essays on the History of Neotropical Dipterology 2* (1973): 285 [by N. Papavero].

**Tikhomirova, Anna L'vovna.** Tikhomirova was born in Krasnogorsk (a small city about 10 km west of Moscow), Russia, on April 11, 1940, the daughter of the painter Lev Richardovich Myoulgaupt and the school teacher Tamara Vasil'evna Shevelova. She died on January 12, 1987, in Moscow, Russia.

Tikhomirova was keenly interested in natural history as a child. She joined the club of young biologists at the Moscow zoo, the well-known informal establishment for children and teenagers interested in nature and biology. This unique organization, with a long history and rich traditions, is about 75 years old now; many widely known Russian biologists started their careers as members of this club. There Tikhomirova chose insects as the objects of her interest. Enthusiasm, patience, and inventiveness were characteristic for the girl even then.

Tikhomirova graduated from the Biological Faculty of the Moscow State University. At the university she was a student in the department of entomology, where she started to study the Staphylinidae. Later she was a postgraduate student at the laboratory of soil zoology (headed by M. S. Gilarov) of the Moscow Institute of Evolutionary Morphology and Ecology of Animals (now Institute of Problems of Ecology and Evolution). Her Ph.D. dissertation on the morphological features and phylogeny of Staphylinidae was later (1973) published as a monograph *Morfoekologicheskie osobennosti i filogenez stafilinid (Morphological and Ecological Features of Staphylinid Beetles and Their Phylogeny)* and brought Tikhomirova a wide-reaching reputation. After her postgraduate study, Tikhomirova continued to work in the laboratory of M. S. Gilarov.

In the 1960s, by then married to A. Raznitsyn, Tikhomirova became interested in her husband's research, and helped him to prepare a paper on the interactions of morphogeny and growth in the evolution of insect ontogeny. She started experiments in this field, working closely with her husband. She completed her thesis for the degree of Doctor of Science, but she did not defend it due to poor health and her untimely death on January 12, 1987. The thesis was published posthumously in 1991 as a monograph *Perestroyka ontogenesa kak mekhanizm evolutsii nasekomykh (Ontogeny Transformation as a Mechanism of the Insect Evolution)*.

Tikhomirova's bursting scientific activity was not restricted to staphylinid beetles and insect morphogeny. To some degree her interests were closely connected to her private life. Her first husband was Sergei Tikhomirov, a talented acarologist. He encouraged her during her work on the Ph.D. project. Tikhomirova at the same time helped him publish his own work, prior to his untimely death by drowning at sea. Her next marriage to A. Raznitsyn lasted only from the fall of 1958 to spring of 1961, but it considerably affected the fates of both of them. Finally, Tikhomirova married the botanist A. Razumovskiy, the author of



Anna L'vovna Tikhomirova





*Werner Topp*



*Charles Edward Tottenham*

ingenious ideas in the field of geographical botany; this marriage stimulated her interests in this field prior to Razumovsky's death.

Tikhomirova's collection of Staphylinidae is deposited at the Zoological Museum of Moscow University. Some type material is also kept in the collections of the Zoological Institute in St. Petersburg. [A.S.]

SOURCE: There is no published biography or bibliography for Tikhomirova. The above biography is based on material kindly provided by Alexandr P. Raznitsyn, Palaeontological Institute of the Russian Academy of Sciences, Moscow, with some assistance from A. Solodovnikov, St. Petersburg.

**Topp, Werner.** Topp, of Germany, was born on May 1, 1942. He became interested in staphylinids when, one winter when he was about 15, he discovered many species under the bark of a tree trunk. Most of his staphylinid work is concerned with adaptational, physiological, and developmental questions. He has published articles on diapause, aestivation, natural history, and larval morphology, photoperiodism, low-temperature survival, adaptation to marine environments, and season partitioning and polymorphism in the developmental cycles of sympatric Staphylinidae, among other topics. He is currently doing breeding experiments with winter-active species, to better understand adaptations to the harsh conditions of winter and the developmental cycles of species that are active during the cool season.

**Tóth, László.** Tóth, of Hungary, died in 1992. He worked almost exclusively on the Hungarian fauna of the family. Probably his best known work is his series of articles, published in the 1980s and 1990s, that present descriptions and keys for all the genera and species of the country. He named seven species.

**Tottenham, Charles Edward.** Tottenham was born in Seldmere, Yorkshire, United Kingdom, on February 22, 1895. He died on June 30, 1977, in Cambridge, United Kingdom.

During his early years, Tottenham pursued scholarly studies of math and the classics (Rustat Scholar), and he obtained his B.A. in 1917 and M.A. in 1922. He was ordained in the Diocese of Chichester and his curacies included places in several counties. He was also the headmaster of Southend Grammar School at Thorpe Bay in Essex. He gave up Holy Orders in September 1937, moved to London, later to West Ewell Surrey, and in 1942 to Cambridge, where he took up teaching again in a local school. He became the curator of the Zürich collection at the Cambridge University Museum. He was elected a fellow of the Royal Entomological Society of London in 1928. In addition to entomology, Tottenham also had other wide-ranging interests. Interested in music, he was a member of the Strauss Society and used to travel to Vienna to collect and record the compositions of the Strauss composers. He was also keen on philately and was a good swimmer and competed in some races.

Tottenham was almost exclusively interested in Staphylinidae. He started to publish his papers, most of which dealt with the British fauna, in the early 1930s. He soon became interested in nomenclatorial problems in the family and from 1939 until 1959 he published numerous important papers on this field. He

contributed a section of Staphylinidae (Piestinae to Euaesthetinae) to the Royal Entomological Society of London series Handbooks for the Identification of British Insects (1954). At the same time, he became deeply involved in the study of the members of the genus *Philonthus* and related genera, particularly of the Afrotropical fauna, and published several important papers on them. In the late 1950s and early 1960s he also published major papers dealing with portions of Staphylinidae from the results of several scientific expeditions to tropical Africa. Tottenham published 50 papers, almost exclusively on Staphylinidae, in which he described 363 species and 18 genera.

Tottenham's large collection of Staphylinidae is housed in The Natural History Museum, formerly British Museum (Natural History), London, England. The collection is quite unique. He kept his specimens in small, extremely shallow trays that he himself made specifically to fit the shallow drawers of his home-made cabinets. Needless to say, it is difficult to handle these specimens on plates attached to quite short pins. [A.S.]

SOURCE: • *Entomologist's Monthly Magazine* 113 (1978): 173–175 [by H. Last, with bibliography, portrait].



Marc Tronquet

**Tronquet, Marc.** Tronquet, of France, was born on July 6, 1938. Some 30 years ago Marc became interested in staphylinids when, as a budding coleopterist, he met the prominent staphylinidologist, Jean Jarrige. His interest in the family is centered on the Aleocharinae of the western Palaearctic region. One of his long-range projects is a revision of all or some groups of *Oxy-poda*, particularly those of the western Palaearctic region. He has published on the staphylinids of Afghanistan and on aleocharine genera such as *Atheta*, *Leptotheta*, *Oxy-poda*, and *Alpinia*. He retired from his job about four years ago, so is now able to devote significantly more time to his staphylinid studies.



Manfred Arthur Uhlig

**Uhlig, Manfred Arthur.** Uhlig, of Germany, was born in 1949. As a child Uhlig was interested in biology in general, and made many collections of beetles near his home village. Among them were, of course, staphylinids, which fascinated him because of their immense variety and the difficulties of identification. He decided then that he wanted to study biology, with the hope of doing research on staphylinids in a museum or in his spare time. His mentors include his high school biology teacher, Heinz Auerswald, as well as such coleopterists as Reinhold Krieger, Walter Paul, Gerhard Linke, Werner Wallis, Gustav Lohse, Fritz Hieke, and Lothar Dieckmann. His dream was granted when he was employed at the Museum für Naturkunde der Humboldt-Universität in Berlin, first as a scientific assistant, then curator, then as the head of the Coleoptera collection. He is interested in the Staphylinidae of Germany, Switzerland, and South Africa, the Staphylininae of Europe and Africa, *Philonthini* of the Afrotropical and Palaearctic regions, and *Erichsonius* and *Neobisnius* of the world. He is producing a monograph of *Erichsonius* in part, and has published taxonomic articles on genera including *Sepedophilus*, *Philonthus*, *Atanygnathus*, and *Adinopsis*, as well as lists of species collected at various sites, along with habitat data. He has authored or coauthored more than 80 articles and 21 nominal species.



*Erich Wasmann*



*Yashuaki Watanabe*

**Wasmann, Erich.** Wasmann was born in Meran, Austria, on May 29, 1859. His father was a landscape and portrait painter. He died on February 27, 1931, in Valkenburg, Holland.

Wasmann finished elementary school in Meran, then continued his education at the Franciscan school in Hall near Innsbruck and eventually at the Stella Matutina Jesuit school in Feldkirch, Austria. He was already interested in insects, and when he left Stella Matutina at the age of 16 years, he gave his collection of insects to the school's museum. In 1875 he entered the novitiate of the Jesuit order in Exaten, Holland. Because of health problems, all his studies were made in private. By doctors' orders, Wasmann had to spend a lot of time outdoors, and that is when he started to study ants and their insect guests. After the completion of his philosophical and theological studies, Wasmann was ordained in the priesthood and continued his investigations of ants and their inquilines in the Jesuit community in Valkenburg, Holland. In 1890 he entered the German university in Prague (now Praha, Czech Republic), and studied zoology under Hatschek and Cori for two years. He did not write a doctoral thesis, but returned to Exaten and devoted all his energy to studies that he had started some time before. He produced many substantial papers dealing with "Entwicklung der Staatenbildung" (1901), with "Ursprung und Entwicklung der Sklaverei bei den Ameisen" (1905), etc. His paper "Die psychischen Fähigkeiten der Ameisen" (1899) became famous and a second edition was printed in 1909. The list of his publications contains 289 papers on myrmecophiles and termitophiles, and 144 other entomological papers, a total of 433 entries! Wasmann soon became the leading authority on any topics concerning ants and termites, and myrmecophily and termitophily, and secured for himself a prominent place in the history of entomology. He became a well-known personality at entomological meetings and congresses and was an honorary member of many learned institutions and societies (e.g., the Institut Grand-Ducal of Luxemburg, Academia Pontifica dei Nuovi Lincei, etc.). The University of Freiburg i. Ue., Germany, awarded him an honorary doctoral degree in 1921. The Jesuits established a biological society named for him with chapters around the world in schools conducted by them, and founded a biological journal, *The Wasmann Collector*, as an official organ of that society. The name of the journal was later (from volume 8) changed to *The Wasmann Journal of Biology*. The Museum Wasmannianum in Valkenburg, Holland, was another monument to Wasmann.

Wasmann's favorite group among the beetles was apparently the carabid tribe Paussini. However, he also worked extensively on Staphylinidae and some of his papers, such as "Neue Beiträge zur Biologie von *Lomechusa* und *Atemeles* . . ." (1915), based on long-term detailed observations of 412 colonies of *Formica* ants, belong to the classical literature on myrmecophily. He described 259 species and 96 genera in Staphylinidae. [A.S.]

SOURCES: There are many biographies and obituaries for Wasmann, therefore only selected ones are given here. A detailed listing can be found in Gilbert (1977). • *Zoologischer Anzeiger* 82 (1929): 1–10 [by A. Reichensperger, with portrait]. • *Koleopterologische Rundschau* 17 (1931): 89–96 [by F. Heikertinger, with portrait]. • *Tijdschrift voor Entomologie* 75

(1932): 1–57 [by H. Schmitz, with bibliography, portrait]. • *Wasmann Collector* 5 (1942): 1–8, 41–46 [by C. J. Wideman, with portrait]. • *Insectes Sociaux* 1 (1954): 345–369 [by R. Stumper, with portrait]. • *Publicaties Reeks van natuurhistorisch genootschap in Limburg* (1956): 113–141 [by J.K.S. Van Boven, bibliography only].

**Watanabe, Yashuaki.** Watanabe, of Japan, was born on November 12, 1932. He became interested in the family because it was one of the most difficult groups of beetles and is rich in species diversity. His primary interests are the Micropeplinae, Omaliinae, and Paederinae of East Asia. He has published a monograph of the Omaliinae of Japan in addition to many articles on various genera of the subfamily, and has authored or coauthored articles on *Erichsonius*, *Quedius*, *Liusus*, *Ocypus*, *Philonthus*, *Derops*, *Micropeplus*, *Mycetoporus*, *Tachinus*, *Syntomium*, *Trichophya*, *Lathrobium*, *Ochtheophilum*, and *Nazeris*, among others. His intention is to revise the East Asian species of the Micropeplinae, Omaliinae, and Paederinae to facilitate identification and to provide data for biogeographic studies. He has described or coauthored more than 220 species and 5 genera.

**Wendeler, Hans.** Wendeler was born in Elberfeld, Germany, on February 2, 1886, but his family soon moved to Berlin. He died on April 4, 1967, in Berlin-Karow, Germany.

Wendeler attended the *Realgymnasium* in Berlin, and after graduation he continued his education in a school for mechanical engineering. He went into the construction business and eventually specialized in railroad safety systems. He worked in that field for 41 years. After retirement he worked at an optical institute of the German Academy of Sciences in Berlin. He was also active as an aquarium and terrarium keeper, and through this hobby he developed an interest in insects, particularly beetles, that eventually led him to Staphylinidae.

Wendeler's speciality in Staphylinidae was the subfamily Paederinae, particularly the Neotropical members of the genus *Paederus*. He also published on other groups of Staphylinidae, such as Leptochirini, etc., also from other zoogeographical regions. The exact number of his publications is not known, but it exceeds 30. He described 243 species and 4 genera in Staphylinidae. [A.S.]

SOURCES: • *Mitteilungen der Deutschen Entomologischen Gesellschaft*, e.V. 25 (1966): 17–18 [by H. Korge, with portrait]. • *Entomologische Blätter*, Krefeld 63 (1967): 56 [by G. Schmidt]. • *Entomologische Blätter*, Krefeld 64 (1968): 61 [by G. Schmidt].

**Willers, Joachim.** Willers, of Germany, was born on June 4, 1959. He became interested in staphylinids because most of his colleagues refused to work with them. His interests center on collecting and identifying all the species of central Europe. His current research concerns *Paederus* and related genera, and is presently focused on species of the Afrotropical, Palaearctic, and Oriental regions. He is completing work on the species of Nepal, and will next work on the Afrotropical region, especially on southern Africa in collaboration with Manfred Uhlig. He plans to study the faunas of the New World and Australia. His



Hans Wendeler



Joachim Willers



Thomas Vernon Wollaston



Paul Wunderle

long-term goal is to understand the systematic relationships and evolution, ecology, and behavior of *Paederus*.

**Wollaston, Thomas Vernon.** Wollaston was born in Scotter, Lincolnshire, England, on March 19, 1822. He died on January 4, 1877, in Teignmouth, Devonshire, England.

Wollaston received his basic education at the Grammar School, Bury St. Edmunds. In 1842 he entered the Jesus College, and received his B.A. in 1845 and later his M.A. degree. Shortly after that he became a Fellow of the Cambridge Philosophical Society and of the Linnean Society in London. While still at the Jesus College, he became interested in British Coleoptera and started to publish on them. His first paper on Coleoptera, observed at Launceston, was published in the first volume of the *Zoologist* in 1843. Because of serious health problems (lung disease), Wollaston spent many winters in Madeira, studied the indigenous fauna, and eventually published his famous work *Insecta Maderensia* in 1854. These experiences, and some contemporary work done in the Canary Islands, stimulated Wollaston's interest in island faunas, and his desire to visit other Atlantic Islands. He went to the Canary Islands in 1858 and 1859 aboard the yacht of his friend John Gray. In 1866 he embarked again on the same yacht for a cruise among the Cape Verde Islands, and in 1875–1876 he spent six months on St. Helena. Despite his poor health, Wollaston worked hard during these trips and produced many important publications on the beetle faunas of these islands that provided a solid foundation for future investigations. These publications were: *Insecta Maderensia* (1854), *Catalogue of the Coleopterous Insects of Madeira* (1857), *Catalogue of the Coleopterous Insects of the Canaries* (1864), *Coleoptera Atlantidum* (1865), *Coleoptera Hesperidum* (1867), and *Coleoptera Sanctae Helenae* (1877). Wollaston's favorite beetle families were apparently the Cossonidae (considered today a subfamily of Curculionidae) and Colydiidae.

As for many other families, Wollaston provided a solid account of the members of Staphylinidae of the Atlantic Islands that facilitated future research that ultimately revealed the amazingly developed endemism on many of these islands.

Wollaston described 186 species and 6 genera of Staphylinidae, most of them from the Atlantic Islands. [A.S.]

SOURCES: • *American Naturalist* 12 (1878): 197 [anonymous]. • *Annals and Magazine of Natural History* (5) 1 (1878): 178–181 [anonymous]. • *Canadian Entomologist* 10 (1878): 34–35 [anonymous]. • *Entomologist's Monthly Magazine* 14 (1878): 213–215 [anonymous]. • *Petites Nouvelles Entomologiques* 2 (1878): 206 [anonymous]. • *Report of the Entomological Society of Ontario* 9 (1878): 25 [anonymous]. • *Berliner Entomologische Zeitschrift* 22 (1878): 228–229 [by G. Kraatz]. • *Nature* 17 (1878): 210 [by "E.C.R."]. • *Proceedings of the Entomological Society of London* 1877 (1878): XXXVIII [by J. O. Westwood]. • *L'Abeille* (Les entomologistes et leurs écrits) 20 (1882): 46–49 [by S. A. Marseul, with bibliography]. • *Index Litteraturae Entomologicae* (1928): 1346–1349 [by W. Horn and S. Schenkling, partial bibliography only]. • *Bibliography of Australian Entomology 1775–1930* (1932): 356 [by A. Musgrave].

• *Index Litteraturae Entomologicae Serie II* (1972): 453–454 [by W. Derksen and U. Scheiding-Göllner, bibliography only].

**Wunderle, Paul.** Wunderle, of Germany, was born in 1954. He became interested in the family as a student working on the pygidial gland secretions in Oxytelinae. He is interested in the staphylinids of the western Palaearctic region, particularly various genera of the Aleocharinae such as *Alevonota*, *Hygroptrophila*, and perhaps *Hydrosmecta*. He has authored or coauthored articles on the defense secretion of *Deleaster dichrous*, a revision of the central European *Ischnoglossa*, the Madeiran species of *Geostiba*, *Othius*, and *Xenomma*, and a revision of the Habrocerinae of the world. His goal is to publish revisionary studies of the Staphylinidae of the western Palaearctic region to simplify the determinations of species and genera so as to facilitate ecological, zoogeographic, and phylogenetic studies. He has authored or coauthored 18 species.



Adriano Zanetti

**Zanetti, Adriano.** Zanetti, of Italy, was born on April 29, 1950. He became interested in the Staphylinidae when he was 18 and a collaborator at the Museo Civico di Storia Naturale di Verona, when there were few other specialists on the group in Italy. He is interested in the entire family for Italy, the Omaliinae of the Palaearctic region, and *Eusphalerum* for the world. He has published a book on the entire fauna of the Omaliinae of Italy, has been publishing a series of articles revising *Eusphalerum*, and has made a number of contributions to the knowledge of the Italian fauna with articles on *Philonthus*, *Quedius*, *Acrolocha*, *Boreaphilus*, *Omalius*, and *Hapalaraea*, among others; he was the principal author of the coauthored staphylinid section of the *Checklist delle specie della fauna italiana*. He plans to revise the genus *Eusphalerum* for the world and produce an ecological-biogeographical catalog of the Italian Staphylinidae. He has described about 60 species and 1 genus.



Lothar Zerche

**Zerche, Lothar.** Zerche, of Germany, was born in 1944. He became interested in the Staphylinidae as a student at Ernst-Moritz-Arndt Universität Greifswald. He is interested in the Palaearctic fauna of the Omaliinae, Aleocharinae, Proteininae (*Metopsia*), and Pseudopsinae. He has published a monograph on the Palaearctic Coryphiini and another on the *Oxypoda* of the Canary Island, which is part of an ongoing series on the Palaearctic *Oxypoda* and related genera. He has published articles on the Palaearctic *Pseudopsis*, a revision of the Hadronathini, a taxonomic and phylogenetic study of the central Asian species of *Hygrogeus* and related genera, and a revision and phylogeny of the west Palaearctic *Metopsia* as well as work on other genera including *Deliphrosoma* and *Amblopusa*. Among his goals are series that revise *Oxypoda* and related genera, and *Alpinia*. He has named at least 115 species and 15 genera.



Johann Wilhelm Zetterstedt

**Zetterstedt, Johann Wilhelm.** Zetterstedt was born on May 20, 1785, on the estate Lärketorp near Mjölby in Ostgothland, Sweden. He died on December 23, 1874, in Lund, Sweden.

Zetterstedt was, from his early years, seriously interested in botany and zoology. He entered the Lund university in 1805, and



Fa-ke Zheng

in 1808 he received his doctoral degree in philosophy. In 1812 he received the title docent in botany, and in 1812 the Lund university established for him the position of an “Adjunctus” in natural sciences. However, until 1816, there was no salary attached to this post, so Zetterstedt was forced to support himself by giving private lessons. Without much recognition, he was giving lectures at the university, either in botany, or in zoology, sometimes even in both at the same time. Eventually, he was given the position and recognition of a professor in 1822. In 1840 he replaced Agardh as a professor of botany and practical economy. In 1853, he retired but continued as an emeritus, and in 1868 he received the title *Doctor medicinae honorarius*.

Zetterstedt is often called one of the nestors of entomology, and rightly so. The list of his publications is not very long, but it includes several instrumental works, such as “Fauna insectorum Lapponica” (1828), “Insecta Lapponica descripta” (published in six issues between 1838 and 1840), and the monumental work *Diptera Scandinaviae disposita and descripta*, published in 14 volumes between 1842 and 1860. The former two works were based to great extent on Zetterstedt’s own explorations in Lapland that the poor Zetterstedt was able to conduct only through the generous financial support of the marshal Axel Gustav Gyllenkrook.

Zetterstedt was a member, or honorary member, of many learned European societies and many species in both zoology and botany were named in his honor. He described 29 species in Staphylinidae. His collection, including the types, is deposited at the Zoological Museum, Lund University. Some of the types (perhaps mainly in Diptera) are also at the Zoological Museum, University of Copenhagen, Denmark. [A.S.]

SOURCES: Many biographies and obituaries of Zetterstedt were published; therefore only some are given here. A detailed listing may be found in Evenhuis (1997). • *Stettiner Entomologische Zeitung* 36 (1875): 192–193 [by C. A. Dohrn]. • *Annales de la Société Entomologique de France* 5 (1875): 9–10 [by J. Lichtenstein]. • *Index Litteraturae Entomologicae* (1929): 1363 [by W. Horn and S. Schenkling, bibliography only]. • *Nyt Magazin for Naturvidenskapens. Oslo* 69 (1934): 30–34 [by O. Dahl, with portrait]. • *Opuscula Entomologica* 1 (1936): 78–79 [by N. A. Kemner]. • *Beiträge zur Entomologie* 21 (1971): 314 [by F. Marwinski]. • *Litteratura Taxonomica Dipteroorum 1758–1930* (1997): 836–841 [by N. L. Evenhuis, with partial bibliography, portrait].

**Zheng, Fa-ke.** Zheng, of China, was born on September 9, 1938. He works on the family in part because few people study the taxonomy of the Chinese Staphylinidae. He is mainly interested in the Oxytelinae, Paederinae, and Staphylininae of the Palaearctic and Oriental regions. He has published articles on *Lathrobium*, *Nazeris*, *Coprophilus*, *Trichophya*, *Cyrtothorax* [= *Bolitogyrus*], *Erichsonius*, *Neobisnius*, *Nudobius*, *Othius*, *Gyrophypnus*, *Bledius*, *Oxyporus*, *Stenus*, *Dianous*, and others. His plans to continue studies of the staphylinid fauna of China. He has described at least 45 species.

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OVERVIEW OF CLASSIFICATION  
(for subfamilies included in present catalog)

Tribal and subtribal composition modified from Newton (ms.) with additions in the Staphylinina by Smetana (personal comm.).

**OMALIINE GROUP**

**DASYCERINAE**

*Dasycerus*

**EMPELINAE**

*Empelus*

**GLYPHOLOMATINAE**

*Glypholoma*

*Proglypholoma*

**MICROPEPLINAE**

*Arrhenopeplus*

*Cerapeplus*

*Kalissus*

*Micropeplus*

*Peplomicrus*

*Pseudokalissus*

**MICROSILPHINAE**

*Microsilpha*

**NEOPHONINAE**

*Neophonus*

**OMALIINAE**

**Anthophagini**

*Acidota*

*Altaiodromicus*

*Amphichroum*

*Anthobioides*

*Anthobium*

*Anthophagus*

*Arpedium*

*Artochia*

*Brathinus*

*Camioleum*

*Cylletron*

*Deinopteroloma*

*Deliphrosoma*

*Deliphrum*

*Emodensia*

*Eucnecosum*

*Geodromicus*

*Hygrodromicus*

*Hygrogeus*

*Lesteva*

*Liophilydrodes*

*Mannerheimia*

*Microedus*

*Olophrum*

*Omalorphanus*

*Orobanus*

*Orochares*

*Paramannerheimia*

*Paratrichodromeus*

*Pelecomalium*

*Philorinum*

*Philydrodema*

*Philydrodes*

*Phlaeopterus*

*Phyllodrepoidea*

*Porrhodites*

*Tanyrhinus*

*Trichodromeus*

*Trigonodemus*

*Unamis*

*Uenohadesina*

*Vellica*

*Xenicopoda*

**Aphaenostemmini**

*Aphaenostemmus*

*Giulianium*

**Corneolabiini**

*Corneolabium*

*Metacorneolabium*

*Paracorneolabium*

**Coryphiini**

**BOREAPHILINA**

*Archaeoboreaphilus*

*Boreaphilus*

*Caloboreaphilus*

*Gnathoryphium*

*Hypsonothrus*

*Niphedodops*

**CORYPHIINA**

*Altaioniphedodes*

*Coryphiocnemus*

*Coryphiodes*

*Coryphiomorphus*

*Coryphiopsis*

*Coryphium*

*Ephelinus*

*Eudectus*

*Haida*

*Holoboreaphilus*

*Murathus*

*Niphedodes*

*Occiephelinus*

*Ophthalmioniphedodes*

*Pareudectus*

*Planeboreaphilus*

*Platycoryphium*

*Pseudohaida*

*Subhaida*

**Eusphalerini**

*Eusphalerum*

**Hadrognathini**

*Brachygnathellus*

*Hadrognathus*

**Omaliiini**

*Acrolocha*

*Acrulia*

*Allodrepa*

*Antarctotachinus*

*Anthobiomimus*

*Austrolophrum*

*Brouniellum*

*Carcinocephalus*

*Crymus*

*Dialycera*

*Hapalaraea*

*Hypopycna*

*Ischnoderus*

*Leaskia*

*Macralymma*

*Metaxylostiba*

*Micralymma*

*Nesomalium*

*Nipponophloeostiba*

*Noumalia*

*Omaliomimus*

*Omalioopsis*

*Omalium*

*Omalonomus*

*Palpomalium*

*Paraphloeostiba*

*Phloeonomus*

*Phloeostiba*

*Phyllodrepa*

*Prosopaspis*

*Pycnoglypta*

*Selonomus*

*Stenomalium*

*Tetradelus*

*Ulommia*

*Xanthomonus*

- Xenanthobium*  
*Xylodromus*  
*Xylostiba*  
*Zeolymma*
- Omaliiinae: Tribe**  
**Incertae Sedis**  
*Archodromus*†  
*Daiodromus*†  
*Eophyllodrepa*†  
*Globoides*†  
*Mesodeliphrum*†  
*Morsum*†  
*Porrhodromus*†  
*Prodaia*†  
*Pseudolesteua*†
- PROTEININAE**  
**Anepiini**  
*Anepius*  
*Eupsorus*
- Austrorhysini**  
*Austrorhysus*  
*Megarthroides*
- Nesoneini**  
*Nesoneus*  
*Paranesoneus*
- Proteinini**  
*Megarthrus*  
*Metopsia*  
*Proteinus*
- Silphotelini**  
*Alloproteinus*  
*Silphotelus*
- PROTOPSELAPHINAE**  
*Protopselaphus*
- TACHYPORINE GROUP**  
**HABROCERINAE**  
*Habrocerus*  
*Nomimocerus*
- OLISTHAERINAE**  
*Anicula*†  
*Olisthaerus*
- PHLOEOCHARINAE**  
*Charhyphus*  
*Dytoscotes*  
*Ecbletus*  
*Phloeocharis*  
*Phloeognathus*  
*Pseudophloeocharis*  
*Vicelva*
- TACHYPORINAE**  
**Cordobanini**  
*Cordobanus*
- Deropini**  
*Derops*
- Megarthropini**  
*Megarthropis*  
*Nepaliodes*  
*Peitawopsis*
- Mycetoporini**  
*Bolitobius*  
*Bolitopunctus*  
*Bryophacis*  
*Bryoporus*  
*Carphacis*  
*Ischnosoma*  
*Lordithon*  
*Mycetoporus*  
*Neobolitobius*  
*Parabolitobius*
- Symmixini**  
*Symmixus*
- Tachyporini**  
*Agathidioporus*  
*Austrotachinus*  
*Cilea*  
*Cileoporus*  
*Coproporus*  
*Coprotachinus*  
*Euconosoma*  
*Lamprinodes*  
*Lamprinus*  
*Leucotachinus*  
*Nitidotachinus*  
*Olophrinus*  
*Paracilea*  
*Pseudotachinus*  
*Sepedophilus*  
*Tachinomorphus*  
*Tachinoporus*  
*Tachinoproporus*  
*Tachinus*  
*Tachyporus*  
*Termitoplus*
- Vatesini**  
*Vatesus*
- Tachyporinae: Tribe**  
**Incertae Sedis**  
*Abscondus*†  
*Cuneocharis*†  
*Hesterniasca*†  
*Mesotachinus*†  
*Mesotachyporus*†  
*Ryvkinus*†  
*Tachyporoides*†  
*Undiatina*†
- TRICHOPHYINAE**  
*Trichophya*
- OXYTELINE GROUP**  
**APATETICINAE**  
*Apatetica*  
*Nodynus*
- OSORIINAE**  
**Eleusinini**  
*Eleusis*  
*Renardia*  
*Zeoleusis*
- Leptochirini**  
*Borolinus*  
*Leptochirus*  
*Priochirus*  
*Thoracochirus*
- Osoriini**  
*Afrosorius*  
*Afrotyphlopsis*  
*Allogonus*  
*Allosorius*  
*Anancosorius*  
*Andringitrana*  
*Arpagonus*  
*Atopocnemius*  
*Bacillopsis*  
*Baculopsis*  
*Bothrys*  
*Craspedus*  
*Cylindrops*  
*Cylindropsis*  
*Edapholotrochus*  
*Euparagonus*  
*Fagelia*  
*Gigarthrus*  
*Gnatholotrochus*  
*Heterocylindropsis*  
*Heterosorius*  
*Holotrochodes*  
*Holotrochomorphus*  
*Holotrochopsis*  
*Holotrochus*  
*Idiocnemius*  
*Indosorius*  
*Kistneria*  
*Leptotyphlopsis*  
*Levasseuria*  
*Lusitanopsis*  
*Madecosorius*  
*Madegassosorius*  
*Mimogonellus*  
*Mimogonia*  
*Mimogonidius*  
*Mimogonoderus*  
*Mimogonus*  
*Mimotrochus*

- Neocaledonopsis*  
*Neosorius*  
*Nepalocylindrops*  
*Nototorchus*  
*Oeophronistus*  
*Oligotyphlopsis*  
*Oryssomma*  
*Osoriellus*  
*Osoriocanthus*  
*Osoriopsis*  
*Osorius*  
*Ouloglene*  
*Paratorchus*  
*Paratrochodes*  
*Parosorius*  
*Rhabdopsidius*  
*Rhabdopsis*  
*Saegerius*  
*Tavakilianidia*  
*Tetrosorius*  
*Thoracogonus*  
*Thoracoprius*  
*Tumboecus*  
*Typhlholotrochus*  
*Typhlobledius*  
*Typhloiulopsis*  
*Typhlosorius*  
*Witelsus*  
**Thoracophorini**  
 CLAVILISPININA  
*Allotrochus*  
*Clavilispinus*  
*Eulibia*  
*Heterotrochinus*  
*Holotrochidius*  
*Hospitalibia*  
*Ischiopsaurus*  
*Myrmelibia*  
*Neolispinus*  
 GLYPTOMINA  
*Espeson*  
*Geomitopsis*  
*Glyptoma*  
*Lispinodes*  
*Parespeson*  
*Pseudespeson*  
*Synaenictus*  
 LISPININA  
*Lispinus*  
*Nacaesus*  
*Neolosus*  
 THORACOPHORINA  
*Aneucamptus*  
*Dirocephalus*
- Euctenopsis*  
*Fauva*  
*Mesotrochus*  
*Pardirocephalus*  
*Pselaphomimus*  
*Rhopalopherus*  
*Teiros*  
*Tetrapleurus*  
*Thoracophorus*  
**Osoriinae: Tribe**  
**Incertae Sedis**  
*Sinolispinodes*†  
 OXYTELINAE  
**Coprophilini**  
*Coprophilus*  
*Coprostygnus*  
*Homalotrichus*  
**Deleasterini**  
*Deleaster*  
*Euphania*  
*Mitosynum*  
*Oxypius*  
*Syntomium*  
**Oxytelini**  
*Anisopsidius*  
*Anisopsis*  
*Anotylus*  
*Apocellus*  
*Ecitoclimax*  
*Hoplitodes*  
*Oxytelopsis*  
*Oxytelus*  
*Paraploderus*  
*Parosus*  
*Paroxytelopsis*  
*Platystethus*  
*Rimba*  
*Sartallus*  
**Thinobiini**  
*Aploderus*  
*Apocellagria*  
*Bledioschema*  
*Blediotrogus*  
*Bledius*  
*Carpelimus*  
*Crassodemus*  
*Eppelsheimius*  
*Manda*  
*Mimopaederus*  
*Neoxus*  
*Ochthephilus*  
*Pareiobledius*  
*Planeustomus*  
*Sciotrogus*
- Teropalpus*  
*Thinobius*  
*Thinodromus*  
*Trigonobregma*  
*Trogactus*  
*Xerophygnus*  
**Oxytelinae: Tribe**  
**Incertae Sedis**  
*Gardnerianus*  
*Megalymma*†  
*Mesoxytelus*†  
*Morda*†  
*Turgaphloeus*†  
 PIESTINAE  
*Abolescus*†  
*Eupiestus*  
*Hypotelus*  
*Parasiagonum*  
*Piestoneus*  
*Piestus*  
*Prognathoides*  
*Siagonium*  
 TRIGONURINAE  
*Kovalevia*†  
*Trigonurus*  
*Trigunda*†  
**STAPHYLININE GROUP**  
 EUAESTHETINAE  
**Alzadaesthetini**  
*Alzadaesthetus*  
**Austroesthetini**  
*Austroesthetus*  
*Chilioesthetus*  
*Mesoaesthetus*  
*Nothoesthetus*  
*Tasmanosthetus*  
**Euaesthetini**  
*Coiffaitia*  
*Ctenomastax*  
*Edaphus*  
*Euaesthetotyphlus*  
*Euaesthetus*  
*Macroturellus*  
*Neocoiffaitia*  
*Octavius*  
*Phaenoclavius*  
*Protopristus*  
*Schatzmayrina*  
*Tamotus*  
**Fenderiini**  
*Fenderia*  
*Stictocranium*

<b>Nordenskioldiini</b>	<i>Prototyphlus</i>	<i>Belonuchus</i>
<i>Edaphosoma</i>	<i>Telotyphlus</i>	<i>Bisnius</i>
<i>Nordenskioldia</i>	<i>Xenotyphlus</i>	<i>Cafius</i>
<b>Stenaesthetini</b>	<b>Leptotyphlinae: Tribe</b>	<i>Chroaptomus</i>
<i>Agnosthaetus</i>	<b>Incertae Sedis</b>	<i>Craspedomerus</i>
<i>Gerhardia</i>	<i>Yosiityphlus</i>	<i>Diplostictus</i>
<i>Stenaesthetus</i>	MEGALOPSIDIINAE	<i>Dorcophilonthus</i>
<i>Tyrannomastax</i>	<i>Megalopinus</i>	<i>Ecitophytes</i>
LEPTOTYPHlinae	OXYPORINAE	<i>Endeius</i>
<b>Cephalotyphlini</b>	<i>Oxyporus</i>	<i>Erichsonius</i>
<i>Cephalotyphlus</i>	PSEUDOPSINAE	<i>Flohria</i>
<b>Entomoculiini</b>	<i>Asemobius</i>	<i>Gabriopalpus</i>
<i>Allotyphlus</i>	<i>Nanobius</i>	<i>Gabrius</i>
<i>Cyrtotyphlus</i>	<i>Pseudopsis</i>	<i>Gabronthus</i>
<i>Entomoculia</i>	<i>Zalobius</i>	<i>Glyphesthus</i>
<i>Mesotyphlus</i>	SOLIERIINAE	<i>Hesperomimus</i>
<i>Neocyrtotyphlus</i>	<i>Solierius</i>	<i>Hesperopalpus</i>
<i>Paratyphlus</i>	STAPHYLININAE	<i>Hesperus</i>
<b>Leptotyphlini</b>	<b>Diochini</b>	<i>Hybridolinus</i>
<i>Afrottyphlus</i>	<i>Antarctothius</i>	<i>Jurececia</i>
<i>Eotyphlus</i>	<i>Coomania</i>	<i>Laetulonthus</i>
<i>Epalxotyphlus</i>	<i>Diochus</i>	<i>Leptopeltus</i>
<i>Hesperotyphlus</i>	<b>Maorothiini</b>	<i>Leucitus</i>
<i>Kenotyphlus</i>	<i>Maorothius</i>	<i>Linoderus</i>
<i>Kilimatyphlus</i>	<b>Othiini</b>	<i>Mentophilonthus</i>
<i>Leptotyphlus</i>	<i>Atrecus</i>	<i>Moeocerus</i>
<i>Newtonius</i>	<i>Othius</i>	<i>Mysolius</i>
<i>Portotyphlus</i>	<i>Parothius</i>	<i>Neobisnius</i>
<i>Sekotyphlus</i>	<b>Platyprosopini</b>	<i>Neoleucitus</i>
<b>Metrotyphlini</b>	<i>Platyprosopus</i>	<i>Odontolinus</i>
<i>Apotyphlus</i>	<b>Staphylinini</b>	<i>Onthostygnus</i>
<i>Banatotyphlus</i>	AMBLYOPININA	<i>Ophionthus</i>
<i>Egeotyphlus</i>	<i>Amblyopinodes</i>	<i>Orthidus</i>
<i>Gynotyphlus</i>	<i>Amblyopinus</i>	<i>Pachypelmopus</i>
<i>Metrotyphlus</i>	<i>Chilamblyopinus</i>	<i>Paederallus</i>
<i>Rhopalotyphlus</i>	<i>Edrabius</i>	<i>Paederomimus</i>
<i>Venezillotyphlus</i>	<i>Megamblyopinus</i>	<i>Paracraspedomerus</i>
<b>Neotyphlini</b>	<i>Myotyphlus</i>	<i>Pescolinus</i>
<i>Apheliotyphlus</i>	ANISOLININA	<i>Peucoglyphus</i>
<i>Cafrottyphlus</i>	<i>Amichrotus</i>	<i>Phileciton</i>
<i>Cainotyphlus</i>	<i>Anisolinus</i>	<i>Philonthus</i>
<i>Chiliotyphlus</i>	<i>Hesperosoma</i>	<i>Phucobius</i>
<i>Chionotyphlus</i>	<i>Misantlius</i>	<i>Platyschema</i>
<i>Cubanoatyphlus</i>	<i>Montiguillonius</i>	<i>Proxenobius</i>
<i>Eutyphlops</i>	<i>Philomyceta</i>	<i>Pseudocraspedomerus</i>
<i>Heterotyphlus</i>	HYPTIOMINA	<i>Pseudomoeocerus</i>
<i>Homeotyphlus</i>	<i>Holisus</i>	<i>Pterygolaetus</i>
<i>Kladotyphlus</i>	PHILONTHINA	<i>Quediosoma</i>
<i>Macrottyphlus</i>	<i>Actinomorphus</i>	<i>Rabigus</i>
<i>Megatyphlus</i>	<i>Actinus</i>	<i>Remus</i>
<i>Neotyphlus</i>	<i>Afrorabigus</i>	<i>Scelotrichus</i>
<i>Oreinotyphlus</i>	<i>Agacerus</i>	<i>Sternotoxus</i>
<i>Paramacrottyphlus</i>	<i>Atopocentrum</i>	<i>Taxiplagus</i>

<i>Thinocafius</i>	<i>Apostenolinus</i>	<i>Hasumius</i>
<i>Trachyphilonthus</i>	<i>Ascialinus</i>	<i>Hesperoschema</i>
<i>Tropiopterus</i>	<i>Bafutella</i>	<i>Isanopus</i>
<i>Xanthodermus</i>	<i>Barygnathus</i>	<i>Nausicotus</i>
<i>Xenobius</i>	<i>Cafioquedius</i>	<i>Nordus</i>
QUEDIINA	<i>Chapmaniella</i>	<i>Ocyolinus</i>
<i>Acylohsellus</i>	<i>Creophilus</i>	<i>Oligotergus</i>
<i>Acylophorus</i>	<i>Diatrechus</i>	<i>Pammegus</i>
<i>Anaquedius</i>	<i>Dinothenarus</i>	<i>Paraxenopygus</i>
<i>Anchocerus</i>	<i>Emus</i>	<i>Phanolinopsis</i>
<i>Arrowinus</i>	<i>Eucibdelus</i>	<i>Phanolinus</i>
<i>Astrapaeus</i>	<i>Glenothorax</i>	<i>Philothalpus</i>
<i>Beeria</i>	<i>Hadropinus</i>	<i>Plociopterus</i>
<i>Bolitogyrus</i>	<i>Hadrotus</i>	<i>Prianophthalmus</i>
<i>Cheilocolpus</i>	<i>Leistotrophus</i>	<i>Prionopedinus</i>
<i>Ctenandropus</i>	<i>Liusus</i>	<i>Prionophilonthus</i>
<i>Euristus</i>	<i>Menoedius</i>	<i>Rientis</i>
<i>Euryporus</i>	<i>Miobdelus</i>	<i>Scaponopselaphus</i>
<i>Haematodes</i>	<i>Naddia</i>	<i>Styngetus</i>
<i>Heinzia</i>	<i>Ocypus</i>	<i>Torobus</i>
<i>Hemiquedius</i>	<i>Ontholestes</i>	<i>Triacrus</i>
<i>Heterothops</i>	<i>Palaestrinus</i>	<i>Tricholinus</i>
<i>Indoquedius</i>	<i>Pancarpus</i>	<i>Trigonopalpus</i>
<i>Ioma</i>	<i>Paragastrisus</i>	<i>Trigonopselaphus</i>
<i>Loncovilius</i>	<i>Parapalaestrinus</i>	<i>Tympanophorus</i>
<i>Lonia</i>	<i>Paraphytolinus</i>	<i>Xanthopygoides</i>
<i>Mimosticus</i>	<i>Philetaerius</i>	<i>Xanthopygus</i>
<i>Paratolmerus</i>	<i>Physetops</i>	<i>Xenopygus</i>
<i>Parisanopus</i>	<i>Phytolinus</i>	STAPHYLININI: SUBTRIBE
<i>Philonthellus</i>	<i>Platydracus</i>	INCERTAE SEDIS
<i>Pseudorientis</i>	<i>Protogoerius</i>	<i>Bombylodes</i> †
<i>Quediocafus</i>	<i>Rhynchocheilus</i>	<i>Descarpentriensiellus</i> †
<i>Quedimacrus</i>	<i>Rhynchocheilus</i>	<i>Paradiatrechus</i> †
<i>Quedimimus</i>	<i>Saniderus</i>	<i>Tolmerinus</i> †
<i>Quediopsis</i>	<i>Sphaeriolinus</i>	<i>Turgiditarsus</i> †
<i>Quedius</i>	<i>Staphylinus</i>	<b>Xantholinini</b>
<i>Quelaestrygon</i>	<i>Tasgius</i>	<i>Agerodes</i>
<i>Quetarsius</i>	<i>Thinopinus</i>	<i>Allolinus</i>
<i>Rolla</i>	<i>Thoracostrongylus</i>	<i>Allotrichus</i>
<i>Scariphaeus</i>	<i>Trichocosmetes</i>	<i>Atopolinus</i>
<i>Smilax</i>	<i>Wasmanellus</i>	<i>Caecolinus</i>
<i>Sphingoquedius</i>	TANYGNATHININA	<i>Calontholinus</i>
<i>Stevensia</i>	<i>Atanygnathus</i>	<i>Crinolinus</i>
<i>Strouhalium</i>	XANTHOPYGINA	<i>Dactylaptatus</i>
<i>Termitoquedius</i>	<i>Algon</i>	<i>Dibothroglyptus</i>
<i>Valdiviodes</i>	<i>Allosthenopsis</i>	<i>Ehomalolinus</i>
<i>Velleiopsis</i>	<i>Amelinus</i>	<i>Eulissus</i>
<i>Velleius</i>	<i>Antimerus</i>	<i>Gauropterus</i>
<i>Weiserianum</i>	<i>Dysanellus</i>	<i>Gyrohypnus</i>
STAPHYLININA	<i>Elecatopselaphus</i>	<i>Habrolinus</i>
<i>Abemus</i>	<i>Elmas</i>	<i>Hesperolinus</i>
<i>Agelosus</i>	<i>Gastrisus</i>	<i>Heterocinus</i>
<i>Amichorus</i>	<i>Glenus</i>	<i>Heterolinus</i>

<i>Holocorynus</i>	<i>Neolinus</i>	<i>Thyrecephalus</i>
<i>Homalolinus</i>	<i>Neoxantholinus</i>	<i>Vulda</i>
<i>Homorocerus</i>	<i>Nepaliellus</i>	<i>Xanthocorynus</i>
<i>Hypnogyra</i>	<i>Nepalinus</i>	<i>Xantholinus</i>
<i>Kainolinus</i>	<i>Notolinus</i>	<i>Xestolinus</i>
<i>Lemiganus</i>	<i>Nudobius</i>	<i>Zenon</i>
<i>Lepidophallus</i>	<i>Oculolabrus</i>	<i>Zeteotomus</i>
<i>Lepitacnus</i>	<i>Oxybleptes</i>	<b>Staphylininae: Tribe</b>
<i>Leptacinus</i>	<i>Pachycorynus</i>	<b>Incertae Sedis</b>
<i>Leptomicrocrus</i>	<i>Paracorynus</i>	<i>Cretoquedius</i> †
<i>Leptophius</i>	<i>Paratesba</i>	<i>Laasbium</i> †
<i>Leurocorynus</i>	<i>Paraxantholinus</i>	<i>Laostaphylinus</i> †
<i>Linohesperus</i>	<i>Paulianella</i>	<i>Mesostaphylinus</i> †
<i>Linosomus</i>	<i>Phacophallus</i>	STENINAE
<i>Liotesba</i>	<i>Platydromus</i>	<i>Dianous</i>
<i>Lissohypnus</i>	<i>Plochionocerus</i>	<i>Stenus</i>
<i>Lithocharodes</i>	<i>Pseudocorynus</i>	STAPHYLINIDAE:
<i>Manilla</i>	<i>Pseudoxantholinus</i>	SUBFAMILY
<i>Megalinus</i>	<i>Renda</i>	INCERTAE SEDIS
<i>Metocinus</i>	<i>Scytalinus</i>	<i>Bembicidiodes</i> †
<i>Metolinus</i>	<i>Somoleptus</i>	<i>Protostaphylinus</i> †
<i>Microleptus</i>	<i>Spaniolinus</i>	<i>Sulcelytrinus</i> †
<i>Microlinus</i>	<i>Stenistoderus</i>	<i>Staphylinites</i> †
<i>Mitomorphus</i>	<i>Stenolinus</i>	<i>Tunicopterus</i> †
<i>Neohypnus</i>	<i>Stictolinus</i>	PROTACTINAE†
<i>Neoleptacinus</i>	<i>Tesba</i>	<i>Protactus</i> †



## STAPHYLINIDAE



[3847 genera; 45,724 species; All regions]

Staphylinidae Latreille, 1802.

- Leach, 1815: 90 (cited as Staphylinides; characters).
- Lamarck, 1817: 479 (characters; notes).
- Fleming, 1821: 49 (characters; included *Staphylinus*, *Pinophilus*, *Lathrobium*).
- Blanchard, 1845: 287 (higher classification of family; family groups and genera characterized).
- Motschulsky, 1869 (list of species described by Motschulsky).
- Motschulsky, 1870 (list of species described by Motschulsky).
- Oustalet, 1874: 132 (characters).
- Heyden, 1880: 63 (list of species of Siberian region).
- Heyden, Reitter, and Weise, 1891: 77 (list of species of Europe and Caucasus).
- Acloque, 1896: 99 (key to genera and species of France).
- J. Sahlberg, 1900a (checklist of species of Finland).
- Heyden, Reitter, and Weise, 1906: 125 (list of species of Europe and Caucasus).
- Jakobson, 1908 (characters; key to tribes and genera; list of species of Russia and western Europe).
- Jakobson, 1909 (key to genera; list of species of Russia and western Europe).
- Eichelbaum, 1909 (family group names; list of genera with some references and with generic synonyms; number of genera in each subfamily; number of species in each genus; general distribution of each genus).
- Bernhauer and Schubert, 1910 (world catalog).
- Sharp and Muir, 1912: 496, 502 (characters of male genitalia).
- Eichelbaum, 1914 (anatomy of abdominal apex).
- Porta, 1926: 1 (characters; anatomy; key to subfamilies of Italy).
- Dallas, 1928 (list of types described by Lynch Arribalzaga in el Museo Nacional de Historia Natural de Buenos Aires).
- Böving and Craighead, 1930: 11, 25 (larval characters).
- Cameron, 1930: 1–18 (anatomy; bionomics; key to subfamilies).
- Scheerpeltz, 1933 (world catalog supplement).
- Omer-Cooper and Tottenham, 1932: 516–526 (species of Wicken Fen, England).
- Joy, 1932: 3–149 (key to British subfamilies, genera and species).
- Porta, 1934: 113 (supplement to Porta, 1926; species of Italy).
- Blackwelder, 1934 (morphology; prostheca).
- Blackwelder, 1936a (comparative morphology of family).
- Voris, 1934 (natural history).
- V. Hansen, Hellén, Jansson, Munster, and Strand, 1939 (checklist; Denmark and Fennoscandia).
- Scheerpeltz, 1940 (anatomy; key to Palaearctic subfamilies, tribes and genera).
- Paulian, 1941: 7, 18, 47, 318, 326 (larvae: Behavior; anatomy; classification; key to genera. Pupae).
- Blackwelder, 1943: 40 (key to West Indian subfamilies).
- Blackwelder, 1944: 100 (checklist of species from Mexico, Central and South America, and the West Indies).
- Hinton, 1945: 35 (adult, larval and pupal anatomy; adult and larval key to species associated with stored products; biological notes).
- Last, 1946 (collecting notes for various British species).
- Tottenham, 1954 (characters; habits; collecting; distribution; key to British subfamilies, genera and species).
- Palm, 1948: 3–30 (characters; anatomy; notes; key to subfamilies).
- Porta, 1949: 129 (supplement to Porta, 1926; species of Italy).
- Crowson, 1955: 31, 37 (adult and larval characters; key to subfamilies; notes on classification and on subfamilial relationships).
- Hatch, 1957: 3, 46, (characters; keys and descriptions of subfamilies, genera and species of Pacific Northwest).



- Tottenham, 1957a: 88 (proposal to place name on Official List of Family-Group Names in Zoology).
- Jarrige, 1958: 100 (discussion of North African distribution).
- Lohse, 1958c (comments on type species catalog of Blackwelder, 1952; some names should be conserved).
- Smetana, 1958 (characters; anatomy of adults and larvae; natural history notes; key to subfamilies; keys and descriptions for Czechoslovakian genera and species of Staphylinini, Xantholinini, and Quediini).
- ICZN, 1959 (name placed on Official List of Family-Group Names in Zoology; type genus: *Staphylinus*).
- V. Hansen, Klefbeck, Sjöberg, Stenius, and Strand, 1960 (checklist; Denmark and Fennoscandia).
- Coiffait, 1963: 6 (key to tribes).
- Arnett, 1963: 233 (characters; classification; key to North American subfamilies and genera).
- Székessy, 1963 (adult and larval characters; key to subfamilies and genera of Hungary).
- Steel, 1963: 52 (list of species of Malham Tarn; collecting notes; Britain).
- Lohse, 1964: 7 (characters; notes; morphology; classification; key to central European subfamilies, genera, and species).
- Moore, 1964a (key to Nearctic subfamilies; notes on phylogeny).
- Kasule, 1966 (larval characters; subfamilial key to larvae; notes).
- Pototskaia, 1967: 12 (key to subfamilies using larval characters; USSR).
- Coiffait and Saiz, 1968 (revision of Chilean species; key to subfamilies, genera, and species).
- Kasule, 1968a (discussion of some life histories).
- Scheerpeltz, 1968a: 64 (catalog of Austrian species).
- Bolov, 1969 (list of species of Caucasus with collecting data).
- Bolov, 1969a (translation of Bolov, 1969).
- Britton, 1970: 544 (characters of adults and larvae; key to Australian subfamilies; notes).
- Hammond, 1970a (use of eye facets as taxonomic character).
- Tikhomirova and Melnikov, 1970 (embryogenesis and larvae).
- Miskimen and Bond, 1970: 81 (list of species of St. Croix).
- Pototskaia, 1971 (comparative larval morphology; ecological data; morphoecological classification of larvae).
- Pototskaia, 1971a: 283 (larval indices and systematics).
- Hammond, 1972 (discussion of identity of type material of Marsham, Leach, and Stephens).
- Coiffait, 1972: 1–120 (taxonomic history; adult and larval morphology; pupae; ecology; parthenogenesis; biogeography; systematic position; collecting methods; classification; key to subfamilies).
- Hammond, 1972 (notes on collections of Stephens, Marsham, and Kirby).
- Koskela, 1972 (habitat of dung inhabiting species).
- Pototskaia, 1972 (morpho-ecological classification of larvae).
- Kryzhanovskii, Tikhomirova, and Filatova, 1973: 144 (list of species with collecting data from eastern Siberia).
- Tikhomirova, 1973a (morphological characters; larvae; fossil species; phylogeny of subfamilies; checklist of species of USSR).
- Moore and Legner, 1974f: 511 (bibliography of family of America north of Mexico).
- Moore and Legner, 1974g: 548 (key to subfamilies and genera of North America, north of Mexico).
- Moore and Legner, 1974h (catalog of the taxonomy, biology, and ecology of developmental stages of species of America north of Mexico).
- Comellini, 1974 (list of and notes on species of high elevations in Europe).
- Hlavac, 1975: 155 (prothoracic morphology).
- Hammond, 1975: 141 (general discussion of Staphylinidae from Ceylon; discussion of dates of publication of works by Motschulsky and Kraatz on Oriental Staphylinidae).
- Newton and Peck, 1975 (pitfall collecting techniques).
- Moore and Legner, 1975 (catalog; North America north of Mexico).
- Osella and Zanetti, 1975 (list of species collected from nest of *Talpa europaea*; Italy).

- Shibata, 1976 (checklist of species of Japan).
- Coiffait, 1976b: 81 (list of species collected from islands in eastern Mediterranean).
- Legner and Moore, 1977 (list of species found under bark).
- Pope, 1977: 22 (list of British species).
- Shilov, 1977 (seasonal dynamics of adults and larvae in the taiga zone of European Russia).
- Araujo, 1978 (comparative anatomy of defensive glands).
- P. Schneider, 1978 (flight and wing folding).
- Topp, 1978: 304 (larval characters; key to subfamilies and genera).
- Botturi, 1978 (metathoracic wings compared to earwigs; wing development; wing size and ocelli).
- Blum, 1979 (abdominal morphology; elytral reduction; abdominal mobility; ecological and phylogenetic significance).
- Frank and Curtis, 1979 (methods for estimate of number of species in family).
- Irmeler, 1979b (habitat changes of species in inundation forest in Brazil).
- Topp, 1979 (development; diapause).
- Burakowski, Mroczkowski, and Stefańska, 1979 (catalog; Poland).
- Moore and Legner, 1979 (morphology; characters; tabular key to genera of North America north of Mexico).
- Muona, 1979: 14 (list of Scandinavian species).
- Burakowski, Mroczkowski, and Stefańska, 1980 (catalog; Poland).
- Bogdanov, 1980 (habitats in Ukrainian Carpathians for some species).
- Bordoni, 1980 (importance of internal sac for taxonomic studies).
- Puthz, 1980n (list of publications of Max Bernhauer).
- Tóth, 1980 (list of species from Bakony Mountains, Hungary).
- Zanetti, 1980c (list of species with habitat notes; Italy).
- Frank, 1981a (review of teratology in family).
- Spahr, 1981: 93 (references to taxa from amber and copal).
- Hinton, 1981: 659 (notes on structure of eggs; key to eggs).
- Gaedike, 1981 (types in collection of Institute of Plant Protection Research, Eberswalde).
- Herger and Uhlig, 1981 (list of some species and collecting notes; Switzerland).
- Tóth, 1981 (list of species of Hortobágy National Park, Hungary).
- Herger and Uhlig, 1982 (list of some species and collecting notes; Switzerland).
- Bordoni, 1982: 1–125 (morphology of larvae, pupae, and adults; discussion of ecology, biology, fossils, distribution, parasitic associations; key to larval subfamilies).
- Watt and McColl, 1982: 13 (key to subfamilies of New Zealand).
- Tóth, 1982: 2 (key to subfamilies of Hungary).
- Dettner and Schwinger, 1982 (defensive secretions; chemistry; discussion of function; Oxytelinae).
- Frank, 1982 (list of parasites of Staphylinidae).
- Herger and Uhlig, 1983 (list of some species and collecting notes; Switzerland).
- E. Matthews, 1982: 6, 22 (characters; notes; key to subfamilies and genera of Australia).
- Uhlig and Herger, 1983 (list of some species and collecting notes; Switzerland).
- Coiffait, 1983a (comments of use of aedeagus in classification).
- Iablokoff-Khnzorian, 1983 (discussion of and corrections of some errors in Coiffait's "Coléoptères Staphylinides de la région Paléarctique occidentale").
- Dettner, 1983 (comparative anatomy of defensive glands and defensive secretions).
- Tóth, 1983 (list of species of the Hortobágy National Park, Hungary).
- Smetana, 1984c (use of aedeagus in taxonomy).
- Dettner, 1987: 28 (defensive glands).
- Pajni and Kohli, 1982 (comparative morphology of aedeagus).
- Klausnitzer, Köberlein, Köberlein, Vogel and Uhlig, 1982 (comparison of fauna of two parks; collecting notes; Germany).
- M. Dvořák, 1984: 59 (discussion of measuring body length).
- White, Brigham, and Doyen, 1984: 400, 432 (key to genera of aquatic genera of North America; notes).
- Smetana, 1985b: 209, 210 (characters; notes).

- Naomi, 1985 (phylogeny of subfamilies).
- Newton, 1985: 195 (list of and notes on taxa with transaustral distribution).
- Ádám, 1985: 247 (list of species from southeast Hungary).
- Outerelo and Gamarra, 1985 (key to genera of Iberian Peninsula).
- Yuh, Paik, Kwon, and Lee, 1985: 223 (checklist of species of Korea).
- Tóth, 1985a (list of species of Bakony Mountains, Hungary).
- Kashcheev, 1986 (spatial and habitat distribution of some riparian species; Russia).
- Dettner and Grümmer, 1986 (defensive secretions; quasisynergism; repellency; penetration; evolution; Oxytelinae).
- Puthz, 1986g (list of publications of Malcolm Cameron).
- Tóth, 1986 (list of species of Hortobágy National Park, Hungary).
- Lecoq and Orousset, 1987 (biographical notes and bibliography for Jean Jarrige).
- Naomi, 1987a (comparative morphology: Head sutures, eyes and ocelli).
- Naomi, 1987b (comparative morphology: Cranial structure and tentorium).
- Naomi, 1988 (comparative morphology: Antennae, labrum, and mandibles).
- Naomi, 1988a (comparative morphology: Maxilla and labium).
- Naomi, 1988b (comparative morphology: Cervix and prothorax).
- Naomi, 1988c (comparative morphology: Mesothorax and metathorax).
- Zerche, 1988a (list of and type despository of most species described by Weise).
- Silfverberg, 1988 (list of types in the Zoological Museum, University of Helsinki).
- Assing, 1988: 118 (list of species collected from grassland, fallow area, and gardens in Hannover).
- Naomi, 1989 (comparative morphology: Metendosternite and wings).
- Naomi, 1989a (comparative morphology: Thoracic legs).
- Naomi, 1989b (comparative morphology: Abdominal segments I to VII).
- Naomi, 1989c (comparative morphology: Abdominal segments VIII to X).
- Gusarov, 1989 (list of species from the Crimea; ecological and habitat notes).
- Kashcheev, Zibnitskaia and Childebaev, 1989 (note on some species collected from mushroom; Kazakhstan).
- Huth and Dettner, 1989 (defensive secretions; gland morphology).
- Lohse and Lucht, 1989: 121 (supplement to Lohse, 1964).
- Zanetti, 1989 (list of species collected in marshlands of northern Italy; collecting notes).
- Uhlig, 1989 (morphology of genital segment of female abdomen).
- Naomi, 1990d (comparative morphology: Abdominal glands, male genitalia and spermatheca).
- Herger and Uhlig, 1990 (list of some species and collecting notes; Switzerland).
- Dettner, 1990 (defensive secretions).
- Borges, 1990 (list of species from the Azores).
- Steidle and Dettner, 1990 (Aleocharinae; defensive gland morphology and secretions; phylogenetic discussion).
- Newton, 1990: 205 (comments on state of larval knowledge; number of species in family).
- Newton, 1990b (adult and larval characters; notes on ecology, biology, collecting techniques; adult and larval key to genera of soil dwelling taxa of North America).
- Uhlig, Vogel, and Herger, 1990 (list of some species and collecting notes; Switzerland).
- Uhlig, Vogel, and Herger, 1990a (list of some species collected in Switzerland).
- Herger and Uhlig, 1990a (list of some species and collecting notes; Switzerland).
- Nowosad, 1990 (discussions and lists concerning species collected from mole nest; Poland).
- Hennessey, 1990 (depository of some Notman types).
- Dettner, 1991 (survey of chemical defensive secretions and defensive behavior).
- Dettner, 1991a (effectiveness of quinone-defensive systems of Oxytelinae).
- Hunter, Kincher, Bay, Beerwinkle, 1991 (seasonal distribution and diel flight activity; Texas).
- Israelson, 1991 (notes on Wollaston's Madeiran collections).
- Frania, 1991 (studies on ecological shifts).
- Frank, 1991: 341 (larval characters; relationships; ecological and biological notes; comments; key to subfamilies).
- Drugmand, 1991 (list of specialists on Staphylinidae with their publications and address).

- Frania, 1992 (studies on ecdysis and metamorphosis).
- Newton and Thayer, 1992: 7–14, 46 (summary of current classification; discussion).
- Janák, 1992 (list of some species from Bohemia; notes).
- Uhlig, Vogel, and Herger, 1992 (list of some species and collecting notes; Switzerland).
- Zanetti, 1992c (list of species collected in forests of northern Italy; collecting notes).
- J. Li, 1992: 49 (list of species from Northeastern China).
- Assing, 1992: 55 (use of pitfall traps for studies of staphylinid communities).
- Assing, 1992a: 178 (list of species collected from habitat islands in Hannover).
- Steidle and Dettner, 1993a (Aleocharinae; defensive gland morphology and secretions; phylogenetic discussion).
- Šustek, 1993 (body size and urbanization).
- Uhlig and Herger, 1993 (list of some species and collecting notes; Switzerland).
- Dettner, 1993 (abdominal gland morphology and their defensive secretions of larval Aleocharinae).
- Dettner, 1993a (summary and discussion of defensive secretions and exocrine glands and their bearing on phylogeny).
- Legorsky, 1993: 77 (list of some Austrian species).
- Navarrete-Heredia and Márquez-Luna, 1993 (cave collections; Mexico).
- Drugmand, 1993b: 199 (discussion of monophyly).
- Bousquet, 1993 (correction of dates of publications for some species described by Thomas Say).
- Welch, 1993 (ovariole structure and development).
- Kukalová-Peck, and Lawrence, 1993 (wing venation, articulation, and folding and Coleoptera phylogeny).
- Janák, 1993 (list of some species collected in Moravia and Slovakia).
- Kocian, 1993b (list of species collected near Prague).
- Drugmand, 1993 (list of some species collected in Luxembourg).
- Drugmand, 1993a (list of some species collected in Luxembourg; possible indicators of humus type).
- Navarrete-Heredia, 1993a (summary of knowledge concerning Staphylinidae in Mexico).
- Leschen, 1994 (ecological and behavioral notes on some mycophagous taxa).
- Dettner and Liepert, 1994 (chemical mimicry and camouflage).
- Nishida, 1994: 70–74 (checklist of species of Hawaii).
- Hernández, Outerelo, and Gamarra, 1994 (list of species of Canary Island including list of species endemic to each island).
- Uhlig, 1994: 224 (field guide for Germany).
- Jászay and Boháč, 1994 (list of some species collected in Slovakia).
- M. Hansen, Mahler, Pritzl, and Runge, 1994 (additions to list of species of Denmark).
- Assing, 1994a (list of species from xerothermous sites; wing length; Germany).
- Lawrence and Britton, 1994: 94 (characters of adults and larvae; key to subfamilies of Australia; notes on natural history of selected taxa).
- Márquez-Luna and Navarrete Heredia, 1995 (species in detritus of *Atta mexicana* in Mexico).
- Gerardi and Zanetti, 1995 (collections of and notes on staphylinids from riparian communities in northern Italy).
- Newton and Thayer, 1995: 288 (key to and phylogenetic analysis of omaliine group of subfamilies).
- Lawrence and Newton, 1995: 822 (subfamily classification; discussion).
- Sadler and Dugmore, 1995 (habitat and distribution notes for 19 species in Iceland).
- Levesque and Levesque, 1995 (abundance, diversity, dispersal powers of species in raspberry plantation; Quebec).
- Ortuño and Arillo, 1995: 408 (unidentified Miocene fossil; Spain).
- Bocáková, 1995 (list of species collected by pitfall traps in forest; Czech Republic).
- Terlutter, 1995 (list of species collected in Westphalia).
- Hodge and Jones, 1995: 30 (list of species in Britain not included in Joy's practical handbook).
- Sparacio, 1995: 133 (characters; species of Sicily).

- Šustek, 1995 (list of species collected in Pálava Biosphere Reserve, Czech Republic).
- Bordoni, 1995 (ecological study of inland marshy region of central Tuscany; lists of species collected; Italy).
- Fraser, Grimaldi, Olsen, and Axsmith, 1996: 616 (Triassic fossil of undescribed genus and species).
- Klimaszewski, Newton, and Thayer, 1996 (review of family for New Zealand; natural history; notes; list of genera).
- M. Hansen, 1996 (catalog of the species of Denmark; distribution of species in Denmark; phylogenetic tree of superfamilies of Coleoptera; taxonomic notes; discussion of higher level classification and relationships within family; Omaliine group may be monophyletic; Oxyteline group monophyly debatable; Staphylinine group may be monophyletic but possibly includes two other groups; Tachyporine group not easily defined but may be natural group).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Lecoq, 1996b (list of species described by Jarrige).
- Levesque and Levesque, 1996 (seasonal abundance; Quebec).
- Kocian, 1996a (preparation of genitalia).
- Navarrete-Heredia and Newton, 1996 (summary of state of knowledge of the Staphylinidae for Mexico).
- Østbye and Hågvar, 1996 (pitfall trap collection in high mountains of Norway).
- Kulicka and Slipinski, 1996 (notes on location of Baltic amber specimens).
- Downie and Arnett, 1996: 369 (characters; key to subfamilies, genera and species of North-eastern North America).
- Pons and Palmer, 1996 (Balearic endemic species).
- Ádám, 1996: 236 (list of species collected in Bükk National Park, Hungary).
- Franzen, 1996 (collecting notes for some species; Germany).
- Lavoie, Elias, and Payette, 1997: 231 (Holocene fossils; subarctic Quebec).
- Klimaszewski, 1997: 662 (comments on composition of New Zealand staphylinid fauna; 936 native and 85 adventive species present).
- Beutel and Molenda, 1997 (comparative larval morphology and phylogeny; character matrix; discussion of character states; phylogenetic tree).
- M. Hansen, 1997: 55, 76, 80, 173 (phylogenetic relationships among the subfamilies; character discussion; characters matrix; description; notes; key to subfamilies for adults and larvae).
- Eisinger, 1997 (collecting notes for various species; Germany).
- T. Wagner, 1997 (collecting notes for various species; Germany).
- Wenzel, 1997 (collecting notes for various species; Germany).
- Telnov, Bersevskis, Savich, Kovalevsky, Berdnikov, Doronin, Cibulskis, and Ratniece, 1997 (checklist; Latvia).
- Anderson, Nash, and O'Connor, 1997 (annotated checklist; Ireland).
- Puthz, 1997a (list of publications of Ludwig Benick).
- M. Hansen, 1997a (evolutionary trends in life history, habitats, feeding habits, locomotion, mating, stridulation, defense, and distribution).
- Hansen, Jørum, Palm, and Pedersen, 1997 (supplemental checklist; Denmark).
- Allen, 1998a (collecting notes for some species; Britain).
- Ballard, Thayer, Newton, and Grismer, 1998 (approches to analyzing phylogenetic relationships).
- Martikainen, Kaila, and Haila, 1998 (some possibly threatened species; Finland).
- Köhler, 1998 (list of species and collecting notes; Germany).
- Puthz, 1998d (bibliography and biographical notes for Alexander Bierig).
- Hennicke and Müller-Motzfeld, 1998 (urban species in Greifswald, Germany).
- Irmiler, 1998: 395 (vertical distribution of some species collected by flight intercept traps).
- Bordoni and Oromi, 1998 (list and summary of cave species).
- Paśnik, 1998: 69 (list of species and their habitat collected in Beskid Mały Mountains, Poland).
- Outerelo, Gamarra, and Salgado, 1998: 111 (species collected from caves; description of caves; Spain).
- Schmidt, 1999 (methods for rearing species).

- M. Hansen, Pedersen, and Pritzl, 1999: 76 (supplemental list of species in Denmark).
  - Fowles, Alexander, and Key, 1999: 129 (list of saproxylic species and their status as threatened or endangered species; discussion; Britain).
  - Lane, Cooke, and Forsythe, 1999: 75 (list of species collected from flood debris; Britain).
  - Cuccodoro, 1999: 388 (device for rearing small hygrophilous beetles).
  - Boháč, 1999: 357 (staphylinids as bioindicators).
  - Kashcheev, 1999b: 157 (classification of ecomorphotypes).
  - Newton, Thayer, Ashe, and Chandler, 2000: 272 (characters of eggs, larvae, pupae, and adults; classification; key to subfamilies, tribes, and Nearctic genera; notes).
  - Naomi, Kuranishi, Saito, and Maruyama, 2000: 101 (list of genera collected from Kuril Islands and Kamchatka Peninsula).
  - Klimaszewski, 2000 (morphology; keys to subfamilies and tribes; checklist and classification to generic level; characters of family and subfamilies; discussions on classification and natural history; table of primary feeding mode of subfamilies; distribution of genera; Canada; Alaska).
  - R. S. Anderson and Ashe, 2000: 617 (use of leaf litter inhabiting species to help identify areas for conservation in tropical montane forests; Honduras).
- Staphylininae Latreille, 1802: 124 (genera included: *Staphylinus*, *Paederus*, *Oxytelus*, *Aleochara*, *Lesteva*, *Anthophagus*, *Paederus*, *Stenus*, *Oxyporus*, *Astrapaeus*).  
**TYPE SPECIES:** *Staphylinus* (see Newton and Thayer, 1992: 46).
- Staphylinida:  
— Heer, 1839a: 27 (cited as family).





## DASYCERINAE



[1 genus; 17 species; Nearctic, Palearctic,  
and Oriental Regions]

### Dasycerinae Reitter, 1887.

- Ganglbauer, 1899: 772 (characters).
- Thayer, 1987: 400 (phylogenetic relationships).
- Newton and Thayer, 1992: 56 (summary of current classification).
- Newton and Thayer, 1995: 247–286, 301 (phylogenetic relationships; characters; discussion; includes *Dasycerus*).
- Lawrence and Newton, 1995: 825 (discussion).
- Löbl and Calame, 1996 (revision; phylogeny).
- M. Hansen, 1996: 35 (listed in Omaliine group of subfamilies).
- M. Hansen, 1997: 80, 81, 82, 118, 174, 177, 178 (characters supporting clade; autapomorphic features; key adult and larval characters; notes).
- Assing, Frisch, Kahlen, et al., 1998: 120 (note).
- Newton, Thayer, Ashe, and Chandler, 2000: 343 (characters; notes).

### Dasycerini Reitter, 1887c: 8, 26 (tribe of the Lathridiidae; genera included: *Dasycerus*).

- TYPE GENUS:** *Dasycerus* (see Newton and Thayer, 1992: 56).
- Belon, 1902: 3, 11 (characters).
- Reitter, 1911b: 79 (characters).

### Dasyceridae Reitter, 1887.

- Crowson, 1955: 26, 31 (placement and status; characters).
- Hlavac, 1975: 160 (prothoracic morphology).
- Newton, 1991: 335 (larval characters; relationships; ecological and biological notes; comments).
- Klausnitzer, 1997: 89 (larval characters).
- Löbl, 1998: 119 (subfamily of Staphylinidae; notes).

## **Dasycerus**

[17 species; Nearctic, Palearctic, and Oriental Regions]

### *Dasycerus* Brongniart, 1800: 115 (species included: *sulcatus*). **TYPE SPECIES:** *Dasycerus sulcatus* Brongniart, fixed by monotypy.

- Redtenbacher, 1849: 212 (characters).
- Redtenbacher, 1857: 389 (characters).
- Reitter, 1875: 410 (characters).
- Reitter, 1881a: 58 (key to species).
- Reitter, 1887c: 26 (key to species).
- Belon, 1897: 113, 125, 170 (characters; key to species; catalog).
- Ganglbauer, 1899: 773 (characters).
- Belon, 1902: 11 (characters; list of species).
- Reitter, 1911b: 79 (characters).
- Crowson, 1955: 26 (probably in Staphylinidae not Lathridiidae; characters).
- Peez, 1967: 170 (characters).
- Löbl, 1977: 101, 104 (key to species; species groups).
- Coulon, 1987: 315 (collecting notes).
- Löbl, 1988: 264 (key to Asian species).
- Newton, 1991: 336 (larval illustrations).
- Löbl and Calame, 1996: 253 (revision; biological notes; characters; key to species; phylogeny).
- Newton, Thayer, Ashe, and Chandler, 2000: 344 (4 Nearctic species; notes; characters in key).

### *Leptocerus* P. W. J. Müller, 1817: 274 [**Note: Nomen nudum**; proposed as a replacement name for another *Nomen nudum*, *Trichocerus*].

- Ganglbauer, 1899: 773 (synonym of *Dasycerus*).



*Trichocerus* P. W. J. Müller, 1817: 274 [**Note: Nomen nudum**; cited without characters and without described species (Article 12.1)].

— Ganglbauer, 1899: 773 (synonym of *Dasycerus*).

**angulicollis** Horn, 1882: 117 (*Dasycerus*; Type locality: California; [**Note:** See lectotype designation by Löbl and Calame, 1996]).

— Belon, 1897: 125, 170 (*Dasycerus*; characters; catalog).

— Löbl, 1977: 103 (*Dasycerus*; characters; western USA).

— Löbl and Calame, 1996: 258 (*Dasycerus*; lectotype designation; characters; California).

▲ **DISTRIBUTION:** USA.

*grouvellei* Belon, 1888: xcvi (*Dasycerus*; Type locality: Mariposa, California).

— Belon, 1897: 125, 170 (*Dasycerus*; characters; catalog; California).

— Löbl and Calame, 1996: 258 (*Dasycerus*; synonym of *angulicollis*).

**audax** Löbl, 1988: 259 (*Dasycerus*; Type locality: Sabah, Mt. Kinabalu Nat. Park, Poring Hot Spings, env. 600 m).

— Löbl and Calame, 1996: 261 (*Dasycerus*; characters; Malaysia).

▲ **DISTRIBUTION:** Malaysia.

**beloni** Pic, 1905: 102, 103 (*Dasycerus*; Type locality: Algérie: Montenotte; [**Note:** See lectotype designation by Löbl and Calame, 1996]).

— Löbl, 1977: 102 (*Dasycerus*; characters; Algeria).

— Löbl and Calame, 1996: 262 (*Dasycerus*; lectotype designation; characters; Algeria).

▲ **DISTRIBUTION:** Algeria.

**bicolor** Wheeler and McHugh, 1994: 265 (*Dasycerus*; Type locality: North Carolina: Haywood Co.: Blue Ridge Parkway, Richland Balsam, near overlook, 6053'. Also cited from Tennessee).

— Löbl and Calame, 1996: 265 (*Dasycerus*; characters; North Carolina; Tennessee).

▲ **DISTRIBUTION:** USA.

**carolinensis** Horn, 1882: 117 (*Dasycerus*; Type locality: Morganton, North Carolina; [**Note:** See lectotype designation by Löbl and Calame, 1996]).

— Belon, 1897: 126, 170 (*Dasycerus*; characters; catalog; North Carolina).

— Löbl, 1977: 103 (*Dasycerus*; characters; Southeastern USA).

— Wheeler, 1984 (*Dasycerus*; habitat; hosts; notes; North Carolina).

— Löbl and Calame, 1996: 268 (*Dasycerus*; lectotype designation; characters; Alabama; North Carolina; Tennessee; Virginia).

▲ **DISTRIBUTION:** USA.

**concolor** Löbl and Calame, 1996: 270 (*Dasycerus*; Type locality: Tennessee: Campbell Co.: Morelly. Also cited from North Carolina and Tennessee).

▲ **DISTRIBUTION:** USA.

**cornutus** Löbl, 1977: 97 (*Dasycerus*; Type locality: Indien: Kerala, Cardamon Hills, Pass 13 km nordöstlich von Munnar, 1900 m).

— Löbl and Calame, 1996: 271 (*Dasycerus*; characters; India).

▲ **DISTRIBUTION:** India.

**crenatus** Motschulsky, 1839: 50 (*Dasycerus*; Type locality: la haute Kahétie au pied des Montagnes du Caucase).

— Reitter, 1881a: 59 (*Dasycerus*; characters; Caucasus).

— Reitter, 1884: 119 (*Dasycerus*; characters).

— Reitter, 1887c: 27 (*Dasycerus*; characters; Caucasus).

— Belon, 1897: 126, 170 (*Dasycerus*; characters; catalog; Caucasus).

— Löbl, 1977: 102 (*Dasycerus*; characters; Caucasus to Alps and Turkey).

— Löbl and Calame, 1996: 272 (*Dasycerus*; characters; Turkey; Russia; Georgia).

▲ **DISTRIBUTION:** Georgia; Russia; Turkey.

*echinatus* Aragona, 1830, see: *sulcatus* Brongniart, 1800.

- elongatus** Reitter, 1875: 410 (*Dasycerus*; Type locality: Algeciras; [**Note:** See lectotype designation by Löbl and Calame, 1996]).  
 — Reitter, 1881a: 58 (*Dasycerus*; characters; Spain).  
 — Reitter, 1884: 119 (*Dasycerus*; characters).  
 — Reitter, 1887c: 27 (*Dasycerus*; characters; Spain).  
 — Belon, 1897: 126, 170 (*Dasycerus*; characters; catalog; Spain).  
 — Löbl, 1977: 103 (*Dasycerus*; characters; Spain).  
 — Pic, 1905: 102 (*Dasycerus*; characters; Spain).  
 — Löbl and Calame, 1996: 274 (*Dasycerus*; lectotype designation; characters; Spain; Morocco).  
 ▲ **DISTRIBUTION:** Morocco, Spain.
- fasciatus** Löbl, 1977: 95 (*Dasycerus*; Type locality: Indien: Madras, Anaimalai Hills, 18 km nördlich von Valparai, 1250 m).  
 — Löbl and Calame, 1996: 275 (*Dasycerus*; characters; India).  
 ▲ **DISTRIBUTION:** India.
- grouvellei* Belon, 1888, see: *angulicollis* Horn, 1882.
- inexpectatus** Löbl, 1986: 186 (*Dasycerus*; Type locality: Indonesien: Java, Volcan Tangkuban Prah, env. 30 km N Bandung).  
 — Löbl and Calame, 1996: 277 (*Dasycerus*; characters; Indonesia).  
 ▲ **DISTRIBUTION:** Indonesia.
- interruptus* Reitter, 1881, see: *sulcatus* Brongniart, 1800.
- italicus* Pic, 1906, see: *sulcatus* Brongniart, 1800.
- japonicus** Nakane, 1963b: 22 (*Dasycerus*; Type locality: Sasayama, Hyogo, Honshu).  
 — Löbl, 1977: 103 (*Dasycerus*; characters; Japan).  
 — Löbl and Calame, 1996: 278 (*Dasycerus*; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- jonicus** Reitter, 1884: 118, 119 (*Dasycerus*; Type locality: Corfu; [**Note:** See lectotype designation by Löbl and Calame, 1996]).  
 — Reitter, 1887c: 27 (*Dasycerus*; characters; Corfu).  
 — Belon, 1897: 126, 170 (*Dasycerus*; cited as *jonicus* and *ionicus*; characters; catalog; Corfu).  
 — Pic, 1905: 102 (*Dasycerus*; characters; Corfu).  
 — Peez, 1967: 171 (*Dasycerus*; characters; central Europe).  
 — Löbl, 1977: 102 (*Dasycerus*; characters).  
 — Löbl and Calame, 1996: 279 (*Dasycerus*; lectotype designation; characters; Greece).  
 ▲ **DISTRIBUTION:** Greece.
- monticola** Löbl, 1988: 262 (*Dasycerus*; Type locality: Malaisie, Sabah, Mt. Kinabalu National Park, 2600 m, ravin au dessous de Layang Layang).  
 — Löbl and Calame, 1996: 281 (*Dasycerus*; characters; Malaysia).  
 ▲ **DISTRIBUTION:** Malaysia.
- numidicus** Pic, 1905: 102, 103 (*Dasycerus*; Type locality: Algérie: Forêt de Yakouren; [**Note:** See lectotype designation by Löbl and Calame, 1996]).  
 — Löbl, 1977: 101 (*Dasycerus*; characters; Algeria).  
 — Löbl and Calame, 1996: 282 (*Dasycerus*; characters; lectotype designation; Algeria).  
 ▲ **DISTRIBUTION:** Algeria.
- sulcatus** Brongniart, 1800: 115 (*Dasycerus*; Type locality: Montmorency).  
 — Redtenbacher, 1849: 213 (*Dasycerus*; characters; Austria).  
 — Redtenbacher, 1857: 390 (*Dasycerus*; characters; Austria).  
 — Reitter, 1875: 411 (*Dasycerus*; characters; central Europe).  
 — Reitter, 1881a: 59 (*Dasycerus*; characters; central Europe).  
 — Reitter, 1884: 119 (*Dasycerus*; characters).  
 — Reitter, 1887c: 27 (*Dasycerus*; characters; central Europe).  
 — Belon, 1897: 126, 170 (*Dasycerus*; characters; catalog; France; Bavaria; Switzerland; Austria; Transylvania; Bosnia; Istria; Italy; Sardinia; Algeria).

- Ganglbauer, 1899: 774 (*Dasycerus*; characters; southern central Europe; Italy; Sardinia; Algeria).
- Reitter, 1911b: 80 (*Dasycerus*; characters; Germany).
- Peez, 1967: 170 (*Dasycerus*; characters; central Europe).
- Löbl, 1977: 101 (*Dasycerus*; characters; Europe).
- Coulon, 1987: 316 (*Dasycerus*; characters; collecting notes; Belgium).
- Löbl and Calame, 1996: 283 (*Dasycerus*; characters; Spain; Bosnia; Macedonia; Montenegro; Serbia).
- Jelínek, 1993: 38 (*Dasycerus*; Czech Republic; Slovakia).

▲ **DISTRIBUTION:** Europe.

*echinatus* Aragona, 1830: 29 (*Dasycerus*; Type locality: Vallis Ticini).

- Reitter, 1887c: 27 (*Dasycerus*; synonym of *sulcatus*).
- Belon, 1897: 170 (*Dasycerus*; synonym of *sulcatus*).
- Löbl and Calame, 1996: 283 (*Dasycerus*; synonym of *sulcatus*).

*interruptus* Reitter, 1881a: 59 (*Dasycerus*; proposed for Reitter's 1875 misidentification of *echinatus*; Type locality: Oesterreich).

- Reitter, 1875: 411 (*Dasycerus*; [**Note:** Misidentified as *echinatus*; Reitter cited Aragona as the author]; characters; Austria; Italy; Sardinia).
- Reitter, 1884: 119 (*Dasycerus*; characters).
- Reitter, 1887c: 27 (*Dasycerus*; cited with *echinatus*: Reitter, 1875 as a synonym]; characters; Austria).
- Belon, 1897: 126, 170 (*Dasycerus*; characters; catalog; Austria).
- Ganglbauer, 1899: 774 (*Dasycerus*; characters; Austria).
- Löbl and Calame, 1996: 283 (*Dasycerus*; synonym of *sulcatus*).

*italicus* Pic, 1906: 9 (*Dasycerus*; Type locality: Italie méridionale: Sta-Euphemia d'Aspromonte en Calabre).

- Löbl and Calame, 1996: 283 (*Dasycerus*; synonym of *sulcatus*).

**suthepensis** Löbl, 1988: 261 (*Dasycerus*; Type locality: Thaïlande, Chiang Mai Prov., Doi Suthep, 800 m).

- Löbl and Calame, 1996: 285 (*Dasycerus*; characters; Thailand).

▲ **DISTRIBUTION:** Thailand.



## EMPELINAE



[1 genus; 1 species; Nearctic Region]

Empelinae Newton and Thayer, 1992: 25, 56 (subfamily of the Staphylinidae; genera included: *Empelus*; also references listed to earlier unavailable uses).

- Newton and Thayer, 1995: 247–286, 296 (phylogenetic relationships; characters; discussion).
- Lawrence and Newton, 1995: 824 (discussion).
- M. Hansen, 1996: 35 (listed in Omaliine group of subfamilies).
- Newton, Thayer, Ashe, and Chandler, 2000: 342 (characters; notes).
- Klimaszewski, 2000: 33 (characters; notes on classification, natural history, distribution in Canada).

Empelidae Newton and Thayer, 1992.

- M. Hansen, 1997: 78, 79, 111, 165, 172 (characters supporting clade; autapomorphic features; description; notes).

### **Empelus**

[1 species; Nearctic Region]

*Empelus* LeConte, 1861a: 52 (species included: *brunnipennis*). **TYPE SPECIES:** *Litochrus brun-*  
*nipennis* Mannerheim, fixed by original designation and monotypy.

- Crowson, 1960: 118 (characters; discussion of placement).
- Hammond, 1971b: 66 (may be assigned to Proteininae).
- Newton, Thayer, Ashe, and Chandler, 2000: 343 (1 Nearctic species; notes; characters in key).

**brunnipennis** Mannerheim, 1852: 369 (*Litochrus*; Type locality: insula Sitkha).

- LeConte, 1861a: 52 (*Empelus*; type species of genus).
- Hatch, 1957: 283 (*Empelus*; characters; British Columbia; Washington; Oregon).
- Campbell and Davies, 1991: 87 (*Empelus*; checklist; Canada).

▲ **DISTRIBUTION:** Canada, USA.





## GLYPHOLMATINAE



[2 genera; 8 species; Neotropical and Australian Regions]

Glypholomatinae Jeannel, 1962.

- Newton and Thayer, 1995: 247–286, 290 (cited as subfamily; characters; phylogenetic relationships; discussion).
- Lawrence and Newton, 1995: 823 (discussion).
- M. Hansen, 1996: 35 (listed in Omaliinae group of subfamilies).
- Thayer, 1997: 159, 170 (characters; key to species; phylogenetic analysis).
- M. Hansen, 1997: 176, 178 (key characters; notes).

Glypholomini Jeannel, 1962: 482 (tribe of Silphidae; genera included: *Glypholoma*). **TYPE**

**GENUS:** *Glypholoma* (see Newton and Thayer, 1992: 58).

- Thayer and Newton, 1979: 62 (note).
- Newton, 1985: 198 (notes on austral distribution and taxonomic position).

Glypholomatini Jeannel, 1962.

- Newton and Thayer, 1992: 58 (name emended; tribe of Omaliinae).

### Glypholoma

[7 species; Neotropical and Australian Regions]

*Glypholoma* Jeannel, 1962: 482 (species included: *pustuliferum*). **TYPE SPECIES:** *Glypholoma pustuliferum* Jeannel, fixed by original designation and monotypy.

- Newton, 1975 (characters; discussion of placement in Omaliinae; Argentina; Chile).
- Thayer and Newton, 1979: 29, 45, 60 (characters; key to species; discussion of relationships).
- Newton and Thayer, 1995: 290 (notes; collecting notes).
- Thayer, 1997: 159 (characters; key to species).

*Lathrimaeodes* Scheerpeltz, 1972: 58 (species included: *pustulipenne*). **TYPE SPECIES:** *Lathrimaeodes pustulipenne* Scheerpeltz, fixed by original designation and monotypy.

- Newton, 1975: 54 (synonym of *Glypholoma*).
- Thayer and Newton, 1979: 29 (synonym of *Glypholoma*).
- Thayer, 1997: 159 (synonym of *Glypholoma*).

**chepuense** Thayer, 1997: 159, 161 (*Glypholoma*; Type locality: Chile: Chiloé Pr.: Chepu).

▲ **DISTRIBUTION:** Chile.

**germaini** Thayer, 1997: 159, 160 (*Glypholoma*; Type locality: Chile: Ñuble Pr. ?, Cordillera Chillán).

▲ **DISTRIBUTION:** Chile.

**pecki** Thayer and Newton, 1979: 50 (*Glypholoma*; Type locality: Chile: Malleco Prov., 20 km E. Manzanar, 1100 m).

- Thayer, 1997: 159, 165 (*Glypholoma*; characters; collecting notes; Chile; Argentina).

▲ **DISTRIBUTION:** Chile, Argentina.

**pustuliferum** Jeannel, 1962: 483 (*Glypholoma*; Type locality: Chile Chico, 46°33' lat. S).

- Thayer and Newton, 1979: 46 (*Glypholoma*; characters; Argentina; Chile).
- Szymczakowski, 1976: 424 (*Glypholoma*; collecting notes; Argentina).
- Thayer, 1997: 159, 163 (*Glypholoma*; characters; collecting notes; Argentina; Chile).

▲ **DISTRIBUTION:** Argentina, Chile.

*pustulipenne* Scheerpeltz, 1972: 59 (*Lathrimaeodes*; Type locality: Argentinien: Rio Negro, El Bolson, Mt Piltriquitron, 520 m).

- Newton, 1975: 54 (*Glypholoma*; synonym of *pustuliferum*).
- Thayer and Newton, 1979: 46 (*Glypholoma*; synonym of *pustuliferum*).
- Thayer, 1997: 163 (*Glypholoma*; synonym of *pustuliferum*).

*pustulipenne* Scheerpeltz, 1972, see: *pustuliferum* Jeannel, 1962.

- rotundulum** Thayer and Newton, 1979: 54 (*Glypholoma*; Type locality: Australia: Victoria: Belgrave).  
— Thayer, 1997: 159, 166 (*Glypholoma*; characters; collecting notes; wing polymorphism; Australia).  
▲ **DISTRIBUTION:** Australia.
- temporale** Thayer and Newton, 1979: 49 (*Glypholoma*; Type locality: Chile: Malleco Prov. 20 km E. Manzanar).  
— Thayer, 1997: 159, 164 (*Glypholoma*; characters; collecting notes; Chile).  
▲ **DISTRIBUTION:** Chile.
- tenuicorne** Thayer and Newton, 1979: 53 (*Glypholoma*; Type locality: Chile: Valdivia Prov., Corral).  
— Thayer, 1997: 159, 166 (*Glypholoma*; characters; collecting notes; Chile).  
▲ **DISTRIBUTION:** Chile.

### **Proglypholoma**

[1 species; Neotropical Region]

- Proglypholoma* Thayer, 1997: 159, 167 (species included: *aenigma*). **TYPE SPECIES:** *Proglypholoma aenigma* Thayer, by original designation.
- aenigma** Thayer, 1997: 159, 169 (*Proglypholoma*; Type locality: Chile: Aisén Pr.: P. N. Laguna San Rafael, Cta. Huales, 46°30'S, 73°46'W).  
▲ **DISTRIBUTION:** Chile.



## MICROPEPLINAE



[6 genera; 82 species; Neotropical, Nearctic, Palaearctic,  
Ethiopian, and Oriental Regions]

### Micropeplinae Leach, 1815.

- Eichelbaum, 1909: 95 (family group names; list of genera with some references; generic synonyms; number of genera in each subfamily and number of species in each genus; general distribution of each genus).
- Porta, 1926: 3 (characters; key to species of Italy).
- Portevin, 1929: 459 (characters).
- Böving and Craighead, 1930: 31 (larval characters).
- Cameron, 1930: 19 (characters).
- Palm, 1948: 30 (characters; Swedish species).
- Crowson, 1955: 33, 39 (adult characters in key; notes).
- Hatch, 1957: 48, 269 (characters; key to genera of Pacific Northwest).
- Arnett, 1963: 237, 253 (key to North American genera; characters; list of North American genera).
- Lohse, 1964: 16 (characters; key to central European species).
- Moore, 1964a: 86 (characters; notes).
- Campbell, 1968: 227 (characters; revision of and key to New World genera and species; checklist of world species).
- Scheerpeltz, 1968a: 2 (catalog of Austrian species).
- J. Matthews, 1970 (phylogenetic relationships; elytral morphology).
- Tikhomirova, 1973a: 136 (checklist of species of USSR).
- Moore and Legner, 1974g: 550 (key to genera of America north of Mexico).
- Moore and Legner, 1975: 154 (catalog; North America north of Mexico).
- Campbell, 1978c: 1257 (key to species of Latin America).
- Topp, 1978: 306 (larval characters).
- Moore and Legner, 1979: 125 (characters; tabular key to genera of North America north of Mexico).
- Silfverberg, 1979: 14 (list of Scandinavian species).
- Tóth, 1981: 94 (list of species of Hortobágy National Park, Hungary).
- Tóth, 1982: 7 (characters; key to species of Hungary).
- Thayer, 1987: 400 (phylogenetic relationships).
- Haghebaert, 1989: 258 (characters; key to species of Belgium).
- Lohse and Lucht, 1989: 240 (family level).
- Newton and Thayer, 1992: 57 (summary of current classification).
- Campbell, 1995: 117 (characters).
- Newton and Thayer, 1995: 247–286, 300 (phylogenetic relationships; characters; discussion; included *Cerapeplus*, *Kalissus*, *Pseudokalissus*, *Peplomicrus*, *Micropeplus*).
- Lawrence and Newton, 1995: 825 (discussion).
- Sparacio, 1995: 134 (characters; species of Sicily).
- M. Hansen, 1996: 35, 96 (listed in Omaliine group of subfamilies; list of Danish species).
- Downie and Arnett, 1996: 425 (characters; key to species of Northeastern North America).
- M. Hansen, 1997: 80, 81, 82, 116, 175, 177, 178 (characters supporting clade; autapomorphic features; key adult and larval characters; notes).
- Anderson, Nash, and O'Connor, 1997: 16 (annotated checklist; Ireland).
- Newton, Thayer, Ashe, and Chandler, 2000: 286, 343 (key to Nearctic genera; characters; notes).
- Klimaszewski, 2000: 34 (characters; notes on classification, natural history, and distribution in Canada and Alaska).

Micropeplida Leach, 1815: 90 (genera included: *Micropeplus*). **TYPE GENUS:** *Micropeplus* (see Newton and Thayer, 1992: 57).

- Heer, 1839a: 4 (cited as family).
- Newton and Thayer, 1992: 57 (synonym of Micropeplinae).



## Micropeplini Leach, 1815.

- Thomson, 1858: 37 (characters).
- Jakobson, 1908: 445, 448 (characters; list of species of Russia and western Europe).
- Bernhauer and Schubert, 1910: 27 (world catalog; *Micropeplus*, *Kalissus*).
- Johansen, 1914: 635 (characters).
- Scheerpeltz, 1933: 1021 (world catalog supplement).
- Scheerpeltz, 1940: 12 (key to Palaearctic genera).
- Welch, 1993 (ovariole structure and development).

## Micropeplina Leach, 1815.

- Jakobson, 1908: 445, 448 (characters; list of species of Russia and western Europe).

## Micropeplidae Leach, 1815.

- Gistel, 1856: 390 (list of taxa).
- Hlavac, 1975: 160 (prothoracic morphology).
- Outerelo and Gamarra, 1985: 11 (key to genera of Iberian Peninsula).
- Ryabukhin, 1990: 855 [= 1992c: 146] (key to genera).
- Newton, 1991: 334 (larval characters; relationships; ecological and biological notes; comments).
- Klausnitzer, 1997: 90 (larval characters).

Micropeplida Heer, 1839: 169 (genera included: *Micropeplus*). **TYPE GENUS:** *Micropeplus* (see Newton and Thayer, 1992: 57).

- Newton and Thayer, 1992: 57 (synonym of Micropeplinae).

**Arrhenopeplus**

[6 species; Neotropical, Nearctic, and Palaearctic Regions]

*Arrhenopeplus* C. Koch, 1937b: 257 (subgenus of *Micropeplus*; species included: *doderoi*, *tesserula*, *punicus*, *laevipennis*). **TYPE SPECIES:** *Micropeplus tesserula* Curtis, fixed by subsequent designation by Blackwelder, 1952: 63.

- Horion, 1963: 1 (subgenus of *Micropeplus*; list of central European species).
- Campbell, 1968: 230 (synonym of *Micropeplus*).
- Coiffait, 1982: 127 (cited as valid genus).
- Boháč, 1993: 39 (cited as valid genus; list of species of Czech Republic and Slovakia).

*Sphaeropeplus* Coiffait, 1982: 127 (subgenus of *Arrhenopeplus*; species included: *quatordecimcarinatus*). **TYPE SPECIES:** *Arrhenopeplus (Sphaeropeplus) quatordecimcarinatus* Coiffait, fixed by original designation and monotypy.

*baicalicus* Motschulsky, 1860, see: *tesserula* Curtis, 1828.

**cassagnai** Coiffait, 1982: 127 (*Arrhenopeplus*; Type locality: Nepal central: Taunja, 4000 m).

▲ **DISTRIBUTION:** Nepal.

*costatus* LeConte, 1850, see: *tesserula* Curtis, 1828.

*costipennis* Mäklin, 1853, see: *tesserula* Curtis, 1828.

**denticollis** Coiffait, 1958c: 413 (*Micropeplus*; subgenus *Arrhenopeplus*; Type locality: Macédoine yougoslave: Katalanovo, entre Skoplié et Titov-Veles).

- Herman, 2001: 13 (*Arrhenopeplus*).

▲ **DISTRIBUTION:** Macedonia.

**quatordecimcarinatus** Coiffait, 1982: 129 (*Arrhenopeplus*; subgenus *Sphaeropeplus*; Type locality: Nepal central: environs de Pokhara, 3200 m).

▲ **DISTRIBUTION:** Nepal.

**tesserula** Curtis, 1828: 204 (*Micropeplus*; [**Note:** Since *A. tesserula* is the type species of *Arrhenopeplus*, it is transferred from *Micropeplus* with the elevation of *Arrhenopeplus* although Coiffait did not explicitly mention or move *tesserula*]; Type locality: near Belfast, in the County Down).

- Gyllenhal, 1810: 213 (*Omalium*); [**Note:** Misidentification: Bernhauer and Schubert, 1910: 29 cited *staphylinoides* Gyllenhal as a synonym of *tesserula*; Gyllenhal did not describe the species as new, he attributed it to Marsham]; characters; Sweden).

- Erichson, 1840: 913 (*Micropeplus*; characters; Sweden; Carinthia).
- Guérin-Méneville, 1844a: 33 (*Micropeplus*; notes; England; France).
- Redtenbacher, 1849: 758 (*Micropeplus*; characters; Austria).
- Redtenbacher, 1857: 259 (*Micropeplus*; characters; Austria).
- Kraatz, 1857d: 1055 (*Micropeplus*; characters; Germany).
- Hochhuth, 1862: 112 (*Micropeplus*; notes; Siberia).
- Fauvel, 1871a: 37 [= 1872: 11] (*Micropeplus*; characters; France; Scandinavia; Britain; Germany; Austria; Switzerland; Algeria; Caucasus; Siberia; Alaska).
- Redtenbacher, 1874: 286 (*Micropeplus*; characters; Austria).
- J. Sahlberg, 1876: 225 (*Micropeplus*; Finland).
- Provancher, 1877: 262 (*Micropeplus*; characters; Quebec).
- Fauvel, 1878: 85 [= 1878a: 5] (*Micropeplus*; Algeria).
- Fauvel, 1878d: 171 [= 1878e: 7] (*Micropeplus*; characters; Alaska; California; Lake Superior; Michigan).
- Rey, 1884: 170 [= 1884a: 18] (*Micropeplus*; characters; France).
- Reitter, 1885: 365 (*Micropeplus*; characters).
- Fauvel, 1886: 11 [= 1886a: 3] (*Micropeplus*; Algeria).
- Ganglbauer, 1895: 770 (*Micropeplus*; characters; north and middle Europe; Siberia; Algeria; Caucasus; North America).
- Fauvel, 1902b: 47 (*Micropeplus*; Algeria; Tunisia).
- Falzoni, 1905: 10 (*Micropeplus*; characters; Italy).
- Fall and Cockerell, 1907: 168 (*Micropeplus*; New Mexico).
- Sainte-Claire Deville, 1907: 8, 9 (*Micropeplus*; characters; France).
- Reitter, 1909: 200 (*Micropeplus*; characters; Germany).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; catalog).
- Johansen, 1914: 638 (*Micropeplus*; characters; Denmark).
- Portevin, 1929: 460 (*Micropeplus*; characters; France).
- Scheerpeltz, 1933: 1023 (*Micropeplus*; catalog).
- Palm, 1948: 34 (*Micropeplus*; characters; Sweden; Norway; Finland).
- Hatch, 1957: 271 (*Micropeplus*; characters; British Columbia; Washington; Oregon).
- Horion, 1963: 1 (*Micropeplus*; subgenus *Arrhenopeplus*; Russia; Finland; Sweden; Norway; Britain; Ireland; Denmark; Poland; Caucasus; Czechoslovakia; Balkan region; Italy; France; Switzerland; Belgium; Holland; Germany; Austria).
- Lohse, 1964: 16 (*Micropeplus*; subgenus *Arrhenopeplus*; characters; central Europe).
- Campbell, 1968: 232 (*Micropeplus*; characters; notes; Alberta; British Columbia; Manitoba; Northwest Territories; Quebec; Durango; Sinaloa; Alaska; California; Illinois; Maine; Michigan; New Hampshire; New Mexico; New York; Oregon; Washington).
- Szujeci, 1969a: 247 (*Micropeplus*; notes; Poland).
- J. Matthews, 1970: 779 (*Micropeplus*; pliocene fossil; Alaska).
- Campbell, 1973b: 569 (*Micropeplus*; notes).
- Pope, 1977: 22 (*Micropeplus*; Britain).
- Campbell, 1978c: 1247 (*Micropeplus*; notes; Ontario; Panama).
- Hammond, 1980: 135 (*Micropeplus*; probably in Ireland).
- Tóth, 1982: 9 (*Micropeplus*; characters; Hungary).
- Drugmand and Haghebaert, 1987: 326 (*Micropeplus*; Belgium).
- Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Haghebaert, 1989: 258, 259 (*Micropeplus*; characters; phenology; notes; summary of distribution; Belgium).
- Boháč, 1993: 39 (*Arrhenopeplus*; Czech Republic; Slovakia).
- Downie and Arnett, 1996: 426 (*Micropeplus*; characters; USA).
- Ryabukhin, 1999: 9 (*Micropeplus*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Europe, Russia, Algeria, Tunisia, Canada, USA, Mexico, Panama.
- costatus* LeConte, 1850: 221 (*Micropeplus*; Type locality: Lake Superior).
- LeConte, 1877: 251, 252 (*Micropeplus*; characters; Lake Superior; California; Alaska).
- Fauvel, 1878d: 171 [= 1878e: 7] (*Micropeplus*; synonym of *tesserula*).

- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; synonym of *tesserula*).
- Hatch, 1957: 271 (*Micropeplus*; synonym of *tesserula*).
- Campbell, 1968: 232 (*Micropeplus*; synonym of *tesserula*).
- Haghebaert, 1989: 259 (*Micropeplus*; synonym of *tesserula*).

*costipennis* Mäklin, 1853: 200 (*Micropeplus*; Type locality: peninsula Kenai).

- Fauvel, 1869: 494 (*Micropeplus*; synonym of *tesserula*).
- Fauvel, 1871a: 37 [= 1872: 11] (*Micropeplus*; synonym of *tesserula*).
- Fauvel, 1878d: 171 [= 1878e: 7] (*Micropeplus*; synonym of *tesserula*).
- Ganglbauer, 1895: 770 (*Micropeplus*; synonym of *tesserula*).
- Falzoni, 1905: 10 (*Micropeplus*; synonym of *tesserula*).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; synonym of *tesserula*).
- Campbell, 1968: 232 (*Micropeplus*; synonym of *tesserula*).
- Haghebaert, 1989: 259 (*Micropeplus*; synonym of *tesserula*).

*baicalicus* Motschulsky, 1860: 541 (*Micropeplus*; Type locality: lac Baïcal dans la Sibérie orientale).

- Fauvel, 1871a: 37 [= 1872: 11] (*Micropeplus*; synonym of *tesserula*).
- Ganglbauer, 1895: 770 (*Micropeplus*; synonym of *tesserula*).
- Falzoni, 1905: 10 (*Micropeplus*; synonym of *tesserula*).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; synonym of *tesserula*).

**thracicus** Coiffait, 1958c: 410 (*Micropeplus*; subgenus *Arrhenopeplus*; Type locality: Thrace grecque: lavage de terre près de Kavalla au bord de la Mer Egée).

- Herman, 2001: 13 (*Arrhenopeplus*).

▲ **DISTRIBUTION:** Greece.

**turcicus** Coiffait, 1958c: 412 (*Micropeplus*; subgenus *Arrhenopeplus*; Type locality: Turquie d'Asie: lavage de terre aux environs de Bursa).

- Herman, 2001: 13 (*Arrhenopeplus*).

▲ **DISTRIBUTION:** Turkey.

### **Cerapeplus**

[2 species; Oriental and Palaearctic Regions]

*Cerapeplus* Löbl and Burckhardt, 1988: 59 (species included: *siamensis*). **TYPE SPECIES:** *Cerapeplus siamensis* Löbl and Burckhardt, fixed by original designation and monotypy.

**siamensis** Löbl and Burckhardt, 1988: 62 (*Cerapeplus*; Type locality: Thailand: Chiang Mai Province, Doi Suthep, 1050 m, northern slope, N of "site B", Agricultural Faculty, University of Chiang Mai).

- Löbl, 1997: 138 (*Cerapeplus*; Java; Thailand).

▲ **DISTRIBUTION:** Indonesia, Thailand.

**sinensis** Löbl, 1997: 138 (*Cerapeplus*; Type locality: China: Shaanxi, Quin Ling Shan, 110.06 E, 34.27 N, Hua Shan Mt., N Valley, 1200–1400 m, 118 km E Xian).

▲ **DISTRIBUTION:** China.

### **Kalissus**

[1 species; Nearctic Region]

*Kalissus* LeConte, 1874a: 50 (species included: *nitidus*). **TYPE SPECIES:** *Kalissus nitidus* LeConte, fixed by monotypy.

- Fauvel, 1878d: 172 [= 1878e: 8] (characters).
- Duvivier, 1883: 206 (catalog).
- Bernhauer and Schubert, 1910: 29 (world catalog; 1 species).
- Leng, 1920: 92 (catalog of North American species).
- Blackwelder, 1952: 206 (type species: *nitidus*).
- Hatch, 1957: 269 (characters; species of Pacific Northwest).
- Campbell, 1968: 228 (characters; revision of species).

- Moore and Legner, 1975: 154 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 126 (characters; notes).
- Ryabukhin, 1990: 855 [= 1992c: 146] (characters in key).
- Newton, Thayer, Ashe, and Chandler, 2000: 343 (1 Nearctic species; notes; characters in key).

**nitidus** LeConte, 1874a: 51 (*Kalissus*; Type locality: Vancouver Island, pebbly margins of lake near Gold Stream).

- LeConte, 1877: 252 (*Kalissus*; Vancouver Island).
- Fauvel, 1878d: 172 [= 1878e: 8] (*Kalissus*; characters; Vancouver).
- Bernhauer and Schubert, 1910: 29 (*Kalissus*; catalog).
- Hatch, 1957: 269 (*Kalissus*; characters; British Columbia; Washington).
- Campbell, 1968: 229 (*Kalissus*; characters; British Columbia; Washington).
- J. Matthews, 1970: 779 (*Kalissus*; pliocene fossil; Alaska).
- Campbell, 1973b: 569 (*Kalissus*; collecting notes; British Columbia).

▲ **DISTRIBUTION:** Canada, USA.

### Micropeplus

[63 species; Oriental, Ethiopian, Palaearctic, Nearctic, and Neotropical Regions]

*Micropeplus* Latreille, 1809: 377 (species included: *porcatus*). **TYPE SPECIES:** *Staphylinus porcatus* Paykull, fixed by monotypy.

- Leach, 1815: 90 (characters).
- Samouelle, 1819: 171 (characters).
- Billberg, 1820: 13 (characters; list of some species).
- Latreille, 1825a: 46 (characters).
- Latreille, 1829: 440 (characters).
- Mannerheim, 1830: 10, 58 (key; characters).
- Mannerheim, 1831: 424, 472 (key; characters).
- Griffith and Pidgeon, 1832: 297 (characters).
- Newman, 1834: 201 (notes).
- Erichson, 1839a: 646 (characters; species of Germany).
- Heer, 1839: 169 (characters).
- Erichson, 1840: 911 (characters).
- Laporte, 1840: 193 (characters).
- Haliday, 1841: 187 (notes).
- Redtenbacher, 1849: 758 (characters).
- Schaum, 1852: 31 (list of species; Europe).
- Lacordaire, 1854: 151 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 658 (characters).
- Gistel, 1856: 390 (list of species).
- Jacquelin du Val, 1857: 82 (characters).
- Redtenbacher, 1857: 259 (characters; key to Austrian species).
- Kraatz, 1857d: 1050 (characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 32 (catalog of British species).
- Schaum, 1859: 33 (catalog; European species).
- Kraatz, 1859b: 65 (notes).
- Fauvel, 1861: 251 (characters; description and key to species).
- Gredler, 1863: 128 (list of species from Tirol).
- LeConte, 1863: 27 (list of North American species).
- Wencker and Silbermann, 1866: 37 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 679 (catalog).
- Jacquelin du Val, 1868: 82 (catalog; European species).
- Fauvel, 1871a: 34 [= 1872: 8] (characters; larval characters; key to species).
- Sharp, 1871d: 15 (list of British species).
- Redtenbacher, 1874: 286 (characters; key to Austrian species).
- Fauvel, 1875a: I [= 1875b: 203] (catalog).

- LeConte, 1877: 250 (characters; key to species).
- Provancher, 1877: 262 (characters).
- Fauvel, 1878d: 168 [= 1878e: 4] (notes; key to North American species).
- Heyden, 1880: 91 (list of species of Siberian region).
- Duvivier, 1883: 206 (catalog).
- Rey, 1884: 153 [= 1884a: 1] (characters; key to French species).
- Sharp, 1887: 747 (notes).
- Heyden, Reitter, and Weise, 1891: 123 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 766 (adult and larval characters; key to middle European species).
- Fauvel, 1897d: 240 (catalog of species of Barbary).
- Falzoni, 1905: 2 (key to Italian species).
- Heyden, Reitter, and Weise, 1906: 125 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 7 (characters; key to French species).
- Reitter, 1909: 200 (characters; key to German species).
- Bernhauer and Schubert, 1910: 27 (world catalog; 22 species).
- Blatchley, 1910: 484 (characters).
- Petri, 1912: 50 (list of species of Siebenbürgen).
- Johansen, 1914: 635 (characters; key to Danish species).
- Leng, 1920: 92 (catalog of North American species).
- Winkler, 1925: 324 (catalog for Palaearctic region).
- Cameron, 1925: 9 (catalog of Indian species).
- Porta, 1926: 4 (characters; key to species of Italy).
- Portevin, 1929: 460 (characters; key to French species).
- Cameron, 1930: 20 (characters; key to species of British India).
- Roubal, 1930: 299 (catalog; Slovakia).
- Joy, 1932: 4 (key to British species).
- Scheerpeltz, 1933: 1021 (world catalog supplement).
- Normand, 1935: 356 (list of species of Tunisia).
- C. Koch, 1937b: 237 (classification and key to Palaearctic species).
- Hinton and Stephens, 1941 (feeding; pupal characters).
- Kloet and Hincks, 1945: 160 (list of British species).
- Palm, 1948: 31 (characters; key to species of Sweden).
- Tottenham, 1949: 353, 404 (type species: *porcatus* Fabricius; list of British species).
- Blackwelder, 1952: 246 (type species: *porcatus*).
- Tottenham, 1954: 9 (characters; key to British species).
- Hatch, 1957: 269 (characters; key to species of Pacific Northwest).
- Kocher, 1958: 89 (checklist of species; Morocco).
- Székessy, 1963: 7 (characters).
- Horion, 1963: 1 (list of central European species).
- Lohse, 1964: 16 (characters; key to central European species).
- Watanabe and Shibata, 1964: 67 (key to species of Japan).
- Campbell, 1968: 230, 257 (characters; revision of and key to New World species; species group classification).
- Scheerpeltz, 1968a: 1 (catalog of Austrian species).
- Campbell, 1973b: 575 (key to New World species).
- Bordoni, 1973j: 654 (list of species from islands near Sicily).
- Tikhomirova, 1973a: 136 (checklist of species of USSR).
- Watanabe, 1975: 304 (characters; revision of and key to species of Japan).
- Moore and Legner, 1975: 155 (catalog; North America north of Mexico).
- Shibata, 1976: 73 (checklist of species of Japan).
- Pope, 1977: 22 (list of British species).
- Campbell, 1978c: 1257 (key to species of Latin America).
- Topp, 1978: 306 (larval characters).
- Moore and Legner, 1979: 127 (characters; notes).
- Silfverberg, 1979: 14 (list of Scandinavian species).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).

- Uhlig and Vogler, 1981: 82 (list of some species collected in Germany; habitat and collecting notes).
- Spahr, 1981: 95 (larva; references to specimens from amber and copal).
- Tóth, 1982: 7 (characters; habitus; key to species of Hungary).
- Ádám, 1985: 252 (list of species from southeast Hungary).
- Segers, 1986: 16 (checklist of species; Belgium).
- Ádám, 1987: 136 (list of four species with collecting notes; Hungary).
- Campbell, 1989: 309 (key to species of *staphylinoides* group).
- Haghebaert, 1989: 258 (characters; key to species of Belgium).
- Ryabukhin, 1990: 855 [= 1992c: 147] (characters in key).
- Angelini, 1991: 191 (list of species from high elevations of Calabria, Italy).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Welch, 1993 (ovariole number and ovary structure).
- Campbell, 1995: 117, 129, 130 (characters; species group classification and characters for some species groups; list of and key to species of Taiwan).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 425 (characters; key to species of Northeastern North America).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
- Newton, Thayer, Ashe, and Chandler, 2000: 343 (14 Nearctic species; notes; characters in key).

*acumen* Sharp, 1887, see: *Peplomicrus*.

**africanus** Cameron, 1950g: 3 (*Micropeplus*; Type locality: Belgian Congo: Kanyabayongo, Kabasha, alt. 1760 m).

▲ **DISTRIBUTION:** Congo.

*angulosus* Motschulsky, 1860, see: *fulvus* Erichson, 1840.

*baicalicus* Motschulsky, 1860, see: *Arrhenopeplus*.

**borealis** Ryabukhin, 1991a: 141 [= 1992b: 72] (*Micropeplus*; Type locality: Magadanskaia obl. Verkhov'e Kol'im, 5 km severo-vostochiee pos. Lariukovoe [Magadan Prov. Upper Kolyma River, 5 km NE of Laryukovoe]).

— Ryabukhin, 1999: 10 (*Micropeplus*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia.

**browni** Campbell, 1968: 243 (*Micropeplus*; Type locality: Quebec: near Mud Lake, 4 mi W. Masham. Also cited from Maryland; Michigan; New York).

— Campbell, 1989: 310 (*Micropeplus*; characters).

— Downie and Arnett, 1996: 426 (*Micropeplus*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

**brunneus** Mäklin, 1852: 326 (*Micropeplus*; Type locality: insula Sitkha).

— LeConte, 1877: 252 (*Micropeplus*; Alaska).

— Fauvel, 1878d: 171 [= 1878e: 7] (*Micropeplus*; characters; Sitka Island).

— Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).

— Hatch, 1957: 271 (*Micropeplus*; characters; British Columbia; Washington; Oregon).

— Campbell, 1968: 236 (*Micropeplus*; characters; notes; British Columbia; Alaska; California; Oregon; Washington).

— Legner and Moore, 1977: 175 (*Micropeplus*; found under bark).

▲ **DISTRIBUTION:** Canada, USA.

**caelatus** Erichson, 1839a: 647 (*Micropeplus*; Type locality: Mark Brandenburg).

— Erichson, 1840: 912 (*Micropeplus*; characters; Germany).

— Redtenbacher, 1849: 758 (*Micropeplus*; characters; Austria).

— Redtenbacher, 1857: 259 (*Micropeplus*; characters; Austria).

— Kraatz, 1857d: 1053 (*Micropeplus*; characters; Germany).

— Fauvel, 1861: 253, 257 (*Micropeplus*; characters; key; France).

— Fauvel, 1871a: 35 [= 1872: 9] note (*Micropeplus*; characters; Germany; Scandinavia).

- Redtenbacher, 1874: 286 (*Micropeplus*; characters; Austria).
- Rey, 1884: 159 (*Micropeplus*; characters; Prussia; Germany; Sweden).
- Reitter, 1885: 366 (*Micropeplus*; characters).
- Ganglbauer, 1895: 769 (*Micropeplus*; characters; Germany; Sweden).
- Falzoni, 1905: 5 (*Micropeplus*; characters; Italy).
- Reitter, 1909: 200 (*Micropeplus*; characters; Germany).
- Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).
- Johansen, 1914: 637 (*Micropeplus*; characters; Denmark).
- Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).
- C. Koch, 1937b: 258 (*Micropeplus*; characters; illustration of aedeagus).
- Palm, 1948: 33 (*Micropeplus*; characters; Sweden; Denmark).
- Horion, 1963: 8 (*Micropeplus*; subgenus *Micropeplus*; Ireland; Denmark; Sweden; Holland; Germany; Austria; Austria).
- Lohse, 1964: 17 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).
- Pope, 1977: 22 (*Micropeplus*; Britain).
- Hammond, 1980: 134 (*Micropeplus*; collecting notes; Ireland).
- Tóth, 1982: 10 (*Micropeplus*; characters; Hungary).
- Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Poland; Austria; Benelux; Denmark; Sweden).
- ▲ **DISTRIBUTION:** Ireland, Sweden, Denmark, France, Germany, Hungary, Austria, Italy, Caucasus.

**calabricus** Reitter, 1907a: 484 (*Micropeplus*; Type locality: Calabrien: Santa Eufemia d'Aspromonte).

- Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).
- C. Koch, 1937b: 263 (*Micropeplus*; subspecies of *staphylinoides*; characters; illustration of aedeagus).
- Sparacio, 1995: 134 (*Micropeplus*; characters; notes; Sicily).
- ▲ **DISTRIBUTION:** Italy.

**carayoni** Jarrige, 1950: 27 (*Micropeplus*; Type locality: Cameroun: Fouban).

▲ **DISTRIBUTION:** Cameroon.

**caspicus** Reitter, 1885: 366 (*Micropeplus*; Type locality: Lenkoran).

- Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).
- C. Koch, 1937b: 262 (*Micropeplus*; characters; illustration of aedeagus).
- ▲ **DISTRIBUTION:** Azerbaijan.

**clypeatus** Campbell, 1992: 221 (*Micropeplus*; Type locality: Taiwan: Hualien Hsien, Taroko N. P., Nanhushi Hut, 2200 m).

- Campbell, 1995: 118, 130 (*Micropeplus*; characters; notes; Taiwan).
- ▲ **DISTRIBUTION:** Taiwan.

*costatus* LeConte, 1850, see: *Arrhenopeplus*.

*costatus* Mäklin, 1852, see: *puncatatus* LeConte, 1863.

*costipennis* Mäklin, 1853, see: *Arrhenopeplus*.

**cribratus** LeConte, 1863a: 60 (*Micropeplus*; Type locality: Georgia).

- LeConte, 1877: 251 (*Micropeplus*; characters; Georgia).
- Fauvel, 1878d: 169 [= 1878e: 5] (*Micropeplus*; characters; Georgia).
- Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).
- Campbell, 1968: 246 (*Micropeplus*; characters; Ontario; Georgia; Illinois; Iowa; Massachusetts; Missouri; New York; Texas; Wisconsin).
- Campbell, 1973b: 574 (*Micropeplus*; Alberta; Iowa; Minnesota; Montana; New York).
- Campbell, 1978c: 1250 (*Micropeplus*; Arkansas; Louisiana; Texas).
- Downie and Arnett, 1996: 426 (*Micropeplus*; characters; USA).
- ▲ **DISTRIBUTION:** Canada, USA.

**cribripennis** Jarrige, 1950: 29 (*Micropeplus*; Type locality: Hoa-Bin, Tonkin).

▲ **DISTRIBUTION:** Vietnam.

*denticollis* Coiffait, 1958, see: *Arrhenopeplus*.

*denticollis* Coiffait, 1982, see: *editus* Herman, 2001.

*devillei* Bernhauer, 1900, see: *obsoletus* Rey, 1884.

**doderoi** Normand, 1920a: 246 (*Micropeplus*; Type locality: Saint-Nazaire près d'Elne, Pyrénées Orientales).

— Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).

▲ **DISTRIBUTION:** France.

**dokuchaevi** Ryabukhin, 1991: 151 (*Micropeplus*; Type locality: Kamchatka. Bystrinskii r-n, okrestnost' poc Esso).

— Ryabukhin, 1992: 159 (*Micropeplus*; translation of Ryabukhin, 1991; characters; Russia).

— Ryabukhin, 1999: 11 (*Micropeplus*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia.

**durangoensis** Campbell, 1968: 240 (*Micropeplus*; Type locality: Mexico: Durango: 5 mi W. Durango, 6500 ft.).

— Campbell, 1973b: 571 (*Micropeplus*; Mexico).

— Campbell, 1989: 310 (*Micropeplus*; characters).

▲ **DISTRIBUTION:** Mexico.

*duvalii* Fauvel, 1861, see: *staphylinoides* Marsham, 1802.

**editus** Herman, 2001: 36 (*Micropeplus*; replacement name for *denticollis* Coiffait).

▲ **DISTRIBUTION:** Nepal.

*denticollis* Coiffait, 1982: 126 (*Micropeplus*; [**preoccupied**]; Type locality: Nepal central: entre Pisang et Chame, 2650 m).

— Herman, 2001: 36 (*Micropeplus*; synonym of *editus*).

*eppelsheimi* Reitter, 1881, see: *longipennis* Kraatz, 1859.

*ferrugineus* Motschulsky, 1860, see: *fulvus* Erichson, 1840.

**fulvus** Erichson, 1840: 912 (*Micropeplus*; Type locality: Lutetiae).

— Fairmaire and Laboulbène, 1856: 659 (*Micropeplus*; characters; France).

— Redtenbacher, 1857: 995 (*Micropeplus*; characters; Austria).

— Kraatz, 1857d: 1054 (*Micropeplus*; characters; Germany).

— Fauvel, 1861: 263 (*Micropeplus*; synonym of *margaritae*).

— Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; characters; France; Britain; Germany; Corsica; Italy; Georgia; Algeria).

— Fauvel, 1873b: 108 [= 1873c: 1] (*Micropeplus*; Sardinia; Sicily; Russia).

— Fauvel, 1874: 319 [= 1874b: 25] (*Micropeplus*; Japan).

— Redtenbacher, 1874: 286 (*Micropeplus*; characters).

— Fauvel, 1876a: 47 [= 1876: 232] (*Micropeplus*; Spain; Syria).

— Fauvel, 1878: 85 [= 1878a: 5] (*Micropeplus*; Algeria).

— Rey, 1884: 165 [= 1884a: 13] (*Micropeplus*; characters; France).

— Reitter, 1885: 367 (*Micropeplus*; characters).

— Fauvel, 1886: 11 [= 1886a: 3] (*Micropeplus*; Algeria).

— Ganglbauer, 1895: 769 (*Micropeplus*; characters; Germany; France; England; Italy; Corsica; Algeria).

— Fauvel, 1902b: 47 (*Micropeplus*; Algeria; Tunisia).

— Falzoni, 1905: 8 (*Micropeplus*; characters; Italy).

— Sainte-Claire Deville, 1907: 9 (*Micropeplus*; France).

— Reitter, 1909: 200 (*Micropeplus*; characters; Germany).

— Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).

— Sharp and Muir, 1912: 502 (*Micropeplus*; characters of male genitalia).

— Johansen, 1914: 637 (*Micropeplus*; characters; Denmark).

— Portevin, 1929: 460 (*Micropeplus*; characters; France).

— Gridelli, 1930: 60 (*Micropeplus*; Libya).

— Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).



- C. Koch, 1937b: 263, 264 (*Micropeplus*; characters; illustration of aedeagus).
  - Hinton and Stephens, 1941 (*Micropeplus*; pupal characters; feeds on and transmits fungi; England).
  - Palm, 1948: 33 (*Micropeplus*; characters; Sweden; Denmark; Finland).
  - Nakane, 1963a: 81 (*Micropeplus*; characters; habitus photograph; Japan).
  - Scheerpeltz, 1963a: 414 (*Micropeplus*; Greece).
  - Horion, 1963: 4 (*Micropeplus*; subgenus *Micropeplus*; Algeria; Libya; Britain; Ireland; Denmark; Switzerland; Finland; Holland; Belgium; France; Spain; Portugal; Corsica; Sardinia; Sicily; Italy; Balkan region; Hungary; Slovakia; Poland; Germany; Austria).
  - Lohse, 1964: 16 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).
  - Smetana, 1966: 323 (*Micropeplus*; characters).
  - Pope, 1977: 22 (*Micropeplus*; Britain).
  - Hammond, 1980: 135 (*Micropeplus*; Ireland).
  - Tóth, 1982: 12 (*Micropeplus*; characters; Hungary).
  - Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
  - Schülke and Uhlig, 1988: 2 (*Micropeplus*; notes; Germany).
  - Haghebaert, 1989: 259, 260 (*Micropeplus*; characters; phenology; notes; summary of distribution; Belgium).
  - J. Li, 1993: 18 (*Micropeplus*; cited as *fulvus*; China).
  - Boháč, 1993: 39 (*Micropeplus*; Czech Republic; Slovakia).
  - Sparacio, 1995: 134 (*Micropeplus*; characters; notes; Sicily).
  - Sagvolden and Hansen, 1996: 91 (*Micropeplus*; Norway).
  - Owen, 2000: 250 (*Micropeplus*; pitfall trap collections from underground at roots of trees; Britain).
  - Assing and Wunderle, 2001: 36 (*Micropeplus*; Cyprus).
  - ▲ **DISTRIBUTION:** Europe, Russia, Georgia, Syria, Libya, Tunisia, Algeria, India, Bangladesh, China, Japan.
- margaritae* Jacquelin du Val, 1857: 82 (*Micropeplus*; Type locality: jardin à Bercy).
- Fauvel, 1861: 263 (*Micropeplus*; characters; key; France).
  - Kraatz, 1859b: 68 (*Micropeplus*; characters; France, Germany, England).
  - Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *fulvus*).
  - Ganglbauer, 1895: 769 (*Micropeplus*; synonym of *fulvus*).
  - Falzoni, 1905: 8 (*Micropeplus*; synonym of *fulvus*).
  - Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *fulvus*).
  - Scheerpeltz, 1933: 1022 (*Micropeplus*; synonym of *fulvus*).
  - Pope, 1977: 22 (*Micropeplus*; synonym of *fulvus*).
  - Haghebaert, 1989: 260 (*Micropeplus*; synonym of *fulvus*).
- angulosus* Motschulsky, 1860: 542 (*Micropeplus*; Type locality: Sicile).
- Fauvel, 1869: 494 (*Micropeplus*; synonym of *fulvus*).
  - Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *fulvus*).
  - Ganglbauer, 1895: 769 (*Micropeplus*; synonym of *fulvus*).
  - Falzoni, 1905: 8 (*Micropeplus*; synonym of *fulvus*).
  - Bernhauer and Schubert, 1910: 27 (*Micropeplus*; synonym of *fulvus*).
  - Haghebaert, 1989: 260 (*Micropeplus*; synonym of *fulvus*).
- ferrugineus* Motschulsky, 1860: 541 (*Micropeplus*; Type locality: Géorgie méridionale aux environs d'Elisabethpol).
- Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *fulvus*).
  - Ganglbauer, 1895: 769 (*Micropeplus*; synonym of *fulvus*).
  - Falzoni, 1905: 8 (*Micropeplus*; synonym of *fulvus*).
  - Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *fulvus*).
- japonicus* Sharp, 1874: 101 (*Micropeplus*; variety of *fulvus*; Type locality: Japan).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; variety of *fulvus*).
  - Cameron, 1930: 21 (*Micropeplus*; variety of *fulvus*; characters; India).

- Scheerpeltz, 1933: 1022 (*Micropeplus*; variety of *fulvus*).
- Watanabe and Shibata, 1964: 67, 68 (*Micropeplus*; subgenus *Micropeplus*; subspecies of *fulvus*; characters; notes; Japan).
- Abdullah and Qadri, 1968a: 303 (*Micropeplus*; variety of *fulvus*; characters; East Pakistan).
- Watanabe, 1975: 316 (*Micropeplus*; subspecies of *fulvus*; characters; Japan).
- Coiffait, 1982: 40 (*Micropeplus*; subspecies of *fulvus*; India).
- Watanabe and Luo, 1991: 93 (*Micropeplus*; subspecies of *fulvus*; China).

*glabratus* Tikhomirova, 1973, see: *Pseudokalissus*.

**gomerensis** Assing, 1999a: 348 (*Micropeplus*; Type locality: E. Islas Canarias, La Gomera, ca. 1200 m, S. La Laguna Grande, Fayal-Brezal, Barranco).

▲ **DISTRIBUTION:** Canary Islands.

**graecus** Reitter, 1887b: 228 (*Micropeplus*; Type locality: Griechenland).

- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- C. Koch, 1937b: 263, 264 (*Micropeplus*; characters; illustration of aedeagus).

▲ **DISTRIBUTION:** Greece.

**hiromasai** Watanabe and Shibata, 1964: 67 (*Micropeplus*; subgenus *Micropeplus*; Type locality: Japan: Kyūshū: Ōita Pref.: Mt. Sobo).

- Watanabe, 1975: 312 (*Micropeplus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**hoogendorni**† J. Matthews, 1970: 780 (*Micropeplus*; Pliocene Fossil; Type locality: Lava Camp Mine, about 20 mi. south of the north coast of the Seward Peninsula, Alaska).

▲ **DISTRIBUTION:** USA.

**hopkinsi**† J. Matthews, 1970: 782 (*Micropeplus*; Pliocene Fossil; Type locality: Lava Camp Mine, about 20 mi. south of the north coast of the Seward Peninsula, Alaska).

▲ **DISTRIBUTION:** USA.

*insularis* Doderò, 1916, see: *porcatus* Paykull, 1789.

*intermedius* Falzoni, 1905 [**Note: Nomen nudum**], see: *staphylinoides* Marsham, 1802.

*interstitialis* J. Sahlberg, 1880, see: *laevipennis* Eppelsheim, 1880.

*japonicus* Sharp, 1874, see: *fulvus* Erichson, 1840.

**kikuchii** Watanabe, 1975: 323 (*Micropeplus*; Type locality: Japan: Honshu: Konsei-pass, Oku-Nikkō).

▲ **DISTRIBUTION:** Japan.

**laevipennis** Eppelsheim, 1880a: 213 (*Micropeplus*; Type locality: Südungarn).

- Reitter, 1885: 365 (*Micropeplus*; characters).
- Ganglbauer, 1895: 771 (*Micropeplus*; characters; Hungary).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Tóth, 1982: 9 (*Micropeplus*; characters).
- J. Li, 1993: 17 (*Micropeplus*; China).

▲ **DISTRIBUTION:** Croatia, Russia, China.

*interstitialis* J. Sahlberg, 1880: 112 (*Micropeplus*; Type locality: Lebedevo).

- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *laevipennis*).

**laticollis** Mäklin, 1853: 199 (*Micropeplus*; Type locality: peninsula Kenai; [**Note:** See lectotype designation by Campbell, 1968]).

- LeConte, 1877: 250, 251 (*Micropeplus*; characters; Alaska; Lake Superior; New Hampshire).
- Fauvel, 1878d: 169 [= 1878e: 5] (*Micropeplus*; characters; Alaska; Lake Superior; New Hampshire).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Hatch, 1957: 270 (*Micropeplus*; characters; British Columbia; Washington; Oregon).
- Campbell, 1968: 238 (*Micropeplus*; characters; lectotype designation; notes; Alberta; British Columbia; Ontario; Quebec; Saskatchewan; Alaska; Colorado; Michigan; Missouri; Montana; New Hampshire; Wyoming).

- Campbell, 1973b: 570 (*Micropeplus*; Alberta; British Columbia; Quebec; Yukon Territory; Idaho).
  - Campbell, 1978c: 1248 (*Micropeplus*; notes; Alberta; Ontario; Quebec; Colorado; New Mexico).
  - Campbell, 1989: 309 (*Micropeplus*; characters).
  - Downie and Arnett, 1996: 426 (*Micropeplus*; characters; USA).
- ▲ **DISTRIBUTION:** Canada, USA.

*laticollis* Rey, 1884, see: *staphylinoides* Marsham, 1802.

*laticollis* Fiori, 1894, see: *staphylinoides* Marsham, 1802.

**latus** Hampe, 1861: 65 (*Micropeplus*; Type locality: Agram).

- Fauvel, 1875a: I [= 1875b: 203] (*Micropeplus*; Croatia).
- Reitter, 1885: 367 (*Micropeplus*; characters).
- Ganglbauer, 1895: 770 (*Micropeplus*; characters; Croatia; Slavonia).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Smetana, 1966: 322, 323 (*Micropeplus*; notes; Czechoslovakia).
- Tóth, 1982: 12 (*Micropeplus*; characters).

▲ **DISTRIBUTION:** Croatia, Czechoslovakia.

**lecontei** Campbell, 1968: 248 (*Micropeplus*; Type locality: California: Pasadena).

- LeConte, 1877: 250, 251 (*Micropeplus*; [**Note:** Misidentified as *punctatus* according to Campbell, 1968: 248]; characters; Alaska; California).
- Fauvel, 1878d: 168 [= 1878e: 4] (*Micropeplus*; [**Note:** Misidentified as *punctatus* according to Campbell, 1968: 248]; Sitka Island).
- Hatch, 1957: 270 (*Micropeplus*; [**Note:** Misidentified as *punctatus* according to Campbell, 1968: 248]; characters; British Columbia).

▲ **DISTRIBUTION:** Canada, USA.

**longipennis** Kraatz, 1859b: 69 (*Micropeplus*; Type locality: Germania).

- Kraatz, 1857d: 1053 (*Micropeplus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 28 cited *staphylinoides* Kraatz as a synonym of *longipennis*; Kraatz did not describe the species as new, he attributed it to Marsham]; characters; Germany).
- Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; characters; Germany; France).
- Rey, 1884: 159 [= 1884a: 7] (*Micropeplus*; characters; France).
- Reitter, 1885: 367 (*Micropeplus*; characters).
- Ganglbauer, 1895: 770 (*Micropeplus*; characters; France; Germany; Austria; Caucasus).
- Falzoni, 1905: 10 (*Micropeplus*; characters; Italy).
- Reitter, 1909: 200 (*Micropeplus*; characters; Germany).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).
- C. Koch, 1937b: 261, 262 (*Micropeplus*; characters; illustration of aedeagus).
- Horion, 1963: 7 (*Micropeplus*; subgenus *Micropeplus*; France; Germany; Austria; Italy; Carpathians; Balkans).
- Watanabe and Shibata, 1964: 67, 68 (*Micropeplus*; subgenus *Micropeplus*; characters; Japan).
- Lohse, 1964: 16 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).
- Smetana, 1964c: 162 (*Micropeplus*; Czechoslovakia).
- Smetana, 1966: 323 (*Micropeplus*; characters).
- Shibata, 1974: 33 (*Micropeplus*; Japan).
- Tóth, 1982: 12 (*Micropeplus*; characters).
- Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Czechoslovakia; Austria).
- J. Li, 1993: 17 (*Micropeplus*; China).
- Boháč, 1993: 39 (*Micropeplus*; Czech Republic; Slovakia).

▲ **DISTRIBUTION:** Austria, Czechoslovakia, Germany, France, Caucasus, China, Japan.

*eppelsheimi* Reitter, 1881: 514 (*Micropeplus*; Type locality: Meskisches Gebirge).

- Ganglbauer, 1895: 770 (*Micropeplus*; synonym of *longipennis*).
- Falzoni, 1905: 10 (*Micropeplus*; synonym of *longipennis*).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *longipennis*).

**macrofulvus**† Gersdorf, 1976: 111 (*Micropeplus*; Pliocene fossil; Type locality: Willershausen).

▲ **DISTRIBUTION:** Germany.

*maillei* Guérin-Méneville, 1829, see: *staphylinoides* Marsham, 1802.

*maillei* Laporte, 1840, see: *staphylinoides* Marsham, 1802.

*margaritae* Jacquelin du Val, 1857, see: *fulvus* Erichson, 1840.

**marietti** Jacquelin du Val, 1857: 82 (*Micropeplus*; Type locality: Italie).

— Fauvel, 1865c: 18 [= 1866: 26] (*Micropeplus*; synonym of *fulvus*).

— Fauvel, 1869: 494 (*Micropeplus*; synonym of *fulvus*).

— Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *fulvus*).

— Rey, 1884: 162 [= 1884a: 10] (*Micropeplus*; characters; France).

— Ganglbauer, 1895: 770 (*Micropeplus*; characters; France; Italy; Bosnia).

— Falzoni, 1905: 9 (*Micropeplus*; variety of *fulvus*; characters; Italy).

— Montandon, 1908: 77 (*Micropeplus*; Romania).

— Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).

— Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).

— C. Koch, 1937b: 264, 265 (*Micropeplus*; characters; illustration of aedeagus).

— Horion, 1963: 5 (*Micropeplus*; subgenus *Micropeplus*; Caucasus; British Columbia [**Note:** Probably an erroneous locality]; Italy; Yugoslavia; Albania; Slovakia; France; Switzerland; Austria; Germany).

— Lohse, 1964: 16 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).

— Smetana, 1966: 323 (*Micropeplus*; characters).

— Osella and Zanetti, 1975: 83 (*Micropeplus*; collected from nest of *Talpa europaea*; notes; Italy).

— Perkovskii, 1980: 530, 532 (*Micropeplus*; characters; Turkmenia).

— Tóth, 1982: 12 (*Micropeplus*; characters; Hungary).

— Drugmand and Haghebaert, 1987: 324 (*Micropeplus*; Belgium).

— Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Czechoslovakia; Austria; France; Benelux).

— Haghebaert, 1989: 259, 162 (*Micropeplus*; characters; phenology; notes; summary of distribution; Belgium).

— Boháč, 1993: 39 (*Micropeplus*; Czech Republic; Slovakia).

— Burakowski, Mroczkowski, and Stefańska, 2000: 38 (*Micropeplus*; catalog; Poland).

▲ **DISTRIBUTION:** Belgium, Germany, France, Switzerland, Austria, Italy, Romania, Hungary, Slovakia, Bosnia Hercegovina, Albania, Caucasus, Turkmenistan.

*mathani* Fauvel, 1861, see: *porcatus* Paykull, 1789.

**minor** Campbell, 1974b: 465 (*Micropeplus*; Type locality: Oregon: Lincoln Co.: 4.5 mi. E. Waldport).

— Campbell, 1989: 309 (*Micropeplus*; characters).

▲ **DISTRIBUTION:** USA.

**nelsoni** Campbell, 1989: 305 (*Micropeplus*; Type locality: Washington: Snohomish County: 1 km west of Stevens Pass).

▲ **DISTRIBUTION:** USA.

**neotomae** Campbell, 1968: 242 (*Micropeplus*; Type locality: Oregon: Benton Co., 2 mi W. Philomath. Also cited from California).

— Campbell, 1978c: 1249 (*Micropeplus*; notes; Oregon).

— Campbell, 1989: 309 (*Micropeplus*; characters).

— Newton, 1991: 335 (*Micropeplus*; larval illustrations).

▲ **DISTRIBUTION:** USA.

**newtoni** Campbell, 1978c: 1250 (*Micropeplus*; Type locality: Mexico: Chiapas: 8 mi N. Pueblo Nuevo, Solistachuacan, 6000 ft.).

▲ **DISTRIBUTION:** Mexico.

**nitidipennis** Campbell, 1995: 128 (*Micropeplus*; Type locality: Taiwan: Nantou Hsien, Yushan N.P., 2 km W Pai-Yun Hut, 3350 m).

▲ **DISTRIBUTION:** Taiwan.

- nomurai** Watanabe, 2000: 50 (*Micropeplus*; Type locality: SW China: Sichuan Prov.: Mao Xian, Chaping Shan Mts., Mt Jiuding Shan).  
 ▲ **DISTRIBUTION:** China.
- obliquus* LeConte, 1877, see: *sculptus* LeConte, 1863.
- obscurus** Campbell, 1992: 222 (*Micropeplus*; Type locality: Taiwan: Hualien Hsien, Taroko N. P., Nanhushi Hut, 2200 m).  
 — Campbell, 1995: 126, 130 (*Micropeplus*; cited erroneously in key as new species; notes; Taiwan).  
 ▲ **DISTRIBUTION:** Taiwan.
- obsoletus** Rey, 1884: 169 [= 1884a: 17] (*Micropeplus*; Type locality: Barousse, Haute-Pyrénées, 1500 mètres; [**Note:** See lectotype designation by Lecoq, 1991]).  
 — Falzoni, 1905: 11 (*Micropeplus*; characters; Italy).  
 — Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).  
 — Portevin, 1929: 460 (*Micropeplus*; characters; Corsica).  
 — Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).  
 — Español, 1945: 89 (*Micropeplus*; Spain).  
 — Lecoq, 1991 (*Micropeplus*; lectotype designation; characters; notes; France).  
 ▲ **DISTRIBUTION:** Spain, France, Corsica, Italy.
- devillei* Bernhauer, 1900a: 203 (*Micropeplus*; Type locality: Vizzavona auf Corsica).  
 — Falzoni, 1905: 11 (*Micropeplus*; synonym of *obsoletus*).  
 — Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *obsoletus*).
- obtusus* Newman, 1834, see: *staphylinoides* Marsham, 1802.
- okiensis** Watanabe, 1990a: 37 (*Micropeplus*; Type locality: Japan: Shimane Pref.: Oki Is., Chibu).  
 ▲ **DISTRIBUTION:** Japan.
- oregonensis* Hatch, 1957, see: *punctatus* LeConte, 1863.
- pauliani** Jarrige, 1950: 28 (*Micropeplus*; Type locality: Hoa-Binh, Tonkin).  
 ▲ **DISTRIBUTION:** Vietnam.
- porcatus** Paykull, 1789: 71 (*Staphylinus*; Type locality: Suecia).  
 — Fabricius, 1793: 530 (*Staphylinus*; [**Note:** Fabricius cited this name as though it were a newly proposed one but in 1801 he attributed it to Paykull. Bernhauer and Schubert, 1910: 28 cited Fabricius, 1792 [= 1793] as the author of the name]; characters).  
 — Rossi, 1794: 104 (*Staphylinus*; characters).  
 — Olivier, 1795:(42): 35 (*Staphylinus*; characters).  
 — Panzer, 1795: 358 (*Staphylinus*; characters; Austria).  
 — Paykull, 1800: 413 (*Staphylinus*; characters; Sweden).  
 — Fabricius, 1801: 602 (*Staphylinus*; characters).  
 — Turton, 1802: 515 (*Staphylinus*; characters; Sweden).  
 — Latreille, 1809: 377 (*Micropeplus*).  
 — Gyllenhal, 1810: 211 (*Omalium*; characters).  
 — Leach, 1815: 90 (*Micropeplus*; characters).  
 — Samouelle, 1819: 171 (*Micropeplus*; characters; habitat).  
 — Latreille, 1825a: 46 (*Micropeplus*; characters; France).  
 — Gyllenhal, 1827: 464 (*Omalium*).  
 — Latreille, 1829: 440 (*Micropeplus*).  
 — Mannerheim, 1830: 58 (*Micropeplus*; Sweden; France).  
 — Mannerheim, 1831: 472 (*Micropeplus*; Sweden; France).  
 — Erichson, 1839a: 646 (*Micropeplus*; characters; Germany).  
 — Heer, 1839: 169 (*Micropeplus*; characters; Switzerland).  
 — Erichson, 1840: 911 (*Micropeplus*; characters; Europe).  
 — Laporte, 1840: 193 (*Micropeplus*; characters; France).  
 — Redtenbacher, 1849: 758 (*Micropeplus*; characters; Austria).  
 — Hardy, 1851: 64 (*Micropeplus*; notes; England).

- Fairmaire and Laboulbène, 1856: 658 (*Micropeplus*; characters; France).
- Redtenbacher, 1857: 259 (*Micropeplus*; characters; Austria).
- Kraatz, 1857d: 1052 (*Micropeplus*; characters; Germany).
- Kraatz, 1858b: 129 (*Micropeplus*; Greece).
- Fauvel, 1861: 253, 254 (*Micropeplus*; characters; key; notes; France).
- Fauvel, 1871a: 35 [= 1872: 9] (*Micropeplus*; characters; France; Algeria; Europe).
- Redtenbacher, 1874: 286 (*Micropeplus*; characters; Austria).
- Fauvel, 1878: 85 [= 1878a: 5] (*Micropeplus*; Algeria).
- Rey, 1884: 156 [= 1884a: 4] (*Micropeplus*; characters; France).
- Reitter, 1885: 366 (*Micropeplus*; characters).
- Fauvel, 1886: 11 [= 1886a: 3] (*Micropeplus*; Algeria).
- Ganglbauer, 1895: 768 (*Micropeplus*; characters; Europe; Mediterranean region).
- Fauvel, 1902b: 47 (*Micropeplus*; Morocco; Algeria; Tunisia).
- Falzoni, 1905: 4 (*Micropeplus*; characters; Italy).
- Sainte-Claire Deville, 1907: 8, 9 (*Micropeplus*; characters; France).
- Reitter, 1909: 200 (*Micropeplus*; characters; Germany).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Johansen, 1914: 636 (*Micropeplus*; characters; Denmark).
- Sainte-Claire Deville, 1926: 117 (*Micropeplus*; Corsica).
- Portevin, 1929: 460 (*Micropeplus*; characters; France).
- Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).
- C. Koch, 1937b: 259 (*Micropeplus*; characters; illustration of aedeagus).
- Palm, 1948: 32 (*Micropeplus*; characters; Sweden; Norway; Finland; Denmark).
- Horion, 1963: 8 (*Micropeplus*; subgenus *Micropeplus*; Bosnia Hercegovina; Finland; Sweden; Norway; Britain; Denmark; Germany; Austria).
- Lohse, 1964: 17 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).
- Szujewski, 1968a: 710 (*Micropeplus*; Poland).
- Pope, 1977: 22 (*Micropeplus*; Britain).
- Hammond, 1980: 135 (*Micropeplus*; Ireland).
- Perkovskii, 1980: 529, 530 (*Micropeplus*; characters; Turkmenia).
- Tóth, 1982: 9 (*Micropeplus*; characters; Hungary).
- Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Haghebaert, 1989: 259, 261 (*Micropeplus*; characters; phenology; notes; summary of distribution; Belgium).
- Welch, 1993: 227 (*Micropeplus*; ovariole number and ovary structure).
- Boháč, 1993: 39 (*Micropeplus*; Czech Republic; Slovakia).
- Ryabukhin, 1999: 10 (*Micropeplus*; catalog; habitat; distribution; northeastern Russia).
- Assing, 2001: 75 (*Micropeplus*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Ireland, Britain, Europe, Sicily, Corfu, Sardinia, Tunisia, Algeria, Morocco, Turkmenistan.

*sulcatus* Herbst, 1793: 247 (*Nitidula*; Type locality: Deutschland).

- Panzer, 1795: 129 (*Nitidula*; characters; Germany).
- Gyllenhal, 1827: 464 (*Omalium*; synonym of *porcatum* Paykull).
- Erichson, 1839a: 647 (*Megarthus*; synonym of *porcatus*).
- Heer, 1839: 169 (*Micropeplus*; synonym of *sulcatus* Herbst).
- Erichson, 1840: 911 (*Micropeplus*; synonym of *porcatus*).
- Fairmaire and Laboulbène, 1856: 658 (*Micropeplus*; synonym of *porcatus*).
- Kraatz, 1857d: 1052 (*Micropeplus*; synonym of *porcatus*).
- Fauvel, 1861: 254 (*Micropeplus*; synonym of *porcatus*).
- Fauvel, 1871a: 35 [= 1872: 9] (*Micropeplus*; synonym of *porcatus*).
- Rey, 1884: 157 [= 1884a: 5] (*Micropeplus*; synonym of *porcatus*).
- Ganglbauer, 1895: 768 (*Micropeplus*; synonym of *porcatus*).
- Falzoni, 1905: 4 (*Micropeplus*; synonym of *porcatus*).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *porcatus*).
- Haghebaert, 1989: 261 (*Micropeplus*; synonym of *porcatus*).

*mathani* Fauvel, 1861: 256 (*Micropeplus*; Type locality: La Folie, près Caen).

— Fauvel, 1871a: 35 [= 1872: 9] (*Micropeplus*; synonym of *porcatus*).

— Ganglbauer, 1895: 768 (*Micropeplus*; synonym of *porcatus*).

— Falzoni, 1905: 4 (*Micropeplus*; synonym of *porcatus*).

— Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *porcatus*).

— Haghebaert, 1989: 261 (*Micropeplus*; synonym of *porcatus*).

*insularis* Doderò, 1916: 341 (*Micropeplus*; variety of *porcatus*; Type locality: Sardegna: Golfo Aranci, Ozieri, Banari, Macomer, Monte Ferru, Gonnese, Cagliari, Terulada; Sicilia: Messina e Fiumedinisi).

— Scheerpeltz, 1933: 1022 (*Micropeplus*; variety of *porcatus*).

**punctatus** LeConte, 1863: 26 (*Micropeplus*; replacement name for *costatus* Mäklin).

— Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).

— Campbell, 1968: 249 (*Micropeplus*; characters; notes; British Columbia; Alaska; Arizona; California; Oregon; Washington).

— Campbell, 1973b: 574 (*Micropeplus*; British Columbia).

— Campbell, 1978c: 1252 (*Micropeplus*; British Columbia; California).

▲ **DISTRIBUTION:** Canada, USA.

*costatus* Mäklin, 1852: 325 (*Micropeplus*; [**preoccupied**]; Type locality: insula Sitkha; [**Note:** See lectotype designation by Campbell, 1968]).

— Fauvel, 1878d: 168 [= 1878e: 4] (*Micropeplus*; synonym of *punctatus*).

— Bernhauer and Schubert, 1910: 28 (*Micropeplus*; synonym of *punctatus*).

— Campbell, 1968: 249 (*Micropeplus*; lectotype designation; synonym of *punctatus*).

*oregonensis* Hatch, 1957: 270 (*Micropeplus*; Type locality: Oregon: Lincoln Co.: Boyer. Also cited from British Columbia and Washington).

— Campbell, 1968: 249 (*Micropeplus*; synonym of *punctatus*).

**punicus** Normand, 1928: 115 (*Micropeplus*; Type locality: TebourSouk et au Kef, Tunisia).

— Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).

▲ **DISTRIBUTION:** Tunisia.

**ripicola** Kerstens, 1964: 10 (*Micropeplus*; Type locality: Ostrittrum in Oldenburg).

— Horion, 1963: 10 (*Micropeplus*; subgenus *Micropeplus*; [**Note:** Horion cited Kerstens as the author but Horion's citation predates that of Kerstens and Horion also presents characters]; characters; Germany; Holland).

— Lohse, 1964: 17 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).

— Drugmand and Haghebaert, 1987: 324 (*Micropeplus*; Belgium).

— Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Benelux).

— Haghebaert, 1989: 259, 262 (*Micropeplus*; characters; summary of distribution; Belgium).

▲ **DISTRIBUTION:** Germany, Netherlands, Belgium.

**robustus** Campbell, 1968: 245 (*Micropeplus*; Type locality: California: Los Angeles. Also cited from Oregon).

— Campbell, 1973b: 574 (*Micropeplus*; British Columbia).

— Campbell, 1978c: 1250 (*Micropeplus*; notes; Oregon).

— Campbell, 1989: 309 (*Micropeplus*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**rougemonti** Watanabe, 1995a: 245 (*Micropeplus*; Type locality: Ruili [Juili], Yunnan Prov., Southwest China).

▲ **DISTRIBUTION:** China.

**satoi** Watanabe, 1975: 319 (*Micropeplus*; Type locality: Japan: Hokkaido: Ikushunbetsu).

▲ **DISTRIBUTION:** Japan.

**sculptus** LeConte, 1863a: 60 (*Micropeplus*; Type locality: Georgia).

— LeConte, 1877: 251 (*Micropeplus*; characters; Georgia).

— Fauvel, 1878d: 170 [= 1878e: 6] (*Micropeplus*; characters; Georgia).

— Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).

- Campbell, 1968: 234 (*Micropeplus*; characters; notes; British Columbia; Ontario; Colorado; Georgia; Illinois; Indiana; Louisiana; Michigan; New Jersey; South Carolina; Texas; Wisconsin).
- Campbell, 1978c: 1248 (*Micropeplus*; notes; Ontario; Quebec).
- Nelson, 1992: 377 (*Micropeplus*; living and subfossil specimens; notes; Maine).
- Downie and Arnett, 1996: 426 (*Micropeplus*; characters; USA).
- ▲ **DISTRIBUTION:** Canada, USA.
- obliquus* LeConte, 1877: 252 (*Micropeplus*; Type locality: British Columbia).
- Fauvel, 1878d: 170 [= 1878e: 6] (*Micropeplus*; characters; British Columbia).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Hatch, 1957: 271 (*Micropeplus*; characters; British Columbia).
- Campbell, 1968: 234 (*Micropeplus*; synonym of *sculptus*).
- sharpi** Sawada, 1964: 35 (*Micropeplus*; Type locality: Japan: Honshu: Pref. Nara: Mt. Kasuga).
- Watanabe, 1975: 305 (*Micropeplus*; characters; Japan).
- ▲ **DISTRIBUTION:** Japan.
- sikkimi** Fauvel, 1902: 8 (*Micropeplus*; Type locality: Sikkim: Darjeeling).
- Bernhauer and Schubert, 1910: 28 (*Micropeplus*; catalog).
- Cameron, 1930: 22 (*Micropeplus*; characters; Sikkim).
- Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).
- Abdullah and Qadri, 1968a: 303 (*Micropeplus*; characters; Pakistan).
- ▲ **DISTRIBUTION:** India, Pakistan.
- sinensis** Watanabe and Luo, 1991: 94 (*Micropeplus*; Type locality: China: Zhejiang Province: Tai-shun County: Tian-mu Mountains).
- ▲ **DISTRIBUTION:** China.
- sinuatus** Campbell, 1992: 218 (*Micropeplus*; Type locality: Taiwan: Taichung Hsien, Anmashan, 2230 m).
- Campbell, 1995: 123, 130 (*Micropeplus*; characters; notes; Taiwan).
- ▲ **DISTRIBUTION:** Taiwan.
- smetanai** Campbell, 1973b: 573 (*Micropeplus*; Type locality: British Columbia: 4 mi. W. Midway).
- Campbell, 1989: 310 (*Micropeplus*; characters).
- ▲ **DISTRIBUTION:** Canada.
- spinatus** Campbell, 1992: 216 (*Micropeplus*; Type locality: Taiwan: Hualien Hsien, Taroko N. P., Nanhushi Hut, 2200 m).
- Campbell, 1995: 123 (*Micropeplus*; notes; Taiwan).
- ▲ **DISTRIBUTION:** Taiwan.
- staphylinoides** Marsham, 1802: 137 (*Nitidula*; Type locality: Britain).
- Gyllenhal, 1810: 213 (*Omalium*; characters; Sweden).
- Gyllenhal, 1827: 464 (*Omalium*).
- Latreille, 1829: 440 (*Micropeplus*).
- C. Sahlberg, 1830: 281 (*Omalium*; characters; Finland).
- Mannerheim, 1830: 58 (*Micropeplus*; Finland).
- Mannerheim, 1831: 472 (*Micropeplus*; Finland).
- Heer, 1839: 169 (*Micropeplus*; characters; Switzerland).
- Erichson, 1840: 913 (*Micropeplus*; characters; England; France; Italy).
- Laporte, 1840: 193 (*Micropeplus*; characters; England; Sicily).
- Heer, 1841: 566 (*Micropeplus*; characters).
- Hardy, 1851: 64 (*Micropeplus*; notes; England).
- Fairmaire and Laboulbène, 1856: 658 (*Micropeplus*; characters; France).
- Redtenbacher, 1857: 260 (*Micropeplus*; characters; Germany).
- Kraatz, 1859b: 68 (*Micropeplus*; characters; England, France, Germany).
- Fauvel, 1861: 253, 259 (*Micropeplus*; characters; key; France).



- Jacquelin du Val, 1868: 82 (*Micropeplus*; [**Note**: Misidentification: Bernhauer and Schubert, 1910: 29 cited *fulvus* Jacquelin du Val as a synonym of *staphylinoides*; Jacquelin du Val did not describe the species as new, he cited the misidentified use of the name by various authors as a synonym of *staphylinoides*]).
- Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; characters; France; Britain; Germany; Austria; Italy; Corsica; Algeria).
- Redtenbacher, 1874: 286 (*Micropeplus*; characters).
- Fauvel, 1878: 85 [= 1878a: 5] (*Micropeplus*; Algeria).
- Rey, 1884: 167 [= 1884a: 15] (*Micropeplus*; characters; France).
- Reitter, 1885: 366 (*Micropeplus*; characters).
- Fauvel, 1886: 11 [= 1886a: 3] (*Micropeplus*; Algeria).
- Ganglbauer, 1895: 769 (*Micropeplus*; characters; middle Europe; western Mediterranean region).
- Fauvel, 1902b: 47 (*Micropeplus*; Algeria; Tunisia).
- Falzoni, 1905: 5 (*Micropeplus*; characters; Italy).
- Sainte-Claire Deville, 1907: 8, 9 (*Micropeplus*; characters; France).
- Reitter, 1909: 200 (*Micropeplus*; characters; Germany).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; catalog).
- Portevin, 1929: 460 (*Micropeplus*; characters; France).
- Scheerpeltz, 1933: 1022 (*Micropeplus*; catalog).
- C. Koch, 1937b: 262, 263 (*Micropeplus*; characters; illustration of aedeagus).
- Español, 1945: 89 (*Micropeplus*; Spain).
- Horion, 1963: 3 (*Micropeplus*; subgenus *Micropeplus*; Britain; Holland; France; Spain; Corsica; Sardinia; Sicily; Italy; Greece; Corfu; Balkan region; Czechoslovakia; Austria; Germany).
- Lohse, 1964: 16 (*Micropeplus*; subgenus *Micropeplus*; characters; central Europe).
- Smetana, 1966: 323 (*Micropeplus*; characters).
- Coiffait, 1968b: 94 (*Micropeplus*; notes; Greece).
- Pope, 1977: 22 (*Micropeplus*; Britain).
- Araujo, 1978: 236 (*Micropeplus*; no defensive glands).
- Hammond, 1980: 135 (*Micropeplus*; Ireland).
- Outerelo, 1980a: 53 (*Micropeplus*; Spain).
- Tóth, 1982: 11 (*Micropeplus*; characters).
- Lucht, 1987: 84 (*Micropeplus*; checklist; Germany; Austria; Switzerland; France; Benelux).
- Haghebaert, 1989: 259, 262 (*Micropeplus*; characters; phenology; notes; summary of distribution; Belgium).
- Boháč, 1993: 39 (*Micropeplus*; Slovakia ?).
- Sparacio, 1995: 134 (*Micropeplus*; characters; notes; Sicily).
- Owen, 2000: 250 (*Micropeplus*; pitfall trap collections from underground at roots of trees; Britain).
- Burakowski, Mroczkowski, and Stefańska, 2000: 38 (*Micropeplus*; catalog; Poland).
- ▲ **DISTRIBUTION:** Europe, Corsica, Sardinia, Sicily, Corfu, Algeria, Tunisia.
- maillei* Guérin-Ménéville, 1829: pl. 10, fig. 4 (*Micropeplus*; Type locality: Not cited).
- Erichson, 1840: 913 (*Micropeplus*; synonym of *staphylinoides*).
- Guérin-Ménéville, 1844a: 33 (*Micropeplus*; synonym of *tesserula*).
- Fairmaire and Laboulbène, 1856: 659 (*Micropeplus*; synonym of *staphylinoides*).
- Kraatz, 1857d: 1055 (*Micropeplus*; synonym of *tesserula*).
- Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *staphylinoides*).
- Rey, 1884: 169 [= 1884a: 16] (*Micropeplus*; synonym of *staphylinoides*).
- Ganglbauer, 1895: 769 (*Micropeplus*; synonym of *staphylinoides*).
- Falzoni, 1905: 5 (*Micropeplus*; synonym of *staphylinoides*).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; synonym of *staphylinoides*).
- maillei* Laporte, 1840: 193 (*Micropeplus*; [**preoccupied**]; Type locality: Rouen).
- Herman, 2001: 19 (*Micropeplus*; synonym of *staphylinoides*).
- obtusus* Newman, 1834: 201 (*Micropeplus*; Type locality: Halifax).
- Erichson, 1840: 913 (*Micropeplus*; characters; Halifax).

- Kraatz, 1857d: 1053 (*Micropeplus*; notes).
- G. Waterhouse, 1858: 32 (*Micropeplus*; synonym of *staphylinoides*).
- Fauvel, 1861: 259 (*Micropeplus*; synonym of *staphylinoides*).
- Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; synonym of *staphylinoides*).
- Ganglbauer, 1895: 769 (*Micropeplus*; synonym of *staphylinoides*).
- Falzoni, 1905: 5 (*Micropeplus*; synonym of *staphylinoides*).
- Bernhauer and Schubert, 1910: 29 (*Micropeplus*; synonym of *staphylinoides*).
- Haghebaert, 1989: 262 (*Micropeplus*; synonym of *staphylinoides*).
- duvalii* Fauvel, 1861: 261 (*Micropeplus*; Type locality: au bord de l'Odon, à Gavrus, près Caen).
  - Fauvel, 1871a: 36 [= 1872: 10] (*Micropeplus*; cited as *duvali*; synonym of *staphylinoides*).
  - Rey, 1884: 168 [= 1884a: 16] (*Micropeplus*; synonym of *staphylinoides*).
  - Ganglbauer, 1895: 769 (*Micropeplus*; cited as *duvali*; synonym of *staphylinoides*).
  - Falzoni, 1905: 5 (*Micropeplus*; cited as *duvali*; synonym of *staphylinoides*).
  - Bernhauer and Schubert, 1910: 29 (*Micropeplus*; cited as *duvali*; synonym of *staphylinoides*).
  - Haghebaert, 1989: 262 (*Micropeplus*; cited as *duvali*; synonym of *staphylinoides*).
- laticollis* Rey, 1884: 168 (*Micropeplus*; variety of *staphylinoides*; [**preoccupied**]; Type locality: Naples).
  - Falzoni, 1905: 7 (*Micropeplus*; variety of *staphylinoides*; characters; Italy).
- laticollis* Fiori, 1894: 98 (*Micropeplus*; variety of *staphylinoides*; [**preoccupied**]; Type locality: Serra S. Bruno, Calabria).
  - Bernhauer and Schubert, 1910: 29 (*Micropeplus*; variety of *staphylinoides*).
  - Fiori, 1915: 5 (*Micropeplus*; variety of *staphylinoides*; notes; Italy).
  - Scheerpeltz, 1933: 1023 (*Micropeplus*; variety of *staphylinoides*).
- intermedius* Falzoni, 1905: 7 (*Micropeplus*; aberration of *staphylinoides*; [**Note: Nomen nudum**] (Articles 1.3.4, 45.5)); locality not cited).
  - Bernhauer and Schubert, 1910: 29 (*Micropeplus*; aberration of *staphylinoides*).
  - Scheerpeltz, 1933: 1023 (*Micropeplus*; aberration of *staphylinoides*).
- sulcatus* Herbst, 1793, see: *porcatus* Paykull, 1789.
- taiwanensis* Campbell, 1992: 214 (*Micropeplus*; Type locality: Taiwan: Taoyuan Hsien, Takuanshan For., 1650 m).
  - Campbell, 1995: 130 (*Micropeplus*; characters).
  - ▲ **DISTRIBUTION:** Taiwan.
- tesserula* Curtis, 1828, see: *Arrhenopeplus*.
- thracicus* Coiffait, 1958, see: *Arrhenopeplus*.
- tichomirovae* Perkovskii, 1980: 531 (*Micropeplus*; Type locality: Kirgizia, Khrebet Terskei-Atalay, severnyi sklon. 80 km k iugo-zapadu ot Przheval'ska, ushel'e Barskaun, zona lesa, 1900 m).
  - ▲ **DISTRIBUTION:** Kyrgyzstan.
- tonkinensis* Jarrige, 1950: 29 (*Micropeplus*; Type locality: Hoa Binh, Tonkin).
  - ▲ **DISTRIBUTION:** Vietnam.
- turcicus* Coiffait, 1958, see: *Arrhenopeplus*.
- uenoi* Watanabe, 2000: 46 (*Micropeplus*; Type locality: SW China: Sichuan Prov.: Luding Xian, Jiabin Shan Mts., Mt. Erlang).
  - ▲ **DISTRIBUTION:** China.
- uyttenboogaarti* Bernhauer, 1928, see: *Peplomicrus*.
- volcanus* Campbell, 1973b: 571 (*Micropeplus*; Type locality: Mex.: km 10, 10,000 ft., V. Popocatepetl).
  - Campbell, 1978c: 1250 (*Micropeplus*; Mexico).
  - Campbell, 1989: 309 (*Micropeplus*; characters).
  - ▲ **DISTRIBUTION:** Mexico.

- vulcanus** Fauvel, 1902: 9 (*Micropeplus*; Type locality: Sikkim: Darjeeling).  
 — Bernhauer and Schubert, 1910: 29 (*Micropeplus*; catalog).  
 — Cameron, 1930: 23 (*Micropeplus*; characters; Sikkim).  
 — Scheerpeltz, 1933: 1023 (*Micropeplus*; catalog).  
 — Abdullah and Qadri, 1968a: 303 (*Micropeplus*; characters; East Pakistan).  
 ▲ **DISTRIBUTION:** India, Bangladesh.
- yasutoshii** Watanabe, 1975: 309 (*Micropeplus*; Type locality: Japan: Honshu: Tokyo Pref.: Mt. Mitake, Oku-Tama).  
 ▲ **DISTRIBUTION:** Japan.
- yunnanus** Watanabe and Xiao, 1996: 1 (*Micropeplus*; Type locality: Southwest China: Yunnan Prov., Mt. Jizu Shan, Binchuan County).  
 ▲ **DISTRIBUTION:** China.
- yushanensis** Campbell, 1995: 118 (*Micropeplus*; Type locality: Taiwan: Nantou Hsien, Yushan N.P., SW slope blw. Yushan Mn. Pk., 3650 m).  
 ▲ **DISTRIBUTION:** Taiwan.

### Peplomicrus

[9 species; Neotropical and Palaearctic Regions]

- Peplomicrus* Bernhauer, 1928i: 286 (subgenus of *Micropeplus*; species included: *uyttenboogaarti*). **TYPE SPECIES:** *Micropeplus (Peplomicrus) uyttenboogaarti* Bernhauer, fixed by monotypy.  
 — Blackwelder, 1952: 298 (type species: *uyttenboogaarti*).  
 — Campbell, 1968: 252 (valid genus; characters; revision of and key to New World species; notes).  
 — Campbell, 1978c: 1257 (key to species of Latin America).  
 — Campbell, 1986: 62 (characters; review of and key to New World species).  
 — Ryabukhin, 1990: 856 [= 1992c: 147] (characters in key).  
 — Campbell, 1991b: 40 (key to species of New World).
- acumen** Sharp, 1887: 747 (*Micropeplus*; Type locality: Guatemala, Cahabon, El Tumbador; [Note: See lectotype designation by Campbell, 1968]).  
 — Bernhauer and Schubert, 1910: 27 (*Micropeplus*; catalog).  
 — Campbell, 1968: 255 (*Micropeplus*; characters; lectotype designation; Costa Rica; Guatemala).  
 — Campbell, 1973b: 576 (*Peplomicrus*; collecting notes; El Salvador; Mexico).  
 — Campbell, 1978c: 1257 (*Peplomicrus*; Mexico).  
 — Campbell, 1986: 72 (*Peplomicrus*; characters).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Costa Rica, Guatemala, El Salvador, Mexico.
- dybasi** Campbell, 1968: 254 (*Peplomicrus*; Type locality: Panama: Province Chiriqui, W. of Finca Palo Santo, near Nueva California, 4900 ft. Also cited from Costa Rica).  
 — Campbell, 1986: 74 (*Peplomicrus*; characters).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Costa Rica, Panama.
- iviei** Campbell, 1991b: 37 (*Peplomicrus*; Type locality: Dom. Rep.: Prov. Pedernales, ca. 35 km N. Cabo Rojo, 1250 m, Las Abejas).  
 ▲ **DISTRIBUTION:** Dominican Republic.
- mexicanus** Campbell, 1978c: 1253 (*Peplomicrus*; Type locality: Mexico: Chiapas: 8 mi. N. Pueblo Nuevo, Solistahuacan, 6000 ft.).  
 — Campbell, 1986: 69 (*Peplomicrus*; characters; Mexico).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Mexico.

- pecki** Campbell, 1978c: 1255 (*Peplomicrus*; Type locality: Colom.: N. de S., 30–35 km S. Chinacota, 9000 ft.).  
 — Campbell, 1986: 72 (*Peplomicrus*; characters).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Colombia.
- unicornis** Yang, 1995: 218, 219 (*Micropeplus*; Type locality: Mt. Baishanzu, 550 m, Zhejiang Prov., 27.7°N, 119.1°E).  
 ▲ **DISTRIBUTION:** China.
- uyttenboogaarti** Bernhauer, 1928i: 286 (*Micropeplus*; subgenus *Peplomicrus*; Type locality: Surinam).  
 — Scheerpeltz, 1933: 1023 (*Micropeplus*; subgenus *Peplomicrus*; catalog).  
 — Campbell, 1968: 253 (*Peplomicrus*; characters; notes; Surinam; Panama).  
 — Campbell, 1973b: 576 (*Peplomicrus*; Venezuela).  
 — Campbell, 1978c: 1253 (*Peplomicrus*; Ecuador).  
 — Campbell, 1986: 70 (*Peplomicrus*; characters; Peru).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Peru, Ecuador, Venezuela, Surinam, Panama.
- watrousi** Campbell, 1986: 73 (*Peplomicrus*; Type locality: Peru).  
 — Campbell, 1991b: 40 (*Peplomicrus*; characters).  
 ▲ **DISTRIBUTION:** Peru.
- yinae** Watanabe and Luo, 1991: 97 (*Peplomicrus*; Type locality: China: Zhejiang Province: Tai-shun County: to of West Tian-mu Mountains, alt. 1506 m).  
 ▲ **DISTRIBUTION:** China.

### **Pseudokalissus**

[1 species; Palaearctic Region]

- Pseudokalissus* Ryabukhin, 1990: 853 [= 1992c: 144] (species included: *glabratus*). **TYPE SPECIES:** *Micropeplus glabratus* Tikhomirova, fixed by original designation and monotypy.
- glabratus** Tikhomirova, 1973: 154 (*Micropeplus*; subgenus *Arrhenopeplus*; Type locality: Suputinskii zapovednik).  
 — Ryabukhin, 1990: 853 [= 1992c: 144] (*Pseudokalissus*; characters; Asian Russia).  
 ▲ **DISTRIBUTION:** Russia.





## MICROSILPHINAE



[1 genus; 4 species; Neotropical and Australian Regions]

Microsilphinae Crowson, 1950: 279, 284 (subfamily of Silphidae; genera included: *Microsilpha*, *Micragyrtes*). **TYPE GENUS:** *Microsilpha* (see Newton and Thayer, 1992: 58).

- Thayer, 1987: 400 (phylogenetic relationships).
- Newton and Thayer, 1995: 247–286, 291 (characters; phylogenetic relationships; discussion).
- Lawrence and Newton, 1995: 824 (discussion).
- Klimaszewski, Newton, and Thayer, 1996: 146 (review of subfamily for New Zealand; notes; list of genera; number of New Zealand species).
- M. Hansen, 1996: 35 (listed in Omaliinae group of subfamilies).
- M. Hansen, 1997: 83, 84, 85, 112, 176, 178 (characters supporting clade; autapomorphic features; key characters; notes).

Microsilphini Crowson, 1950.

- Newton, 1985: 197 (notes on austral distribution and taxonomic position).
- Newton and Thayer, 1992: 58 (tribe of Omaliinae).

Micragyrtini Jeannel, 1962: 484 (cited as tribe of Silphidae; genera included: *Micragyrtes*).

**TYPE GENUS:** *Micragyrtes* (see Newton and Thayer, 1992: 58).

- Newton and Thayer, 1992: 58 (synonym of Microsilphini).

Micragyrtini Blackwelder, 1944: 84 (cited as tribe of Leiodidae; genera included:

*Micragyrtes*, *Neopelatops*, *Ragytoodes*; [**Note:** Nomen nudum; without description (Article 13.1); *Micragyrtes* is also cited in by Blackwelder (1944: 99) in the Agyrtini of the Silphidae]).

- Newton and Thayer, 1992: 58.

### Microsilpha

[4 species; Neotropical and Australian Regions]

*Microsilpha* Broun, 1886: 889 (described in the Silphidae; species included: *litorea*). **TYPE SPECIES:** *Microsilpha litorea* Broun, fixed by monotypy.

- Hatch, 1928: 212 (catalog; type species; Silphidae subfamily Camiarinae).
- Jeannel, 1936: 15 (Colonidae [= Leiodidae]).
- Crowson, 1950: 279, 284, 285 (cited in Microsilphinae).
- Crowson, 1955: 36 (note).
- Szymczakowski, 1964: 519 (should be removed from Colonidae).
- Newton, 1985: 197 (placed in Omaliinae tribe Microsilphini).
- Newton and Thayer, 1995: 291 (list of synonyms and included species).

*Micragyrtes* Champion, 1918: 46 (described in the Silphidae; species included: *ocelligerus*).

**TYPE SPECIES:** *Micragyrtes ocelligerus* Champion, fixed by original designation and monotypy.

- Hatch, 1928: 72 (catalog; type species; Silphidae tribe Agyrtini; probably should be in the Omaliinae).
- Jeannel, 1936: 11 (Leiodidae, cited as Liodidae; notes).
- Blackwelder, 1944: 84, 99 (cited in the Leiodidae tribe Micragyrtini and the Silphidae tribe Agyrtini).
- Crowson, 1950: 284 (cited in Microsilphinae; may be congeneric with *Microsilpha*).
- Crowson, 1955: 36 (note; may be congeneric with *Microsilpha*).
- Jeannel, 1962: 484 (characters).
- Newton, 1985: 197 (placed in Omaliinae tribe Microsilphini).
- Newton and Thayer, 1995: 291 (synonym of *Microsilpha*).

*Acruliodema* Scheerpeltz, 1972: 45 (species included: *argentinum*, *topali*). **TYPE SPECIES:** *Acruliodema argentinum* Scheerpeltz, fixed by original designation.

- Newton, 1985: 197 (placed in Omaliinae tribe Microsilphini).
- Newton and Thayer, 1995: 291 (synonym of *Microsilpha*).

- argentina** Scheerpeltz, 1972: 47 (*Acruliodema*; Type locality: Argentinien: Rio Negro, El Bolson, 350 m).  
— Newton and Thayer, 1995: 291 (*Microsilpha*).  
▲ **DISTRIBUTION:** Argentina.
- litorea** Broun, 1886: 890 (*Microsilpha*; Type locality: Port Chalmers).  
— Hatch, 1928: 212 (*Microsilpha*; catalog).  
— Jeannel, 1936: 15 (*Microsilpha*; note; New Zealand).  
— Klimaszewski and Watt, 1997: 169 (*Microsilpha*; characters; collecting notes; New Zealand).  
▲ **DISTRIBUTION:** New Zealand.
- ocelligera** Champion, 1918: 46 (*Micragyrtes*; Type locality: Chile: Chiloe Island).  
— Hatch, 1928: 72 (*Micragyrtes*; catalog).  
— Jeannel, 1936: 11 (*Micragyrtes*; note; Chile).  
— Jeannel, 1962: 485 (*Micragyrtes*; characters; Chile).  
— Szymczakowski, 1976: 424 (*Micragyrtes*; Argentina).  
— Newton and Thayer, 1995: 291 (*Microsilpha*).  
▲ **DISTRIBUTION:** Argentina, Chile.
- topali** Scheerpeltz, 1972: 49 (*Acruliodema*; Type locality: Argentinien: Rio Negro, El Bolson, Mt. Piltriquitron, 400–600 m).  
— Newton and Thayer, 1995: 291 (*Microsilpha*).  
▲ **DISTRIBUTION:** Argentina.



## NEOPHONINAE



[1 genus; 1 species; Neotropical Region]

Neophoninae Fauvel, 1905.

- Eichelbaum, 1909: 96 (in list of genera of family; distribution of genus).
- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).
- Newton, 1985: 196 (notes on austral distribution and taxonomic position).
- Thayer, 1987: 400 (phylogenetic relationships).
- Newton and Thayer, 1992: 57 (summary of current classification).
- Newton and Thayer, 1995: 247–286, 300 (phylogenetic relationships; characters; discussion).
- Lawrence and Newton, 1995: 825 (discussion).
- M. Hansen, 1996: 35 (listed in Omaliine group of subfamilies).
- M. Hansen, 1997: 83, 84, 86, 117, 176, 178 (characters supporting clade; autapomorphic features; key characters; notes).

Neophoni Fauvel, 1905: 98 (genera included: *Neophonus*). **TYPE GENUS:** *Neophonus* (see Newton and Thayer, 1992: 57).

Neophonini Fauvel, 1905.

- Bernhauer and Schubert, 1910: 36 (world catalog; *Neophonus*).

### Neophonus

[1 species; Neotropical]

*Neophonus* Fauvel, 1905: 98 (species included: *bruchi*). **TYPE SPECIES:** *Neophonus bruchi* Fauvel, fixed by monotypy.

- Bernhauer and Schubert, 1910: 37 (world catalog; 1 species).
- Blackwelder, 1952: 260 (type species: *bruchi*).
- Newton and Thayer, 1995: 300 (Neophoninae).

**bruchi** Fauvel, 1905: 99 (*Neophonus*; Type locality: Republique Argentine: province de Neuquen).

- Bernhauer and Schubert, 1910: 37 (*Neophonus*; catalog).
  - Thayer, 1987 (*Neophonus*; habitat; habits; feeding; life cycle and phenology; ecology; morphology; characters; phylogenetic relationships; Argentina; Chile).
- ▲ **DISTRIBUTION:** Argentina, Chile.







## OMALIINAE



[125 genera; 1458 species; All Regions]

Omaliiinae W. S. MacLeay, 1825.

- Eichelbaum, 1909: 96 (list of genera with some references; generic synonyms; number of genera; number of species in each genus; general distribution of genera).
- Reitter, 1909: 178 (characters; cited as Omalinae; key to German genera).
- Portevin, 1929: 429 (characters; key to French genera).
- Böving and Craighead, 1930: 29 (larval characters).
- Joy, 1932: 92 (key to British tribes).
- Bernet Kempers, 1941: 34, 36 (larval characters).
- Blackwelder, 1943: 51 (key to genera from West Indies).
- Palm, 1948: 52 (characters; keys to Swedish genera and species).
- Tottenham, 1954: 16 (characters; key to British genera).
- Crowson, 1955: 33, 37 (adult and larval characters in key; relationships).
- Hatch, 1957: 47, 48 (characters; key to genera of Pacific Northwest).
- Steel, 1960: 8 (key to species of New Caledonia).
- Lohse, 1961a (elytral reduction and species systematics).
- Arnett, 1963: 239, 257 (key to North American genera; characters; list of North American genera).
- Steel, 1963: 52 (list of species of Malham Tarn; collecting notes; Britain).
- Lohse, 1964: 25 (characters; key to central European genera and species).
- Moore, 1964a: 87 (characters; notes).
- Kasule, 1966: 265, 268 (larval characters; notes).
- Coiffait and Saiz, 1968: 448 (characters; key to Chilean genera).
- Kasule, 1968: 132 (larval characters; larval key to genera).
- Scheerpeltz, 1968a: 5 (catalog of Austrian species).
- Steel and Woodroffe, 1969: 135 (list of species collected from Isle of Rhum; collecting notes).
- Britton, 1970: 546 (characters of adults; Australia; notes).
- Steel, 1970a (larval characters; notes on rearing methods; key to British larvae).
- Moore and Legner, 1974g: 551 (key to genera of America north of Mexico).
- Moore and Legner, 1974h: 473 (catalog of the taxonomy, biology, and ecology of developmental stages of species of America north of Mexico).
- Moore and Legner, 1975: 178 (catalog; North America north of Mexico).
- Klinger and Maschwitz, 1977: 402 (morphology and chemical secretions of defensive glands).
- Topp, 1978: 306, 308 (larval characters; key to genera).
- Burakowski, Mroczkowski, and Stefańska, 1979: 16 (catalog; Poland).
- Moore and Legner, 1979: 160 (characters; tabular key to tribes and genera of North America north of Mexico).
- Muona, 1979: 17 (list of Scandinavian species).
- Tóth, 1981: 94 (list of species of Hortobágy National Park, Hungary).
- Watt and McColl, 1982: 13, 19 (characters; notes on New Zealand taxa).
- Tóth, 1982: 31 (characters; key to genera and species of Hungary).
- E. Matthews, 1982: 8, 27 (notes; key to genera of Australia).
- Outerelo and Gamarra, 1985: 78 (key to genera of Iberian Peninsula).
- Thayer, 1985a: 182 (larval characters).
- Dettner, 1987: 28 (defensive glands).
- Zanetti, 1987: 1–46 (characters; morphology of adults and larvae; biology; behavior; parasites; ecology; zoogeography; paleontology; collecting techniques; key to species of Italy).
- Thayer, 1987: 400 (phylogenetic relationships).
- Lohse and Lucht, 1989: 122 (supplement for characters and key to genera of Lohse, 1964).
- Watanabe, 1990 (characters; key to tribes, genera, and species of Japan; relationships of genera).
- Zerche, 1990: 12 (monophyly of Omaliiinae discussed; phylogenetic position of Coryphiini unclear).

- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
  - Frank, 1991: 344 (larval characters).
  - Frania, 1992 (studies on ecdysis and metamorphosis).
  - Zerche, 1992a: 138 (phylogeny of genera of *Hygrogeus* group).
  - Newton and Thayer, 1992: 13, 57 (summary of current classification; discussion).
  - Welch, 1993 (ovariole structure and development).
  - Dettner, 1993a (summary and discussion of defensive secretions and exocrine glands and their bearing on phylogeny).
  - Sparacio, 1995: 139 (characters; species of Sicily).
  - Newton and Thayer, 1995: 247–286, 288, 292 (key to and phylogenetic analysis of omaliine group of subfamilies; characters; discussion; may not be monophyletic).
  - Lawrence and Newton, 1995: 824 (discussion).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (review of subfamily for New Zealand; notes; list of genera; number of New Zealand species).
  - M. Hansen, 1996: 35, 93 (listed in Omaliine group of subfamilies; list of Danish species).
  - Downie and Arnett, 1996: 429 (characters; key to genera and species of Northeastern North America).
  - Ádám, 1996: 237 (list of species collected in Bükk National Park, Hungary).
  - M. Hansen, 1997: 83, 84, 85, 113, 176, 178 (characters supporting clade; autapomorphic features; key adult and larval characters; notes).
  - Anderson, Nash, and O'Connor, 1997: 15 (annotated checklist; Ireland).
  - Assing, 1998f: 124 (supplement to key to genera in Lohse, 1964).
  - Cuccodoro, 1999: 388 (device for rearing small hygrophilous beetles).
  - Newton, Thayer, Ashe, and Chandler, 2000: 281, 335 (key to Nearctic tribes and genera; characters; notes).
  - Naomi, Kuranishi, Saito, and Maruyama, 2000: 102 (collected from Kuril Islands and Kamchatka).
  - Klimaszewski, 2000: 16, 29 (characters; notes on classification, natural history, distribution, and key to tribes in Canada and Alaska).
- Omalidae W. S. MacLeay, 1825: 49, 50 (genera included: *Lesteva*; [**Note:** Only one genus, *Lesteva*, is cited (p. 50) by name. On page 49 Omalidae is cited in a list that showed it to be equal to Latreille's group "Aplatis", cited as Applatis. In *Aplatis* Latreille listed the following genera: "Prognathe (*Siagone*, Kirby), Zirophore (Dalm., *Lep-tochire*, Germar); Osorius, Oxytèle, Pieste, Omalie, Lestève, Proteine, Aléochare."]. **TYPE GENUS:** *Omalium* (see Newton and Thayer, 1992: 57).
- Heer, 1839a: 4 (cited as family).
- Omalitae:
- Jeannel and Jarrige, 1949: 311 (characters).
- Omalides Mannerheim, 1830: 9 (genera included: *Phloeocharis*, *Taenosoma*, *Omalium*, *Anthobium*, *Acidota*, *Lesteva*, *Proteinus*, *Micropeplus*). **TYPE GENUS:** *Omalium* (see Newton and Thayer, 1992: 57).
- Newton and Thayer, 1992: 57 (synonym of Omaliinae).
- Homalioidae Agassiz, 1847: 184 (emendation). **TYPE GENUS:** *Omalium*, cited as *Homalium* (see Newton and Thayer, 1992: 57).
- Newton and Thayer, 1992: 57 (synonym of Omaliinae).

### Tribe Anthophagini

Anthophagini Thomson, 1859.

- Portevin, 1929: 431 (key to French genera).
- Hatch, 1957: 49 (characters; key to genera of Pacific Northwest).
- Arnett, 1963: 239, 257 (key to North American genera; characters; list of North American genera).
- Moore, 1966: 47, 48 (characters; key to Nearctic genera).
- Campbell, 1978: 1 (*Eudectus*, *Haida*, *Pseudohaida* included).

- Moore and Legner, 1979: 172 (characters; tabular key to genera of North America north of Mexico).
  - Muona, 1979: 18 (list of Scandinavian species).
  - Thayer, 1985a: 182 (characters; may not be monophyletic).
  - Watanabe, 1990: 116, 377 (characters; key to genera of Japan; relationships of genera).
  - Zerche, 1990: 261 (*Eudectus* excluded; *Haida*, *Pseudohaida* probably excluded; Anthophagini probably polyphyletic).
  - Newton and Thayer, 1992: 57 (tribe of Omaliinae).
  - Zerche, 1992a: 137 (phylogenetic relationships of genera of Hygrogeus group; characters; discussion; distribution).
  - Newton and Thayer, 1995: 247–286, 294 (phylogenetic relationships; characters; discussion; may be paraphyletic).
  - M. Hansen, 1996: 95 (list of Danish species).
  - Newton, Thayer, Ashe, and Chandler, 2000: 283 (key to Nearctic genera).
  - Newton, Thayer, Ashe, and Chandler, 2000: 338 (characters; notes).
- Anthophagini Thomson, 1859.
- Outerelo and Gamarra, 1985: 85 (key to genera of Iberian Peninsula).
- Anthophagides Thomson, 1859: 48 (genera included: *Anthophagus*, *Geodromicus*, *Lesteva*, *Boreaphilus*, *Coryphium*). **TYPE GENUS:** *Anthophagus* (see Newton and Thayer, 1992: 57).
- Brathinidae LeConte, 1861a: 48, 52 (genera included: *Brathinus*). **TYPE GENUS:** *Brathinus* (see Newton and Thayer, 1992: 57).
- Hammond, 1971b: 63 (discussion of familial placement; belongs in the Omaliinae).
  - Shibata, 1976: 96 (placed in Omaliinae).
  - Newton and Thayer, 1992: 57 (synonym of Anthophagini).
- Lestévates Mulsant and Rey, 1880: 8 (genera included: *Anthophagus*, *Geodromicus*, *Lesteva*, *Phagnathus*). **TYPE GENUS:** *Lesteva* (see Newton and Thayer, 1992: 57).
- Newton and Thayer, 1992: 57 (synonym of Anthophagini).
- Lestevina Jakobson, 1908: 445, 450 (replacement name for Homaliina; genera included: *Anthobium*, *Acrulia*, *Omaliium*, cited as *Homaliium*, *Pycnoglypta*, *Acrolocha*, *Phyllo-drepa*, *Phloeonomus*, *Carcinocephalus*, *Micralymma*, *Derops*, *Xylodromus*, *Philo-rinum*, *Acidota*, *Porrhodites*, *Cylletron*, *Lathrimaeum*, *Olophrum*, *Orochares*, *Arpedium*, *Deliphrum*, *Mannerheimia*, *Trigonodemus*, *Phyllodrepoidea*, *Amphi-chroum*, *Lesteva*, *Geodromicus*, *Hygrogeus*, *Anthophagus*, *Hadrognathus*, *Eudectus*, *Coryphium*, *Coryphiodes*, *Boreaphilus*, *Niphetodes*, *Tetradelus*). **TYPE GENUS:** *Lesteva* (see Newton and Thayer, 1992: 57).
- Newton and Thayer, 1992: 57 (synonym of Anthophagini).
- Lestevini Jakobson, 1908.
- Jakobson, 1908: 445, 449 (characters; list of species of Russia and western Europe).
  - Tikhomirova, 1968: 141 (fossil species).

### Acidota

[12 species; Nearctic and Palaeartic Regions]

- Acidota* Stephens, 1829a: 25 (species included: *crenata*, *rufa*). **TYPE SPECIES:** *Staphylinus crenatus* Fabricius, fixed by subsequent designation by Westwood, 1838a: 18.
- Stephens, 1829: 298 (catalog; Britain).
  - Mannerheim, 1830: 10, 55 (key; characters).
  - Mannerheim, 1831: 424, 469 (key; characters).
  - Dejean, 1833: 69 (list of species).
  - Stephens, 1834: 357 (characters; habitat).
  - Lacordaire, 1835: 476 (characters).
  - Westwood, 1838a: 18 (characters; type species).
  - Erichson, 1839a: 620 (characters).
  - Heer, 1839: 189 (characters).

- Stephens, 1839: 422 (characters).
- Erichson, 1840: 860 (characters).
- Laporte, 1840: 192 (characters).
- Redtenbacher, 1849: 748 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 139 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 633 (characters).
- Gistel, 1856: 389 (list of species).
- Jacquelin du Val, 1857: 72 (characters).
- Redtenbacher, 1857: 247 (characters).
- Kraatz, 1857d: 935 (characters).
- Thomson, 1858: 38 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 51 (characters; type species: *crenata*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 203 (characters).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 659 (catalog).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Fauvel, 1871a: 114 [= 1872: 88] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 267 (characters; key to Austrian species).
- Fauvel, 1875a:VI [= 1875b: 208] (catalog).
- Provancher, 1877: 259 (characters).
- Fauvel, 1878d: 227 [= 1878e: 63] (key to North American species).
- Mulsant and Rey, 1880: 101 (characters; key to French species).
- Heyden, 1880: 82 (list of species of Siberian region).
- Fowler, 1888: 403 (notes).
- Seidlitz, 1891: 338 (key to some European species).
- Seidlitz, 1891a: 360 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 716 (adult and larval characters).
- Heyden, 1896: 37 (list of species of Siberian region).
- Luze, 1905b: 69 (characters; revision of and key to Palaearctic species).
- Heyden, Reitter, and Weise, 1906: 134 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 45 (characters; key to and annotated list of species of Seine Basin, France).
- Reitter, 1909: 185 (characters; key to German species).
- Bernhauer and Schubert, 1910: 69 (world catalog; 8 species).
- Blatchley, 1910: 477 (characters).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Johansen, 1914: 598 (characters).
- Leng, 1920: 95 (catalog of North American species).
- Winkler, 1925: 334 (catalog for Palaearctic region).
- Porta, 1926: 27 (characters; key to species of Italy).
- Portevin, 1929: 439 (characters; key to French species).
- Roubal, 1930: 315 (catalog; Slovakia).
- Joy, 1932: 103 (key to British species).
- Scheerpeltz, 1933: 1061 (world catalog supplement).
- Kloet and Hincks, 1945: 161 (list of British species).
- Scheerpeltz, 1947: 266 (key to Palaearctic species).
- Palm, 1948: 113 (characters; key to species of Sweden).
- Tottenham, 1949: 357, 407 (type species: *crenata* Fabricius; list of British species; notes).
- Blackwelder, 1952: 35 (type species).

- Tottenham, 1954: 31 (characters; key to British species).
- Hatch, 1957: 50, 68 (characters; species of Pacific Northwest).
- Kocher, 1958: 95 ([queried] list of species; Morocco).
- Horion, 1963: 121 (list of central European species).
- Székessy, 1963: 20 (characters).
- Lohse, 1964: 57 (characters; key to central European species).
- Moore, 1966: 48, 51 (characters; notes).
- Scheerpeltz, 1968a: 15 (catalog of Austrian species).
- Steel, 1970a: 20 (larval characters; biological notes).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Moore and Legner, 1975: 178 (catalog; North America north of Mexico).
- Shibata, 1976: 111 (checklist of species of Japan).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 63 (catalog; Poland).
- Moore and Legner, 1979: 175 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, 1979: 243 (some species collected in Germany).
- Uhlig and Vogler, 1981: 88 (list of some species collected in Germany; habitat and collecting notes).
- Campbell, 1982b: 1005 (revision of and key to North American species; characters; habitus).
- Tóth, 1982: 88 (characters; habitus; key to species of Hungary).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Segers, 1986: 22 (checklist of species; Belgium).
- Zanetti, 1987: 319 (characters; habitus; key to species of Italy).
- Watanabe, 1990: 141, 377 (characters; key to species of Japan; relationships of genera).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Campbell and Davies, 1991: 89 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Smetana, 1993a: 71 (key to Taiwanese species).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 434 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 338 (3 Nearctic species; notes; characters in key).

*Helobium* Gistel, 1834: 9 (species included: *crenatum*). **TYPE SPECIES:** *Staphylinus crenatus* Fabricius, fixed by monotypy.

- Blackwelder, 1952: 182 (type species: *crenatum*; synonym of *Acidota*).

*alpina* Heer, 1839, see: *Olophrum*.

*baicalensis* Motschulsky, 1860, see: *Pycnoglypta*.

*castanea* Gravenhorst, 1806, see: *crenata* Fabricius, 1793.

**caucasica** Reitter, 1909: 185 (*Acidota*; Type locality: Kaukasus, Swanetien).

- Scheerpeltz, 1933: 1061 (*Acidota*; catalog).
- Scheerpeltz, 1947: 267 (*Acidota*; characters).

▲ **DISTRIBUTION:** Georgia.

**clandestina** Luze, 1905b: 75 (*Acidota*; Type locality: Kroatien, Sljeme Gebirge).

- Bernhauer and Schubert, 1910: 69 (*Acidota*; cited as *claudestina*; catalog).
- Scheerpeltz, 1947: 267 (*Acidota*; characters).

▲ **DISTRIBUTION:** Croatia.

- crenata** Fabricius, 1793: 525 (*Staphylinus*; Type locality: Germania).  
 — Panzer, 1795: 354 (*Staphylinus*; characters; Germany).  
 — Paykull, 1800: 403 (*Staphylinus*; characters; Sweden).  
 — Fabricius, 1801: 596 (*Staphylinus*; characters; Germany).  
 — Turton, 1802: 512 (*Staphylinus*; characters; Germany).  
 — Gyllenhal, 1810: 230 (*Omalium*; characters; Sweden).  
 — Olivier, 1811: 476 (*Omalium*; characters; Sweden; Germany).  
 — Zetterstedt, 1828: 55 (*Omalium*; characters; Lapland).  
 — Curtis, 1829: 29 (*Omalium*; catalog; Britain).  
 — Mannerheim, 1830: 55 (*Acidota*; Finland; Sweden; Russia).  
 — Mannerheim, 1831: 469 (*Acidota*; Finland; Sweden; Russia).  
 — Stephens, 1834: 358 (*Acidota*; characters; England; Scotland).  
 — Lacordaire, 1835: 476 (*Acidota*; characters; France).  
 — Westwood, 1838a: 18 (*Acidota*; type species).  
 — Zetterstedt, 1838: 53 (*Omalium*; characters; habitat; Lapland).  
 — Erichson, 1839a: 620 (*Acidota*; characters; Germany).  
 — Heer, 1839: 189 (*Acidota*; characters; Switzerland).  
 — Stephens, 1839: 430 (*Omalium*; characters; England).  
 — Erichson, 1840: 861 (*Acidota*; characters; Europe).  
 — Laporte, 1840: 191 (*Omalium*; characters; France).  
 — Redtenbacher, 1849: 748 (*Acidota*; characters; Austria).  
 — Hardy, 1851: 57 (*Acidota*; notes; England).  
 — Fairmaire and Laboulbène, 1856: 634 (*Acidota*; characters; France).  
 — Redtenbacher, 1857: 247 (*Acidota*; characters; Austria).  
 — Kraatz, 1857d: 936 (*Acidota*; characters; Germany).  
 — Thomson, 1859: 51 (type species of *Acidota*).  
 — Thomson, 1861: 204 (*Acidota*; characters; Scandinavia).  
 — Fauvel, 1865a: 318 [= 1865b: 68] (*Acidota*; habitat; France).  
 — Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; characters; France; Europe; Italy; North America).  
 — Redtenbacher, 1874: 267 (*Acidota*; characters; Austria).  
 — Seidlitz, 1875: 233 (*Acidota*; characters; Baltic region).  
 — J. Sahlberg, 1876: 217 (*Acidota*; Finland).  
 — Fauvel, 1878d: 228 [= 1878e: 64] (*Acidota*; characters; Lake Superior; Michigan).  
 — Mulsant and Rey, 1880: 104 (*Acidota*; characters; France).  
 — Fowler, 1888: 403 (*Acidota*; characters; Britain).  
 — Ganglbauer, 1895: 717 (*Acidota*; characters; north and middle Europe; Caucasus; Siberia; North America).  
 — Luze, 1905b: 73 (*Acidota*; characters; northern and central Europe; Siberia; North America).  
 — Poppus, 1909: 6 (*Acidota*; Lena Valley, Siberia).  
 — Reitter, 1909: 185 (*Acidota*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 69 (*Acidota*; catalog).  
 — Johansen, 1914: 598 (*Acidota*; characters; Denmark).  
 — Bernhauer, 1926g: 2 (*Acidota*; Kamchatka region).  
 — Portevin, 1929: 439 (*Acidota*; characters; France).  
 — Scheerpeltz, 1933: 1061 (*Acidota*; catalog).  
 — Scheerpeltz, 1947: 266 (*Acidota*; characters).  
 — Palm, 1948: 115 (*Acidota*; characters; Sweden; Denmark; Norway; Finland).  
 — Hatch, 1957: 68 (*Acidota*; characters; British Columbia; Washington).  
 — Larsson and Gígja, 1959: 68 (*Acidota*; biological notes; Iceland).  
 — Horion, 1963: 121 (*Acidota*; Caucasus; Siberia; Scotland; Finland; Sweden; Russia; Pyrenees; Italy; Austria; Romania; Hungary; Czechoslovakia; Poland; Germany; Austria).  
 — Lohse, 1964: 58 (*Acidota*; characters; central Europe).  
 — Smetana, 1964d: 55 (*Acidota*; Czechoslovakia).  
 — Smetana, 1968: 228 (*Acidota*; notes; Mongolia).  
 — Kasule, 1968a: 70 (*Acidota*; life history).  
 — Steel, 1970a: 20 (*Acidota*; biological notes).

- Ashworth, 1972: 214 (*Acidota*; late-glacial subfossil; Britain).
  - Shibata, 1974: 39 (*Acidota*; Japan).
  - Pope, 1977: 22 (*Acidota*; Britain).
  - Hammond, 1980: 136 (*Acidota*; Ireland).
  - Schwert and Morgan, 1980: 101 (*Acidota*; late glacial fossil; New York).
  - Campbell, 1982b: 1009 (*Acidota*; characters; Alberta; British Columbia; Manitoba; Newfoundland; Labrador; Saskatchewan; Ontario; Prince Edward Island; Quebec; Alaska; Colorado; Illinois; Indiana; Maine; Massachusetts; Michigan; New Hampshire; New Jersey; New York; North Carolina; Washington).
  - Tóth, 1982: 88 (*Acidota*; characters).
  - Miller and Morgan, 1982: 264 (*Acidota*; Postglacial fossils; New York).
  - Yuh, Paik, Kwon, and Lee, 1985: 225 (*Acidota*; Korea).
  - Morgan and Morgan, 1985: 1819 (*Acidota*; middle Holocene fossil; Michigan).
  - Zanetti, 1987: 320 (*Acidota*; characters; Italy).
  - Ádám, 1987: 138 (*Acidota*; collecting notes; Hungary).
  - Lucht, 1987: 89 (*Acidota*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
  - Schülke and Uhlig, 1988: 3 (*Acidota*; Germany).
  - Wittwer, 1993: 248 (*Acidota*; Switzerland).
  - Boháč, 1993: 41 (*Acidota*; Slovakia; Czech Republic).
  - Zanetti, 1995: 8 (*Acidota*; Italy).
  - Downie and Arnett, 1996: 434 (*Acidota*; characters; Canada; USA).
  - Lemdahl and Gustavsson, 1997: 181 (*Acidota*; collected in lateglacial and middle Holocene deposits; Sweden).
  - Ryabukhin, 1999: 27 (*Acidota*; catalog; habitat; distribution; northeastern Russia).
  - Cibulskis, 1999: 36 (*Acidota*; list; Latvia).
  - ▲ **DISTRIBUTION:** Iceland, Europe, Russia, Mongolia, Korea, Japan, Canada, USA.
- rufa* Gravenhorst, 1802: 115 (*Omalium*; Type locality: Brunsvigae).
- Latreille, 1804: 372 (*Omalium*; characters; Germany).
  - Gravenhorst, 1806: 207 (*Omalium*).
  - Olivier, 1811: 476 (*Omalium*; characters; Brunswick).
  - Curtis, 1829: 29 (*Omalium*; catalog; Britain).
  - C. Sahlberg, 1830: 288 (*Omalium*; characters; Finland).
  - Mannerheim, 1830: 55 (*Acidota*; Finland).
  - Mannerheim, 1831: 469 (*Acidota*; Finland).
  - Stephens, 1834: 35 (*Acidota*; characters; England; Scotland).
  - Erichson, 1839a: 620 (*Acidota*; synonym of *crenata*).
  - Stephens, 1839: 430 (*Acidota*; characters; England).
  - Erichson, 1840: 861 (*Acidota*; synonym of *crenata*).
  - Laporte, 1840: 192 (*Acidota*; characters; Germany; Sweden; France).
  - Kraatz, 1857d: 936 (*Acidota*; synonym of *crenata*).
  - Thomson, 1861: 204 (*Acidota*; characters; Scandinavia).
  - Fauvel, 1869: 493 (*Acidota*; synonym of *crenata*).
  - Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; synonym of *crenata*).
  - Mulsant and Rey, 1880: 104 (*Acidota*; synonym of *crenata*).
  - Ganglbauer, 1895: 717 (*Acidota*; synonym of *crenata*).
  - Luze, 1905b: 73 (*Acidota*; synonym of *crenata*).
  - Bernhauer and Schubert, 1910: 69 (*Acidota*; synonym of *crenata*).
  - Scheerpeltz, 1933: 1061 (*Acidota*; aberration of *crenata*).
  - Campbell, 1982b: 1010 (*Acidota*; synonym of *crenata*).
- castanea* Gravenhorst, 1806: 207 (*Omalium*; Type locality: Norimbergae).
- Olivier, 1811: 476 (*Omalium*; characters; Germany).
  - Erichson, 1839a: 620 (*Acidota*; synonym of *crenata*).
  - Erichson, 1840: 861 (*Acidota*; synonym of *crenata*).
  - Kraatz, 1857d: 936 (*Acidota*; synonym of *crenata*).
  - Mulsant and Rey, 1880: 104 (*Acidota*; synonym of *crenata*).



- Ganglbauer, 1895: 717 (*Acidota*; synonym of *crenata*).
- Luze, 1905b: 73 (*Acidota*; synonym of *crenata*).
- Bernhauer and Schubert, 1910: 69 (*Acidota*; synonym of *crenata*).
- Campbell, 1982b: 1010 (*Acidota*; synonym of *crenata*).
- pulchra* Motschulsky, 1857a: 493 (*Acidota*; Type locality: Styrie).
  - Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; synonym of *crenata*).
  - Bernhauer and Schubert, 1910: 69 (*Acidota*; synonym of *crenata*).
- seriata* LeConte, 1863a: 55 (*Acidota*; Type locality: Lake Superior; [Note: See lectotype designation by Campbell, 1982b]).
  - Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; synonym of *crenata*).
  - LeConte, 1873: 327 (*Acidota*; synonym of *crenata*).
  - Ganglbauer, 1895: 717 (*Acidota*; synonym of *crenata*).
  - Luze, 1905b: 73 (*Acidota*; synonym of *crenata*).
  - Bernhauer and Schubert, 1910: 69 (*Acidota*; synonym of *crenata*).
  - Campbell, 1982b: 1010 (*Acidota*; lectotype designation; synonym of *crenata*).
- nigra*† Scudder, 1900a: 85 (*Acidota*; variety of *crenata*; pleistocene fossil; Type locality: Scarborough).
- japonica* Watanabe, 1990: 145 (*Acidota*; subspecies of *crenata*; Type locality: Japan: Hokkaido: Mt. Kurodake on Daisetsu Mts.).
- cruentata*** Mannerheim, 1830: 55 (*Acidota*; Type locality: Petropoli).
  - Gyllenhal, 1810: 228 (*Omaliium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 69 cited *rufa* Gyllenhal as a synonym of *cruentata* but Gyllenhal did not describe the species as new, he attributed it to Gravenhorst]; characters; Sweden).
  - Mannerheim, 1831: 469 (*Acidota*; Russia).
  - Erichson, 1839a: 621 (*Acidota*; characters; Germany).
  - Heer, 1839: 190 (*Acidota*; characters; Switzerland).
  - Erichson, 1840: 862 (*Acidota*; characters; Germany; Sweden).
  - Redtenbacher, 1849: 749 (*Acidota*; characters; Austria).
  - Fairmaire and Laboulbène, 1856: 634 (*Acidota*; characters; France).
  - Redtenbacher, 1857: 247 (*Acidota*; characters; Austria).
  - Kraatz, 1857d: 937 (*Acidota*; characters; Germany).
  - Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; characters; France; Scandinavia; Britain; Germany; Switzerland; Austria).
  - Fauvel, 1873b: 118 [= 1873c: 11] (*Acidota*; Russia).
  - Redtenbacher, 1874: 267 (*Acidota*; characters; Austria).
  - J. Sahlberg, 1876: 217 (*Acidota*; Finland).
  - Mulsant and Rey, 1880: 107 (*Acidota*; characters; France).
  - Fowler, 1888: 403 (*Acidota*; characters; Britain).
  - Ganglbauer, 1895: 717 (*Acidota*; characters; north and middle Europe).
  - Luze, 1905b: 74 (*Acidota*; characters; northern and central Europe).
  - Peyerimhoff, 1905: 186 (*Acidota*; notes; Algeria).
  - Sainte-Claire Deville, 1906: 70 (*Philorinum*; Corsica).
  - Reitter, 1909: 185 (*Acidota*; characters; Germany).
  - Bernhauer and Schubert, 1910: 69 (*Acidota*; catalog).
  - Johansen, 1914: 599 (*Acidota*; characters; Denmark).
  - Bernhauer, 1926g: 2 (*Acidota*; Kamchatka region).
  - Portevin, 1929: 439 (*Acidota*; characters; France).
  - Scheerpeltz, 1933: 1061 (*Acidota*; catalog).
  - Scheerpeltz, 1947: 267 (*Acidota*; characters).
  - Palm, 1948: 116 (*Acidota*; characters; Sweden; Denmark; Norway; Finland).
  - Szujewski, 1963a: 32 (*Acidota*; Poland).
  - Horion, 1963: 122 (*Acidota*; Scotland; Sweden; Norway; Finland; Russia; Pyrenees; France; Corsica; Sardinia; Italy; Bosnia; Romania; Slovakia; Czech Republic; Germany; Austria).
  - Lohse, 1964: 58 (*Acidota*; characters; central Europe).
  - Szujewski, 1968a: 712 (*Acidota*; Poland).

- Ashworth, 1972: 214 (*Acidota*; late-glacial subfossil; Britain).
- Pope, 1977: 22 (*Acidota*; Britain).
- Hammond, 1980: 136 (*Acidota*; Ireland).
- Tóth, 1982: 89 (*Acidota*; characters; Hungary).
- Zanetti, 1987: 323 (*Acidota*; characters; Italy).
- Lucht, 1987: 89 (*Acidota*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Welch, 1993: 227 (*Acidota*; ovariole number and ovary structure).
- Wittwer, 1993: 248 (*Acidota*; Switzerland).
- Boháč, 1993: 41 (*Acidota*; Slovakia; Czech Republic).
- Sparacio, 1995: 142 (*Acidota*; characters; notes; Sicily).
- Zanetti, 1995: 8 (*Acidota*; Italy).
- Lemdahl and Gustavsson, 1997: 181 (*Acidota*; collected in lateglacial and middle Holocene deposits; Sweden).
- Zanetti and Sabella, 1998: 32 (*Acidota*; notes; Sicily).
- Cibulskis, 1999: 36 (*Acidota*; list; Latvia).
- Owen, 2000: 251 (*Acidota*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Acidota*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Europe, Russia, Algeria.

*ferruginea* Lacordaire, 1835: 477 (*Acidota*; Type locality: Fontainebleau).

- Erichson, 1840: 862 (*Acidota*; characters; Sweden).
- Kraatz, 1857d: 937 (*Acidota*; synonym of *cruentata*).
- Hochhuth, 1872: 169 (*Acidota*; characters; notes; Ukraine).
- Fauvel, 1871a: 115 [= 1872: 89] (*Acidota*; synonym of *cruentata*).
- Fowler, 1888: 404 (*Acidota*; variety of *cruentata*; characters; Britain).
- Ganglbauer, 1895: 717 (*Acidota*; synonym of *cruentata*).
- Luze, 1905b: 74 (*Acidota*; synonym of *cruentata*).
- Bernhauer and Schubert, 1910: 69 (*Acidota*; synonym of *cruentata*).
- Scheerpeltz, 1933: 1062 (*Acidota*; synonym of *cruentata*).

*nigrescens* Fleischer, 1918: 76 (*Acidota*; aberration of *cruentata*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).

- Scheerpeltz, 1933: 1062 (*Acidota*; aberration of *cruentata*).
- Scheerpeltz, 1947: 267 (*Acidota*; aberration of *cruentata*; characters).

*crenulata* Hatch, 1957, see: *quadrata* Zetterstedt, 1838.

*daisetsuzana* Watanabe, 1990: 146 (*Acidota*; Type locality: Japan: Hokkaido: Mt. Kurodake on Daisetsu Mts.).

▲ **DISTRIBUTION:** Japan.

*ferruginea* Lacordaire, 1835, see: *cruentata* Mannerheim, 1830.

*frankenhauseri* Mäklin, 1853, see: *quadrata* Zetterstedt, 1838.

*heydeni* Heer, 1839, see: *Arpedium*.

*hirtella* Heer, 1839, see: *Amphichroum*.

*japonica* Watanabe, 1990, see: *crenata* Fabricius, 1793.

*major* Luze, 1905, see: *quadrata* Zetterstedt, 1838.

*minuta* Luze, 1905b: 76 (*Acidota*; Type locality: Griechenland, Morea: Cumani).

- Bernhauer and Schubert, 1910: 69 (*Acidota*; catalog).
- Scheerpeltz, 1947: 267 (*Acidota*; characters).

▲ **DISTRIBUTION:** Greece.

*montana* Smetana, 1993a: 71 (*Acidota*; Type locality: Taiwan: Nantou Hsien, Nenkaoshan Tenchi Hut, 2895 m).

▲ **DISTRIBUTION:** Taiwan.

*nigra* Scudder, 1900, see: *crenata* Fabricius, 1793.

*nigrescens* Fleischer, 1918 [**Note: Nomen nudum**], see: *cruentata* Mannerheim, 1830.

**nivicola** Smetana, 1993a: 74 (*Acidota*; Type locality: Taiwan: Taichung Hsien Hsuehshan, Hsuehshan Main Peak, 3650 m).

▲ **DISTRIBUTION:** Taiwan.

*patruelis* LeConte, 1863, see: *quadrata* Zetterstedt, 1838.

*pechlaneri* Scheerpeltz, 1947, see: *quadrata* Zetterstedt, 1838.

*pulchra* Motschulsky, 1857, see: *crenata* Fabricius, 1793.

*quadra* Zetterstedt, 1828, see: *quadrata* Zetterstedt, 1838.

**quadrata** Zetterstedt, 1838: 53 (*Omaliium*; replacement name for *quadra*).

- Erichson, 1840: 862 (*Acidota*; synonym of *ferruginea*).
  - Kraatz, 1857d: 937 (*Acidota*; synonym of *cruentata*).
  - Thomson, 1861: 205 (*Acidota*; characters; Scandinavia).
  - Fauvel, 1873b: 118 [= 1873c: 11] (*Acidota*; Lapland).
  - Seidlitz, 1875: 233 (*Acidota*; characters; Baltic region).
  - J. Sahlberg, 1876: 217 (*Acidota*; Finland).
  - Fauvel, 1878d: 229 [= 1878e: 65] (*Acidota*; characters; Alaska; Lake Superior; Lapland).
  - Luze, 1905b: 78 (*Acidota*; characters; Finland; Sweden; Siberia).
  - Bernhauer and Schubert, 1910: 70 (*Acidota*; catalog).
  - Fall, 1926: 145 (*Acidota*; Alaska).
  - Scheerpeltz, 1933: 1062 (*Acidota*; catalog).
  - Scheerpeltz, 1947: 268 (*Acidota*; characters).
  - Palm, 1948: 116 (*Acidota*; characters; Sweden; Norway; Finland).
  - Smetana, 1968: 229 (*Acidota*; Mongolia).
  - Ashworth, 1972: 214 (*Acidota*; late-glacial subfossil; Britain).
  - Smetana 1975c: 160 (*Acidota*; Mongolia).
  - Morgan and Morgan, 1979: 230 (*Acidota*; Postglacial fossils; Wisconsin).
  - Campbell, 1982b: 1021 (*Acidota*; characters; Alberta; British Columbia; Labrador; Manitoba; Northwest Territories; Ontario; Quebec; Yukon Territory; Alaska; Maine; Montana; New Hampshire; Colorado).
  - Miller and Morgan, 1982: 264 (*Acidota*; Postglacial fossils; New York).
  - Zanetti, 1987: 323 (*Acidota*; possibly not in Italy).
  - Downie and Arnett, 1996: 434 (*Acidota*; characters; Canada; USA).
  - Lavoie, Elias, and Payette, 1997: 231 (*Acidota*; Holocene fossil; subarctic Quebec).
  - Ryabukhin, 1999: 28 (*Acidota*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Finland, Sweden, Austria, Russia, Mongolia, Canada, USA.

*quadra* Zetterstedt, 1828: 54 (*Omaliium*; [**preoccupied**]; Type locality: Wittangi Lapponiae Tornensis).

— Bernhauer and Schubert, 1910: 70 (*Acidota*; synonym of *quadrata*).

*frankenhaeuseri* Mäklin, 1853: 194 (*Acidota*; Type locality: interior pars peninsulae Kenai).

— Bernhauer and Schubert, 1910: 70 (*Acidota*; synonym of *quadrata*).

— Campbell, 1982b: 1021 (*Acidota*; synonym of *quadrata*).

*patruelis* LeConte, 1863a: 56 (*Acidota*; Type locality: north side of Lake Superior; [**Note:** See lectotype designation by Campbell, 1982b]).

— Bernhauer and Schubert, 1910: 70 (*Acidota*; synonym of *quadrata*).

— Campbell, 1982b: 1021 (*Acidota*; lectotype designation; synonym of *quadrata*).

*major* Luze, 1905b: 78 (*Acidota*; variety of *quadra*; Type locality: Ostsibirien, Quellgebiet des Irkut).

— Bernhauer and Schubert, 1910: 70 (*Acidota*; synonym of *quadrata*).

— Scheerpeltz, 1933: 1062 (*Acidota*; subspecies of *quadrata*).

— Scheerpeltz, 1947: 269 (*Acidota*; cited as valid species; characters).

— Campbell, 1982b: 1021 (*Acidota*; synonym of *quadrata*).

*pechlaneri* Scheerpeltz, 1947: 263 (*Acidota*; Type locality: Österreich: Gebiet der Silvretta im Jamtal).

— Lohse, 1964: 57 (*Acidota*; characters; Austria).

— Zanetti, 1987: 322 (*Acidota*; characters).

- Lucht, 1987: 89 (*Acidota*; checklist; Austria).
- Lohse, 1987: 135 (*Acidota*; synonym of *quadrata*).

*crenulata* Hatch, 1957: 62 (*Olophrum*; Type locality: B. C.: Waterloo Mine).

- Campbell, 1982b: 1021 (*Acidota*; synonym of *quadrata*).

*rufa* Gravenhorst, 1802, see: *crenata* Fabricius, 1793.

**semisericea** Cameron, 1929a: 152 (*Acidota*; [Note: **Nomen dubium**]; Type locality: Norway: Trondjhem).

- Scheerpeltz, 1933: 1062 (*Acidota*; catalog).
- Scheerpeltz, 1947: 269 (*Acidota*; characters).
- Tikhomirova, 1973a: 140 (*Acidota*; checklist; Norway).

▲ **DISTRIBUTION:** Norway.

*seriata* LeConte, 1863, see: *crenata* Fabricius, 1793.

**subcarinata** Erichson, 1840: 863 (*Acidota*; Type locality: Bostoniae in America septentrionali; [Note: See lectotype designation by Campbell, 1982b]).

- LeConte, 1850: 220 (*Acidota*; Lake Superior).
- Provancher, 1877: 260 (*Acidota*; characters; Quebec).
- Fauvel, 1878d: 228 [= 1878e: 64] (*Acidota*; characters; Michigan; Lake Superior; Massachusetts).
- Bernhauer and Schubert, 1910: 70 (*Acidota*; catalog).
- Blatchley, 1910: 477 (*Acidota*; characters; Indiana).
- Campbell, 1982b: 1015 (*Acidota*; lectotype designation: Boston, Massachusetts; characters; Newfoundland; Ontario; Quebec; Illinois; Indiana; Maine; Maryland; Massachusetts; Michigan; Minnesota; New Hampshire; New Jersey; New York; Ohio; Pennsylvania; Rhode Island; Virginia; Wisconsin).
- Morgan and Morgan, 1985: 1819, 1822 (*Acidota*; middle Holocene fossil; Michigan).
- Dearborn and Donahue, 1994: 14 (*Acidota*; Maine).
- Levesque and Levesque, 1996: 290 (*Acidota*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 434 (*Acidota*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

**sculpturata** Luze, 1905b: 77 (*Acidota*; Type locality: Kaukasus).

- Bernhauer and Schubert, 1910: 70 (*Acidota*; catalog).
- Scheerpeltz, 1947: 267 (*Acidota*; characters).
- Tikhomirova, 1973a: 140 (*Acidota*; checklist; Caucasus).

▲ **DISTRIBUTION:** Caucasus.

*tenuis* LeConte, 1863, see: *Eucnecosum*.

### Altaiodromicus

[1 species; Palaearctic Region]

*Altaiodromicus* Zerche, 1992a: 107 (species included: *schilenkovi*). **TYPE SPECIES:** *Altaiodromicus schilenkovi* Zerche, fixed by original designation and monotypy.

**schilenkovi** Zerche, 1992a: 108 (*Altaiodromicus*; Type locality: Altai, Chr. [Hütte] Korgon, verch. rutsch [Oberlauf des Baches] Mochnatyj, prit. Kumira [Zufluss des Kumir], 1750 m).

▲ **DISTRIBUTION:** Altai region.

### Amphichroum

[14 species; Nearctic and Palaearctic Region]

*Amphichroum* Kraatz, 1857d: 947 (species included: *canaliculatum*, *hirtellum*). **TYPE SPECIES:** *Lathrimaemum canaliculatum* Erichson, fixed by subsequent designation by R. Lucas, 1920: 90.

- Redtenbacher, 1857: 993 (characters).
- Schaum, 1859: 31 (catalog; European species).
- Gredler, 1863: 123 (list of species from Tirol).

- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 661 (catalog).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Fauvel, 1871a: 116 [= 1872: 90] (characters).
- Redtenbacher, 1874: 269 (characters; key to Austrian species).
- Fauvel, 1875a:VI [= 1875b: 208] (catalog).
- Fauvel, 1878d: 236 [= 1878e: 72] (key to North American species).
- Mulsant and Rey, 1880: 93 (characters; key to French species).
- Duvivier, 1883: 195 (catalog).
- Seidlitz, 1891: 343 (key to some European species).
- Seidlitz, 1891a: 366 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 715 (characters).
- Heyden, Reitter, and Weise, 1906: 134 (list of species of Europe and Caucasus).
- Reitter, 1909: 185 (characters; key to German species).
- Bernhauer and Schubert, 1910: 70 (world catalog; 12 species).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Leng, 1920: 95 (catalog of North American species).
- Winkler, 1925: 334 (catalog for Palaearctic region).
- Cameron, 1925: 11 (catalog of Indian species).
- Porta, 1926: 27 (characters; key to species of Italy).
- Portevin, 1929: 438 (characters; key to French species).
- Cameron, 1930: 156 (characters; key to species of British India).
- Roubal, 1930: 315 (catalog; Slovakia).
- Scheerpeltz, 1933: 1062 (world catalog supplement).
- Blackwelder, 1952: 50 (type species).
- Scheerpeltz, 1956: 13 (key to European species).
- Hatch, 1957: 49, 54 (characters; key to species of Pacific Northwest).
- Horion, 1963: 123 (list of central European species).
- Székessy, 1963: 21 (characters).
- Lohse, 1964: 58 (characters; key to central European species).
- Moore, 1966: 48, 49 (cited as *Amphichroum*; characters; notes).
- Scheerpeltz, 1968a: 15 (catalog of Austrian species).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Moore and Legner, 1975: 180 (catalog; North America north of Mexico).
- Shibata, 1976: 112 (checklist of species of Japan).
- Burakowski, Mroczkowski, and Stefańska, 1979: 64 (catalog; Poland).
- Moore and Legner, 1979: 176 (characters; notes).
- Tóth, 1982: 77 (cited as *Amphichroum*; characters; habitus; key to species of Hungary).
- Zanetti, 1987: 330 (characters; habitus; key to species of Italy).
- Angelini, 1991: 190 (list of species from high elevations of Calabria, Italy).
- Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).
- Zanetti, 1995: 8 (list of species of Italy).
- Newton, Thayer, Ashe, and Chandler, 2000: 338 (3 Nearctic species; notes; characters in key).

*Stachygraphis* Horn, 1883: 285 (species included: *maculata*). **TYPE SPECIES:** *Stachygraphis maculata* Horn, fixed by monotypy.

- Bernhauer and Schubert, 1910: 70 (synonym of *Amphichroum*).
- Blackwelder, 1952: 356 (type species: *maculata*).

*adelaidae* Blackburn, 1892, see: *Austrolophrum*.

**albanicum** Bernhauer, 1936g: 237 (*Amphichroum*; Type locality: Mali Dajtit in Albanien).

▲ **DISTRIBUTION:** Albania.

**altivagans** Cameron, 1941: 143 (*Amphichroum*; Type locality: Kashmir: Khelanmarg, altitude 10,000 feet).

▲ **DISTRIBUTION:** India.

*alutaceum* Casey, 1886, see: *Pelecomalium*.

**anthobioides** Champion, 1925: 104 (*Amphichroum*; Type locality: Burphu, Gori River, E. Kumaon, alt. 11,000 ft.).

- Cameron, 1930: 158 (*Amphichroum*; characters; India).
- Scheerpeltz, 1933: 1062 (*Amphichroum*; catalog).

▲ **DISTRIBUTION:** India.

*australe* Fauvel, 1877, see: *Austrolophrum*.

**canaliculatum** Erichson, 1840: 871 (*Lathrimaeum*; Type locality: Germaniae; Austriae; Hungariae; Syrmiae montes).

- Heer, 1841: 569 (*Omalium*; synonym of *dentipes*).
- Redtenbacher, 1849: 750 (*Lathrimaeum*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 637 (*Lathrimaeum*; synonym of *dentipes*).
- Redtenbacher, 1857: 248 (*Olophrum*; characters; Austria).
- Redtenbacher, 1857: 993 (*Amphichroum*; characters; Austria).
- Kraatz, 1857d: 949 (*Amphichroum*; characters; Germany).
- Fauvel, 1871a: 117 [= 1872: 91] (*Amphichroum*; characters; France; Germany; Switzerland; Italy; Austria).
- Redtenbacher, 1874: 269 (*Amphichroum*; characters; Austria).
- Seidlitz, 1875: 237 (*Amphichroum*; characters; Baltic region).
- Fauvel, 1878d: 240 [= 1878e: 76] (*Amphichroum*; characters; California).
- Mulsant and Rey, 1880: 96 (*Amphichroum*; characters; France).
- Ganglbauer, 1895: 715 (*Amphichroum*; characters; Alps; Carpathians; Germany).
- Reitter, 1909: 185 (*Amphichroum*; characters; Germany).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Portevin, 1929: 439 (*Amphichroum*; characters; France).
- Scheerpeltz, 1933: 1062 (*Acidota*; catalog).
- Blackwelder, 1952: 50 (*Amphichroum*; type species of genus).
- Scheerpeltz, 1956: 15 (*Amphichroum*; characters; Italy).
- Scheerpeltz, 1956: 12, 16 (*Amphichroum*; [**Note:** Misidentified as *albanicum* according to Zanetti, 1987: 333]; characters; notes; Italy).
- Smetana, 1958: 46, 63 (*Amphichroum*; notes).
- Horion, 1963: 123 (*Amphichroum*; Slovakia; Poland; Czechoslovakia; Romania; Bosnia; Macedonia; Albania; Croatia; Austria; Germany; Italy; Switzerland; France).
- Lohse, 1964: 58 (*Amphichroum*; characters; central Europe).
- Scheerpeltz, 1968a: 15 (*Amphichroum*; catalog; Austria).
- Tikhomirova, 1973a: 140 (*Amphichroum*; checklist; USSR).
- Zerche, 1977a: 8 (*Amphichroum*; Germany).
- Heger and Uhlig, 1981: 81 (*Amphichroum*; habitat notes; Switzerland).
- Tóth, 1982: 78 (*Amphichroum*; characters; Hungary).
- Heger and Uhlig, 1982: 96 (*Amphichroum*; Switzerland).
- Zanetti, 1987: 333 (*Amphichroum*; characters; Italy).
- Lucht, 1987: 89 (*Amphichroum*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France).
- K. Koch, 1989: 232 (*Amphichroum*; habitat).
- Angelini, 1991: 190 (*Amphichroum*; Italy).
- Drugmand and Coulon, 1993: 238 (*Amphichroum*; collecting notes; Luxembourg).
- Boháč, 1993: 41 (*Amphichroum*; Czech Republic; Slovakia).
- Gerardi and Zanetti, 1995: 143 (*Amphichroum*; collecting notes; Italy).
- Ádám, 1995: 41 (*Amphichroum*; Hungary).
- Zanetti, 1995: 8 (*Amphichroum*; Italy).
- Böhme, 1996: 46 (*Amphichroum*; humus collection; Austria).
- Pašnik, 1998: 69 (*Amphichroum*; habitat; Poland).
- Herman, 2001: 19 (*Amphichroum*; discussion; nomen protectum).

▲ **DISTRIBUTION:** Europe.

*tenuipes* Heer, 1839: 182 (*Omalium*; Type locality: Matt).

- Heer, 1834: 76 (*Omalium*; subgenus *Omalium*; [Note: Nomen nudum, cited without characters]; elevational listing).
- Kraatz, 1857d: 949 (*Amphichroum*; synonym of *canaliculatum*).
- Mulsant and Rey, 1880: 97 (*Amphichroum*; synonym of *canaliculatum*).
- Ganglbauer, 1895: 715 (*Amphichroum*; synonym of *canaliculatum*).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; synonym of *canaliculatum*).

*dentipes* Heer, 1839: 181 (*Omalium*; [Note: This name is older than *canaliculatum*]; Type locality: Genf; Vallorbes).

- Fairmaire and Laboulbène, 1856: 637 (*Lathrimaeum*; characters; France).
- Kraatz, 1857d: 949 (*Amphichroum*; synonym of *canaliculatum*).
- Mulsant and Rey, 1880: 97 (*Amphichroum*; synonym of *canaliculatum*).
- Ganglbauer, 1895: 715 (*Amphichroum*; synonym of *canaliculatum*).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; synonym of *canaliculatum*).
- Herman, 2001: 19 (*Amphichroum*; discussion; nomen oblitum).

*crassicorne* Casey, 1886, see: *Pelecomalium*.

*cribriceps* Fauvel, 1878, see: *Austrolophrum*.

*debile* Sharp, 1889, see: *Orochares*.

*dentipes* Heer, 1839, see: *canaliculatum* Erichson, 1840.

*flavicorne* Casey, 1886, see: *floribundum* LeConte, 1863.

**floribundum** LeConte, 1863a: 56 (*Amphichroum*; Type locality: San Francisco, California).

- Fauvel, 1878d: 237 [= 1878e: 73] (*Amphichroum*; characters; British Columbia; California).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Scheerpeltz, 1933: 1062 (*Acidota*; catalog).
- Hatch, 1957: 55 (*Amphichroum*; characters; British Columbia).

▲ **DISTRIBUTION:** Canada, USA.

*flavicorne* Casey, 1886: 235 (*Amphichroum*; Type locality: California: San Francisco; Lake Co.).

- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Scheerpeltz, 1933: 1062 (*Amphichroum*; synonym of *floribundum*).

**hirtellum** Heer, 1839: 191 (*Acidota*; Type locality: Randen; Klausen; Mühlebachalp).

- Fairmaire and Laboulbène, 1856: 637 (*Lathrimaeum*; characters; France).
- Redtenbacher, 1857: 993 (*Amphichroum*; characters; Austria).
- Kraatz, 1857d: 950 (*Amphichroum*; characters; Germany).
- Fauvel, 1871a: 117 [= 1872: 91] (*Amphichroum*; characters; France; Switzerland; Germany; Austria).
- Redtenbacher, 1874: 269 (*Amphichroum*; characters; Austria).
- Seidlitz, 1875: 237 (*Amphichroum*; characters; Baltic region).
- Mulsant and Rey, 1880: 99 (*Amphichroum*; characters; France).
- Ganglbauer, 1895: 715 (*Amphichroum*; characters; Alps).
- Reitter, 1909: 185 (*Amphichroum*; characters; Germany).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Portevin, 1929: 439 (*Amphichroum*; characters; France).
- Scheerpeltz, 1933: 1062 (*Acidota*; catalog).
- Scheerpeltz, 1956: 15 (*Amphichroum*; characters; Italy).
- Horion, 1963: 124 (*Amphichroum*; France; Italy; Switzerland; Austria; Romania; Germany).
- Lohse, 1964: 58 (*Amphichroum*; characters; central Europe).
- Tóth, 1982: 78 (*Amphichroum*; characters).
- Zanetti, 1987: 335 (*Amphichroum*; characters; Italy).
- Lucht, 1987: 89 (*Amphichroum*; checklist; Germany; Austria; Switzerland).
- Zanetti, 1995: 8 (*Amphichroum*; Italy).

▲ **DISTRIBUTION:** Germany, France, Switzerland, Austria, Italy.

*immaculatum* Hatch, 1957, see: *maculatum* Horn, 1883.

*laevicolle* LeConte, 1866, see: *Pelecomalium*.

*maculatum* LeConte, 1884, see: *maculatum* Horn, 1883.

**maculatum** Horn, 1883: 285, pl. IX, fig. 7 (*Stachygraphis*; Type locality: California).

— Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).

— Hatch, 1957: 54 (*Amphichroum*; characters; Washington; Oregon).

▲ **DISTRIBUTION:** USA.

*maculatum* LeConte, 1884: 3 (*Amphichroum*; [**preoccupied**]; Type locality: high Sierras of California, Big Trees, Calaveras Co., western Nevada).

— Bernhauer and Schubert, 1910: 70 (*Amphichroum*; synonym of *maculatum*).

*immaculatum* Hatch, 1957: 54 (*Amphichroum*; subspecies of *maculatum*; Type locality: Oregon: Wapinitia Cut-off. Also cited from British Columbia and Washington).

**maculicolle** Mannerheim, 1843b: 234 (*Arpedium*; Type locality: insula Sitkha).

— Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).

▲ **DISTRIBUTION:** USA.

**miaoershanum** Watanabe, 1999: 260 (*Amphichroum*; Type locality: China: Guangxi Province: Xing'an Xian, near Tieshan Ping, Mt. Miao'er Shan).

▲ **DISTRIBUTION:** China.

**milkensis** Coiffait, 1984e: 385 (*Amphichroum*; Type locality: Milke Himal, 2000 m).

▲ **DISTRIBUTION:** Nepal.

**monticola** Cameron, 1928c: 558 (*Amphichroum*; Type locality: Tibet: Tropde, 11,000 feet).

— Cameron, 1930: 157 (*Amphichroum*; characters; Tibet).

— Scheerpeltz, 1933: 1062 (*Acidota*; catalog).

— Coiffait, 1978b: 114 (*Amphichroum*; Bhutan).

▲ **DISTRIBUTION:** China, Bhutan.

*opaculum* Fauvel, 1878, see: *Pelecomalium*.

*pilosellum* Casey, 1886, see: *Pelecomalium*.

**pindarensis** Champion, 1920: 243 (*Amphichroum*; Type locality: Sunderdhunga and Pindar Valley, alt. 8000–12,000 ft.).

— Cameron, 1928c: 558 (*Amphichroum*; Tibet).

— Cameron, 1930: 157 (*Amphichroum*; characters; Tibet).

— Scheerpeltz, 1933: 1062 (*Acidota*; catalog).

— Coiffait, 1978b: 114 (*Amphichroum*; Bhutan).

▲ **DISTRIBUTION:** Himalaya region, China, Bhutan.

*puberulum* Fauvel, 1878, see: *Pelecomalium*.

**queinneci** Coiffait, 1984e: 384 (*Amphichroum*; Type locality: Nepal: Everest, col de Salpa, 3400 m).

▲ **DISTRIBUTION:** Nepal.

**reticulatum** Coiffait, 1978b: 149 (*Amphichroum*; Type locality: Sampa-Kotoka, 1400–2600 m).

▲ **DISTRIBUTION:** Bhutan.

*scutatum* Fauvel, 1878, see: *Pelecomalium*.

*sparsum* Fauvel, 1878, see: *Pelecomalium*.

*spinipes* Fauvel, 1878, see: *Leaskia*.

*tenuipes* Heer, 1839, see: *canaliculatum* Erichson, 1840.

*veterator* Casey, 1886, see: *Pelecomalium*.



**Anthobioides**

[1 species; Nearctic Region]

*Anthobioides* Campbell, 1987: 1027 (species included: *pubescens*; phylogenetic discussion).**TYPE SPECIES:** *Anthobioides pubescens* Campbell, fixed by original designation and monotypy.

— Newton, Thayer, Ashe, and Chandler, 2000: 339 (1 Nearctic species; notes; characters in key).

**pubescens** Campbell, 1987: 1031 (*Anthobioides*; Type locality: Washington Olympic N. P., Hurricane Ridge Rd., 4000 feet).▲ **DISTRIBUTION:** USA.**Anthobium**

[51 species (5 doubtful); Nearctic and Palearctic Regions]

*Anthobium* Leach, 1819: 175 (species included: *melanocephalum*; [**Note:** The *Anthobium* of Mannerheim, 1830 is a misidentification of *Omalium*. Mannerheim did not describe the genus as new, he attributed it to Leach]). **TYPE SPECIES:** *Omalium atrocephalum* Gyllenhal (= *Silpha melanocephalum* sensu Marsham), fixed by application of Article 70.3 (see Herman, 2001).

— Curtis, 1829: 28, 245 (catalog; Britain).

— Stephens, 1829a: 25 (catalog; Britain).

— Stephens, 1829: 295 (catalog; Britain).

— Dejean, 1833: 68 (list of species).

— Stephens, 1834: 335 (characters; habitat; [**Note:** The species included by Stephens now are in several genera including *Anthobium*, *Proteinus*, *Eusphalerum*, *Omalium*, *Acrolocha*, and *Deliphrum*]).

— Lacordaire, 1835: 468 (characters).

— Westwood, 1838a: 18 (characters; type species).

— Stephens, 1839: 422 (characters).

— Redtenbacher, 1849: 753 (characters).

— Lacordaire, 1854: 145 (characters; notes; list of species).

— Jacquelin du Val, 1857: 77 (characters).

— Kraatz, 1857d: 1005 (characters).

— Thomson, 1858: 38 (characters).

— G. Waterhouse, 1858: 32 (catalog of British species).

— Thomson, 1859: 50 (characters; type species: *minutum*).

— Schaum, 1859: 32 (catalog; European species).

— Thomson, 1861: 202 (characters).

— Gredler, 1863: 125 (list of species from Tirol).

— Fauvel, 1867a: 45 [= 1868: 50] (characters).

— Jacquelin du Val, 1868: 82 (catalog; European species).

— Provancher, 1877: 261 (characters; [**Note:** Cited with one species, *protectum* LeConte; I can find no such species name in the family]).

— Fauvel, 1897d: 248 (catalog of species of Barbary).

— Leng, 1920: 93 (catalog of North American species).

— Roubal, 1930: 302 (catalog; Slovakia).

— Tottenham, 1939d: 225 (*Anthobium* misidentified; species in *Eusphalerum*; species of *Anthobium* in *Lathrimaeum*).

— Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).

— Kloet and Hincks, 1945: 161 (list of British species).

— Tottenham, 1949: 357, 407 (type species: *atrocephalum* Gyllenhal = *melanocephalum* Marsham; list of British species; this name must be used for the species formerly listed in *Lathrimaeum*).— Blackwelder, 1952: 55 (type species: *melanocephalum* Fabricius; notes concerning identification of which species of *melanocephalum* was intended by Leach).

— Tottenham, 1954: 30 (characters; key to British species).

- Hatch, 1957: 50, 64 (characters; key to species of Pacific Northwest).
- Lohse, 1964: 52 (synonym of *Lathrimaeum*; recommended that the name though valid be suppressed to avoid confusion).
- Moore, 1966: 48, 55 (characters; notes).
- Steel, 1970a: 18 (larval characters; biological notes).
- Moore and Legner, 1975: 181 (catalog; North America north of Mexico).
- Shibata, 1976: 113 (checklist of species of Japan).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 54 (catalog; Poland).
- Moore and Legner, 1979: 177 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Spahr, 1981: 93 (references to specimens from amber and copal).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Welch, 1993: 227 (ovariole number and ovary structure).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- M. Hansen, 1996: 95 (list of Danish species).
- Assing, Frisch, Kahlen, et al., 1998: 125 (note).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (12 Nearctic species; notes; characters in key).
- Herman, 2001: 6 (type species; discussion; fixed by application of Article 70.3).

*Lathrimaeum* Erichson, 1839a: 624 (species included: *atrocephalum*, *fusculum*). **TYPE SPECIES:** *Omalium atrocephalum* Gyllenhal, fixed by subsequent designation by Westwood, 1840: 156.

- Heer, 1839: 187 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 868 (characters).
- Redtenbacher, 1849: 749 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 141 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 636 (characters).
- Jacquelin du Val, 1857: 75 (characters).
- Redtenbacher, 1857: 248 (characters).
- Kraatz, 1857d: 943 (characters).
- Thomson, 1858: 38 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 49 (characters; type species: *atrocephalum*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 195 (characters).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 661 (catalog).
- Jacquelin du Val, 1868: 81 (catalog; European species).
- Fauvel, 1871a: 118 [= 1872: 92] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 268 (characters; key to Austrian species).
- Fauvel, 1875a: VI [= 1875b: 208] (catalog).
- Provancher, 1877: 260 (characters).
- Fauvel, 1878d: 233 [= 1878e: 69] (key to North American species).
- Mulsant and Rey, 1880: 119 (characters; key to French species).
- Duvivier, 1883: 195 (catalog).
- Fowler, 1888: 405 (notes; key to British species).
- Casey, 1894: 416 (notes; key to North American species).
- Heyden, 1893: 48 (list of species of Siberian region).

- Seidlitz, 1891: 344 (key to some European species).
  - Seidlitz, 1891a: 367 (key to some European species).
  - Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
  - Ganglbauer, 1895: 721 (characters; key to middle European species).
  - Luze, 1905a: 53 (characters; revision of and key to Palaearctic species).
  - Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).
  - Sainte-Claire Deville, 1907: 42 (characters; key to and annotated list of species of Seine Basin, France).
  - Reitter, 1909: 187 (characters; key to German species).
  - Bernhauer and Schubert, 1910: 64 (world catalog; 18 species).
  - Petri, 1912: 54 (list of species of Siebenbürgen).
  - Leng, 1920: 94 (catalog of North American species).
  - Winkler, 1925: 332 (catalog for Palaearctic region).
  - Cameron, 1925: 104 (catalog of Indian species).
  - Porta, 1926: 25 (characters; key to species of Italy).
  - Portevin, 1929: 441 (characters; key to French species).
  - Cameron, 1930: 151 (characters; key to species of British India).
  - Roubal, 1930: 312 (catalog; Slovakia).
  - Joy, 1932: 96 (key to British species).
  - Scheerpeltz, 1933: 1055 (world catalog supplement).
  - Scheerpeltz, 1937b: 187 (list of Bulgarian species).
  - Kloet and Hincks, 1945: 161 (synonym of *Anthobium*).
  - Palm, 1948: 99 (characters; key to species of Sweden).
  - Tottenham, 1949: 357 (synonym of *Anthobium*; type species: *atrocephalum*).
  - Blackwelder, 1952: 209 (type species: *atrocephalum*).
  - Kocher, 1958: 194 (checklist of species; Morocco).
  - Scheerpeltz, 1961c: 72–74 (notes; key to Palaearctic species; type species: *melanocephalum*).
  - Ferreira, 1962a: 9 (list of Portuguese species).
  - Horion, 1963: 105 (list of central European species).
  - Székessy, 1963: 19 (characters).
  - Lohse, 1964: 52 (cited as valid genus; characters; key to central European species).
  - Pototskaia, 1967: 20 (larval characters).
  - Kasule, 1968: 133, 134 (larval characters).
  - Scheerpeltz, 1968a: 13 (catalog of Austrian species).
  - Tikhomirova, 1973a: 139 (checklist of species of USSR).
  - Pope, 1977: 22 (synonym of *Anthobium*).
  - Coiffait, 1978f: 274 (key to species of France).
  - Uhlig, 1979: 242 (some species collected in Germany).
  - Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
  - Uhlig and Vogler, 1981: 86 (list of some species collected in Germany; habitat and collecting notes).
  - Tóth, 1982: 78 (characters; habitus; key to species of Hungary).
  - Segers, 1986: 21 (checklist of species; Belgium).
  - Zanetti, 1987: 290 (characters; habitus; key to species of Italy).
  - Lohse and Lucht, 1989: 126 (notes).
  - Watanabe, 1990: 121 (characters; species of Japan).
  - Angelini, 1991: 191 (list of species from high elevations of Calabria, Italy).
  - Detner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
  - Boháč, 1993: 41 (synonym of *Anthobium*).
  - Zanetti, 1995: 8 (list of species of Italy).
  - M. Hansen, 1996: 95 (synonym of *Anthobium*).
  - Assing, Frisch, Kahlen, et al., 1998: 125 (synonym of *Anthobium*).
- Priono thorax* Luze, 1905a: 68 (subgenus of *Lathrimaenum*; species included: *reflexum*).
- TYPE SPECIES:** *Lathrimaenum reflexum* Reitter, fixed by monotypy.
- Bernhauer and Schubert, 1910: 64 (subgenus of *Lathrimaenum*).
  - Blackwelder, 1952: 321 (type species: *reflexum*).

*Eudeliphrum* Champion, 1920: 244 (species included: *gracilipalpe*). **TYPE SPECIES:**  
*Eudeliphrum gracilipalpe* Champion, fixed by monotypy.

- Cameron, 1925: 12 (catalog of Indian species).
- Cameron, 1930: 151 (synonym of *Lathrimaeum*).
- Scheerpeltz, 1933: 1055 (synonym of *Lathrimaeum*).
- Blackwelder, 1952: 155 (type species: *gracilipalpe*).

**abantense** Fagel, 1968: 121 (*Lathrimaeum*; Type locality: Anatolie occidentale; dans des détritatus de cure sur les berges de l'Abant Gölü, 1450 m).

▲ **DISTRIBUTION:** Turkey.

*adultum* Kiesenwetter, 1851, see: *Eusphalerum*.

*adustum* Kiesenwetter, 1851, see: *Eusphalerum*.

**aequicolle** Casey, 1894: 419 (*Deliphrum*; Type locality: California: Lake Tahoe).

- Bernhauer and Schubert, 1910: 63 (*Deliphrum*; catalog).
- Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** USA.

*aetolicum* Kraatz, 1858, see: *Eusphalerum*.

*africanum* Roubal, 1915, see: *Eusphalerum*.

*albipilis* Fauvel, 1900, see: *Eusphalerum*.

*alpestre* Motschulsky, 1857, see: *Eusphalerum*.

**altivagans** Cameron, 1941: 59 (*Lathrimaeum*; subgenus *Prionothorax*; Type locality: Kashmir: Gulmarg, alt. 8000–10,000 feet).

▲ **DISTRIBUTION:** India.

*alutaceum* Scheerpeltz, 1956, see: *Eusphalerum*.

*anale* Erichson, 1840, see: *Eusphalerum*.

*analogicum* Roubal, 1915, see: *Eusphalerum*.

**anatolicum** Fagel, 1968: 118 (*Lathrimaeum*; Type locality: Antolie occidentale: Abant Dagh, à quelques kilomètres au Sud du lac d'Abant ou Abant Gölü, 1500 m).

- Bordoni, 1986c: 44 (*Lathrimaeum*; valid species; characters).

▲ **DISTRIBUTION:** Turkey.

*andicola* Fauvel, 1867, see: *Xenanthobium*.

*angulatum* Luze, 1911, see: *Eusphalerum*.

*angustum* Kiesenwetter, 1850, see: *Eusphalerum*.

*apenninum* C. Koch, 1938, see: *Eusphalerum*.

*assimile* Stephens, 1834, see: *unicolor* Marsham, 1802.

*atriceps* Motschulsky, 1860, see: *Hapalaraea*.

*atriventre* Casey, 1894, see: *Eusphalerum*.

**atrocephalum** Gyllenhal, 1827: 463 (*Omaliium*; Type locality: Sparsåtra Vestrogothiae).

- Marsham, 1802: 127 (*Silpha*; [Note: Misidentification: Bernhauer and Schubert, 1910: 64 and Erichson, 1840: 870 cited *melanocephalum* Marsham as a synonym of *atrocephalum* Gyllenhal; Marsham did not describe the species, he attributed it to Panzer who attributed it to Illiger. Tottenham, 1949: 357 cited this use of *melanocephalum* Marsham as a misidentification of *atrocephalum* and that misidentification as the type species of *Anthobium*. Marsham's use of *melanocephala* is an unavailable name]; characters; Britain).
- Curtis, 1829: 28 (*Anthobium*; catalog; Britain).
- Stephens, 1834: 342 (*Anthobium*; characters; England).
- Lacordaire, 1835: 486 (*Omaliium*; characters; France).
- Erichson, 1839a: 625 (*Lathrimaeum*; characters; Germany).
- Stephens, 1839: 426 (*Lathrimaeum*; characters; England).
- Erichson, 1840: 870 (*Lathrimaeum*; characters; Germany; Sweden).

- Heer, 1841: 571 (*Lathrimaeum*; notes).
- Redtenbacher, 1849: 829 (*Lathrimaeum*; characters; Austria).
- Hardy, 1851: 57 (*Lathrimaeum*; notes; England).
- Fairmaire and Laboulbène, 1856: 636 (*Lathrimaeum*; characters; France).
- Redtenbacher, 1857: 248 (*Olophrum*; characters; Austria).
- Kraatz, 1857d: 946 (*Lathrimaeum*; characters; Germany).
- Thomson, 1859: 49 (type species of *Lathrimaeum*).
- Thomson, 1861: 195 (*Lathrimaeum*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Lathrimaeum*; Russia).
- Fauvel, 1871a: 120 [= 1872: 94] (*Lathrimaeum*; characters; France; Scandinavia; Britain; Germany; Austria; Russia; Algeria).
- Fauvel, 1874: 323 [= 1874b: 29] (*Lathrimaeum*; Japan).
- Redtenbacher, 1874: 269 (*Lathrimaeum*; characters; Austria).
- Seidlitz, 1875: 239 (*Lathrimaeum*; characters; Baltic region).
- J. Sahlberg, 1876: 213 (*Lathrimaeum*; Finland).
- Mulsant and Rey, 1880: 128 (*Lathrimaeum*; characters; France).
- Fowler, 1888: 405 (*Lathrimaeum*; characters; Britain).
- Ganglbauer, 1895: 722 (*Lathrimaeum*; characters; north and middle Europe; Mediterranean region; Japan; California).
- Fauvel, 1902b: 56 (*Lathrimaeum*; Algeria).
- Luze, 1905a: 63 (*Lathrimaeum*; characters; central and northern Europe; Mediterranean Sea; Japan; Caucasus; Asia Minor; California).
- Reitter, 1909: 188 (*Lathrimaeum*; characters; Germany).
- Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; catalog).
- Johansen, 1914: 595 (*Lathrimaeum*; characters; Denmark).
- Eichelbaum, 1914: 27, 94 (*Lathrimaeum*; abdominal segmentation; apical segments).
- Portevin, 1929: 441 (*Lathrimaeum*; characters; France).
- Scheerpeltz, 1933: 1055 (*Lathrimaeum*; catalog).
- Paulian, 1941: 150 (*Lathrimaeum*; larval characters; France).
- Scheerpeltz and Höfler, 1948: 153 (*Lathrimaeum*; characters; fungus inhabitant).
- Palm, 1948: 102 (*Lathrimaeum*; characters; Sweden; Denmark; Norway; Finland).
- Scheerpeltz, 1961c: 82 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Europe; Mediterranean region; Turkey; Caucasus; Siberia; Japan).
- Scheerpeltz, 1961d: 117 (*Lathrimaeum*; Italy).
- Scheerpeltz, 1963a: 415 (*Lathrimaeum*; Greece).
- Horion, 1963: 107 (*Lathrimaeum*; Scotland; Norway; Sweden; Finland; Russia; Pyrenees; Italy; Dalmatia; Bosnia; Serbia; Italy; Corsica; Sicily; Sardinia; Germany; Austria).
- Lohse, 1964: 52 (*Lathrimaeum*; characters; central Europe).
- Smetana, 1964d: 54 (*Lathrimaeum*; Czechoslovakia).
- Moore, 1966: 55 (*Anthobium*).
- Pototskaia, 1967: 20 (*Lathrimaeum*; larval characters).
- Szujecki, 1968a: 712 (*Lathrimaeum*; Poland).
- Steel, 1970a: 18 (*Anthobium*; biological notes).
- Pope, 1977: 22 (*Anthobium*; Britain).
- Coiffait, 1978f: 274 (*Lathrimaeum*; characters; France).
- Topp, 1979: 18 (*Lathrimaeum*; development; diapause).
- Grigo and Topp, 1980: 22 (*Lathrimaeum*; influence of temperature and photoperiod on oxygen consumption in diapause and non-diapause).
- Hammond, 1980: 135 (*Anthobium*; unconfirmed in Ireland).
- Tóth, 1982: 81 (*Lathrimaeum*; characters; Hungary).
- Zanetti, 1984: 76 (*Lathrimaeum*; Bulgaria).
- Ádám, 1987: 137 (*Anthobium*; collecting notes; Hungary).
- Zanetti, 1987: 295 (*Lathrimaeum*; characters; Italy).
- Lucht, 1987: 88 (*Lathrimaeum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).

- Dettner and Reissenweber, 1991 (*Lathrimaeum*; defensive secretions: chemistry and systematics).
- Janák and Vysoky, 1992: 134 (*Anthobium*; collected with *Formica polyctena*; Bohemia).
- Welch, 1993: 227 (*Anthobium*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Anthobium*; Slovakia; Czech Republic).
- Zanetti, 1995: 8 (*Lathrimaeum*; Italy).
- Owen, 1999b: 61 (*Anthobium*; captured underground at roots of old trees; Britain).
- Zanetti and Sabella, 1998: 31 (*Lathrimaeum*; Sicily).
- Cibulskis, 1999: 35 (*Anthobium*; list; Latvia).
- Owen, 2000: 251 (*Anthobium*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Anthobium*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Algeria, Europe, Russia, Turkey, Japan, USA.
- ruficolle* Stephens, 1834: 340 (*Anthobium*; Type locality: Not cited, presumably Britain).
  - Stephens, 1839: 425 (*Anthobium*; characters; England).
  - G. Waterhouse, 1858: 31 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Ganglbauer, 1895: 722 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Luze, 1905a: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Scheerpeltz, 1961c: 82 (*Lathrimaeum*; synonym of *atrocephalum*).
- longipenne* Stephens, 1834: 342 (*Anthobium*; Type locality: Norfolk; Suffolk; near London).
  - Stephens, 1839: 426 (*Lathrimaeum*; characters; England).
  - Hardy, 1851: 58 (*Lathrimaeum*; synonym of *atrocephalum*).
- ciatrix* Mulsant and Rey, 1880: 130 (*Lathrimaeum*; Type locality: Hautes-Pyrénées).
  - Ganglbauer, 1895: 722 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Luze, 1905a: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
- fauveli* Pic, 1893: 88 (*Lathrimaeum*; variety of *atrocephalum*; Type locality: Montagnes de Batna).
  - Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
- concolor* Delahon, 1914: 621 (*Lathrimaeum*; aberration of *atrocephalum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Mark Brandenburg).
  - Scheerpeltz, 1933: 1055 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Tóth, 1982: 81 (*Lathrimaeum*; aberration of *atrocephalum*; characters; Hungary).
- sardoum* Scheerpeltz, 1961c: 84, 92 (*Lathrimaeum*; subgenus *Lathrimaeum*; Type locality: Gebiete des Monte Genargentu auf Sardinien).
  - Coiffait, 1970e: 64 (*Lathrimaeum*; Cyprus).
  - Zanetti, 1986: 96 (*Lathrimaeum*; subspecies of *atrocephalum*).
  - Zanetti, 1987: 295 (*Lathrimaeum*; subspecies of *atrocephalum*; characters; Italy).
  - Zanetti, 1995: 8 (*Lathrimaeum*; subspecies of *atrocephalum*; Italy).
- aucupariae** Gistel, 1857: 4 (*Anthobium*; [**Note: Nomen dubium**]; Type locality: Styria).
  - ▲ **DISTRIBUTION:** Austria.
- aucupariae* Kiesenwetter, 1866, see: *Eusphalerum*.
- auliense* Bernhauer, 1913, see: *Eusphalerum*.
- aurifluum* Fauvel, 1878, see: *Eusphalerum*.
- bargaglii* Luze, 1910, see: *Eusphalerum*.
- baudii** Kraatz, 1870c: 402 (*Lathrimaeum*; Type locality: Not cited).
  - Fauvel, 1871a: 120 [= 1872: 94] (*Lathrimaeum*; synonym of *atrocephalum*).
  - Ganglbauer, 1895: 722 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Luze, 1905a: 64 (*Lathrimaeum*; synonym of *atrocephalum*).
  - Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; synonym of *atrocephalum*).

- Scheerpeltz, 1961c: 82 (*Lathrimaeum*; synonym of *atrocephalum*).
- Zanetti, 1987: 297 (*Anthobium*; cited as an incorrect synonym of *atrocephalum* and as though valid).
- Assing and Wunderle, 2001: 36 (*Anthobium*; cited as valid; Cyprus).

▲ **DISTRIBUTION:** Cyprus.

*baudii* Fiori, 1894, see: *Eusphalerum*.

*bigliani* Doderò, 1922, see: *Eusphalerum*.

*birmanum* Scheerpeltz, 1965, see: *Eusphalerum*.

*bivittatum* Eppelsheim, 1887, see: *Eusphalerum*.

*bolivari* C. Koch, 1940, see: *Eusphalerum*.

*bonnelli* Hatch, 1944, see: *Eusphalerum*.

*brachiale* Fauvel, 1878, see: *Eusphalerum*.

*brevipenne* Luze, 1910, see: *Philorinum*.

**brunneum** Stephens, 1834: 340 (*Anthobium*; [**Note: Nomen dubium**]; Type locality: London).

- Stephens, 1839: 425 (*Anthobium*; characters; England).

▲ **DISTRIBUTION:** England.

**cachemicum** Coiffait, 1982: 150 (*Lathrimaeum*; Type locality: Inde: Cachemire, Zagipal, près Pahalgam, 3500–3600 m).

▲ **DISTRIBUTION:** India.

*californicum* Fauvel, 1878, see: *Eusphalerum*.

*canaliculatum* Erichson, 1840, see: *Amphichroum*.

*cantabricum* C. Koch, 1940, see: *Eusphalerum*.

**carpophagum** Gistel, 1857: 40 (*Anthobium*; [**Note: Nomen dubium**]; Type locality: Deutschland).

▲ **DISTRIBUTION:** Germany.

*caucasicum* Bernhauer, 1908, see: *Eusphalerum*.

**cavicrus** Champion, 1925: 102 (*Lathrimaeum*; Type locality: Siahidevi, W. Almora, Kumaon, alt. 6000 ft.).

- Cameron, 1930: 153 (*Lathrimaeum*; characters; India).
- Scheerpeltz, 1933: 1055 (*Lathrimaeum*; catalog).
- Scheerpeltz, 1961c: 79 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; India).

▲ **DISTRIBUTION:** India.

*celsum* Luze, 1910, see: *Eusphalerum*.

*cerrutii* Bernhauer, 1940, see: *Eusphalerum*.

*chinense* Bernhauer, 1938, see: *Eusphalerum*.

*cicatrix* Mulsant and Rey, 1880, see: *atrocephalum* Gyllenhal, 1827.

*cincticolle* Chevrolat, 1860, see: *Eusphalerum*.

**clarkae** Hatch, 1957: 65 (*Anthobium*; Type locality: B. C. [British Columbia]: Terrace).

- Moore, 1966: 55 (*Anthobium*; cited as *clarki*).

▲ **DISTRIBUTION:** Canada.

*clavipes* Scriba, 1868, see: *Eusphalerum*.

*collare* Crotch, 1870, see: *Eusphalerum*.

**collare** Coiffait, 1978f: 273 (*Lathrimaeum*; [**Note: Preoccupied as a secondary homonym of *Eusphalerum collare* (Crotch)**]; Type locality: Ariège, Salau, Cirque d'Anglade).

▲ **DISTRIBUTION:** France.

*concolor* Delahon, 1914 [**Note: Nomen nudum**], see: *atrocephalum* Gyllenhal, 1827.

*convexum* Fauvel, 1878, see: *Eusphalerum*.

*corpulentum* Bernhauer, 1913, see: *Eusphalerum*.

*corsicum* Luze, 1910, see: *Eusphalerum*.

**coryleti** Gistel, 1857: 71 (*Lathrimaeum*; [Note: **Nomen dubium**]; Type locality: Tyrolis).

▲ **DISTRIBUTION:** Austria.

*crebepunctatum* Scheerpeltz, 1976, see: *Eusphalerum*.

**crenulatum** Hatch, 1957: 66 (*Anthobium*; Type locality: Oregon: Wasco Co.: Bear Springs).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** USA.

*cribrellum* Fauvel, 1900, see: *Eusphalerum*.

*cribricolle* Baudi, 1870, see: *Eusphalerum*.

*croaticum* Luze, 1910, see: *Eusphalerum*.

**deinekini** Roubal, 1913b: 479 (*Lathrimaeum*; Type locality: Teberda).

— Scheerpeltz, 1933: 1055 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 84 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Caucasus).

— Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Caucasus).

▲ **DISTRIBUTION:** Russia.

*densepilosum* Scheerpeltz, 1961, see: *Eusphalerum*.

*denticolle* Bernhauer, 1915, see: *Eusphalerum*.

*densipenne* Fauvel, 1900, see: *Eusphalerum*.

*diabolicum* Luze, 1905, see: *unicolor* Marsham, 1802.

*diabolicum* Roubal, 1914 [Note: **Nomen nudum**], see: *Eusphalerum*.

*dichroum* Fall, 1922, see: *Eusphalerum*.

*difficile* Rosenhauer, 1856, see: *Eusphalerum*.

*dimidiatum* Melsheimer, 1844, see: *Eusphalerum*.

*discinum* Gredler, 1863, see: *Eusphalerum*.

*dispar* Baudi, 1889, see: *Eusphalerum*.

*dissimile* Luze, 1910, see: *Eusphalerum*.

*diversicolle* Casey, 1894, see: *Eusphalerum*.

*elongatum* Ganglbauer, 1895, see: *Eusphalerum*.

*excavatum* Erichson, 1840, see: *Eusphalerum*.

**expansum** LeConte, 1879: 510 (*Deliphrum*; Type locality: Veta Pass, Colo.).

— Bernhauer and Schubert, 1910: 64 (*Deliphrum*; catalog).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** USA.

*farrarae* Hatch, 1944, see: *Eusphalerum*.

*fauveli* Pic, 1893, see: *atrocephalum* Gyllenhal, 1827.

*fenyesi* Bernhauer, 1912, see: *Eusphalerum*.

*fidele* Luze, 1910, see: *Eusphalerum*.

**fimetarium** Mannerheim, 1830: 52 (*Omalium*; Type locality: Insula Sitcha Americae borealis).

— Mannerheim, 1831: 466 (*Omalium*; Sitka Island).

— Erichson, 1840: 899 (*Anthobium*; characters; Sitka).

— Mannerheim, 1843b: 235 (*Anthobium*; characters; Sitka Island).

— Fauvel, 1878d: 235 [= 1878e: 71] (*Lathrimaeum*; characters; Alaska).

— Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1933: 1055 (*Lathrimaeum*; catalog).

— Hatch, 1957: 66 (*Anthobium*; characters; British Columbia; Washington; Oregon; Idaho).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** Canada, USA.



*flavipenne* Erichson, 1840, see: *Eusphalerum*.

*formosae* Cameron, 1949, see: *Eusphalerum*.

*foveicolle* Fauvel, 1871, see: *Eusphalerum*.

*foveolatum* Luze, 1910, see: *Eusphalerum*.

*fratellum* Rottenberg, 1874, see: *Deliphrosoma*.

*fraternum* Casey, 1894, see: *Eusphalerum*.

*fraternum* Luze, 1910, see: *Eusphalerum*.

*frosti* Bernhauer, 1928, see: *Eusphalerum*.

*fulvipenne* Solsky, 1874, see: *Eusphalerum*.

**fusculum** Erichson, 1839a: 626 (*Lathrimaeum*; Type locality: Mark Brandenburg).

- Erichson, 1840: 870 (*Lathrimaeum*; characters; Germany).
- Redtenbacher, 1849: 829 (*Lathrimaeum*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 637 (*Lathrimaeum*; characters; France).
- Redtenbacher, 1857: 249 (*Olophrum*; characters; Austria).
- Kraatz, 1857d: 947 (*Lathrimaeum*; characters; Germany).
- Hochhuth, 1862: 103 (*Lathrimaeum*; Russia).
- Baudi, 1870: 401 (*Lathrimaeum*; characters).
- Fauvel, 1871a: 120 [= 1872: 94] (*Lathrimaeum*; characters; France; Switzerland; Germany; Austria; Russia).
- Redtenbacher, 1874: 268 (*Lathrimaeum*; characters; Austria).
- Seidlitz, 1875: 239 (*Lathrimaeum*; characters; Baltic region).
- Mulsant and Rey, 1880: 131 (*Lathrimaeum*; characters; France).
- Ganglbauer, 1895: 722 (*Lathrimaeum*; characters; middle Europe).
- Luze, 1905a: 67 (*Lathrimaeum*; characters; Tyrol).
- Reitter, 1909: 188 (*Lathrimaeum*; characters; Germany).
- Bernhauer and Schubert, 1910: 64 (*Lathrimaeum*; catalog).
- Johansen, 1914: 596 (*Lathrimaeum*; characters; Denmark).
- Portevin, 1929: 442 (*Lathrimaeum*; characters; France).
- Scheerpeltz, 1933: 1055 (*Lathrimaeum*; catalog).
- Palm, 1948: 102 (*Lathrimaeum*; characters; Denmark; Norway).
- Scheerpeltz, 1961c: 79 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Europe).
- Horion, 1963: 107 (*Lathrimaeum*; Norway; Denmark; Germany; Austria; France; Switzerland; Czechoslovakia).
- Lohse, 1964: 52 (*Lathrimaeum*; characters; central Europe).
- Coiffait, 1978f: 274 (*Lathrimaeum*; characters; France).
- Tóth, 1982: 80 (*Lathrimaeum*; characters).
- Zanetti, 1987: 297 (*Lathrimaeum*; characters; Italy).
- Lucht, 1987: 88 (*Lathrimaeum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Denmark; Sweden).
- Boháč, 1993: 41 (*Anthobium*; Czech Republic).
- Zanetti, 1995: 8 (*Lathrimaeum*; Italy).

▲ **DISTRIBUTION:** Europe, Russia.

**ganglbaueri** Luze, 1905a: 65 (*Lathrimaeum*; Type locality: Südungarn, Herkulesbad).

- Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).
- Scheerpeltz, 1961c: 83 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Capathians; Romania; Bulgaria).
- Tóth, 1982: 81 (*Lathrimaeum*; characters).
- H. Franz, 1984: 59 (*Lathrimaeum*; Macedonia).

▲ **DISTRIBUTION:** Bulgaria, Greece, Macedonia, Romania.

*genistarum* Coquerel, 1860, see: *Omalium*.

*gilvipenne* Casey, 1894, see: *Eusphalerum*.

*goetzelmanni* Luze, 1910, see: *Eusphalerum*.

*gracile* Luze, 1910, see: *Eusphalerum*.

**gracilicorne** Luze, 1905a: 66 (*Lathrimaeum*; Type locality: Nordafrika, Hammam R'iza).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 83 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Tunisia; Algeria; Morocco).

▲ **DISTRIBUTION:** Algeria, Morocco, Tunisia.

**gracilipalpe** Champion, 1920: 244 (*Eudeliphrum*; Type locality: W. Almora in Kumaon).

— Cameron, 1930: 153 (*Lathrimaeum*; characters; India).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 75 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Himalaya).

▲ **DISTRIBUTION:** India.

*granulipenne* J. Sahlberg, 1871, see: *Eusphalerum*.

*grayae* Hatch, 1944, see: *Eusphalerum*.

**hamatum** Luze, 1905a: 59 (*Lathrimaeum*; Type locality: Caucasus, Meskisches Gebirge. Also cited from Armenia).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 76 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Caucasus).

— Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Caucasus).

— Bordoni, 1986c: 43 (*Lathrimaeum*; characters).

▲ **DISTRIBUTION:** Georgia, Armenia.

**hammondi** Watanabe, 1989: 53 (*Lathrimaeum*; Type locality: Japan).

— Sharp, 1874: 98 (*Lathrimaeum*; [Note: Misidentified as *atrocephalum* according to Watanabe, 1989: 53]; Japan).

— Watanabe, 1990: 124 (*Lathrimaeum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*heydeni* Bernhauer, 1902, see: *Eusphalerum*.

*hirtellum* Fauvel, 1901, see: *Eusphalerum*.

*hispanicum* Brisout, 1866, see: *Eusphalerum*.

*horni* Fauvel, 1878, see: *Eusphalerum*.

*humerales* Casey, 1886, see: *Deinopteroloma*.

*hummleri* Bernhauer, 1908, see: *Eusphalerum*.

*impressicolle* Kiesenwetter, 1850, see: *Eusphalerum*.

*improvisum* Luze, 1911, see: *Eusphalerum*.

*indicum* Champion, 1920, see: *Eusphalerum*.

*italicum* C. Koch, 1938, see: *Eusphalerum*.

*japonicum* Bernhauer, 1909, see: *Eusphalerum*.

*jurassicum* Jarrige, 1946, see: *Eusphalerum*.

*kambaitiense* Scheerpeltz, 1965, see: *Eusphalerum*.

**kashmiricum** Cameron, 1941: 58 (*Lathrimaeum*; subgenus *Prionothorax*; Type locality: Kashmir: Gulmarg).

▲ **DISTRIBUTION:** India.

**knappei** Scheerpeltz, 1961c: 83, 89 (*Lathrimaeum*; subgenus *Lathrimaeum*; Type locality:

Nordwestfuss des Bergzuges Galicica Dorf Ramne südöstlich von Ochrid in Mazedonien in etwa 1000 bis 1200 m).

▲ **DISTRIBUTION:** Macedonia.

*korbi* Bernhauer, 1903, see: *Eusphalerum*.

*kraatzii* Jacquelin du Val, 1857, see: *Eusphalerum*.

**kuehnelti** Scheerpeltz, 1963a: 415, 426 (*Lathrimaeum*; subgenus *Lathrimaeum*; Type locality: im Tannenwald bei Ano Trikkala im Ziria-[Kyllänë-] Massiv des nordöstlichen Peloponnes).

▲ **DISTRIBUTION:** Greece.

*krasae* Roubal, 1940, see: *Eusphalerum*.

*lacinipenne* Scheerpeltz, 1976, see: *Eusphalerum*.

*laevipenne* Baudi, 1870, see: *Eusphalerum*.

**laterale** Luze, 1911: 293 (*Lathrimaeum*; Type locality: Kaukasus occid., Krasnaja Poljana).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 81 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Caucasus).

— Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; northwestern Caucasus).

▲ **DISTRIBUTION:** Russia.

*lewisi* Cameron, 1930, see: *Eusphalerum*.

*liepolti* Bernhauer, 1943, see: *Eusphalerum*.

*limbatum* Erichson, 1840, see: *Eusphalerum*.

*lindbergi* Bernhauer, 1931, see: *Eusphalerum*.

**longicorne** Fauvel, 1886: 15 [= 1886a: 7] (*Lathrimaeum*; Type locality: Algérie: Teniet-el-Had, forêt des Cèdres).

— Fauvel, 1902b: 56 (*Lathrimaeum*; Algeria).

— Luze, 1905a: 62 (*Lathrimaeum*; characters; Algeria).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 78 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Algeria).

— Coiffait, 1973a: 269 (*Lathrimaeum*; Morocco).

▲ **DISTRIBUTION:** Algeria, Morocco.

*longipenne* Stephens, 1834, see: *atrocephalum* Gyllenhal, 1827.

*longipenne* Erichson, 1839, see: *Eusphalerum*.

*longulum* Kiesenwetter, 1847, see: *Eusphalerum*.

*luigionii* Bernhauer, 1940, see: *Eusphalerum*.

*luteicorne* Erichson, 1840, see: *Eusphalerum*.

*luteipenne* Erichson, 1840, see: *Eusphalerum*.

*luteum* Erichson, 1840, see: *unicolor* Marsham, 1802.

*luzei* Roubal, 1915, see: *Eusphalerum*.

*lybicum* Normand, 1935 [**Note:** **Nomen nudum**], see: *Eusphalerum*.

*macrocephalum* Eppelsheim, 1873, see: *Deliphrosoma*.

*macropterum* Kraatz, 1857, see: *Eusphalerum*.

*maculicolle* Fairmaire, 1860, see: *Eusphalerum*.

*malaisei* Scheerpeltz, 1965, see: *Eusphalerum*.

*marshami* Fauvel, 1869, see: *Eusphalerum*.

**melanocephalum** Illiger, 1794: 596 (*Silpha*; Type locality: not cited, possibly Braunschweig).

— Panzer, 1795: 122 (*Silpha*; characters; Germany).

— Illiger, 1798: 356 (*Silpha*; characters).

— Panzer, 1808b: 5 (*Silpha*; characters; Germany).

— Runde, 1835: 22 (*Omalium*; [**Note:** Panzer cited as the author of *Silpha melanocephala*]; characters; Germany).

— Lacordaire, 1835: 485 (*Omalium*; [**Note:** Sturm cited as the author of *Nitidula melanocephala*]; characters; France).

- Heer, 1839: 187 (*Lathrimaeum*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 65 cited *atrocephalum* Heer as a synonym of *melanocephalum* Illiger; Heer did not describe the species as new, he attributed it to Gyllenhal]; characters; Switzerland).
- Heer, 1839: 188 (*Lathrimaeum*; characters; Switzerland).
- Erichson, 1840: 869 (*Lathrimaeum*; characters; Germany).
- Redtenbacher, 1849: 749 (*Lathrimaeum*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 636 (*Lathrimaeum*; characters; France).
- Redtenbacher, 1857: 248 (*Lathrimaeum*; characters; Austria).
- Kraatz, 1857d: 944 (*Lathrimaeum*; characters; Germany).
- Fauvel, 1871a: 118 [= 1872: 92] (*Lathrimaeum*; characters; France; Germany; Switzerland; Italy; Austria).
- Fauvel, 1874: 323 [= 1874b: 29] (*Lathrimaeum*; Russia).
- Redtenbacher, 1874: 269 (*Lathrimaeum*; characters; Austria).
- Seidlitz, 1875: 239 (*Lathrimaeum*; characters; Baltic region).
- Mulsant and Rey, 1880: 125 (*Lathrimaeum*; characters; France).
- Ganglbauer, 1895: 722 (*Lathrimaeum*; characters; middle Europe).
- Luze, 1905a: 58 (*Lathrimaeum*; characters; central and northern Europe).
- Reitter, 1909: 187 (*Lathrimaeum*; characters; Germany).
- Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).
- Johansen, 1914: 594 (*Lathrimaeum*; characters; Denmark).
- Portevin, 1929: 441 (*Lathrimaeum*; characters; France).
- Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).
- Scheerpeltz and Höfler, 1948: 153 (*Lathrimaeum*; fungus inhabitant).
- Palm, 1948: 101 (*Lathrimaeum*; characters; Sweden; Norway).
- Scheerpeltz, 1961c: 76 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Europe).
- Szujewski, 1963a: 32 (*Lathrimaeum*; Poland).
- Horion, 1963: 105 (*Lathrimaeum*; Norway; Sweden; Poland; Czechoslovakia; Romania; Bosnia; Croatia; Slovenia; Italy; Switzerland; France; Belgium; Germany; Austria).
- Lohse, 1964: 52 (*Lathrimaeum*; characters; central Europe).
- Coiffait, 1978f: 275 (*Lathrimaeum*; characters; France).
- Tóth, 1982: 80 (*Lathrimaeum*; characters; Hungary).
- Zanetti, 1987: 294 (*Lathrimaeum*; characters; Italy).
- Lucht, 1987: 88 (*Lathrimaeum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Sweden).
- Boháč, 1993: 41 (*Anthobium*; Slovakia; Czech Republic).
- Zanetti, 1995: 8 (*Lathrimaeum*; Italy).
- Cibulskis, 1998: 67 (*Anthobium*; Latvia).
- Cibulskis, 1999: 35 (*Anthobium*; list; Latvia).

▲ **DISTRIBUTION:** Europe, Russia.

**melanochromum** Iablokov-Khnzorian, 1961: 140 (*Lathrimaeum*; Type locality: Armenia: Sevan, bord du lac en face de l'ancienne île).

- Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Armenia).

▲ **DISTRIBUTION:** Armenia.

*melanurum* C. Koch, 1938 [**Note:** **Nomen nudum**], see: *Eusphalerum*.

*melichari* Bernhauer, 1913, see: *Eusphalerum*.

**mesasiaticum** Kirshenblat, 1961: 363 (*Lathrimaeum*; Type locality: Tadzhikistan: Stalinabad. Also cited from Uzbekistan).

- Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Central Asia).

▲ **DISTRIBUTION:** Tajikistan, Uzbekistan.

**metallicum** Luze, 1905a: 63 (*Lathrimaeum*; Type locality: Syrie, Akbes).

- Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).
- Scheerpeltz, 1961c: 77 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Syria; Lebanon).

▲ **DISTRIBUTION:** Lebanon, Syria.

*metasternale* Fauvel, 1898, see: *Eusphalerum*.

*microcephalum* Motschulsky, 1860, see: *Eusphalerum*.

*minskae* Hatch, 1944, see: *Eusphalerum*.

*miricolle* Sainte-Claire Deville, 1901, see: *Eusphalerum*.

*mocsarskii* Bernhauer, 1913, see: *Eusphalerum*.

**moczarskii** Scheerpeltz, 1961c: 77, 85 (*Lathrimaeum*; subgenus *Lathrimaeum*; Type locality: Süd-Spanien auf der Sierra Alfacar).

▲ **DISTRIBUTION:** Spain.

*montanum* Erichson, 1840, see: *Eusphalerum*.

**monticola** Cameron, 1924b: 169 (*Lathrimaeum*; Type locality: Chakrata and Simla Districts, 7000 to 9000 feet).

— Cameron, 1930: 154 (*Lathrimaeum*; characters; India).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 78 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; India).

▲ **DISTRIBUTION:** India.

*mucronatum* Stephens, 1834, see: *Eusphalerum*.

*nepalense* Scheerpeltz, 1976, see: *Eusphalerum*.

*notabile* Cameron, 1941, see: *Deinopteroloma*.

*nigerrimum* Casey, 1894, see: *Eusphalerum*.

*nigricorne* Stephens, 1834, see: *Proteinus*.

*nigriventre* Stephens, 1834, see: *Eusphalerum*.

*nigriventre* Motschulsky, 1860, see: *Eusphalerum*.

**nigropiceum** Casey, 1894: 417 (*Lathrimaeum*; Type locality: California: Santa Cruz Co.).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** USA.

*nigrum* Erichson, 1840, see: *Eusphalerum*.

**nigrum** Cameron, 1924b: 170 (*Lathrimaeum*; [**Note:** Preoccupied as a secondary homonym]; Type locality: Simla Hills; Gahan, 7000 feet).

— Cameron, 1930: 152 (*Lathrimaeum*; characters; India).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 75 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Himalayan region).

▲ **DISTRIBUTION:** India.

*nitidicolle* Baudi, 1857, see: *Eusphalerum*.

*nitidifrons* Luze, 1910, see: *Eusphalerum*.

*nitidum* Stephens, 1834, see: *Proteinus*.

*nudum* Luze, 1910, see: *Eusphalerum*.

*nuristanicum* Scheerpeltz, 1961, see: *Eusphalerum*.

*obliquum* Mulsant and Rey, 1861, see: *Eusphalerum*.

*oblitum* Fairmaire and Laboulbène, 1856, see: *Eusphalerum*.

*oblongum* Lacordaire, 1835, see: *Xylodromus*.

*obscurellum* Luze, 1911 [**Note:** **Nomen nudum**], see: *Eusphalerum*.

*obscurum* Brisout, 1866, see: *Eusphalerum*.

*obsoletum* Erichson, 1840, see: *Eusphalerum*.

*obtusicolle* Fauvel, 1876, see: *Eusphalerum*.

**occidium** Casey, 1894: 420 (*Deliphrum*; Type locality: California: Siskiyou Co.).

— Bernhauer and Schubert, 1910: 64 (*Deliphrum*; catalog).

— Hatch, 1957: 67 (*Deliphrum*; cited as *occidum*; characters; British Columbia; Washington; Oregon).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** Canada, USA.

*octavii* Fauvel, 1871, see: *Eusphalerum*.

*orientale* Bernhauer, 1912, see: *Eusphalerum*.

*palligerum* Kiesenwetter, 1847, see: *Eusphalerum*.

*parallelum* Sharp, 1889, see: *Eusphalerum*.

*parnassicum* Bernhauer, 1910, see: *Eusphalerum*.

*parvulum* Scheerpeltz, 1976, see: *Eusphalerum*.

*pectorale* Luze, 1910, see: *Eusphalerum*.

*petzi* Bernhauer, 1910, see: *Eusphalerum*.

*petzianum* Bernhauer, 1929, see: *Eusphalerum*.

*pfefferi* Roubal, 1941, see: *Eusphalerum*.

*piceum* Stephens, 1834, see: *Omalium*.

*picipenne* Stephens, 1834, see: *Eusphalerum*.

*pictum* Fauvel, 1878, see: *Deinopteroloma*.

*pilosellum* Luze, 1910, see: *Eusphalerum*.

*pollens* Sharp, 1889, see: *Eusphalerum*.

*pothos* Mannerheim, 1843, see: *Eusphalerum*.

**pourtoyi** Coiffait, 1978f: 273 (*Lathrimaeum*; Type locality: Hautes-Pyrénées, Lac Bleu).

▲ **DISTRIBUTION:** France.

*procerum* Baudi, 1857, see: *Eusphalerum*.

*prolongatum* Rottenberg, 1873, see: *Deliphrosoma*.

*pruinatum* Fauvel, 1871, see: *Eusphalerum*.

*pseudocupariae* E. Strand, 1917, see: *Eusphalerum*.

*pulcherrimum* Bernhauer, 1902, see: *Eusphalerum*.

*pumilio* Rosenhauer, 1856, see: *Eusphalerum*.

*punctatum* Casey, 1894, see: *Eusphalerum*.

*puncticeps* Luze, 1910, see: *Eusphalerum*.

*puncticolle* Gredler, 1863, see: *Eusphalerum*.

*punctulatum* Mulsant and Rey, 1880, see: *Eusphalerum*.

*ragusae* Bernhauer, 1923, see: *Eusphalerum*.

*rectanguloides* Smetana, 1967, see: *Eusphalerum*.

*rectangulum* Baudi, 1870, see: *Eusphalerum*.

*rectangulum* Fauvel, 1871, see: *Eusphalerum*.

**reflexicolle** Casey, 1894: 417 (*Lathrimaeum*; Type locality: British Columbia: Stickeen River Cañon).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Hatch, 1957: 65 (*Anthobium*; characters; British Columbia; Washington; Oregon; Idaho).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** Canada, USA.

**reflexum** Reitter, 1891b: 195 (*Lathrimaeum*; Type locality: bei Taschkent).

— Luze, 1905a: 68 (*Lathrimaeum*; subgenus *Prionothrax*; characters; Turkestan; Buchara).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

- Scheerpeltz, 1961c: 85 (*Lathrimaeum*; subgenus *Prionothonorax*; characters; Turkestan; Buchara).
- Coiffait, 1970d: 144 (*Lathrimaeum*; subgenus *Prionothonorax*; Uzbekistan).
- Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Central Asia).

▲ **DISTRIBUTION:** Uzbekistan.

*reitteri* Bernhauer, 1935, see: *Eusphalerum*.

*retowskii* Bernhauer, 1914, see: *Eusphalerum*.

*rhododendri* Baudi, 1848, see: *Eusphalerum*.

*rhododendri* Motschulsky, 1857, see: *Eusphalerum*.

**roubali** Luze, 1911: 293 (*Lathrimaeum*; Type locality: Kaukasus occid., Krasnaja Poljana).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 81 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Caucasus).

▲ **DISTRIBUTION:** Russia.

*ruffoi* Scheerpeltz, 1956, see: *Eusphalerum*.

*ruficolle* Stephens, 1834, see: *atrocephalum* Gyllenhal, 1827.

**ruficorne** Stephens, 1834: 338 (*Anthobium*; [**Note: Nomen dubium**]; Type locality: Not cited, but presumably Britain).

— Stephens, 1839: 425 (*Anthobium*; characters; England).

▲ **DISTRIBUTION:** England.

*rufipenne* Gerhardt, 1910 [**Note: Nomen nudum**], see: *Eusphalerum*.

*rufiventre* Cameron, 1930, see: *Eusphalerum*.

*rufoscutellatum* Eppelsheim, 1881, see: *Eusphalerum*.

*rufotestaceum* Motschulsky, 1860, see: *Eusphalerum*.

*rufulum* Luze, 1910 [**Note: Nomen nudum**], see: *Eusphalerum*.

**rugosum** Champion, 1925: 103 (*Lathrimaeum*; Type locality: Upper Gumti Valley, W. Almora Division, alt. 6000 ft.).

— Cameron, 1930: 154 (*Lathrimaeum*; characters; India).

— Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 85 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; India).

— Coiffait, 1977: 244 (*Lathrimaeum*; Nepal).

▲ **DISTRIBUTION:** India, Nepal.

*rugulosum* Mäklin, 1853, see: *Eusphalerum*.

*sahlbergi* Luze, 1910, see: *Eusphalerum*.

*sardoum* Scheerpeltz, 1961, see: *atrocephalum* Gyllenhal, 1827.

*sareptanum* Eppelsheim, 1878, see: *Eusphalerum*.

*satanas* Luze, 1911 [**Note: Nomen nudum**], see: *Eusphalerum*.

*schatzmayri* C. Koch, 1938, see: *Eusphalerum*.

*scribae* Schaufuss, 1862, see: *Eusphalerum*.

*scutellare* Erichson, 1840, see: *Eusphalerum*.

*sibiricum* Luze, 1910, see: *Eusphalerum*.

*signatum* Märkel, 1857, see: *Eusphalerum*.

*sikkimi* Fauvel, 1904, see: *Eusphalerum*.

*silesiacum* Letzner, 1868, see: *Eusphalerum*.

*sinuatocolle* Lokay, 1919, see: *Eusphalerum*.

**sinuosum** Hatch, 1957: 66 (*Anthobium*; Type locality: B. C. [British Columbia]: Creston. Also cited from Washington, Oregon, Idaho).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** Canada, USA.

**socialis** Cameron, 1941: 59 (*Lathrimaeum*; subgenus *Prionothorax*; Type locality: Kashmir: Gulmarg, alt. 8000–10,000 feet).

▲ **DISTRIBUTION:** India.

*solitare* Sharp, 1874, see: *Eusphalerum*.

*sorbicola* Y. Kangas, 1941, see: *Eusphalerum*.

*sordidulum* Kraatz, 1857, see: *Eusphalerum*.

**sordidum** Erichson, 1840: 871 (*Lathrimaeum*; Type locality: America septentrionalis).

— LeConte, 1850: 221 (*Lathrimaeum*; Lake Superior).

— Provancher, 1877: 260 (*Lathrimaeum*; characters; Quebec).

— Fauvel, 1878d: 235 [= 1878e: 71] (*Lathrimaeum*; characters; North America).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

▲ **DISTRIBUTION:** Canada, USA.

*sparsum* Fauvel, 1876, see: *Eusphalerum*.

**spretum** Casey, 1894: 418 (*Lathrimaeum*; Type locality: California: Siskiyou Co.).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Moore, 1966: 55 (*Anthobium*).

▲ **DISTRIBUTION:** USA.

*starcki* Reitter, 1890, see: *Eusphalerum*.

*stramineum* Kraatz, 1857, see: *Eusphalerum*.

*stussineri* Bernhauer, 1909, see: *Eusphalerum*.

*subangulatum* Casey, 1894, see: *Eusphalerum*.

*subcostatum* Mäklin, 1852, see: *Deinopteroloma*.

*subjectum* Mulsant and Rey, 1880, see: *Eusphalerum*.

*subsulcatum* Stephens, 1834, see: *Proteinus*.

*sulculum* Stephens, 1834, see: *Acrolocha*.

*tempestivum* Erichson, 1840, see: *Eusphalerum*.

*tenebaumi* Bernhauer, 1932, see: *Eusphalerum*.

**tenuis** Eppelsheim, 1881: 507 (*Lathrimaeum*; Type locality: Suramgebirge).

— Luze, 1905a: 60 (*Lathrimaeum*; characters; Caucasus).

— Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).

— Scheerpeltz, 1961c: 80 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Caucasus).

— Bordoni, 1986c: 43 (*Lathrimaeum*; characters).

— Tikhomirova, 1973a: 139 (*Lathrimaeum*; subgenus *Lathrimaeum*; checklist; Caucasus).

▲ **DISTRIBUTION:** Georgia.

*tibiale* Casey, 1894, see: *Eusphalerum*.

*tibiale* Luze, 1910, see: *Eusphalerum*.

*transcaucasicum* Bernhauer, 1902, see: *Eusphalerum*.

*triviale* Erichson, 1839, see: *Eusphalerum*.

*umbellatarum* Kiesenwetter, 1850, see: *Eusphalerum*.

*umbricolor* Roubal, 1915, see: *Eusphalerum*.

*uncipes* C. Koch, 1938, see: *Eusphalerum*.

**unicolor** Marsham, 1802: 127 (*Silpha*; Type locality: Britain).

— Stephens, 1834: 343 (*Anthobium*; characters; England).

— Stephens, 1839: 426 (*Lathrimaeum*; characters; England).

— Stephens, 1839: 427 (*Olophrum*; [Note: Misidentified as *assimile* according to Waterhouse, 1858: 31]; characters; England).

— Hardy, 1851: 58 (*Lathrimaeum*; synonym of *atrocephalum*).

— Fauvel, 1871a: 119 [= 1872: 93] (*Lathrimaeum*; characters; France; Britain; Germany; Portugal).



- Fauvel, 1876a: 52 [= 1876: 237] (*Lathrimaeum*; Spain).
- Fowler, 1888: 406 (*Lathrimaeum*; characters; Britain).
- Ganglbauer, 1895: 722 (*Lathrimaeum*; characters; middle Europe; Portugal).
- Luze, 1905a: 61 (*Lathrimaeum*; characters; central Europe; Spain; Portugal).
- Reitter, 1909: 188 (*Lathrimaeum*; characters; Germany).
- Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).
- Johansen, 1914: 596 (*Lathrimaeum*; characters; Denmark).
- Portevin, 1929: 441 (*Lathrimaeum*; characters; France).
- Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).
- Palm, 1948: 101 (*Lathrimaeum*; characters; Sweden; Denmark; Norway).
- Scheerpeltz, 1961c: 81 (*Lathrimaeum*; subgenus *Lathrimaeum*; characters; Europe an Mediterranean region).
- Horion, 1963: 106 (*Lathrimaeum*; Britain; Denmark; Norway; Sweden; Holland; Belgium; France; Spain; Portugal; Romania ?; Slovakia ?; Germany; Austria).
- Lohse, 1964: 52 (*Lathrimaeum*; characters; central Europe).
- Kasule, 1968: 134 (*Lathrimaeum*; larval characters).
- Kasule, 1968a: 73 (*Lathrimaeum*; life history).
- Steel, 1970a: 18 (*Anthobium*; biological notes).
- Pope, 1977: 22 (*Anthobium*; Britain).
- Coiffait, 1978f: 275 (*Lathrimaeum*; characters; France).
- Burakowski, Mroczkowski, and Stefańska, 1979: 57 (*Anthobium*; Poland).
- Hammond, 1980: 136 (*Anthobium*; Ireland).
- Tóth, 1982: 80 (*Lathrimaeum*; characters).
- Lucht, 1987: 88 (*Lathrimaeum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Detner and Reissenweber, 1991 (*Lathrimaeum*; defensive secretions: chemistry and systematics).
- Welch, 1993: 227 (*Anthobium*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Anthobium*; Slovakia ?).
- Owen, 1999b: 61 (*Anthobium*; captured underground at roots of old trees; Britain).
- Owen, 2000: 251 (*Anthobium*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Anthobium*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Europe.
- assimile* Stephens, 1834: 342 (*Anthobium*; Type locality: London; Suffolk).
  - G. Waterhouse, 1858: 31 (*Lathrimaeum*; synonym of *unicolor*).
  - Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; synonym of *unicolor*).
- luteum* Erichson, 1840: 869 (*Lathrimaeum*; Type locality: Lusitania).
  - Fairmaire and Laboulbène, 1856: 636 (*Lathrimaeum*; characters; France).
  - Redtenbacher, 1857: 249 (*Olophrum*; characters; Germany).
  - Kraatz, 1857d: 945 (*Lathrimaeum*; characters; Germany).
  - G. Waterhouse, 1858: 31 (*Lathrimaeum*; synonym of *unicolor*).
  - Thomson, 1867: 315 (*Lathrimaeum*; characters; Scandinavia).
  - Thomson, 1867a: 48 (*Lathrimaeum*; characters; Scandinavia).
  - Fauvel, 1871a: 119 [= 1872: 119] (*Lathrimaeum*; synonym of *unicolor*).
  - Redtenbacher, 1874: 269 (*Lathrimaeum*; characters; Germany).
  - Seidlitz, 1875: 239 (*Lathrimaeum*; characters; Baltic region).
  - Mulsant and Rey, 1880: 123 (*Lathrimaeum*; characters; France).
  - Fowler, 1888: 406 (*Lathrimaeum*; synonym of *unicolor*).
  - Ganglbauer, 1895: 722 (*Lathrimaeum*; synonym of *unicolor*).
  - Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; synonym of *unicolor*).
  - Scheerpeltz, 1933: 1056 (*Lathrimaeum*; synonym of *unicolor*).
- diabolicum* Luze, 1905a: 61 (*Lathrimaeum*; variety of *unicolor*; Type locality: Not cited).
  - Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; variety of *unicolor*).
  - Scheerpeltz, 1961c: 81 (*Lathrimaeum*; subgenus *Lathrimaeum*; aberration of *unicolor*; characters).

**urgelense** Fagel, 1968: 122 (*Lathrimaeum*; Type locality: Espagne: Catalogne, Seo de Urgel, contreforts de la Sierra del Cadi, 1000 m).

▲ **DISTRIBUTION:** Spain.

*ustulatum* Fairmaire and Laboulbène, 1856, see: *Eusphalerum*.

*viertli* Ganglbauer, 1895, see: *Eusphalerum*.

*zolotarevi* Reitter, 1909, see: *Eusphalerum*.

### **Anthophagus**

[36 species (7 doubtful); Palaearctic and Nearctic Regions]

*Anthophagus* Gravenhorst, 1802: 120 (species included: *caraboides*, *abbreviatus*, *testaceus*, *armiger*, *obscurus*, *plagiatus*, *dichrous*, *alpinus*; [**Note:** Without action by the Commission the name of this genus must be *Lesteva* and the generic name for the species currently in *Lesteva* must be *Tevalis*. See Herman, 2001: 7]). **TYPE SPECIES:** *Staphylinus alpinus* Fabricius, fixed by subsequent designation by Thomson, 1859: 48.

- Latreille, 1802: 129 (cited as *antophagus*; synonym of *Lesteva*).
- Latreille, 1804: 286, 366 (cited as synonym of *Lesteva*).
- Latreille, 1806: 296 (synonym of *Lesteva*).
- Gravenhorst, 1806: 220 (characters).
- Gyllenhal, 1810: 191 (characters).
- Leach, 1815: 92 (characters).
- Billberg, 1820: 15 (characters; list of some species).
- Dejean, 1821: 25 (cited as *Antophagus*; list of species in collection).
- C. Sahlberg, 1827: 273 (characters).
- Zetterstedt, 1828: 44 (characters).
- Latreille, 1829: 439 (synonym of *Lesteva*).
- Dejean, 1833: 68 (list of species).
- Gistel, 1834: 9 (list of species).
- Say, 1834: 463 (characters).
- Zetterstedt, 1838: 48 (characters).
- Erichson, 1839a: 614 (characters).
- Heer, 1839: 194 (characters).
- Erichson, 1840: 847 (characters).
- Laporte, 1840: 192 (characters).
- Kiesenwetter, 1845: 21 (notes).
- Redtenbacher, 1849: 745 (characters).
- Schaum, 1852: 29 (list of species; Europe).
- Lacordaire, 1854: 135 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 625 (characters).
- Gistel, 1856: 267, 389 (list of species).
- Jacquelin du Val, 1857: 69 (characters).
- Redtenbacher, 1857: 241 (characters; key to Austrian species).
- Kraatz, 1857d: 912 (characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 30 (catalog of British species).
- Thomson, 1859: 48 (characters; type species: *alpinus*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 178 (characters).
- Gredler, 1863: 119 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 35 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 657 (catalog).
- Jacquelin du Val, 1868: 79 (catalog; European species).
- Fauvel, 1871a: 137 [= 1872: 111] (characters; key to species).
- Sharp, 1871d: 14 (list of British species).

- Redtenbacher, 1874: 263 (characters; key to Austrian species).
- Fauvel, 1875a:VII [= 1875b: 209] (catalog).
- Provancher, 1877: 259 (characters).
- Mulsant and Rey, 1880: 8 (characters; key to French species).
- Heyden, 1880: 81 (list of species of Siberian region).
- Duvivier, 1883: 193 (catalog).
- Fowler, 1888: 398 (notes; key to British species).
- Seidlitz, 1891: 348 (key to some European species).
- Seidlitz, 1891a: 371 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 117 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 704 (characters; key to middle European species).
- Luze, 1902d: 505 (characters; key to Palaeartic species).
- Heyden, Reitter, and Weise, 1906: 136 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 50 (characters; key to and annotated list of species of Seine Basin, France).
- Reitter, 1909: 182 (characters; key to German species).
- Bernhauer and Schubert, 1910: 78 (world catalog; 29 species).
- Johansen, 1914: 585 (characters).
- Winkler, 1925: 335 (catalog for Palaeartic region).
- Porta, 1926: 31 (characters; key to species of Italy).
- Portevin, 1929: 433 (characters; key to French species).
- Roubal, 1930: 317 (catalog; Slovakia).
- Joy, 1932: 98 (key to British species).
- Scheerpeltz, 1933: 1067 (world catalog supplement).
- C. Koch, 1933a (discussion; classification).
- C. Koch, 1934a (revision; key to species; redescription of species; discussion; distribution).
- Scheerpeltz, 1937b: 199 (list of Bulgarian species).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 123 (characters; key to species of Sweden).
- Tottenham, 1949: 358, 408 (type species: *alpinus* Paykull; list of British species).
- Blackwelder, 1952: 56 (type species).
- Tottenham, 1954: 34 (characters; key to British species).
- Smetana, 1959a: 196 (list of species collected in Albania).
- Horion, 1963: 138 (list of central European species).
- Székessy, 1963: 22 (characters).
- Lohse, 1964: 63 (characters; key to central European species).
- Moore, 1966: 48, 51 (characters; notes).
- Pototskaia, 1967: 20 (larval characters).
- Scheerpeltz, 1968a: 17 (catalog of Austrian species).
- Steel, 1970a: 21 (larval characters; biological notes).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Moore and Legner, 1975: 183 (catalog; one unnamed species from California).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 309 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 71 (catalog; Poland).
- Moore and Legner, 1979: 178 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
- Uhlig and Vogler, 1981: 88 (list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 89 (characters; habitus; key to species of Hungary).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Muona and Viramo, 1986: 16 (list of species of northeastern Finland).
- Segers, 1986: 23 (checklist of species; Belgium).
- Zanetti, 1987: 387 (characters; habitus; key to species of Italy).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).

- Angelini, 1991: 190 (list of species from high elevations of Calabria, Italy).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 9 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (1 undescribed Nearctic species; notes; characters in key).

*Phaganthus* Mulsant and Rey, 1880: 12, 42 (subgenus of *Anthophagus*; species included: *scutellaris*, *testaceus*, *praeustus*, *rotundicollis*). **TYPE SPECIES:** *Anthophagus testaceus* Gravenhorst, fixed by subsequent designation by Blackwelder, 1952: 299.

- Ganglbauer, 1895: 704 (subgenus of *Anthophagus*).
- Bernhauer and Schubert, 1910: 78 (subgenus of *Anthophagus*).
- Joy, 1932: 99 (key to British species).
- Scheerpeltz, 1933: 1067 (subgenus of *Anthophagus*).
- Tottenham, 1945: 70 (subgenus of *Anthophagus*; cited as *Plaganthus* [**Note:** Corrected to *Phaganthus* by Tottenham, 1949c: 41]; type species: *Staphylinus caraboides* Linné, 1785 = *Anthophagus testaceus* Gravenhorst, 1802 [**Note:** *caraboides* was not an originally included species]).
- Kloet and Hincks, 1945: 161 (list of British species).
- Tottenham, 1949: 358, 408 (subgenus of *Anthophagus*; type species: *caraboides* Linné = *testaceus* Gravenhorst; list of British species).
- Horion, 1963: 138 (cited as *Phagantus*; subgenus of *Anthophagus*; list of central European species).
- Lohse, 1964: 64 (subgenus of *Anthophagus*; characters; key to central European species).
- Kasule, 1968: 133, 136 (larval characters).
- Zanetti, 1987: 387 (subgenus of *Anthophagus*; characters; key to species of Italy).

*Dimorphoschelus* Blackwelder, 1952: 126. **TYPE SPECIES:** *Anthophagus alpestris* Heer, fixed by subsequent designation by Blackwelder, 1952: 126.

- C. Koch, 1933a: 140, 142 (characters; subgenus of *Anthophagus*; species included: *angusticollis*, *fulvus*, *gracilis*, *obscuriceps*, *fascifer*, *apfelbecki*, *schneideri*, *omalinus*, *arpedinus*, *arrowsi*, *melanocephalus*, *fenestrellanus*, *hummleri*, *schatzmayri*, *dinaricus*, *transversus*, *alpestris*, *austriacus*, *decoratus*; [**Note:** This is the original description for *Dimorphoschelus* but the name was unavailable because the author failed to designate a type species (Article 13.3). A type species was designated by Blackwelder, 1952]).
- Zanetti, 1987: 388, 413 (subgenus of *Anthophagus*; characters; habitus; key to species of Italy).

*abbreviatus* Fabricius, 1779, see: *angusticollis* Mannerheim, 1830.

**advena** Gistel, 1857: 89 (*Anthophagus*; [**Note:** *Nomen dubium*]; Type locality: Alpes Longobardiae).

▲ **DISTRIBUTION:** ?.

*aemulus* Rosenhauer, 1847, see: *Hygrogeus*.

**aneicollis** Fauvel, 1873b: 120 [= 1873c: 13] (*Anthophagus*; Type locality: Gap; [**Note:** See lectotype designation by Zanetti, 1986]).

- Mulsant and Rey, 1880: 17 (*Anthophagus*; characters; France).
- Ganglbauer, 1895: 706 (*Anthophagus*; characters; western Alps).
- Luze, 1902d: 514 (*Anthophagus*; characters; western Alps).
- Bernhauer and Schubert, 1910: 78 (*Anthophagus*; catalog).
- Portevin, 1929: 434 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).
- C. Koch, 1934a: 181 (*Anthophagus*; subgenus *Anthophagus*; characters; France; Switzerland; Austria).
- Horion, 1935: 168 (*Anthophagus*; characters; western Alps; Germany).

- Horion, 1963: 143 (*Anthophagus*; subgenus *Anthophagus*; France; Italy; Switzerland; Germany; Austria).
  - Lohse, 1964: 65 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
  - Jarrige, 1968b: 76 (*Anthophagus*; France).
  - Zanetti, 1986: 97 (*Anthophagus*; lectotype designation).
  - Zanetti, 1987: 403 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
  - Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria).
  - Zanetti, 1995: 9 (*Anthophagus*; Italy).
- ▲ **DISTRIBUTION:** Germany, France, Switzerland, Austria, Italy.

*albanicus* Bernhauer, 1926, see: *alpinus* Paykull, 1790.

**alpestris** Heer, 1839: 196 (*Anthophagus*; Type locality: Alp Manigorio Ct. Tessin).

- Redtenbacher, 1849: 745 (*Anthophagus*; synonym of *austriacus*).
  - Kraatz, 1857d: 918 (*Anthophagus*; synonym of *austriacus*).
  - Fauvel, 1871a: 141 [= 1872: 115] (*Anthophagus*; characters; France; Germany; Switzerland; Italy; Austria).
  - Mulsant and Rey, 1880: 37 (*Anthophagus*; characters; France).
  - Ganglbauer, 1895: 708 (*Anthophagus*; characters; Alps; Sudeten; Carpathians).
  - Luze, 1902d: 512 (*Anthophagus*; characters; Alps; Sudeten; Carpathians; Jura).
  - Reitter, 1909: 183 (*Anthophagus*; characters; Germany).
  - Bernhauer and Schubert, 1910: 78 (*Anthophagus*; catalog).
  - Portevin, 1929: 434 (*Anthophagus*; characters; France).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
  - C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Dimorphoschelus*; figure).
  - C. Koch, 1934a: 234 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Czechoslovakia; Alps; Hungary; Bosnia; Italy; France).
  - Horion, 1963: 149 (*Anthophagus*; subgenus *Dimorphoschelus*; Czech Republic; Slovakia; Romania; Bulgaria; Bosnia Hercegovina; Serbia; Albania; Slovenia; Austria; Italy; France; Germany; Switzerland).
  - Lohse, 1964: 67 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; central Europe).
  - Tóth, 1982: 95 (*Anthophagus*; characters; Hungary).
  - Zanetti, 1984: 79 (*Anthophagus*; Bulgaria).
  - Zanetti, 1987: 420 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Italy).
  - Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland).
  - Schülke and Uhlig, 1988: 3 (*Anthophagus*; Germany).
  - Boháč, 1993: 42 (*Anthophagus*; subgenus *Anthophagus*; [**Note:** Incorrect subgeneric assignment; *A. alpestris* is the type species of subgenus *Dimorphoschelus*]; subspecies *alpestris*; Slovakia; Czech Republic).
  - Zanetti, 1995: 9 (*Anthophagus*; Italy).
- ▲ **DISTRIBUTION:** France, Germany, Switzerland, Italy, Austria, Hungary, Czech Republic, Slovakia, Bulgaria, Bosnia Hercegovina.

*austriacus* Erichson, 1840: 849 (*Anthophagus*; Type locality: Austria; Carinthia).

- Kiesenwetter, 1845: 23 (*Anthophagus*; notes).
- Kiesenwetter, 1847a: 55 (*Anthophagus*; characters; Germany; Switzerland).
- Märkel and Kiesenwetter, 1848a: 327 (*Anthophagus*; Carpathian Alps).
- Redtenbacher, 1849: 745 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 628 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 242 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 918 (*Anthophagus*; characters; Austria).
- Fauvel, 1865a: 314 [= 1865b: 64] (*Anthophagus*; habitat; France).
- Fauvel, 1871a: 141 [= 1872: 115] (*Anthophagus*; synonym of *alpestris*).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 38 (*Anthophagus*; synonym of *alpestris*).
- Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *alpestris*).
- Luze, 1902d: 512 (*Anthophagus*; synonym of *alpestris*).

- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *alpestris*).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; synonym of *alpestris*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *alpestris*).
  - Zanetti, 1987: 420 (*Anthophagus*; synonym of *alpestris*).
- decoratus* C. Koch, 1933: 30 (*Anthophagus*; named for an aberrant form of *transversus* Motschulsky and cited as *alpestris decoratus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5); although Koch did not explicitly state that *decoratus* was an aberration he did say that it was named for an aberrant form of *transversus* and in later articles cited it as an aberration]; locality cited: Alpes de la Carniole).
- C. Koch, 1933a: 142 (*Anthophagus*; aberration of *alpestris*; name is replacement for *transversus sensu auctorum*).
  - C. Koch, 1934a: 234 (*Anthophagus*; subgenus *Dimorphoschelus*; aberration of *alpestris*).
  - Tóth, 1982: 95 (*Anthophagus*; aberration of *alpestris*; characters).
  - Zanetti, 1987: 420 (*Anthophagus*; synonym of *alpestris*).
- kochi* Bernhauer, 1935a: 39 (*Anthophagus*; Type locality: Italien: Mte. Arazecca).
- Zanetti, 1986: 96 (*Anthophagus*; subspecies of *alpestris*).
  - Zanetti, 1987: 420 (*Anthophagus*; subgenus *Dimorphoschelus*; subspecies of *alpestris*; characters; Italy).
  - Zanetti, 1995: 9 (*Anthophagus*; subspecies of *alpestris*; Italy).
- alpinus** Paykull, 1790: 134 (*Staphylinus*; [**Note:** This name is older than *alpinus* Fabricius, however, Paykull cited *alpinus* again in 1800 but attributed it to Fabricius so the Fabricius and Paykull species may be the same]; Type locality: Dalicaria, Lapponia).
- Turton, 1802: 512 (*Staphylinus*; characters; Lapland).
  - Latreille, 1806: 297 (*Lesteva*; characters).
  - Fauvel, 1871a: 147 [= 1872: 121] (*Anthophagus*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Austria).
  - J. Sahlberg, 1876: 206 (*Anthophagus*; Finland).
  - Fowler, 1888: 399 (*Anthophagus*; characters; Britain).
  - Pope, 1977: 23 (*Anthophagus*; Britain).
  - Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France).
  - Herman, 2001: 19 (*Anthophagus*; synonymy).
- ▲ **DISTRIBUTION:** Europe, Russia.
- alpinus* Fabricius, 1793: 526 (*Staphylinus*; [**preoccupied**]; Type locality: Lapponia).
- Olivier, 1795:(42): 32 (*Staphylinus*; characters).
  - Paykull, 1800: 387 (*Staphylinus*; [**Note:** Paykull attributed the species in this reference to Fabricius and did not mention *alpinus* Paykull, 1790]; characters; Sweden).
  - Fabricius, 1801: 598 (*Staphylinus*; characters; Lapland).
  - Gravenhorst, 1802: 188 (*Anthophagus*; characters).
  - Latreille, 1804: 368 (*Lesteva*; characters; Lapland).
  - Gravenhorst, 1806: 220 (*Anthophagus*; characters).
  - Latreille, 1806: 297 (*Lesteva*; characters).
  - Gyllenhal, 1810: 194 (*Anthophagus*; characters; Sweden).
  - Latreille, 1825a: 216 (*Lesteva*; characters; Lapland).
  - Gyllenhal, 1827: 460 (*Anthophagus*; characters of variety).
  - Zetterstedt, 1828: 46 (*Anthophagus*; characters; Lapland).
  - Curtis, 1830: pl. 303 (*Lesteva*; habitat; Britain).
  - Curtis, 1829: 29 (*Lesteva*; catalog; Britain).
  - Mannerheim, 1830: 56 (*Lesteva*; Finland; Sweden; Lapland).
  - Mannerheim, 1831: 470 (*Lesteva*; Finland; Sweden; Lapland).
  - Runde, 1835: 24 (*Lesteva*; characters; Germany).
  - Zetterstedt, 1838: 48 (*Anthophagus*; characters; habitat; Lapland).
  - Heer, 1839: 196 (*Anthophagus*; characters; Switzerland).
  - Stephens, 1839: 431 (*Lesteva*; characters; England; Scotland).

- Erichson, 1840: 848 (*Anthophagus*; characters; Sweden; Alpius Tyrolensibus; Switzerland; Silesia).
- Kiesenwetter, 1845: 22 (*Anthophagus*; notes).
- Kiesenwetter, 1847a: 53 (*Anthophagus*; characters; Europe).
- Märkel and Kiesenwetter, 1848a: 326 (*Anthophagus*; notes; Carpathian Alps).
- Hochhuth, 1849: 201 (*Anthophagus*; characters; Caucasus; Akhaltzik).
- Redtenbacher, 1849: 745 (*Anthophagus*; characters; Austria).
- Kiesenwetter, 1851a: 433 (*Anthophagus*; Pyrenees).
- Hardy, 1851: 54 (*Anthophagus*; notes; England).
- Fairmaire and Laboulbène, 1856: 626 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 242 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 918 (*Anthophagus*; characters; Germany).
- Thomson, 1859: 48 (type species of *Anthophagus*).
- Thomson, 1861: 179 (*Anthophagus*; characters; Scandinavia).
- Fauvel, 1865a: 314 [= 1865b: 64] (*Anthophagus*; habitat; France).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Seidlitz, 1875: 242 (*Anthophagus*; characters; Baltic region).
- Mulsant and Rey, 1880: 19 (*Anthophagus*; characters; France).
- Ganglbauer, 1895: 706 (*Anthophagus*; characters; north and middle Europe; Italy; Bosnia).
- Luze, 1902d: 518 (*Anthophagus*; characters; northern and central Europe; northern Italy).
- Reitter, 1909: 182 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- Portevin, 1929: 434 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Anthophagus*).
- C. Koch, 1934a: 196 (*Anthophagus*; subgenus *Anthophagus*; characters; Lapland; Russia; Norway; Sweden; Sudeten; Tatra; Hungary; Alps; Italy; England; Scotland; Ireland; Switzerland; France).
- Palm, 1948: 124 (*Anthophagus*; characters; Sweden; Norway; Finland).
- Horion, 1963: 144 (*Anthophagus*; subgenus *Anthophagus*; Britain; Norway; Sweden; Finland; Russia; Czech Republic; Slovakia; Romania; Italy; France; Austria; Germany).
- Lohse, 1964: 65 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Hammond, 1980: 136 (*Anthophagus*; Ireland).
- Tóth, 1982: 93 (*Anthophagus*; characters; Hungary).
- Zanetti, 1987: 407 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Boháč, 1993: 41 (*Anthophagus*; subgenus *Dimorphoschelus*; [**Note:** Incorrect subgeneric assignment; *A. alpinus* is the type species of subgenus *Anthophagus*]; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Herman, 2001: 19 (*Anthophagus*; synonym of *alpinus*).
- mandibularis* Gyllenhal, 1827: 460 (*Anthophagus*; Type locality: Lapponia).
  - C. Sahlberg, 1827: 275 (*Anthophagus*; characters; Lapland).
  - Erichson, 1840: 848 (*Anthophagus*; synonym of *alpinus*).
  - Kraatz, 1857d: 919 (*Anthophagus*; synonym of *alpinus*).
  - Thomson, 1861: 179 (*Anthophagus*; synonym of *alpinus*).
  - J. Sahlberg, 1876: 206 (*Anthophagus*; synonym of *alpinus*).
  - Mulsant and Rey, 1880: 20 (*Anthophagus*; synonym of *alpinus*).
  - Ganglbauer, 1895: 706 (*Anthophagus*; synonym of *alpinus*).
  - Luze, 1902d: 518 (*Anthophagus*; synonym of *alpinus*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *alpinus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *alpinus*).
  - Pope, 1977: 23 (*Anthophagus*; synonym of *alpinus*).
- lapponicus* C. Sahlberg, 1827: 275 (*Anthophagus*; Type locality: Lapponia).
  - Mannerheim, 1830: 56 (*Lesteva*; [**Note:** Mannerheim cited *lapponica* as his but at the same time attributed it to C. Sahlberg]; Lapland).
  - Mannerheim, 1831: 470 (*Lesteva*; [**Note:** Mannerheim cited *lapponica* as his but at the same time attributed it to C. Sahlberg]; Lapland).

- Zetterstedt, 1838: 47 (*Anthophagus*; characters; Lapland).
  - Erichson, 1840: 849 (*Anthophagus*; synonym of *alpinus*).
  - Redtenbacher, 1849: 745 (*Anthophagus*; synonym of *alpinus*).
  - Kraatz, 1857d: 919 (*Anthophagus*; synonym of *alpinus*).
  - J. Sahlberg, 1876: 206 (*Anthophagus*; synonym of *alpinus*).
  - Ganglbauer, 1895: 706 (*Anthophagus*; synonym of *alpinus*).
  - Luze, 1902d: 518 (*Anthophagus*; synonym of *alpinus*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *alpinus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *alpinus*).
- maxillosus* Zetterstedt, 1828: 45 (*Anthophagus*; Type locality: insula Reenoe: Finkrog, Lyngentind. Nordlandiae).
- Zetterstedt, 1838: 48 (*Anthophagus*; characters; habitat; Lapland).
  - Erichson, 1840: 848 (*Anthophagus*; synonym of *alpinus*).
  - Kraatz, 1857d: 919 (*Anthophagus*; synonym of *alpinus*).
  - Thomson, 1861: 179 (*Anthophagus*; synonym of *alpinus*).
  - Ganglbauer, 1895: 706 (*Anthophagus*; synonym of *alpinus*).
  - Luze, 1902d: 518 (*Anthophagus*; synonym of *alpinus*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *alpinus*).
- flavipennis* Lacordaire, 1835: 480 (*Lesteva*; Type locality: Paris).
- Erichson, 1840: 849 (*Anthophagus*; synonym of *alpinus*).
  - Fairmaire and Laboulbène, 1856: 626 (*Anthophagus*; synonym of *alpinus*).
  - Kraatz, 1857d: 919 (*Anthophagus*; synonym of *alpinus*).
  - Ganglbauer, 1895: 706 (*Anthophagus*; synonym of *alpinus*).
  - Luze, 1902d: 518 (*Anthophagus*; synonym of *alpinus*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *alpinus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *alpinus*).
- pyrenaicus* Brisout, 1863: 41 (*Anthophagus*, cited as *Antophagus*; Type locality: Mont-Louis).
- Fauvel, 1871a: 146 [= 1872: 120] (*Anthophagus*; characters; France).
  - Fauvel, 1873b: 120 [= 1873c: 13] (*Anthophagus*; Spain).
  - Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
  - Mulsant and Rey, 1880: 22 (*Anthophagus*; characters; France).
  - Luze, 1902d: 519 (*Anthophagus*; characters; Pyrenees; Cantabrian region).
  - Portevin, 1929: 434 (*Anthophagus*; characters; France).
  - Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
  - C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *alpinus*).
  - C. Koch, 1934a: 196 (*Anthophagus*; subgenus *Anthophagus*; race of *alpinus*; Pyrenees).
  - C. Koch, 1940: 374 (*Anthophagus*; subspecies of *alpinus*; Spain).
  - Zanetti, 1987: 407 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *alpinus*; characters).
  - Tronquet, 1998a: 114 (*Anthophagus*; cited as valid species; collected from marmot burrow; France).
- bosnicus* Bernhauer, 1901: 539 (*Anthophagus*; Type locality: Sarajevo auf der Bjelasnica in Bosnien).
- Luze, 1902d: 519 (*Anthophagus*; characters; Bosnia).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
  - C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *alpinus*).
  - C. Koch, 1934a: 196 (*Anthophagus*; subgenus *Anthophagus*; Bosnia; Hercegowina).
  - Zanetti, 1987: 407 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *alpinus*; characters).
- albanicus* Bernhauer, 1926: 267 (*Anthophagus*; Type locality: Korab in Albanien).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
  - C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *alpinus*).
  - C. Koch, 1934a: 197 (*Anthophagus*; subgenus *Anthophagus*; race of *alpinus*; Albania; Bulgaria).
  - Zanetti, 1984: 79 (*Anthophagus*; subspecies of *alpinus*; Bulgaria).
  - Zanetti, 1987: 407 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *alpinus*; characters).



- speculicollis* C. Koch, 1933: 29 (*Anthophagus*; variety of *alpinus*; Type locality: Alpi della Carinzia, Dobratsch).  
 — C. Koch, 1933a: 142 (*Anthophagus*; aberration of *alpinus*).  
 — C. Koch, 1934a: 197 (*Anthophagus*; subgenus *Anthophagus*; aberration of *alpinus*).
- pseudosudeticus* C. Koch, 1934a: 197, 200 (*Anthophagus*; subgenus *Anthophagus*; aberration of *alpinus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality not cited).  
 — Tóth, 1982: 93 (*Anthophagus*; variety of *alpinus*; characters).
- aprutianus* C. Koch, 1934a: 197, 201 (*Anthophagus*; subgenus *Anthophagus*; race of *alpinus*; Type locality: Abruzzo, Gran Sasso, Fonte Portella).  
 — Zanetti, 1987: 407 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *alpinus*; characters; Italy).  
 — Zanetti, 1995: 9 (*Anthophagus*; subspecies of *alpinus*; Italy).
- paratus* Havelka and R. Dvořák, 1953: 27 (*Anthophagus*; aberration of *alpinus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Carp.: Pol. Borsava).
- fischeri* Havelka and R. Dvořák, 1953: 27 (*Anthophagus*; aberration of *alpinus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Carniola: Silesia: Krnov).
- alpinus* Fabricius, 1793, see: *alpinus* Paykull, 1790.
- angusticollis** Mannerheim, 1830: 56 (*Lesteva*; Type locality: circa Petropolin).  
 — Mannerheim, 1831: 470 (*Lesteva*; Russia).  
 — Erichson, 1840: 850 (*Anthophagus*; synonym of *abbreviatus*).  
 — Erichson, 1840: 850 (*Anthophagus*; [**Note: Misidentified as caraboides** according to Bernhauer and Schubert, 1916: 78, who cited it as a synonym of *angusticollis*]; characters; Europe).  
 — Kraatz, 1857d: 923 (*Anthophagus*; synonym of *caraboides*).  
 — Kraatz, 1857d: 922 (*Anthophagus*; [**Note: Misidentified as caraboides** according to Bernhauer and Schubert, 1916: 78]; characters; Germany).  
 — Thomson, 1861: 180 (*Anthophagus*; [**Note: Misidentified as caraboides** according to Bernhauer and Schubert, 1916: 78]; characters; Scandinavia).  
 — Fauvel, 1871a: 142 [= 1872: 116] (*Anthophagus*; [**Note: Misidentified as caraboides** according to Bernhauer and Schubert, 1916: 78]; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Austria; Russia).  
 — J. Sahlberg, 1876: 207 (*Anthophagus*; synonym of *abbreviatus*).  
 — Mulsant and Rey, 1880: 30 (*Anthophagus*; synonym of *caraboides*).  
 — Mulsant and Rey, 1880: 29 (*Anthophagus*; [**Note: Misidentified as caraboides** according to Bernhauer and Schubert, 1916: 78]; characters; France).  
 — Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *abbreviatus*).  
 — Luze, 1902d: 516 (*Anthophagus*; synonym of *abbreviatus*).  
 — Bernhauer and Schubert, 1910: 78 (*Anthophagus*; synonym of *abbreviatus*).  
 — Portevin, 1929: 435 (*Anthophagus*; [**Note: Misidentified as caraboides** according to Zanetti, 1987: 414]; characters; France).  
 — C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Dimorphoschelus*).  
 — C. Koch, 1934a: 214 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Finland; Russia; Germany; Czechoslovakia; Poland; Hungary; Croatia; Istria; Bosnia; Dalmatia; Italy; Belgium; France).  
 — Horion, 1963: 146 (*Anthophagus*; subgenus *Dimorphoschelus*; Caucasus; Siberia; Russia; Finland; Baltic States; Poland; Czechoslovakia; Hungary; Romania; Bosnia Hercegovina; Dalmatia; Croatia; Slovenia; Italy; France; Switzerland; Belgium Holland; Austria; Germany).  
 — Lohse, 1964: 67 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; central Europe).  
 — Scheerpeltz, 1968a: 18 (*Anthophagus*; catalog; Austria).  
 — Tikhomirova, 1973a: 141 (*Anthophagus*; subgenus *Dimorphoschelus*; checklist; USSR).  
 — Muona, 1979: 18 (*Anthophagus*; Finland; Russia; Baltic States).  
 — Burakowski, Mroczkowski, and Stefańska, 1979: 75 (*Anthophagus*; catalog; Poland).  
 — Tóth, 1980: 98 (*Anthophagus*; subgenus *Dimorphoschelus*; Hungary).  
 — Tóth, 1982: 97 (*Anthophagus*; characters; Hungary).  
 — Friebe, 1983: 50 (*Anthophagus*; habitat notes; Germany).

- Terlutter, 1984: 34, 43 (*Anthophagus*; notes; Germany).
- Renner, 1985: 99 (*Anthophagus*; collecting notes; Germany).
- Muona and Viramo, 1986: 16 (*Anthophagus*; Finland).
- Segers, 1986: 23 (*Anthophagus*; Belgium).
- Zanetti, 1987: 414 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Köhler, 1988: 163 (*Anthophagus*; notes; Germany).
- K. Koch, 1989: 236 (*Anthophagus*; habitat).
- Detner and Reissenweber, 1991 (*Anthophagus*; defensive secretions: chemistry and systematics).
- Silfverberg, 1992: 22 (*Anthophagus*; Finland; Russia; Estonia; Latvia; Lithuania).
- K. Koch, 1992: 36 (*Anthophagus*; cited as *angulicollis*; Germany).
- Janák, 1992: 85 (*Anthophagus*; Czech Republic).
- Boháč, 1993: 42 (list of species of Czech Republic and Slovakia).
- Kocian, 1993b: 92 (*Anthophagus*; Czech Republic).
- Boháč, 1993: 42 (*Anthophagus*; subgenus *Anthophagus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Ádám, 1996: 239 (*Lesteva*; Hungary).
- Böhme, 1996: 46 (*Anthophagus*; humus collection; Germany; Austria).
- Telnov, Bersevskis, Savich, Kovalevsky, Berdnikov, Doronin, Cibulskis, and Ratniece, 1997: 44 (*Anthophagus*; Latvia).
- Köhler, 1998: 159 (*Anthophagus*; collecting notes; Germany).
- Pašnik, 1998: 69 (*Anthophagus*; habitat; Poland).
- Cibulskis, 1999: 36 (*Anthophagus*; list; Latvia).
- Herman, 2001: 19 (*Anthophagus*; discussion; has two older synonyms; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).

▲ **DISTRIBUTION:** Europe, Russia, Georgia.

*fulvus* De Geer, 1774: 25 (*Staphylinus*; [**Note:** This name is older than *angusticollis* but the synonymy needs verification since only Koch in 1933 has listed *fulvus* as a synonym of *angusticollis*]; Type locality: Not cited).

- Paykull, 1789: 18 (*Staphylinus*; synonym of *caraboides* Linné).
- Gmelin, 1790: 2029 (*Staphylinus*; synonym of *caraboides*).
- Olivier, 1795:(42): 22 (*Staphylinus*; synonym of *caraboides* Linné).
- Marsham, 1802: 521 (*Staphylinus*; synonym of *caraboides* Linné).
- Gravenhorst, 1806: 221 (*Anthophagus*).
- Gyllenhal, 1810: 192 (*Anthophagus*; synonym of *caraboides*).
- Curtis, 1830: pl. 303 (*Lesteva*; synonym of *caraboides*).
- Erichson, 1840: 850 (*Anthophagus*; synonym of *caraboides*).
- Kraatz, 1857d: 923 (*Anthophagus*; synonym of *caraboides*).
- Luze, 1902d: 525 (*Anthophagus*; synonym of *caraboides*).
- C. Koch, 1933a: 142 (*Anthophagus*; synonym of *angusticollis*).

*abbreviatus* Fabricius, 1779: 263 (*Carabus*; [**Note:** This name is older than *angusticollis*]; Type locality: Norwegen: Drontheim).

- Panzer, 1795: 367 (*Carabus*; characters; Germany).
- Panzer, 1796d: 2 (*Carabus*; characters; illustrations).
- Latreille, 1804: 367 (*Lesteva*; synonym of *caraboides* Linné).
- Panzer, 1808a: 2 (*Carabus*; characters; illustrations).
- Erichson, 1839a: 615 (*Anthophagus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 78 cited *caraboides* Erichson as a synonym of *abbreviatus* Fabricius; Erichson did not describe the species as new, he attributed it to Linné]; characters; Germany).
- Erichson, 1840: 850 (*Anthophagus*; characters; Europe).
- Kiesenwetter, 1847a: 57 (*Anthophagus*; characters; Europe).
- Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 629 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).

- Fauvel, 1869: 493 (*Anthophagus*; synonym of *caraboides*).
  - Fauvel, 1871a: 143 [= 1872: 117] (*Anthophagus*; synonym of *caraboides*).
  - Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
  - J. Sahlberg, 1876: 207 (*Anthophagus*; Finland).
  - Mulsant and Rey, 1880: 30 (*Anthophagus*; synonym of *caraboides*).
  - Ganglbauer, 1895: 708 (*Anthophagus*; characters; north and middle Europe; Caucasus).
  - Luze, 1902d: 516 (*Anthophagus*; characters; central and northern Europe; Caucasus).
  - Reitter, 1909: 183 (*Anthophagus*; characters; Germany).
  - Bernhauer and Schubert, 1910: 78 (*Anthophagus*; catalog).
  - Scheerpeltz, 1933: 1067 (*Anthophagus*; catalog).
  - C. Koch, 1933a: 141 (*Anthophagus*; synonym of *caraboides*).
  - Lohse, 1964: 67 (*Anthophagus*; synonym of *angusticollis*).
  - Zanetti, 1987: 414 (*Anthophagus*; synonym of *angusticollis*).
- gracilis* Heer, 1841: 573 (*Anthophagus*; Type locality: Helvetia occidentalis: Jorat, Châlet à Gobet).
- Fauvel, 1871a: 143 [= 1872: 117] (*Anthophagus*; synonym of *caraboides*).
  - Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *abbreviatus*).
  - Luze, 1902d: 516 (*Anthophagus*; synonym of *abbreviatus*).
  - Bernhauer and Schubert, 1910: 78 (*Anthophagus*; synonym of *abbreviatus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *angusticollis*).
- obscuriceps* Motschulsky, 1860: 551 (*Anthophagus*; Type locality: Montagnes de Douderhoff aux environs de St. Petersbourg).
- Fauvel, 1871a: 143 [= 1872: 117] (*Anthophagus*; synonym of *caraboides*).
  - Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *abbreviatus*).
  - Luze, 1902d: 516 (*Anthophagus*; synonym of *abbreviatus*).
  - Bernhauer and Schubert, 1910: 78 (*Anthophagus*; synonym of *abbreviatus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; synonym of *angusticollis*).
- fascifer* Reitter, 1888: 150 (*Anthophagus*; variety of *abbreviatus*; Type locality: Circassien).
- Ganglbauer, 1895: 708 (*Anthophagus*; aberration of *abbreviatus*).
  - Luze, 1902d: 516 (*Anthophagus*; synonym of *abbreviatus*).
  - Bernhauer and Schubert, 1910: 78 (*Anthophagus*; aberration of *abbreviatus*).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; aberration of *abbreviatus*).
  - C. Koch, 1933a: 142 (*Anthophagus*; aberration of *angusticollis*).
  - Tóth, 1982: 97 (*Anthophagus*; aberration of *angusticollis*; characters).
- roubali* C. Koch, 1934a: 214, 218 (*Anthophagus*; subgenus *Dimorphoschelus*; race of *angusticollis*; Type locality: Kaukasus: Taberda, Abchasie, Kuban, Wladikavkas).
- Zanetti, 1987: 414 (*Anthophagus*; subgenus *Dimorphoschelus*; subspecies of *angusticollis*; characters; Italy).
- apenninus** Baudi, 1870: 401 (*Anthophagus*; Type locality: Etruscis Apenninis; [**Note:** See lectotype designation by Zanetti, 1986]).
- Fauvel, 1871a: 145 [= 1872: 119] (*Anthophagus*; characters; Italy).
  - Luze, 1902d: 514 (*Anthophagus*; characters; Apennines).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
  - C. Koch, 1933: 28 (*Anthophagus*; characters).
  - C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).
  - C. Koch, 1934a: 183 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
  - Zanetti, 1986: 97 (*Anthophagus*; lectotype designation).
  - Zanetti, 1987: 404 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
  - Zanetti, 1995: 9 (*Anthophagus*; Italy).
- ▲ **DISTRIBUTION:** Italy.
- apfelbecki** Bernhauer, 1914d: 1 (*Anthophagus*; Type locality: Schar Dag, Ljuboten in Albanien).
- Bernhauer, 1923d: 176 (*Anthophagus*; characters; Albania).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).

- C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Dimorphoschelus*).
- C. Koch, 1934a: 220 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Albania).

▲ **DISTRIBUTION:** Albania.

*aprutianus* C. Koch, 1934, see: *alpinus* Fabricius, 1793.

*aquatilis* Sharp, 1889, see: *Philydrodes*.

*aquilonaris* C. Koch, 1940, see: *caraboides* Linné, 1758.

*armiger* Gravenhorst, 1802, see: *bicornis* Block, 1799.

*arpedinus* Hochhuth, 1849, see: *omalinus* Zetterstedt, 1828.

*arrowi* C. Koch, 1933, see: *omalinus* Zetterstedt, 1828.

*austriacus* Erichson, 1840, see: *alpestris* Heer, 1839.

**baikalensis** Yablokov-Khznorian, 1974: 62 (*Anthophagus*; subgenus *Phaganthus*; Type locality: Baikal, Listvennoe, Limnologicheskii Institut).

▲ **DISTRIBUTION:** Russia.

**bellicanus** Gistel, 1857: 74 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Tyrolis).

▲ **DISTRIBUTION:** Austria.

**bicolor** Grimmer, 1841: 34 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Steiermark).

▲ **DISTRIBUTION:** Austria.

**bicornis** Block, 1799: 118 (*Staphylinus*; Type locality: Plauscher Grund bei Dresden).

- Erichson, 1840: 848 (*Anthophagus*; synonym of *armiger*).
- Redtenbacher, 1849: 746 (*Anthophagus*; synonym of *armiger*).
- Kraatz, 1857d: 916 (*Anthophagus*; synonym of *armiger*).
- Fauvel, 1871a: 144 [= 1872: 118] (*Anthophagus*; characters; France; Belgium; Scandinavia; Germany; Switzerland; Italy; Austria).
- Fauvel, 1873b: 119 [= 1873c: 12] (*Anthophagus*; Sardinia).
- Mulsant and Rey, 1880: 13 (*Anthophagus*; synonym of *armiger*).
- Ganglbauer, 1895: 706 (*Anthophagus*; characters; middle Europe; Italy).
- Luze, 1902d: 513 (*Anthophagus*; characters; central Europe; northern Italy).
- Reitter, 1909: 182 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- Portevin, 1929: 434 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).
- C. Koch, 1934a: 176 (*Anthophagus*; subgenus *Anthophagus*; characters; Holland; Germany; Czechoslovakia; Austria; Italy; France; Bosnia; Herzegovina; Bulgaria; Hungary; Croatia).
- Horion, 1963: 143 (*Anthophagus*; subgenus *Anthophagus*; Belgium; France; Switzerland; Italy; Bosnia Hercegovina; Serbia; Macedonia; Albania; Bulgaria; Romania; Hungary; Czechoslovakia; Poland; Austria; Germany).
- Lohse, 1964: 66 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Tóth, 1982: 93 (*Anthophagus*; characters; Hungary).
- Zanetti, 1984: 79 (*Anthophagus*; Bulgaria).
- Zanetti, 1987: 401 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Boháč, 1993: 42 (*Anthophagus*; subgenus *Dimorphoschelus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Zerche, 2000: 52 (*Anthophagus*).

▲ **DISTRIBUTION:** Europe.

*armiger* Gravenhorst, 1802: 122 (*Anthophagus*; Type locality: Not cited, but presumably Brunsvigae).

- Latreille, 1804: 368 (*Lesteva*; cited as *armigera*; characters; Germany).
- Gravenhorst, 1806: 221 (*Anthophagus*).

- Heer, 1839: 197 (*Anthophagus*; characters; Switzerland).
  - Erichson, 1840: 848 (*Anthophagus*; characters; Germany).
  - Kiesenwetter, 1845: 21 (*Anthophagus*; notes).
  - Kiesenwetter, 1848: 64 (*Anthophagus*; characters; Sweden; Germany; Switzerland).
  - Märkel and Kiesenwetter, 1848a: 326 (*Anthophagus*; notes; Carpathian Alps).
  - Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
  - Fairmaire and Laboulbène, 1856: 626 (*Anthophagus*; characters; France).
  - Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
  - Kraatz, 1857d: 916 (*Anthophagus*; characters; Germany).
  - Fauvel, 1865a: 314 [= 1865b: 64] (*Anthophagus*; habitat; France).
  - Fauvel, 1871a: 144 [= 1872: 118] (*Anthophagus*; synonym of *bicornis*).
  - Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
  - Mulsant and Rey, 1880: 13 (*Anthophagus*; characters; France).
  - Ganglbauer, 1895: 706 (*Anthophagus*; synonym of *bicornis*).
  - Luze, 1902d: 513 (*Anthophagus*; synonym of *bicornis*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *bicornis*).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; synonym of *bicornis*).
  - C. Koch, 1933a: 141 (*Anthophagus*; synonym of *bicornis*).
  - Zanetti, 1987: 401 (*Anthophagus*; synonym of *bicornis*).
- nivalis* Mulsant and Rey, 1880: 15 (*Anthophagus*; Type locality: Chamonix).
- Ganglbauer, 1895: 706 (*Anthophagus*; aberration of *bicornis*).
  - Luze, 1902d: 513 (*Anthophagus*; aberration of *bicornis*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; aberration of *bicornis*).
  - Rambousek, 1927: 77 (*Anthophagus*; aberration of *bicornis*; characters).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1933a: 141 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1934a: 177 (*Anthophagus*; subgenus *Anthophagus*; aberration of *bicornis*).
  - Tóth, 1982: 93 (*Anthophagus*; aberration of *bicornis*; characters; Hungary).
- marginicollis* Eppelsheim, 1889: 181 (*Anthophagus*; variety of *bicornis*; Type locality: Croatiën).
- Ganglbauer, 1895: 706 (*Anthophagus*; aberration of *bicornis*).
  - Luze, 1902d: 513 (*Anthophagus*; aberration of *bicornis*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; aberration of *bicornis*).
  - Rambousek, 1927: 77 (*Anthophagus*; aberration of *bicornis*; characters).
  - C. Koch, 1933a: 141 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1934a: 177 (*Anthophagus*; subgenus *Anthophagus*; aberration of *bicornis*).
  - Tóth, 1982: 93 (*Anthophagus*; aberration of *bicornis*; characters; Hungary).
- nigrinus* Eppelsheim, 1889: 181 (*Anthophagus*; variety of *bicornis*; Type locality: Saas).
- Ganglbauer, 1895: 706 (*Anthophagus*; aberration of *bicornis*).
  - Luze, 1902d: 513 (*Anthophagus*; aberration of *bicornis*).
  - Bernhauer and Schubert, 1910: 79 (*Anthophagus*; aberration of *bicornis*).
  - Rambousek, 1927: 77 (*Anthophagus*; aberration of *bicornis*; characters).
  - Scheerpeltz, 1933: 1068 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1933a: 141 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1934a: 177 (*Anthophagus*; subgenus *Anthophagus*; aberration of *bicornis*).
  - Tóth, 1982: 93 (*Anthophagus*; aberration of *bicornis*; characters).
- subfasciatus* Luze, 1902d: 513 (*Anthophagus*; aberration of *bicornis*; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1933a: 141 (*Anthophagus*; aberration of *bicornis*).
  - C. Koch, 1934a: 177 (*Anthophagus*; subgenus *Anthophagus*; aberration of *bicornis*).
  - Tóth, 1982: 93 (*Anthophagus*; aberration of *bicornis*; characters).
- obenbergeri* Rambousek, 1927: 77 (*Anthophagus*; aberration of *bicornis*; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Krkonoše Bohemiae).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; aberration of *bicornis*).

- C. Koch, 1933a: 141 (*Anthophagus*; aberration of *bicornis*).
- C. Koch, 1934a: 177 (*Anthophagus*; subgenus *Anthophagus*; aberration of *bicornis*).
- solarii* C. Koch, 1934a: 177, 179 (*Anthophagus*; subgenus *Anthophagus*; race of *bicornis*);  
Type locality: Gubbio; Monte Pollino, Lucania.
- Zanetti, 1987: 402 (*Anthophagus*; synonym of *bicornis*).
- inexpectatus* Havelka and R. Dvořák, 1953: 26 (*Anthophagus*; aberration of *bicornis*);  
[**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Bohemia: Krkonose, Iserwiese).
- carpathicus* Havelka and R. Dvořák, 1953: 26 (*Anthophagus*; aberration of *bicornis*); [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Carp. or.: Pop Ivan).
- bimaculatus* Lacordaire, 1835, see: *praeustus* P. W. J. Müller, 1821.
- bosnicus* Bernhauer, 1901, see: *alpinus* Fabricius, 1793.
- brevicornis* Kiesenwetter, 1861, see: *rotundicollis* Heer, 1839.
- brunneus* Say, 1823, see: *Geodromicus*.
- caesus* Erichson, 1840, see: *Geodromicus*.
- caliginosus* Sharp, 1889, see: *Geodromicus*.
- caprai* C. Koch, 1933, see: *fauveli* Luze, 1902.
- caraboides** Linné, 1758: 422 (*Staphylinus*; Type locality: Europa).
  - Linné, 1760: 233 (*Staphylinus*; characters; Sweden).
  - Linné, 1767: 685 (*Staphylinus*; characters; Europe).
  - Fabricius, 1775: 267 (*Staphylinus*; characters; Europe).
  - Goeze, 1777: 720 (*Staphylinus*; characters).
  - Schrank, 1781: 234 (*Staphylinus*; characters; Austria).
  - Fabricius, 1781: 337 (*Staphylinus*; characters; Europe).
  - Fabricius, 1787: 222 (*Staphylinus*; characters).
  - Paykull, 1789: 19 (*Staphylinus*; redescription; Sweden).
  - Villers, 1789: 417 (*Staphylinus*; characters; France).
  - Gmelin, 1790: 2029 (*Staphylinus*; characters).
  - Fabricius, 1793: 530 (*Staphylinus*; characters).
  - Olivier, 1795:(42): 22 (*Staphylinus*; characters; France, Sweden).
  - Panzer, 1795: 358 (*Staphylinus*; characters; Germany).
  - Cederhjelm, 1798: 119 (*Staphylinus*; characters).
  - Paykull, 1800: 386 (*Staphylinus*; characters; Sweden).
  - Fabricius, 1801: 601 (*Staphylinus*; characters).
  - Turton, 1802: 514 (*Staphylinus*; characters; Europe).
  - Gravenhorst, 1802: 120 (*Anthophagus*; characters).
  - Marsham, 1802: 521 (*Staphylinus*; characters; Britain).
  - Latreille, 1804: 367 (*Lesteva*; characters).
  - Gravenhorst, 1806: 220 (*Anthophagus*).
  - Gyllenhal, 1810: 192 (*Anthophagus*; characters).
  - Gyllenhal, 1827: 460 (*Anthophagus*).
  - C. Sahlberg, 1827: 274 (*Anthophagus*; characters; Finland).
  - Zetterstedt, 1828: 45 (*Anthophagus*; characters; Lapland).
  - Curtis, 1829: 29 (*Lesteva*; catalog; Britain).
  - Curtis, 1830: pl. 303 (*Lesteva*; type species of *Lesteva*; Britain).
  - Mannerheim, 1830: 55 (*Lesteva*; Finland).
  - Mannerheim, 1831: 469 (*Lesteva*; Finland).
  - Stephens, 1834: 360 (*Lesteva*; characters; England; Scotland).
  - Runde, 1835: 23 (*Lesteva*; characters; Germany).
  - Lacordaire, 1835: 480 (*Lesteva*; characters; France).
  - Westwood, 1838a: 18 (*Lesteva*; type species).
  - Zetterstedt, 1838: 47 (*Anthophagus*; characters; habitat; Lapland).
  - Heer, 1839: 195 (*Anthophagus*; characters; Switzerland).

- Stephens, 1839: 431 (*Lesteva*; characters; England; Scotland).
- Laporte, 1840: 192 (*Anthophagus*; characters; France).
- Westwood, 1845: 52 (*Lesteva*; subgenus *Anthophagus*; characters; notes).
- Kiesenwetter, 1847a: 56 (*Anthophagus*; characters; Europe).
- Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
- Hardy, 1851: 54 (*Anthophagus*; notes; England).
- Fairmaire and Laboulbène, 1856: 627 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
- Fauvel, 1865a: 315 [= 1865b: 65] (*Anthophagus*; habitat; France).
- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Seidlitz, 1875: 242 (*Anthophagus*; characters; Baltic region).
- J. Sahlberg, 1876: 207 (*Anthophagus*; Finland).
- Fowler, 1888: 399 (*Anthophagus*; synonym of *testaceus*).
- Ganglbauer, 1895: 709 (*Anthophagus*; subgenus *Phaganthus*; characters; middle Europe).
- Luze, 1902d: 526 (*Anthophagus*; characters; central and northern Europe).
- Reitter, 1909: 183 (*Anthophagus*; subgenus *Phaganthus*; characters; Germany).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- Johansen, 1914: 586 (*Anthophagus*; characters; Denmark).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141, 143 (*Anthophagus*; subgenus *Phaganthus*; figure).
- C. Koch, 1934a: 169 (*Anthophagus*; subgenus *Phaganthus*; characters; Lapland; Sweden; Norway; Russia; Great Britain; Holland; Germany; Czechoslovakia; Austria; Hungary; Yugoslavia; Italy; Switzerland; France; Spain).
- Palm, 1948: 126 (*Anthophagus*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 141 (*Anthophagus*; subgenus *Phaganthus*; Russia; Finland; Sweden; Norway; Denmark; Baltic States; Poland; Czechoslovakia; Hungary; Romania; Bosnia; Croatia; Italy; Switzerland; Spain; France; Belgium; Holland; Britain; Austria; Germany).
- Lohse, 1964: 64 (*Anthophagus*; subgenus *Phaganthus*; characters; central Europe).
- Kasule, 1968: 136 (*Phaganthus*; larval characters).
- Szujecki, 1968a: 712 (*Anthophagus*; Poland).
- Szujecki, 1969a: 248 (*Anthophagus*; notes; Poland).
- Steel, 1970a: 21 (*Anthophagus*; larval characters; biological notes).
- Pope, 1977: 23 (*Anthophagus*; Britain).
- Hammond, 1980: 137 (*Anthophagus*; doubtfully in Ireland).
- Tóth, 1982: 92 (*Anthophagus*; characters; Hungary).
- Zanetti, 1987: 393 (*Anthophagus*; subgenus *Phaganthus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Anthophagus*; subgenus *Phaganthus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Cibulskis, 1999: 36 (*Anthophagus*; list; Latvia).
- ▲ **DISTRIBUTION:** Europe, Russia, Georgia.

*testaceus* Gravenhorst, 1802: 121 (*Anthophagus*; Type locality: Not cited, but presumably Brunsvigae).

- Latreille, 1804: 367 (*Lesteva*; characters).
- Gravenhorst, 1806: 221 (*Anthophagus*).
- Curtis, 1830: pl. 303 (*Lesteva*; Britain).
- Curtis, 1829: 29 (*Lesteva*; catalog; Britain).
- Mannerheim, 1830: 55 (*Lesteva*; Finland).
- Mannerheim, 1831: 469 (*Lesteva*; Finland).
- Stephens, 1834: 361 (*Lesteva*; characters; England).
- Runde, 1835: 23 (*Lesteva*; characters; Germany).
- Erichson, 1839a: 615 (*Anthophagus*; characters; Germany).
- Heer, 1839: 194 (*Anthophagus*; characters; Switzerland).
- Stephens, 1839: 431 (*Lesteva*; characters; England).
- Erichson, 1840: 851 (*Anthophagus*; characters; Europe).

- Märkel and Kiesenwetter, 1848a: 327 (*Anthophagus*; notes; Carpathian Alps).
- Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
- Hardy, 1851: 54 (*Anthophagus*; notes; England).
- Fairmaire and Laboulbène, 1856: 628 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 924 (*Anthophagus*; characters; Germany).
- Hochhuth, 1862: 102 (*Anthophagus*; Russia).
- Fauvel, 1871a: 140 [= 1872: 114] (*Anthophagus*; characters; France; Britain; Germany; Austria; Switzerland; Italy; Russia).
- Fauvel, 1873b: 119 [= 1873c: 12] (*Anthophagus*; Sicily).
- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Seidlitz, 1875: 242 (*Anthophagus*; characters; Baltic region).
- J. Sahlberg, 1876: 207 (*Anthophagus*; synonym of *caraboides*).
- Mulsant and Rey, 1880: 46 (*Anthophagus*; subgenus *Phaganthus*; characters; France).
- Fowler, 1888: 399 (*Anthophagus*; characters; Britain).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *caraboides*).
- Luze, 1902d: 525 (*Anthophagus*; synonym of *caraboides*).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *caraboides*).
- Portevin, 1929: 435 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; synonym of *caraboides*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *caraboides*).
- Pope, 1977: 23 (*Anthophagus*; synonym of *caraboides*).
- Zanetti, 1987: 393 (*Anthophagus*; synonym of *caraboides*).
- hookeri* Stephens, 1834: 361 (*Lesteva*; Type locality: Scotland).
- Stephens, 1839: 431 (*Lesteva*; characters; England; Scotland).
- G. Waterhouse, 1858: 30 (*Anthophagus*; synonym of *testaceus*).
- Fauvel, 1871a: 143 [= 1872: 117] (*Anthophagus*; synonym of *caraboides*).
- Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *abbreviatus*).
- Luze, 1902d: 516 (*Anthophagus*; synonym of *abbreviatus*).
- Bernhauer and Schubert, 1910: 78 (*Anthophagus*; synonym of *abbreviatus*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *caraboides*).
- palustris* Heer, 1841: 572 (*Anthophagus*; Type locality: Mt. Jorat).
- Kraatz, 1857d: 924 (*Anthophagus*; synonym of *testaceus*).
- Mulsant and Rey, 1880: 46 (*Anthophagus*; synonym of *testaceus*).
- Fowler, 1888: 399 (*Anthophagus*; synonym of *testaceus*).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *caraboides*).
- Luze, 1902d: 525 (*Anthophagus*; synonym of *caraboides*).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; synonym of *caraboides*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *caraboides*).
- trimaculatus* Luze, 1902d: 527 (*Anthophagus*; Type locality: Caucasus, Abastuman).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141 (*Anthophagus*; subspecies of *caraboides*).
- C. Koch, 1934a: 169 (*Anthophagus*; subgenus *Phaganthus*; aberration of *caraboides*).
- maculipennis* Luze, 1902d: 526 (*Anthophagus*; aberration of *caraboides*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).
- Bernhauer and Schubert, 1910: 80 (*Anthophagus*; synonym of *caraboides*).
- Scheerpeltz, 1933: 1068 (*Anthophagus*; aberration of *caraboides*).
- C. Koch, 1933a: 141 (*Anthophagus*; aberration of *caraboides*).
- C. Koch, 1934a: 169 (*Anthophagus*; subgenus *Phaganthus*; aberration of *caraboides*).
- aquilonaris* C. Koch, 1940: 373 (*Anthophagus*; subgenus *Phaganthus*; subspecies of *caraboides*; [**Note: Described first by Koch (1934) as an aberration of *caraboides* and therefore an unavailable name (Articles 1.3.4, 45.5) but made available in 1940]; Type locality: Nordspanien: Espinama, kantabr. Kordilleren).**
- C. Koch, 1934a: 169, 171 (*Anthophagus*; subgenus *Phaganthus*; aberration of *caraboides*; [**Note: Unavailable name**]; Germany and Russia).



*carinthiacus* Mulsant and Rey, 1880, see: *fallax* Kiesenwetter, 1848.

*carpathicus* Havelka and R. Dvořák, 1953 [**Note: Nomen nudum**], see: *bicornis* Block, 1799.

*cenisius* Fairmaire, 1861, see: *Hygrogeus*.

*crassicornis* Mulsant and Rey, 1861, see: *rotundicollis* Heer, 1839.

*decoratus* C. Koch, 1933 [**Note: Nomen nudum**], see: *alpestris* Heer, 1839.

*dichrous* Gravenhorst, 1802, see: *Deleaster*.

*dinaricus* Apfelbeck, 1909, see: *transversus* Motschulsky, 1857.

**durmitorensis** Coiffait, 1980a: 48 (*Anthophagus*; subgenus *Dimorphoschelus*; Type locality: Montenegro, Durmitor, Alisnica, 1800 m).

▲ **DISTRIBUTION:** Yugoslavia.

**fallax** Kiesenwetter, 1848b: 18 (*Anthophagus*; Type locality: Kärnthner Alpen).

— C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).

— Horion, 1935: 169 (*Anthophagus*; characters; Alps; Böhmerwald; Riesengebirge).

— Horion, 1963: 146 (*Anthophagus*; subgenus *Anthophagus*; Alps from Austria to Italy and France; Germany).

— Lohse, 1964: 66 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).

— Tóth, 1982: 95 (*Anthophagus*; characters).

— Zanetti, 1987: 412 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).

— Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria; Switzerland).

— Zanetti, 1995: 9 (*Anthophagus*; Italy).

— Burakowski, Mroczkowski, and Stefańska, 2000: 42 (*Anthophagus*; subgenus *Anthophagus*; catalog; Poland).

— Herman, 2001: 20 (*Anthophagus*; synonymy).

▲ **DISTRIBUTION:** France, Germany, Austria, Switzerland, Italy.

*fallax* Märkel and Kiesenwetter, 1848a: 326 (*Anthophagus*; [**preoccupied**]; Type locality: Kärnthner Alpen).

— Kraatz, 1857d: 920 (*Anthophagus*; characters; Germany).

— Fauvel, 1865a: 315 [= 1865b: 65] (*Anthophagus*; habitat; France).

— Fauvel, 1871a: 148 [= 1872: 122] (*Anthophagus*; characters; France; Germany; Switzerland; Italy).

— Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).

— Mulsant and Rey, 1880: 35 (*Anthophagus*; characters; France).

— Ganglbauer, 1895: 708 (*Anthophagus*; characters; western Alps).

— Luze, 1902d: 522 (*Anthophagus*; characters; Italy; France; Switzerland; Tessin; Austria).

— Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).

— Portevin, 1929: 436 (*Anthophagus*; characters; France).

— Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).

— C. Koch, 1934a: 210 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).

— Assing, Frisch, Kahlen, et al., 1998: 125 (*Anthophagus*; author of species).

— Herman, 2001: 20 (*Anthophagus*; synonym of *fallax* Kiesenwetter).

*carinthiacus* Mulsant and Rey, 1880: 37 (*Anthophagus*; Type locality: Carinthie).

— Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *fallax*).

— Bernhauer and Schubert, 1910: 80 (*Anthophagus*; synonym of *fallax*).

*fallax* Märkel and Kiesenwetter, 1848, see: *fallax* Kiesenwetter, 1848.

*fascifer* Reitter, 1888, see: *angusticollis* Mannerheim, 1830.

**fauxeli** Luze, 1902d: 524 (*Anthophagus*; Type locality: Sicily).

— Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).

— Fiori, 1915: 6 (*Anthophagus*; Italy).

— C. Koch, 1933: 27 (*Anthophagus*; characters; Sicily).

— C. Koch, 1933a: 141 (*Anthophagus*; subgenus *Phaganthus*).

— C. Koch, 1934a: 167 (*Anthophagus*; subgenus *Phaganthus*; characters; Italy).

— Scheerpeltz, 1961d: 118 (*Anthophagus*; subgenus *Phaganthus*; Italy).

- Scheerpeltz, 1965b: 392 (*Anthophagus*; subgenus *Phaganthus*; Sicily).
- Zanetti, 1987: 395 (*Anthophagus*; subgenus *Phaganthus*; characters; Italy).
- Sparacio, 1995: 143 (*Anthophagus*; characters; notes; Sicily).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Zanetti and Sabella, 1998: 34 (*Anthophagus*; Sicily).

▲ **DISTRIBUTION:** Italy.

*caprai* C. Koch, 1933: 27 (*Anthophagus*; subspecies of *fauveli*; Type locality: Tutto l'Appennino).

- C. Koch, 1933a: 141, 143 (*Anthophagus*; subspecies of *fauveli*; figure).
- C. Koch, 1934a: 167 (*Anthophagus*; subgenus *Phaganthus*; race of *fauveli*).
- Zanetti, 1987: 395 (*Anthophagus*; subgenus *Phaganthus*; subspecies of *fauveli*; characters; Italy).
- Zanetti, 1995: 9 (*Anthophagus*; subspecies of *fauveli*; Italy).

*fenestrellanus* Bernhauer, 1909, see: *melanocephalus* Heer, 1839.

*fischeri* Havelka and R. Dvořák, 1953 [**Note: Nomen nudum**], see: *alpinus* Fabricius, 1793.

*flavipennis* Lacordaire, 1835, see: *alpinus* Fabricius, 1793.

**forticornis** Kiesenwetter, 1846: 21 (*Anthophagus*; Type locality: Spieglitzer Schneeberg in der Grafschaft Glatz in einer Höhe von gegen 4,500 Fuss).

- Kiesenwetter, 1847a: 51 (*Anthophagus*; characters; Germany).
- Märkel and Kiesenwetter, 1848a: 326 (*Anthophagus*; notes; Carpathian Alps).
- Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 917 (*Anthophagus*; characters; Germany).
- Fauvel, 1871a: 144 [= 1872: 118] (*Anthophagus*; characters; Switzerland; Germany; Austria).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Ganglbauer, 1895: 707 (*Anthophagus*; characters; Alps; Sudeten).
- Luze, 1902d: 521 (*Anthophagus*; characters; Alps; Sudeten).
- Reitter, 1909: 182 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).
- C. Koch, 1934a: 209 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Horion, 1963: 145 (*Anthophagus*; subgenus *Anthophagus*; Czech Republic; Slovakia; Switzerland; Italy; Austria; Germany).
- Lohse, 1964: 66 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Tóth, 1982: 95 (*Anthophagus*; characters; Slovakia).
- Zanetti, 1987: 411 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Poland; Czechoslovakia; Austria).
- Boháč, 1993: 42 (*Anthophagus*; subgenus *Dimorphoschelus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Austria, Czech Republic, Slovakia, Italy.

*fulvus* De Geer, 1774, see: *angusticollis* Mannerheim, 1830.

**giebeli**† Heyden and Heyden, 1866: 136 (*Anthophagus*; Oligocene fossil; Type locality: Braunkohle des Siebengebirges).

- Scudder, 1891: 467 (*Anthophagus*; catalog; Aquitanian Horizon).
- Handlirsch, 1907: 730 (*Anthophagus*; catalog; Oligocene; Germany).

▲ **DISTRIBUTION:** Germany.

*gracilis* Heer, 1841, see: *angusticollis* Mannerheim, 1830.

**hanfii** Gistel, 1857: 4 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Niederbayern: Passau, Cham).

▲ **DISTRIBUTION:** Germany.

*homalinus* Fauvel, 1871, see: *omalinus* Zetterstedt, 1828.

*hookeri* Stephens, 1834, see: *caraboides* Linné, 1758.

*horni* C. Koch, 1933, see: *noricus* Ganglbauer, 1895.

**hummleri** Bernhauer, 1912k: 259 (*Anthophagus*; Type locality: Asturien: Cancas).

— Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).

— C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Dimorphoschelus*).

— C. Koch, 1934a: 230 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Spain).

▲ **DISTRIBUTION:** Spain.

**ilgazicus** Coiffait, 1981a: 55 (*Anthophagus*; subgenus *Dimorphoschelus*; Type locality: Turquie septentrionale: Col de l'Ilgaz Dag, 1800 m).

▲ **DISTRIBUTION:** Turkey.

*imitator* Luze, 1902 [**Note: Nomen nudum**], see: *rotundicollis* Heer, 1839.

*inexpectatus* Havelka and R. Dvořák, 1953 [**Note: Nomen nudum**], see: *bicornis* Block, 1799.

*intermedius* Gravenhorst, 1806, see: *Lesteva*.

*kochi* Bernhauer, 1935, see: *alpestris* Heer, 1839.

*lapponicus* C. Sahlberg, 1827, see: *alpinus* Fabricius, 1793.

*laticollis* Mannerheim, 1843, see: *Microedus*.

*leederi* Bernhauer, 1940, see: *noricus* Ganglbauer, 1895.

*lestevoides* Sharp, 1889, see: *Geodromicus*.

*lituratus* Kraatz, 1857, see: *Geodromicus*.

*maculipennis* Luze, 1902 [**Note: Nomen nudum**], see: *caraboides* Linné, 1758.

*mandibularis* Gyllenhal, 1827, see: *alpinus* Fabricius, 1793.

*marginicollis* Eppelsheim, 1889, see: *bicornis* Block, 1799.

*maxillosus* Zetterstedt, 1828, see: *alpinus* Fabricius, 1793.

**melanocephalus** Heer, 1839: 195 (*Anthophagus*; Type locality: Urschein; Calankeralpen).

— Kiesenwetter, 1845: 23 (*Anthophagus*; characters; notes).

— Kiesenwetter, 1847a: 59 (*Anthophagus*; characters; Switzerland).

— Märkel and Kiesenwetter, 1848a: 327 (*Anthophagus*; notes; Carpathian Alps).

— Redtenbacher, 1857: 242 (*Anthophagus*; characters; Austria).

— Kraatz, 1857d: 921 (*Anthophagus*; characters; Germany).

— Fauvel, 1871a: 143 [= 1872: 117] (*Anthophagus*; characters; France; Germany; Switzerland; Italy; Austria).

— Redtenbacher, 1874: 263 (*Anthophagus*; characters; Austria).

— Mulsant and Rey, 1880: 32 (*Anthophagus*; characters; France).

— Ganglbauer, 1895: 708 (*Anthophagus*; characters; Europe).

— Luze, 1902d: 522 (*Anthophagus*; characters; Alps).

— Reitter, 1909: 183 (*Anthophagus*; characters; Germany).

— Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).

— Portevin, 1929: 434 (*Anthophagus*; characters; France).

— Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).

— C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Dimorphoschelus*; figure).

— C. Koch, 1934a: 226 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Alps).

— Horion, 1963: 148 (*Anthophagus*; subgenus *Dimorphoschelus*; France; Italy; Switzerland; Germany; Austria; Slovenia).

— Lohse, 1964: 67 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; central Europe).

— Tóth, 1982: 96 (*Anthophagus*; characters).

— Zanetti, 1987: 417 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Italy).

— Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria; Switzerland).

— Boháč, 1993: 42 (*Anthophagus*; subgenus *Anthophagus*; Czech Republic ?).

— Zanetti, 1995: 9 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Austria, Italy, Carpathians.

- fenestrellanus* Bernhauer, 1909b: 197 (*Anthophagus*; Type locality: Piemontesische Alpen).  
 — Bernhauer and Schubert, 1910: 80 (*Anthophagus*; synonym of *melanocephalus*).  
 — C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *melanocephalus*).  
 — C. Koch, 1934a: 226 (*Anthophagus*; subgenus *Dimorphoschelus*; race of *melanocephalus*; characters).  
 — Zanetti, 1987: 417 (*Anthophagus*; synonym of *melanocephalus*).

*muelleri* Bernhauer, 1901, see: *spectabilis* Heer, 1839.

- muticus** Kiesenwetter, 1850: 221 (*Anthophagus*; Type locality: Pyrenaei centrales).  
 — Kiesenwetter, 1851a: 433 (*Anthophagus*; characters; France).  
 — Fairmaire and Laboulbène, 1856: 627 (*Anthophagus*; characters; France).  
 — Kraatz, 1857d: 916 (*Anthophagus*; notes).  
 — Fauvel, 1871a: 146 [= 1872: 120] (*Anthophagus*; characters; France).  
 — Fauvel, 1876a: 54 [= 1876: 239] (*Anthophagus*; Italy).  
 — Mulsant and Rey, 1880: 27 (*Anthophagus*; characters; France).  
 — Luze, 1902d: 515 (*Anthophagus*; characters; central and eastern Pyrenees).  
 — Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).  
 — C. Koch, 1933: 28 (*Anthophagus*; characters; Pyrenees).  
 — C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).  
 — C. Koch, 1934a: 193 (*Anthophagus*; subgenus *Anthophagus*; characters; Pyrenees).  
 — C. Koch, 1940: 374 (*Anthophagus*; Spain).  
 ▲ **DISTRIBUTION:** France, Italy, Spain.

- scheerpeltzi* C. Koch, 1933: 28 (*Anthophagus*; subspecies of *muticus*; Type locality: Asturia, Cordilliere cantabrice).  
 — C. Koch, 1933a: 142 (*Anthophagus*; cited as *scheerpeltzi*; subspecies of *muticus*).  
 — C. Koch, 1934a: 193, 194 (*Anthophagus*; subgenus *Anthophagus*; race of *muticus*; characters).

- nigrifrons** Grimmer, 1841: 34 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Steiermark).  
 ▲ **DISTRIBUTION:** Austria.

*nigrinus* Eppelsheim, 1889, see: *bicornis* Block, 1799.

*nigrita* P. W. J. Müller, 1821, see: *Geodromicus*.

*nigrophthalmus* Block, 1799, see: *plagiatus* Fabricius, 1798.

*nivalis* Mulsant and Rey, 1880, see: *bicornis* Block, 1799.

- noricus** Ganglbauer, 1895: 707 (*Anthophagus*; Type locality: Tauern).  
 — Luze, 1902d: 520 (*Anthophagus*; characters; Tauern).  
 — Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).  
 — Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).  
 — C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Anthophagus*).  
 — C. Koch, 1934a: 206 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).  
 — Horion, 1963: 145 (*Anthophagus*; subgenus *Anthophagus*; Austria).  
 — Lohse, 1964: 65 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).  
 — Zanetti, 1987: 410 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).  
 — Lucht, 1987: 90 (*Anthophagus*; checklist; Austria).  
 — Zanetti, 1995: 9 (*Anthophagus*; Italy).  
 ▲ **DISTRIBUTION:** Austria, Italy.

- horni* C. Koch, 1933: 29 (*Anthophagus*; variety of *noricus*; Type locality: Gastein).  
 — C. Koch, 1933a: 142 (*Anthophagus*; aberration of *noricus*).  
 — C. Koch, 1934a: 206 (*Anthophagus*; subgenus *Anthophagus*; aberration of *noricus*; characters).

*leederi* Bernhauer, 1940b: 625 (*Anthophagus*; variety of *noricus*; Type locality: Hohe Tauern, Krumeltal, 2100 m).

*obenbergeri* Rambousek, 1927 [**Note: Nomen nudum**], see: *bicornis* Block, 1799.

*obscuriceps* Motschulsky, 1860, see: *angusticollis* Mannerheim, 1830.

**omalinus** Zetterstedt, 1828: 46 (*Anthophagus*; Type locality: Lapponia Norvegica. Nordlandia: Bjorkvik; Evenas; Lingen. Suecia: Johannis Ro. Insula Dyroe: Hamnvigen. Insula Senjen: Goebostad).

- C. Sahlberg, 1827: 274 (*Anthophagus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 80 cited *alpinus* Sahlberg as a synonym of *omalinus* Zetterstedt; Sahlberg did not describe the species as new, he attributed it to Fabricius]; characters; Finland).
- Zetterstedt, 1838: 48 (*Anthophagus*; characters; habitat; Lapland).
- Erichson, 1840: 849 (*Anthophagus*; characters; Lapland).
- Heer, 1841: 573 (*Anthophagus*; characters).
- Kiesenwetter, 1845: 23 (*Anthophagus*; notes).
- Kiesenwetter, 1847a: 54 (*Anthophagus*; characters; Germany; Lapland; Sweden; Switzerland).
- Märkel and Kiesenwetter, 1848a: 327 (*Anthophagus*; notes; Carpathian Alps).
- Redtenbacher, 1849: 746 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 628 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 242 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 921 (*Anthophagus*; characters; Germany).
- Thomson, 1861: 179 (*Anthophagus*; characters; Scandinavia).
- Hochhuth, 1862: 102 (*Anthophagus*; Russia).
- Fauvel, 1865a: 315 [= 1865b: 65] (*Anthophagus*; habitat; France).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Seidlitz, 1875: 242 (*Anthophagus*; characters; Baltic region).
- Mulsant and Rey, 1880: 40 (*Anthophagus*; characters; France).
- Ganglbauer, 1895: 709 (*Anthophagus*; characters; north Europe; Sudeten; Alps).
- Luze, 1902d: 523 (*Anthophagus*; characters; Sudeten; northern Europe; Alps).
- Reitter, 1909: 183 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).
- Portevin, 1929: 435 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Dimorphoschelus*; figure).
- C. Koch, 1934a: 223 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Lapland; Finland; Sweden; Norway; Russia; Germany; Czechoslovakia; Austria; Croatia; Italy; Switzerland; France).
- Palm, 1948: 125 (*Anthophagus*; characters; Sweden; Norway; Finland).
- Horion, 1963: 147 (*Anthophagus*; subgenus *Dimorphoschelus*; Norway; Sweden; Finland; Russia; Siberia; Czech Republic; Slovakia; Romania; Slovenia; Croatia; Germany; Austria).
- Tóth, 1982: 97 (*Anthophagus*; characters).
- Zanetti, 1987: 416 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; distribution of nominate subspecies; checklist; Sweden).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).
- Cibulskis, 1999: 36 (*Anthophagus*; list; Latvia).

▲ **DISTRIBUTION:** Europe, Russia, Caucasus.

*arpedinus* Hochhuth, 1849: 201 (*Anthophagus*; Type locality: Kaukasus).

- Luze, 1902d: 524 (*Anthophagus*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *omalinus*).
- C. Koch, 1934a: 225 (*Anthophagus*; synonym of *omalinus*).
- Tikhomirova, 1973a: 141 (*Anthophagus*; subgenus *Dimorphoschelus*; checklist; Caucasus).

*ruficeps* Motschulsky, 1860: 547 (*Heterops*; Type locality: Sibérie orientale au delà du lac Baical; [**Note:** See lectotype designation by Hammond, 1970]).

- Heyden, 1880: 82 (*Heterops*; Siberian region).
- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Hammond, 1970: 69, 70 (*Anthophagus*; lectotype designation; notes; synonym of *omalinus*).

*homalinus* Fauvel, 1871a: 149 [= 1872: 123] (*Anthophagus*; emendation of *omalinus*).

- J. Sahlberg, 1876: 207 (*Anthophagus*; Finland).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *omalinus*).

- Luze, 1902d: 523 (*Anthophagus*; synonym of *omalinus*).
- Bernhauer and Schubert, 1910: 80 (*Anthophagus*; synonym of *omalinus*).
- C. Koch, 1933a: 142 (*Anthophagus*; synonym of *omalinus*).
- Zanetti, 1987: 416 (*Anthophagus*; synonym of *omalinus*).

*arrowi* C. Koch, 1933: 29 (*Anthophagus*; subspecies of *omalinus*; Type locality: Europa centralis).

- C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *omalinus*).
- C. Koch, 1934a: 223 (*Anthophagus*; subgenus *Dimorphoschelus*; race of *omalinus*; characters).
- Lohse, 1964: 67 (*Anthophagus*; subgenus *Dimorphoschelus*; subspecies of *omalinus*; characters; central Europe).
- Zanetti, 1987: 416 (*Anthophagus*; subgenus *Dimorphoschelus*; subspecies of *omalinus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; subspecies of *omalinus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland).
- Boháč, 1993: 42 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *omalinus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Anthophagus*; subspecies of *omalinus*; Italy).

*ursus* Havelka and R. Dvořák, 1953: 28 (*Anthophagus*; aberration of *omalinus*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Carniola: Medvedi Dolina, Vallée d'Ours).

*palustris* Heer, 1841, see: *caraboides* Linné, 1758.

*paratus* Havelka and R. Dvořák, 1953 [**Note: Nomen nudum**], see: *alpinus* Fabricius, 1793.

*picipennis* Gredler, 1863, see: *spectabilis* Heer, 1839.

*pollinensis* C. Koch, 1934, see: *torretassoi* C. Koch, 1933.

**praeustus** P. W. J. Müller, 1821: 228 (*Anthophagus*; Type locality: Odenbach).

- Runde, 1835: 23 (*Lesteva*; characters; Germany).
- Heer, 1839: 194 (*Anthophagus*; characters; Switzerland).
- Erichson, 1840: 852 (*Anthophagus*; characters; Germany; France).
- Redtenbacher, 1849: 747 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 629 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 924 (*Anthophagus*; characters; Germany).
- Fauvel, 1871a: 141 [= 1872: 115] (*Anthophagus*; characters; France; Germany; Switzerland; Italy; Austria).
- Fauvel, 1873b: 119 [= 1873c: 12] (*Anthophagus*; Sardinia).
- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 48 (*Anthophagus*; subgenus *Phaganthus*; characters; France).
- Ganglbauer, 1895: 709 (*Anthophagus*; subgenus *Phaganthus*; characters; middle Europe).
- Luze, 1902d: 527 (*Anthophagus*; characters; central Europe).
- Reitter, 1909: 183 (*Anthophagus*; subgenus *Phaganthus*; characters; Germany).
- Bernhauer and Schubert, 1910: 80 (*Anthophagus*; cited as *pracustus*; catalog).
- Portevin, 1929: 435 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141, 143 (*Anthophagus*; subgenus *Phaganthus*; figure).
- C. Koch, 1934a: 158 (*Anthophagus*; subgenus *Phaganthus*; characters; Germany; France; Switzerland; Portugal).
- Horion, 1963: 138 (*Anthophagus*; subgenus *Phaganthus*; Holland; Belgium; France; Spain; Portugal; Switzerland; Sardinia; Italy; Romania; Czech Republic; Germany; Austria).
- Lohse, 1964: 64 (*Anthophagus*; subgenus *Phaganthus*; characters; central Europe).
- Smetana, 1964c: 164 (*Anthophagus*; subgenus *Phaganthus*; Czechoslovakia).
- Tóth, 1982: 92 (*Anthophagus*; characters; Hungary).
- Zanetti, 1987: 393 (*Anthophagus*; species not in Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Czechoslovakia; Austria; Switzerland; France; Benelux).

- Boháč, 1993: 41 (*Anthophagus*; subgenus *Phaganthus*; Czech Republic).
- Zerche, 2000: 52 (*Anthophagus*; discussion; **nomen protectum**).

▲ **DISTRIBUTION:** Europe.

*nigrophthalmus* Block, 1799: 117 (*Staphylinus*; Type locality: Plauischer Grund bei Dresden).

- Gemminger and Harold, 1868: 658 (*Anthophagus*; synonym of *plagiatus*).
- Fauvel, 1869: 493 (*Anthophagus*; synonym of *plagiatus*).
- Bernhauer and Schubert, 1910: 77 (*Geodromicus*; synonym of *plagiatus*).
- Zerche, 2000: 52 (*Anthophagus*; synonym of *praeustus*; **nomen protectum**).

*bimaculatus* Lacordaire, 1835: 481 (*Lesteva*; Type locality: Fontainbleau).

- Erichson, 1840: 852 (*Anthophagus*; synonym of *praeustus*).
- Redtenbacher, 1849: 747 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 629 (*Anthophagus*; synonym of *praeustus*).
- Kraatz, 1857d: 925 (*Anthophagus*; synonym of *praeustus*).
- Mulsant and Rey, 1880: 49 (*Anthophagus*; synonym of *praeustus*).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *praeustus*).
- Luze, 1902d: 527 (*Anthophagus*; synonym of *praeustus*).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; synonym of *praeustus*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *praeustus*).

*pseudosudeticus* C. Koch, 1934 [**Note: Nomen nudum**], see: *alpinus* Fabricius, 1793.

*puberulum* Märkel and Kiesenwetter, 1848, see: *Eusphalerum*.

*puncticollis* Weise, 1875, see: *Geodromicus*.

*pyrenaicus* Brisout, 1863, see: *alpinus* Fabricius, 1793.

**rotundicollis** Heer, 1839: 195 (*Anthophagus*; Type locality: Frugmatt).

- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 51 (*Anthophagus*; subgenus *Phaganthus*; characters; France).
- Ganglbauer, 1895: 709 (*Anthophagus*; subgenus *Phaganthus*; characters; Alps).
- Luze, 1902d: 528 (*Anthophagus*; characters; East Tirol).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141, 143 (*Anthophagus*; subgenus *Phaganthus*; figure).
- C. Koch, 1934a: 160 (*Anthophagus*; subgenus *Phaganthus*; characters; Alps; Austria; Transylvania; Alps).
- Horion, 1935: 169 (*Anthophagus*; subgenus *Phaganthus*; characters; Alps; Austria; Germany).
- Horion, 1963: 140 (*Anthophagus*; subgenus *Phaganthus*; France; Switzerland; Italy; Germany; Austria; Romania).
- Lohse, 1964: 64 (*Anthophagus*; subgenus *Phaganthus*; characters; central Europe).
- Tóth, 1982: 92 (*Anthophagus*; characters).
- Zanetti, 1987: 392 (*Anthophagus*; subgenus *Phaganthus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria).

▲ **DISTRIBUTION:** Germany, France, Switzerland Italy, Austria.

*brevicornis* Kiesenwetter, 1861: 376 (*Anthophagus*; Type locality: Saas am Ufer des Vispbaches; Macugnaga am Ufer der Anza; Annivier-Thal an der Nanvisanche).

- Fauvel, 1871a: 139 [= 1872: 113] (*Anthophagus*; characters; France; Germany; Switzerland; Italy; Austria).
- Fauvel, 1874: 324 [= 1874b: 30] (*Anthophagus*; synonym of *brevicornis*).
- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 51 (*Anthophagus*; synonym of *rotundicollis*).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *rotundicollis*).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; synonym of *rotundicollis*).
- Portevin, 1929: 435 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; synonym of *rotundicollis*).
- C. Koch, 1933a: 141 (*Anthophagus*; aberration of *rotundicollis*).

- C. Koch, 1934a: 160 (*Anthophagus*; subgenus *Phaganthus*; aberration of *rotundicollis*).
- Tóth, 1982: 92 (*Anthophagus*; aberration of *rotundicollis*; characters).
- Zanetti, 1987: 392 (*Anthophagus*; synonym of *rotundicollis*).

*crassicornis* Mulsant and Rey, 1861: 179 [= 1862: 163] (*Anthophagus*; Type locality: Chamouni).

- Fauvel, 1871a: 139 [= 1872: 113] (*Anthophagus*; synonym of *brevicornis*).
- Mulsant and Rey, 1880: 51 (*Anthophagus*; synonym of *rotundicollis*).
- Ganglbauer, 1895: 709 (*Anthophagus*; synonym of *rotundicollis*).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; synonym of *rotundicollis*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *rotundicollis*).

*imitator* Luze, 1902d: 528 (*Anthophagus*; aberration of *rotundicollis*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).

- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; aberration of *rotundicollis*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *brevicornis*).

*roubali* C. Koch, 1934, see: *angusticollis* Mannerheim, 1830.

*ruficeps* Motschulsky, 1860, see: *omalinus* Zetterstedt, 1828.

*schatzmayri* C. Koch, 1933: 30 (*Anthophagus*; Type locality: Brussa).

- C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Dimorphoschelus*).
- C. Koch, 1934a: 237 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Asia Minor).
- Tikhomirova, 1973a: 141 (*Anthophagus*; subgenus *Dimorphoschelus*; checklist; Asia Minor).

▲ **DISTRIBUTION:** Turkey.

*scheerpeltzi* C. Koch, 1933, see: *muticus* Kiesenwetter, 1850.

*schneideri* Eppelsheim, 1878: 125 (*Anthophagus*; Type locality: Elisabetpol).

- Luze, 1902d: 517 (*Anthophagus*; characters; Caucasus; Transcaucasian region).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Dimorphoschelus*).
- C. Koch, 1934a: 221 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Caucasus).

▲ **DISTRIBUTION:** Armenia, Azerbaijan, Georgia.

*scutellaris* Erichson, 1840: 851 (*Anthophagus*; Type locality: Genevae).

- Heer, 1841: 572 (*Anthophagus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 81 cited *caraboides* variety b Heer as a synonym of *scutellaris*; the variety is unavailable]; characters).
- Heer, 1841: 572 (*Anthophagus*; characters; Switzerland).
- Kiesenwetter, 1845: 23 (*Anthophagus*; notes).
- Kiesenwetter, 1847a: 58 (*Anthophagus*; characters; Switzerland).
- Fairmaire and Laboulbène, 1856: 628 (*Anthophagus*; characters; France).
- Kraatz, 1857d: 916 (*Anthophagus*; notes).
- Fauvel, 1865a: 314 [= 1865b: 64] (*Anthophagus*; habitat; France).
- Fauvel, 1871a: 142 [= 1872: 116] (*Anthophagus*; characters; France; Switzerland; Italy).
- Mulsant and Rey, 1880: 43 (*Anthophagus*; subgenus *Phaganthus*; characters; France).
- Ganglbauer, 1895: 709 (*Anthophagus*; subgenus *Phaganthus*; characters; western Alps; Jura).
- Luze, 1902d: 525 (*Anthophagus*; characters; Jura; France; Piemont; Swiss and Tirolian Alps; Austria).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- Portevin, 1929: 435 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141, 143 (*Anthophagus*; subgenus *Phaganthus*; figure).
- C. Koch, 1934a: 164 (*Anthophagus*; subgenus *Phaganthus*; characters; Europe).
- Horion, 1935: 169 (*Anthophagus*; subgenus *Phaganthus*; characters; Alps; Austria).
- Horion, 1963: 140 (*Anthophagus*; subgenus *Phaganthus*; France; Italy; Switzerland; Germany; Austria).
- Lohse, 1964: 64 (*Anthophagus*; subgenus *Phaganthus*; characters; central Europe).
- Tóth, 1982: 91 (*Anthophagus*; characters).
- Zanetti, 1987: 391 (*Anthophagus*; subgenus *Phaganthus*; characters; Italy).



- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria; Switzerland).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** Germany, France, Switzerland, Austria, Italy.

*sinuatus* Sharp, 1889, see: *Geodromicus*.

*solarii* C. Koch, 1934, see: *bicornis* Block, 1799.

**spectabilis** Heer, 1839: 197 (*Anthophagus*; Type locality: in *Valesiae alpinus*).

- Kiesenwetter, 1845: 23 (*Anthophagus*; notes).
- Fairmaire and Laboulbène, 1856: 627 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 242 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 914 (*Anthophagus*; characters; Austria).
- Fauvel, 1865a: 314 [= 1865b: 64] (*Anthophagus*; France).
- Fauvel, 1871a: 144 [= 1872: 118] (*Anthophagus*; characters; France; Switzerland; Germany).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 24 (*Anthophagus*; characters; France).
- Ganglbauer, 1895: 707 (*Anthophagus*; characters; Alps; Vosges).
- Luze, 1902d: 511 (*Anthophagus*; characters; Alps; Voges).
- Reitter, 1909: 182 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- Portevin, 1929: 434 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 141 (*Anthophagus*; subgenus *Anthophagus*).
- C. Koch, 1934a: 173 (*Anthophagus*; subgenus *Anthophagus*; characters; Switzerland; France; Italy).
- Horion, 1963: 142 (*Anthophagus*; subgenus *Anthophagus*; France; Italy; Switzerland; Germany; Austria).
- Lohse, 1964: 64 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Zanetti, 1987: 401 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Germany; Austria; Switzerland; France).
- Zanetti, 1995: 9 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** France, Switzerland, Germany, Austria, Italy.

*picipennis* Gredler, 1863a: 166 (*Anthophagus*; Type locality: Not cited, collected in the Alps).

- Redtenbacher, 1874: 265 (*Anthophagus*; characters; Austria).
- Fauvel, 1876a: 54 [= 1876: 239] (*Anthophagus*; synonym of *picipennis*).
- Luze, 1902d: 511 (*Anthophagus*; synonym of *spectabilis*).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; synonym of *spectabilis*).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; synonym of *spectabilis*).
- C. Koch, 1933a: 141 (*Anthophagus*; aberration of *spectabilis*).
- C. Koch, 1934a: 173 (*Anthophagus*; subgenus *Anthophagus*; aberration of *spectabilis*).

*muelleri* Bernhauer, 1901: 539 (*Anthophagus*; variety of *spectabilis*; Type locality: Bregenz auf den Vorarlberger Alpen).

- Luze, 1902d: 511 (*Anthophagus*; variety of *spectabilis*).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; variety of *spectabilis*).
- C. Koch, 1933a: 141 (*Anthophagus*; synonym of *picipennis*).
- C. Koch, 1934a: 176 (*Anthophagus*; subgenus *Anthophagus*; aberration of *spectabilis*; characters).
- Zanetti, 1987: 401 (*Anthophagus*; synonym of *spectabilis*).

*speculicollis* C. Koch, 1933, see: *alpinus* Fabricius, 1793.

*subfasciatus* Luze, 1902 [**Note: Nomen nudum**], see: *bicornis* Block, 1799.

*subtilis* Sharp, 1889, see: *Liophilydrodes*.

**sudeticus** Kiesenwetter, 1846: 22 (*Anthophagus*; Type locality: Riesengebirge; Spiegglitzer Schneeberg im Glatzer Gebirge).

- Kiesenwetter, 1847a: 52 (*Anthophagus*; characters; Germany).

- Redtenbacher, 1849: 828 (*Anthophagus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 626 (*Anthophagus*; characters; France).
- Redtenbacher, 1857: 243 (*Anthophagus*; characters; Austria).
- Kraatz, 1857d: 920 (*Anthophagus*; characters; Germany).
- Fauvel, 1871a: 147 [= 1872: 121] (*Anthophagus*; characters; Italy; Austria).
- Redtenbacher, 1874: 264 (*Anthophagus*; characters; Austria).
- Mulsant and Rey, 1880: 16 (*Anthophagus*; characters; France).
- Ganglbauer, 1895: 707 (*Anthophagus*; characters; Sudeten).
- Luze, 1902d: 520 (*Anthophagus*; characters; Sudeten; Carpathian and Transylvanian Alps).
- Reitter, 1909: 182 (*Anthophagus*; characters; Germany).
- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Anthophagus*; figure).
- C. Koch, 1934a: 205 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Horion, 1963: 144 (*Anthophagus*; subgenus *Anthophagus*; Czech Republic; Slovakia; Romania; Germany; Austria).
- Lohse, 1964: 66 (*Anthophagus*; subgenus *Anthophagus*; characters; central Europe).
- Tóth, 1982: 94 (*Anthophagus*; characters).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Poland; Czechoslovakia).
- Boháč, 1993: 42 (*Anthophagus*; subgenus *Dimorphoschelus*; Slovakia; Czech Republic).
- ▲ **DISTRIBUTION:** Poland, Germany, Austria, Italy, Czech Republic, Slovakia, Romania, Carpathians.

*testaceus* Gravenhorst, 1802, see: *caraboides* Linné, 1758.

**torretassoi** C. Koch, 1933: 27 (*Anthophagus*; Type locality: Appennino abruzzese, Lazio).

- C. Koch, 1933a: 142 (*Anthophagus*; subgenus *Anthophagus*).
- C. Koch, 1934a: 185 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Zanetti, 1987: 405 (*Anthophagus*; subgenus *Anthophagus*; characters; Italy).
- Zanetti, 1995: 10 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** Italy.

*pollinensis* C. Koch, 1934a: 185, 188 (*Anthophagus*; subgenus *Anthophagus*; race of *torretassoi*; Type locality: Lucania, Mte. Pollino, Duglia).

- Zanetti, 1987: 405 (*Anthophagus*; subgenus *Anthophagus*; subspecies of *torretassoi*; characters; Italy).
- Zanetti, 1995: 10 (*Anthophagus*; subspecies of *torretassoi*; Italy).

**transversus** Motschulsky, 1857a: 494 (*Anthophagus*; Type locality: Alpes de la Carniole).

- Fauvel, 1865c: 18 [= 1866: 25] (*Anthophagus*; synonym of *austriacus*).
- Kraatz, 1867: 415 (*Anthophagus*; synonym of *austriacus*).
- Fauvel, 1871a: 141 [= 1872: 115] (*Anthophagus*; synonym of *alpestris*).
- Ganglbauer, 1895: 708 (*Anthophagus*; synonym of *alpestris*).
- Luze, 1902d: 512 (*Anthophagus*; synonym of *alpestris*).
- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; aberration of *alpestris*).
- C. Koch, 1933a: 142 (*Anthophagus*; subspecies of *dinaricus*).
- C. Koch, 1934a: 234 (*Anthophagus*; subgenus *Dimorphoschelus*; race of *dinaricus*; characters).
- Zanetti, 1986: 96 (*Anthophagus*; cited as valid species).
- Zanetti, 1987: 419 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Italy).
- Zanetti, 1995: 10 (*Anthophagus*; Italy).

▲ **DISTRIBUTION:** Italy, Austria, Bosnia Hercegovina, Slovenia.

*dinaricus* Apfelbeck, 1909: 501 (*Anthophagus*; Type locality: Bosnia sept. occ.: in monte Klekovača).

- Scheerpeltz, 1933: 1069 (*Anthophagus*; catalog).
- C. Koch, 1933: 30 (*Anthophagus*; Italy).
- C. Koch, 1933a: 142, 143 (*Anthophagus*; subgenus *Dimorphoschelus*; figure).
- C. Koch, 1934a: 231 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; Herzegovina; Bosnia).

- Horion, 1963: 148 (*Anthophagus*; subgenus *Dimorphoschelus*; Austria; Bosnia Hercegovina; Slovenia).
- Lohse, 1964: 67 (*Anthophagus*; subgenus *Dimorphoschelus*; characters; central Europe).
- Zanetti, 1986: 96 (*Anthophagus*; subspecies of *transversus*).
- Lucht, 1987: 90 (*Anthophagus*; checklist; Austria).
- Zanetti, 1987: 419 (*Anthophagus*; subgenus *Dimorphoschelus*; subspecies of *transversus*; characters; Italy).
- Lohse and Lucht, 1989: 127 (*Anthophagus*; subspecies of *transversus*).
- Zanetti, 1995: 10 (*Anthophagus*; subspecies of *transversus*; Italy).

*trimaculatus* Luze, 1902, see: *caraboides* Linné, 1758.

*ursus* Havelka and R. Dvořák, 1953 [**Note: Nomen nudum**], see: *omalinus* Zetterstedt, 1828.

**variegatus** Gistel, 1857: 5 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Styria).

▲ **DISTRIBUTION:** Austria.

**vehemans** Gistel, 1857: 85 (*Anthophagus*; [**Note: Nomen dubium**]; Type locality: Tyrolis).

▲ **DISTRIBUTION:** Austria.

*verticalis* Say, 1831, see: *Geodromicus*.

*villosus* Waltl, 1838, see: *Lesteva*.

### Arpedium

[6 species; Nearctic and Palaeartic Region]

*Arpedium* Erichson, 1839a: 618 (species included: *quadrum*). **TYPE SPECIES:** *Omalium*

*quadrum* Gravenhorst, fixed by monotypy.

- Erichson, 1840: 858 (characters).
- Redtenbacher, 1849: 748 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 139 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 633 (characters).
- Jacquelin du Val, 1857: 72 (characters).
- Redtenbacher, 1857: 246 (characters).
- Kraatz, 1857d: 957 (characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 49 (characters; type species: *quadrum*).
- Schaum, 1859: 31 (catalog; European species).
- Thomson, 1861: 188 (characters).
- Gredler, 1863: 123 (list of species from Tirol).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 662 (catalog).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Fauvel, 1871a: 111 [= 1872: 85] (characters; key to species).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 270 (characters).
- Fauvel, 1875a: VI [= 1875b: 208] (catalog).
- Fauvel, 1878d: 224 [= 1878e: 60] (key to North American species).
- Mulsant and Rey, 1880: 144 (characters; key to French species).
- Heyden, 1880: 82 (list of species of Siberian region).
- Duvivier, 1883: 196 (catalog).
- Fowler, 1888: 407 (notes).
- Seidlitz, 1891: 343 (key to some European species).
- Seidlitz, 1891a: 365 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Heyden, 1893: 48 (list of species of Siberian region).
- Ganglbauer, 1895: 717 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).

- Heyden, Reitter, and Weise, 1906: 134 (list of species of Europe and Caucasus).
- Reitter, 1909: 186 (characters; key to German species).
- Bernhauer and Schubert, 1910: 67 (world catalog; 15 species).
- Blatchley, 1910: 477 (characters; key to Indiana species).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Johansen, 1914: 600 (characters; key to Danish species).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 333 (catalog for Palaearctic region).
- Cameron, 1925: 11 (catalog of Indian species).
- Porta, 1926: 26 (characters; key to species of Italy).
- Portevin, 1929: 440 (key to French genera).
- Cameron, 1930: 155 (characters).
- Roubal, 1930: 314 (catalog; Slovakia).
- Munster, 1933 (revision of and key to Norwegian species).
- Joy, 1932: 102 (key to British species).
- Scheerpeltz, 1933: 1060 (world catalog supplement).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 109 (characters; key to species of Sweden).
- Tottenham, 1949: 357, 407 (type species: *quadrum* Gravenhorst; list of British species).
- Blackwelder, 1952: 62 (type species: *quadrum*).
- Tottenham, 1954: 31 (characters; British species).
- Hatch, 1957: 49, 53 (characters; key to species of Pacific Northwest).
- Horion, 1963: 117 (list of central European species).
- Székessy, 1963: 20 (characters).
- Lohse, 1964: 55 (characters; key to central European species).
- Moore, 1966: 48, 51 (characters; notes).
- Scheerpeltz, 1968a: 14 (catalog of Austrian species).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Moore and Legner, 1975: 184 (catalog; North America north of Mexico).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 61 (catalog; Poland).
- Moore and Legner, 1979: 180 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, 1979: 243 (some species collected in Germany).
- Uhlig and Vogler, 1981: 87 (list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 81 (characters; habitus; key to species of Hungary).
- Campbell, 1984: 506 (characters; revision of and key to species of North America).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Zanetti, 1987: 307 (characters; habitus; species of Italy).
- Ádám, 1987: 137 (*Arpedium*; collecting notes; Hungary).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- Downie and Arnett, 1996: 431 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (3 Nearctic species; notes; characters in key).

*alpinum* Fauvel, 1871, see: *quadrum* Gravenhorst, 1806.

*angulare* Fauvel, 1878, see: *cribratum* Fauvel, 1878.

**angulare** Fauvel, 1878d: 226 [= 1878e: 62] (*Arpedium*; Type locality: Pointe des Pins, Sault St. Marie, Lake Superior; [**Note:** See lectotype designation by Campbell, 1984]. Also cited from Detroit, Michigan).

- Bernhauer and Schubert, 1910: 67 (*Arpedium*; catalog).

- Campbell, 1984: 508 (*Arpedium*; lectotype designation: Pointe des Pins, Sault St. Marie, Lake Superior, Ontario; synonym of *cribratum*).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (*Arpedium*; appears to be distinct species).

▲ **DISTRIBUTION:** Canada; USA.

*beringense* Van Dyke, 1921, see: *Eucnecosum*.

*brevicollis* Mäklin, 1852, see: *Porrhodites*.

*brunnescens* J. Sahlberg, 1871, see: *Eucnecosum*.

*columbiense* Hatch, 1957, see: *cribratum* Fauvel, 1878.

*creticum* Scheerpeltz, 1958, see: *Deliphrosoma*.

**cribratum** Fauvel, 1878d: 224 [= 1878e: 60] (*Arpedium*; Type locality: Detroit, Michigan; [Note: See lectotype designation by Campbell, 1984]. Originally cited from Michigan, Detroit; Illinois).

- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Blatchley, 1910: 478 (*Arpedium*; characters; Indiana).
- Legner and Moore, 1977: 175 (*Arpedium*; found under bark).
- Campbell, 1984: 508 (*Arpedium*; lectotype designation: Detroit, Michigan; characters; British Columbia; New Brunswick; Ontario; Quebec; Illinois; Iowa; Maine; Massachusetts; Michigan; Missouri; Nebraska; New Hampshire; New York; Ohio; Wisconsin).
- Campbell and Davies, 1991: 89 (*Arpedium*; checklist of species; Canada).
- Levesque and Levesque, 1996: 289 (*Arpedium*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 431 (*Arpedium*; characters; USA).

▲ **DISTRIBUTION:** Canada; USA.

*columbiense* Hatch, 1957: 53 (*Arpedium*; Type locality: Barkerville, B. C. Also cited from Idaho).

— Steel, 1964a: 249 (*Arpedium*; synonym of *quadrum*).

— Campbell, 1984: 508 (*Arpedium*; synonym of *cribratum*).

*engadinicum* Heyden, 1863, see: *Eucnecosum*.

*gyllenhali* C. Sahlberg, 1830, see: *Eucnecosum*.

*heydeni* Heer, 1839, see: *quadrum* Gravenhorst, 1806.

*humile* Erichson, 1840, see: *Philorinum*.

*impressum* Zetterstedt, 1828, see: *Eucnecosum*.

*kittilense* Munster, 1933, see: *Eucnecosum*.

*libanicum* Fauvel, 1875, see: *Deliphrosoma*.

*limbatum* Gebler, 1848, see: *quadrum* Gravenhorst, 1806.

*lindebergi* Scheerpeltz, 1958, see: *Deliphrosoma*.

*maculicolle* Mannerheim, 1843, see: *Amphichroum*.

*major* Bernhauer, 1902, see: *Deliphrosoma*.

*mandli* Scheerpeltz, 1937, see: *Deliphrosoma*.

*mixtum* Bernhauer, 1902, see: *Eucnecosum*.

*morvani* Jarrige, 1971, see: *Deliphrosoma*.

*myops* Haliday, 1841, see: *Philorinum*.

**nepalicum** Coiffait, 1982: 145 (*Arpedium*; Type locality: Nepal occidental: Dzunda, Khola Tal, près Talphi, 3000–3500 m).

▲ **DISTRIBUTION:** Nepal.

*norvegicum* Munster, 1933, see: *Eucnecosum*.

*pallens* Motschulsky, 1857, see: *Phloeonomus*.

*platyophthalmum* C. Koch, 1937, see: *Deliphrosoma*.

*puncticolle* J. Sahlberg, 1880, see: *Eucnecosum*.

**quadrum** Gravenhorst, 1806: 213 (*Omalium*; Type locality: Not cited).

- Gyllenhal, 1810: 198 (*Omalium*; synonym of *boreale* Paykull).
- Olivier, 1811: 478 (*Omalium*; characters; Germany; Sweden).
- Gyllenhal, 1827: 461 (*Omalium*; characters; not synonym of *boreale*; Sweden; Finland).
- C. Sahlberg, 1827: 278 (*Omalium*; cited as *quadratum*; characters; Finland).
- Mannerheim, 1830: 52 (*Omalium*; Lapland).
- Mannerheim, 1831: 466 (*Omalium*; Lapland).
- Heer, 1834: 43, 76 (*Omalium*; cited as *consimile* Gyllenhal; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 68 cited *consimile* Heer as a synonym of *quadrum*; Heer did not describe the species as new, he attributed it to Gyllenhal]; collecting notes).
- Runde, 1835: 23 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 68 cited *castaneum* Runde as a synonym of *quadrum*; Runde did not describe the species as new, he attributed it to Gravenhorst]; characters; Germany).
- Lacordaire, 1835: 487 (*Omalium*; characters; France).
- Zetterstedt, 1838: 50 (*Omalium*; characters; habitat; Lapland).
- Zetterstedt, 1838: 50 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 68 cited *piceum* Zetterstedt as a synonym of *quadrum* Gravenhorst; Zetterstedt did not describe the species as new, he attributed it to Gyllenhal]; characters; habitat; Lapland).
- Erichson, 1839a: 618 (*Arpedium*; characters; Germany).
- Heer, 1839: 191 (*Acidota*; characters; Switzerland).
- Erichson, 1840: 858 (*Arpedium*; characters; Germany; Sweden).
- Redtenbacher, 1849: 748 (*Arpedium*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 633 (*Arpedium*; characters; France).
- Redtenbacher, 1857: 246 (*Arpedium*; characters; Austria).
- Kraatz, 1857d: 958 (*Arpedium*; characters; Germany).
- Thomson, 1859: 49 (type species of *Arpedium*).
- Thomson, 1861: 189 (*Arpedium*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Arpedium*; Russia).
- Fauvel, 1871a: 112 [= 1872: 86] (*Arpedium*; characters; France; Italy; Russia).
- Fauvel, 1871a: 112 [= 1872: 86] (*Arpedium*; cited as *consimile* Gyllenhal; [**Note:** Misidentification of *consimile* Gyllenhal; see Note for Heer, 1834]; synonym of *quadrum*).
- Redtenbacher, 1874: 270 (*Arpedium*; characters; Austria).
- Seidlitz, 1875: 237 (*Arpedium*; characters; Baltic region).
- J. Sahlberg, 1876: 210 (*Arpedium*; Finland).
- Mulsant and Rey, 1880: 147 (*Arpedium*; characters; France).
- Ganglbauer, 1895: 718 (*Arpedium*; characters; north and middle Europe; North America).
- Ganglbauer, 1895: 718 (*Arpedium*; [**Note:** Misidentification of *consimile* Gyllenhal; see Note for Heer, 1834]; synonym of *quadrum*).
- Sainte-Claire Deville, 1907: 45 (*Arpedium*; characters; France).
- Reitter, 1909: 186 (*Arpedium*; characters; Germany).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; [**Note:** Misidentification of *consimile* Gyllenhal; see Note for Heer, 1834]; synonym of *quadrum*).
- Johansen, 1914: 600 (*Arpedium*; characters; Denmark).
- Portevin, 1929: 441 (*Arpedium*; characters; France).
- Munster, 1933: 258 (*Arpedium*; characters; Norway).
- Scheerpeltz, 1933: 1061 (*Arpedium*; catalog).
- Palm, 1948: 111 (*Arpedium*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 117 (*Arpedium*; subgenus *Arpedium*; Russia; Finland Sweden; Norway; Denmark; Poland; Czech Republic; Slovakia; Hungary; Romania; Bosnia; Italy; France; Switzerland; Belgium; Holland; Germany; Austria).
- Lohse, 1964: 55 (*Arpedium*; characters; central Europe).
- Sujecki, 1968a: 712 (*Arpedium*; Poland).
- Osella and Zanetti, 1975: 88 (*Arpedium*; collected from nest of *Talpa europaea*; notes; Italy).
- Tóth, 1982: 82 (*Arpedium*; characters; Hungary).

- Campbell, 1984: 508 (*Arpedium*; characters).
- Segers, 1986: 22 (*Arpedium*; checklist of species; Belgium).
- Zanetti, 1987: 308 (*Arpedium*; characters; Italy).
- Lucht, 1987: 89 (*Arpedium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Schülke and Uhlig, 1988: 3 (*Arpedium*; Germany).
- Boháč, 1993: 41 (*Arpedium*; Slovakia; Czech Republic).
- Vorst, Drost, and Cuppen, 1995 (*Arpedium*; Netherlands).
- Zanetti, 1995: 8 (*Arpedium*; Italy).
- Cibulskis, 1998: 67 (*Arpedium*; Latvia).
- Ryabukhin, 1999: 25 (*Arpedium*; catalog; habitat; distribution; northeastern Russia).
- Cibulskis, 1999: 35 (*Arpedium*; list; Latvia).

▲ **DISTRIBUTION:** Europe, Russia.

*sibiricum* Mannerheim, 1830: 52 (*Omalium*; Type locality: Barnaul Sibiriae).

- Mannerheim, 1831: 466 (*Omalium*; Siberia).
- Erichson, 1840: 860 (*Arpedium*; characters; Siberia).
- Motschulsky, 1858d: 72 (*Arpedium*; synonym of *quadrum*).
- Bernhauer and Schubert, 1910: 69 (*Arpedium*; catalog).
- Munster, 1933: 258 (*Arpedium*; synonym of *quadrum*).

*heydeni* Heer, 1839: 190 (*Acidota*; Type locality: Frugmatt; Mühlebachalp; Klausen; Berneralpen; Walliser Alpen).

- Kraatz, 1857d: 958 (*Arpedium*; [**Note:** Bernhauer and Schubert, 1910: 68 cited *heydeni* Kraatz as a synonym of *quadrum*; Kraatz attributed it to Heer]; characters; Germany).
- Fauvel, 1871a: 112 [= 1872: 86] (*Arpedium*; synonym of *quadrum*).
- Ganglbauer, 1895: 718 (*Arpedium*; synonym of *quadrum*).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *quadrum*).

*limbatum* Gebler, 1848: 80 (*Arpedium*; Type locality: Barnaul).

- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Munster, 1933: 258 (*Arpedium*; synonym of *quadrum*).

*alpinum* Fauvel, 1871a: 113 [= 1872: 87] (*Arpedium*; variety B of *quadrum*; Type locality: Savoie; Albertville; Switzerland; hautes Alpes allemandes et l'Europe boreale).

- Ganglbauer, 1895: 718 (*Arpedium*; variety of *quadrum*).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; variety of *quadrum*).
- Scheerpeltz, 1933: 1061 (*Arpedium*; variety of *quadrum*).
- Tóth, 1982: 83 (*Arpedium*; subspecies of *quadrum*; characters; Hungary).
- Zanetti, 1987: 308 (*Arpedium*; synonym of *quadrum*).

*salaasi* Munster, 1933, see: *Eucnecosum*.

*schatzmayri* Bernhauer, 1906, see: *Deliphrum*.

**schwarzi** Fauvel, 1878d: 225 [= 1878e: 61] (*Arpedium*; Type locality: Ohio, Ross Co.; [**Note:** See lectotype designation by Campbell, 1984]).

- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Blatchley, 1910: 478 (*Arpedium*; cited as *schwarzii*; characters; Indiana).
- Campbell, 1984: 512 (*Arpedium*; lectotype designation; characters; Alabama; Arkansas; Illinois; Indiana; Kentucky; Louisiana; Massachusetts; Michigan; Missouri; New Jersey; New York; North Carolina; Ohio; Pennsylvania; South Carolina; Tennessee; Virginia).
- Downie and Arnett, 1996: 431 (*Arpedium*; characters; USA).

▲ **DISTRIBUTION:** USA.

*sibiricum* Mannerheim, 1830, see: *quadrum* Gravenhorst, 1806.

*skalitzkyi* Bernhauer, 1902, see: *Deliphrosoma*.

**stillicidii**† Scudder, 1895: 42 (*Arpedium*; pleistocene fossil, interglacial clays; Type locality: Scarboro, Ontario).

- Scudder, 1900a: 86 (*Arpedium*; Canada).

▲ **DISTRIBUTION:** Canada.

*testaceum* Mannerheim, 1843, see: *Pelecomalium*.

*trogodytes* Kiesenwetter, 1847, see: *Eucnecosum*.

*weiratheri* Scheerpeltz, 1938, see: *Deliphrosoma*.

### Artochia

[2 species; Nearctic Region]

*Artochia* Casey, 1894: 398, 400 (species included: *productifrons*). **TYPE SPECIES:** *Artochia productifrons* Casey, fixed by monotypy.

- Bernhauer and Schubert, 1910: 74 (world catalog; 1 species).
- Leng, 1920: 95 (catalog of North American species).
- Scheerpeltz, 1933: 1064 (world catalog supplement).
- Blackwelder, 1952: 63 (type species: *productifrons*).
- Moore, 1966: 48, 50 (characters; notes).
- Moore and Legner, 1975: 185 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 181 (characters; notes).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (2 Nearctic species; notes; characters in key).

**californica** Bernhauer, 1912i: 679 (*Artochia*; Type locality: Kalifornien: Sugar Pine).

- Scheerpeltz, 1933: 1064 (*Artochia*; catalog).

▲ **DISTRIBUTION:** California.

**productifrons** Casey, 1894: 401 (*Artochia*; Type locality: California: Gilroy Springs, Santa Clara Co.).

- Bernhauer and Schubert, 1910: 74 (*Artochia*; catalog).
- Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).

▲ **DISTRIBUTION:** California, British Columbia, Alaska.

### Brathinus

[5 species; Nearctic and Palaeartic Region]

*Brathinus* LeConte, 1852a: 156 (species included: *nitidus*, *varicornis*). **TYPE SPECIES:** *Brathinus nitidus* LeConte, fixed by subsequent designation by R. Lucas, 1920: 149.

- Bernhauer and Schubert, 1910: 74 (world catalog; 2 species).
- Leng, 1918: 203 (removed from Scydmaenidae and placed in separate family).
- Scheerpeltz, 1933: 1065 (world catalog supplement).
- Blackwelder, 1952: 411 (type species).
- Hatch, 1957: 49, 52 (characters).
- Moore, 1966: 56 (not in Omaliinae).
- Hammond, 1971b: 63 (discussion of familial placement; belongs in the Omaliinae; notes; characters; key to species).
- Peck, 1975: 64 (zoogeography).
- Shibata, 1976: 96 (checklist of species of Japan).
- Thayer, 1985a (egg, larval and pupal characters; natural history notes; discussion of taxonomic position; note on larval parasite; place in Anthophagini).
- Frank, Habeck and Peck, 1987: 138 (key to North American species; distribution of species).
- Watanabe, 1990: 244 (characters; key to species of Japan).
- Campbell and Davies, 1991: 89 (checklist of species; Canada).
- Newton and Thayer, 1995: 294 (placed in Anthophagini).
- Downie and Arnett, 1996: 439 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (3 Nearctic species; notes; characters in key).

**californicus** Hubbard, 1894: 11 (*Brathinus*; Type locality: Lake Tahoe, Cala.; Sisson, Cala.).

- Scheerpeltz, 1933: 1065 (*Brathinus*; catalog).
- Hammond, 1971b: 68 (*Brathinus*; characters; California).
- Peck, 1975: 63 (*Brathinus*; habitat; California; Oregon; Washington; Idaho).
- Frank, Habeck and Peck, 1987: 138 (*Brathinus*; characters).

▲ **DISTRIBUTION:** USA.



*japonicus* Nakane, 1961, see: *oculatus* Lewis, 1886.

**nitidus** LeConte, 1852a: 157 (*Brathinus*; Type locality: Nova Scotia).

- Hubbard, 1894: 11 (*Brathinus*; characters).
- Bernhauer and Schubert, 1910: 74 (*Brathinus*; catalog).
- Hammond, 1971b: 67, 68 (*Brathinus*; characters; New Hampshire; Nova Scotia; Newfoundland).
- Peck, 1975: 59 (*Brathinus*; habitat; Newfoundland; Nova Scotia; Quebec; Alabama; Kentucky; Maine; Michigan; New Hampshire; New Jersey; New York; Tennessee; Virginia; West Virginia).
- Schwert and Morgan, 1980: 101 (*Brathinus*; late glacial fossil; New York).
- Steiner, 1981: 233 (*Brathinus*; collecting and natural history notes; Maryland).
- Holeski, 1985: 264 (*Brathinus*; collecting notes; Ohio).
- Thayer, 1985a (*Brathinus*; characters of egg, larva, pupa; life cycle; natural history notes).
- Morgan and Morgan, 1985: 1819 (*Brathinus*; middle Holocene fossil; Michigan).
- Frank, Habeck and Peck, 1987: 137, 138 (*Brathinus*; characters; collecting notes; Arkansas).
- Downie and Arnett, 1996: 439 (*Brathinus*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

**oculatus** Lewis, 1886: 85 (*Brathinus*; Type locality: Yezo, district of the Ishikari River, Japan; [Note: See lectotype designation by Hammond, 1971b]).

- Hammond, 1971b: 68 (*Brathinus*; lectotype designation; characters; Japan).
- Watanabe and Sato, 1981: 618 (*Brathinus*; aedeagus illustration).
- Watanabe, 1990: 247 (*Brathinus*; characters; Japan).

▲ **DISTRIBUTION:** Japan, Russia [Note: Cited from Sakhalin in reference unavailable to me (Zerche, personal communication)].

*japonicus* Nakane, 1961: 3 (*Brathinus*; Type locality: Japan: Hokkaido: Sapporo).

- Nakane, 1963a: 82 (*Brathinus*; characters; habitus photograph; Japan).
- Hammond, 1971b: 68 (*Brathinus*; synonym of *oculatus*).
- Watanabe, 1990: 247 (*Brathinus*; synonym of *oculatus*).

**shikokuensis** Watanabe and Sato, 1981: 615 (*Brathinus*; Type locality: Japan: Shikoku: Ehime Pref.: Omogo-kei).

- Watanabe, 1990: 249 (*Brathinus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**varicornis** LeConte, 1852a: 157 (*Brathinus*; Type locality: Utica).

- Hubbard, 1894: 11 (*Brathinus*; characters).
- Bernhauer and Schubert, 1910: 74 (*Brathinus*; catalog).
- Hatch, 1957: 53 (*Brathinus*; characters; Washington; Idaho; Oregon).
- Hammond, 1971b: 68 (*Brathinus*; characters; New York; Lake Superior; Massachusetts).
- Peck, 1975: 63 (*Brathinus*; habitat; Ontario; Quebec; Maine; Massachusetts; Michigan; New Hampshire; New Jersey; New York).
- Frank, Habeck and Peck, 1987: 138 (*Brathinus*; characters; Vermont; Connecticut).
- Downie and Arnett, 1996: 439 (*Brathinus*; cited as *picticornis*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

### Camioleum

[2 species; Palaearctic Region]

*Camioleum* Lewis, 1893: 394 (species included: *loripes*). **TYPE SPECIES:** *Camioleum loripes* Lewis, fixed by monotypy.

- Watanabe, 1991: 66 (key).
- Bernhauer and Schubert, 1910: 65 (world catalog; 1 species).
- Winkler, 1925: 333 (catalog for Palaearctic region).
- Blackwelder, 1952: 411 (type species: *loripes*).
- Hammond, 1971b: 69 (placement in Omaliinae affirmed; in Anthophagini, *Anthobium* group; close affinities with and possible synonym of *Anthobium*).

- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Shibata, 1976: 98 (cited as *Camioleum*; placed in Omaliinae; checklist of species of Japan).
- Smetana, 1985a: 301 (characters).
- Watanabe, 1990: 116 (characters; species of Japan).

**loripes** Lewis, 1893: 395 (*Camioleum*; Type locality: Japan: main Island, near Kashiwagi; [Note: See lectotype designation by Hammond, 1971b]).

- Bernhauer and Schubert, 1910: 65 (*Camioleum*; catalog).
- Watanabe, 1991: 66 (*Camioleum*; key).
- Hammond, 1971b: 69 (*Camioleum*; assignment to the Omaliinae confirmed; lectotype designation; characters).
- Smetana, 1985a: 303 (*Camioleum*; characters; Japan).
- Watanabe, 1990: 119 (*Camioleum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**yasutoshii** Watanabe, 1991: 63 (*Camioleum*; Type locality: Taiwan: Nantou Hsien, Sungchuankang, 2400 m).

▲ **DISTRIBUTION:** Taiwan.

### Cylletron

[1 species; Palaearctic Region]

*Cylletron* Thomson, 1859: 49 (species included: *nivale*; [Note: This generic name can be accepted as available in 1859 if the description is considered to refer to both the genus and species. If not, then the name became available in 1861 when Thomson provided a separate description for each name and designated the type species by monotypy]). **TYPE SPECIES:** *Cylletron nivale* Thomson, fixed by original designation and monotypy.

- Thomson, 1861: 190 (characters).
- Gemminger and Harold, 1868: 663 (synonym of *Porrhodites*).
- Fauvel, 1869: 493 (valid genus).
- Fauvel, 1875a: VI [= 1875b: 208] (catalog).
- Heyden, 1880: 82 (list of species of Siberian region).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Heyden, Reitter, and Weise, 1906: 132 (list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 62 (world catalog; 1 species).
- Winkler, 1925: 332 (catalog for Palaearctic region).
- Scheerpeltz, 1933: 1053 (world catalog supplement).
- Palm, 1948: 91 (characters; species of Sweden).
- Blackwelder, 1952: 115 (type species: *nivale*).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Muona, 1979: 18 (list of Scandinavian species).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).

*hyperboreum* Mäklin, 1880, see: *Coryphiomorphus*.

**nivale** Thomson, 1859: 49 (*Cylletron*; Type locality: Not cited, see Thomson, 1861: 191).

- Thomson, 1861: 191 (*Cylletron*; characters; Type locality: Lappland).
- Seidlitz, 1875: 239 (*Cylletron*; characters; Baltic region).
- J. Sahlberg, 1876: 211 (*Cylletron*; Finland).
- Mäklin, 1880: 84 (*Cylletron*, cited as *Cyllethro*; characters).
- Seidlitz, 1891: 344 (*Cylletron*; characters; Europe).
- Seidlitz, 1891a: 366 (*Cylletron*; characters; Europe).
- Poppius, 1909: 5 (*Cylletron*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 62 (*Cylletron*; catalog).
- Scheerpeltz, 1933: 1053 (*Cylletron*; catalog).
- Palm, 1948: 92 (*Cylletron*; characters; Sweden; Norway; Finland).

▲ **DISTRIBUTION:** Finland, Russia.

**Deinopteroloma**

[13 species; Nearctic, Palaearctic, and Oriental Regions]

- Deinopteroloma* Jansson, 1947: 15 (species included: *diabolica*, *semiflava*). **TYPE SPECIES:** *Deinopteroloma diabolica* Jansson, fixed by original designation.
- Smetana, 1985: 471, 472 (member of the Omaliinae; characters; key to species).
  - Smetana, 1990b: 258 (key to species).
  - Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
  - Newton, Thayer, Ashe, and Chandler, 2000: 339 (2 Nearctic species; notes; characters in key).
- Mathrilaenum* Moore, 1966: 48, 53 (species included: *pictum*, *subcostatum*; key to species).
- TYPE SPECIES:** *Lathrimaenum pictum* Fauvel, fixed by original designation.
- Moore and Legner, 1975: 195 (catalog; North America north of Mexico).
  - Moore and Legner, 1979: 183 (characters; notes).
  - Smetana, 1985: 472 (synonym of *Deinopteroloma*).
- chiangi** Smetana, 1990b: 257 (*Deinopteroloma*; Type locality: Taiwan: Taoyuan Hsien, Takuanshan For., 1600 m).
- ▲ **DISTRIBUTION:** Taiwan.
- crenatum** Smetana, 1985: 490 (*Deinopteroloma*; Type locality: Nepal: Khandbari Distr.: For. N.E. Kuwapani, 2500 m).
- Smetana, 1990b: 259 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Nepal.
- cristatum** Smetana, 1986a: 48 (*Deinopteroloma*; Type locality: Nepal: distr. Kathmandu: Phulcoki, 2500 m).
- Smetana, 1990b: 259 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Nepal.
- diabolicum** Jansson, 1947: 16 (*Deinopteroloma*; Type locality: Kambaiti, 7000 feet).
- Smetana, 1985: 495 (*Deinopteroloma*; characters; Burma).
  - Smetana, 1990b: 258 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Myanmar.
- egregium** Smetana, 1985: 493 (*Deinopteroloma*; Type locality: Nepal: Khandbari District: Pass N.E. Mangmaya, 2300 m).
- Smetana, 1990b: 260 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Nepal.
- hamatum** Smetana, 1996e: 79 (*Deinopteroloma*; Type locality: China: Kuantun, Fukien).
- ▲ **DISTRIBUTION:** China.
- humerale* Casey, 1886, see: *subcostatum* Mäklin, 1852.
- insigne** Smetana, 1985: 495 (*Deinopteroloma*; Type locality: Nepal: Khandbari District: For. N.E. Kuwapani, 2500 m).
- Smetana, 1990b: 259 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Nepal.
- notabile** Cameron, 1941: 59 (*Lathrimaenum*; subgenus *Prionothonax*; Type locality: Darjeeling: Ghum district).
- Smetana, 1985: 487 (*Deinopteroloma*; characters; Nepal; India).
  - Smetana, 1990b: 259 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** India, Nepal.
- pictum** Fauvel, 1878d: 233 [= 1878e: 69] (*Lathrimaenum*; Type locality: Californie, Mariposa; [Note: See lectotype designation by Smetana, 1985]).
- Bernhauer and Schubert, 1910: 65 (*Lathrimaenum*; catalog).
  - Hatch, 1957: 65 (*Anthobium*; characters; British Columbia; Oregon).
  - Moore, 1966: 53 (*Mathrilaenum*).
  - Smetana, 1985: 482 (*Deinopteroloma*; lectotype designation; characters; California; Oregon; Washington; British Columbia).
  - Smetana, 1990b: 259 (*Deinopteroloma*; characters).
- ▲ **DISTRIBUTION:** Canada, USA.

- semiflavum** Jansson, 1947: 17 (*Deinopteroloma*; Type locality: Kambaiti, 7000 feet).  
 — Smetana, 1985: 485 (*Deinopteroloma*; characters; Burma).  
 — Smetana, 1990b: 259 (*Deinopteroloma*; characters).  
 ▲ **DISTRIBUTION:** Myanmar.
- spectabile** Smetana, 1985: 490 (*Deinopteroloma*; Type locality: Nepal: Kathmandu District: Phulcoki, 2550 m).  
 — Smetana, 1990b: 260 (*Deinopteroloma*; characters).  
 ▲ **DISTRIBUTION:** Nepal.
- subcostatum** Mäklin, 1852: 320 (*Lathrimaeum*; Type locality: insula Sitkha; [**Note:** See lectotype designation by Smetana, 1985]).  
 — Fauvel, 1878d: 234 [= 1878e: 70] (*Lathrimaeum*; characters; Alaska).  
 — Bernhauer and Schubert, 1910: 65 (*Trigonurus*; catalog).  
 — Scheerpeltz, 1933: 1056 (*Lathrimaeum*; catalog).  
 — Hatch, 1957: 65 (*Anthobium*; characters; British Columbia; Washington; Oregon).  
 — Moore, 1966: 53 (*Mathrilaem*).  
 — Smetana, 1985: 480 (*Deinopteroloma*; lectotype designation; characters; California; Oregon; Washington; British Columbia; Alaska).  
 — Smetana, 1990b: 259 (*Deinopteroloma*; characters).  
 ▲ **DISTRIBUTION:** Canada, USA.
- humerale* Casey, 1886: 243 (*Lathrimaeum*; Type locality: California: Humboldt Co.).  
 — Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; catalog).  
 — Scheerpeltz, 1961c: 73 (*Lathrimaeum*; synonym of *subcostatum*).  
 — Smetana, 1985: 480 (*Deinopteroloma*; synonym of *subcostatum*).
- tricuspidatum** Smetana, 1996e: 77 (*Deinopteroloma*; Type locality: China: Kuantun, Fukien).  
 ▲ **DISTRIBUTION:** China.

### Deliphrosoma

[18 species; Palaearctic Region]

- Deliphrosoma* Reitter, 1909: 180, 187 (species included: *macrocephalum*, *fratellum*, *skalitzkyi*, *prolongatum*). **TYPE SPECIES:** *Lathrimaeum macrocephalum* Eppelsheim, fixed by original designation.  
 — Winkler, 1925: 334 (catalog for Palaearctic region; subgenus of *Arpedium*).  
 — Scheerpeltz, 1937b: 189 (subgenus to *Arpedium*; key to Palaearctic species).  
 — Scheerpeltz, 1938: 229 (subgenus to *Arpedium*; key to species).  
 — Blackwelder, 1952: 119 (type species: *macrocephala*).  
 — Lohse, 1963: 170 (valid genus).  
 — Horion, 1963: 120 (subgenus of *Arpedium*; list of central European species).  
 — Lohse, 1964: 57 (characters; key to central European species).  
 — Scheerpeltz, 1968a: 15 (catalog of Austrian species).  
 — Tikhomirova, 1973a: 140 (checklist of species of USSR).  
 — Zanetti, 1987: 324 (characters; habitus; key to species of Italy).  
 — Zerche, 1991 (characters; revision of species; checklist of and key to species; distribution).  
 — Zanetti, 1995: 8 (in list of species of Italy).  
 — Bordoni, 2000a: 268 (distribution of genus in Turkey).
- australe* Zerche, 1998, see: *prolongatum* Rottenberg, 1873.
- bakhtiyariense** Zerche, 1991: 326 (*Deliphrosoma*; Type locality: Iran Bakhtiyari, N-E du Zardeh-Kuh, 2700 m, 32°23'N/50°07'E).  
 ▲ **DISTRIBUTION:** Iran.
- balcanicum* Zerche, 1998, see: *prolongatum* Rottenberg, 1873.
- bulgaricum** Zerche, 1998a: 246 (*Deliphrosoma*; Type locality: Bulgarien, Rila-Gebirge: SW Ribni Ezera, 2200 m, 42°07'10 N, 23°29'36 E).  
 ▲ **DISTRIBUTION:** Bulgaria.
- creticum* Scheerpeltz, 1958, see: *fratellum* Rottenberg, 1874.

**fratellum** Rottenberg, 1874: 330 (*Lathrimaenum*; Type locality: Taygetos; [**Note:** See lectotype designation by Zerche, 1991]).

- Reitter, 1909: 187 (*Deliphrosoma*; characters; Greece).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Scheerpeltz, 1933: 1060 (*Arpedium*; catalog).
- Scheerpeltz, 1937b: 189 (*Arpedium*; subgenus *Deliphrosoma*; characters; Aegean Sea region; Greece; Crete; Asia Minor).
- Scheerpeltz, 1938: 230 (*Arpedium*; subgenus *Deliphrosoma*; characters in key; Aegean Sea region; Greece; Macedonia; Asia Minor ?; Crete ?).
- Scheerpeltz, 1958a: 7 (*Arpedium*; subgenus *Deliphrosoma*; characters).
- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zanetti, 1984: 77 (*Deliphrosoma*; notes; Bulgaria).
- Zerche, 1991: 322 (*Deliphrosoma*; lectotype designation; characters; Greece; Montenegro; Serbia).
- Zerche, 1997: 51 (*Deliphrosoma*; Greece).
- Bordoni, 1999a: 202 (*Deliphrosoma*; notes).

▲ **DISTRIBUTION:** Greece, Bosnia Hercegovina, Yugoslavia, Albania.

**major** Bernhauer, 1902d: 702 (*Arpedium*; Type locality: Griechenland, Veluchi; [**Note:** See lectotype designation by Zerche, 1991]).

- Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *fratellum*).
- Gridelli, 1924a: 39 (*Deliphrosoma*; cited as *major*; cited as valid species; characters; Albania).
- Scheerpeltz, 1933: 1060 (*Arpedium*; variety of *fratellum*).
- Scheerpeltz, 1937b: 190 (*Arpedium*; subspecies of *fratellum*).
- Scheerpeltz, 1938: 230 (*Arpedium*; subgenus *Deliphrosoma*; subspecies of *fratellum*; characters in key).
- Scheerpeltz, 1958a: 7 (*Arpedium*; subgenus *Deliphrosoma*; subspecies of *fratellum*; characters).
- Bordoni, 1984: 335 (*Deliphrosoma*; subspecies of *fratellum*).
- Zanetti, 1984: 77 (*Deliphrosoma*; macrophthalmic form of *fratellum*).
- Zerche, 1991: 322 (*Deliphrosoma*; lectotype designation; synonym of *fratellum*).

**creticum** Scheerpeltz, 1958a: 7 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: Gebirge der Insel Kreta; [**Note:** See lectotype designation by Zerche, 1991]).

- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zerche, 1991: 322 (*Deliphrosoma*; lectotype designation; synonym of *fratellum*).

**freudeorum** Zerche, 1996: 175 (*Deliphrosoma*; Type locality: Türkei: Nemrut Dag, bei Malathya, 2000 m).

▲ **DISTRIBUTION:** Turkey.

**kopdagense** Bordoni, 1999b: 196 (*Deliphrosoma*; Type locality: Turchia: Erzurum, Kopdagi gecidi, 2390 m).

- Bordoni, 2000a: 268 (*Deliphrosoma*; comparison to *lothari*).

▲ **DISTRIBUTION:** Turkey.

**libanicum** Fauvel, 1875a: VI [= 1875b: 208] (*Arpedium*; Type locality: Liban, Djebel-Zebdani).

- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Bordoni, 1984: 332 (*Deliphrosoma*; characters; Lebanon).
- Zerche, 1991: 326 (*Deliphrosoma*; Lebanon).

▲ **DISTRIBUTION:** Lebanon.

**lindbergi** Scheerpeltz, 1958a: 4 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: Ahlat, Grotte, de Soltan Séit; [**Note:** See lectotype designation by Zerche, 1991]. Originally cited as Nordwestufer des Van-Sees, Armenien in der “Grotte de Sultan Seit”).

- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zerche, 1991: 324 (*Deliphrosoma*; lectotype designation: Ahlat, Grotte, de Soltan Séit; characters).
- Bordoni, 1999a: 201 (*Deliphrosoma*; notes; Turkey).

▲ **DISTRIBUTION:** Turkey.

**lothari** Bordoni, 2000a: 265 (*Deliphrosoma*; Type locality: Türkei: Anatolien, Erzurum, Kop-Gec, 2300 m).

▲ **DISTRIBUTION:** Turkey.

**macrocephalum** Eppelsheim, 1873: 86 (*Lathrimaeum*; Type locality: Franzenshöhe, 6700'; [Note: See lectotype designation by Zerche, 1991]. Originally cited as Tirol).

- Fauvel, 1876a: 51 [= 1876: 236] (*Arpedium*; characters; France; Tirol).
  - Mulsant and Rey, 1880: 150 (*Arpedium*; characters; France).
  - Ganglbauer, 1895: 719 (*Arpedium*; characters; Europe).
  - Reitter, 1909: 187 (*Deliphrosoma*; type of genus; characters; Alps; Herzegowina, Greece).
  - Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
  - Scheerpeltz, 1933: 1061 (*Arpedium*; catalog).
  - Horion, 1935: 173 (*Arpedium*; subgenus *Deliphrosoma*; Austria).
  - Scheerpeltz, 1938: 229 (*Arpedium*; subgenus *Deliphrosoma*; characters in key; Alps; Balkan region).
  - Scheerpeltz, 1958a: 6 (*Arpedium*; subgenus *Deliphrosoma*; characters).
  - Horion, 1963: 120 (*Arpedium*; subgenus *Deliphrosoma*; France; Italy; Switzerland; Slovenia; Dalmatia; Bosnia Hercegovina; Croatia; Germany; Austria).
  - Lohse, 1964: 57 (*Deliphrosoma*; characters; central Europe).
  - Jarrige, 1968b: 74 (*Arpedium*; subgenus *Deliphrosoma*; France).
  - Tóth, 1982: 82 (*Arpedium*; characters).
  - Bordoni, 1984: 335 (*Deliphrosoma*).
  - Zanetti, 1987: 316 (*Deliphrosoma*; characters; Italy).
  - Lucht, 1987: 89 (*Deliphrosoma*; checklist; Germany; Austria).
  - Zerche, 1991: 316 (*Deliphrosoma*; lectotype designation: Franzenshöhe, 6700'; characters; France; Germany; Austria; Switzerland; Italy; Yugoslavia; Albania).
  - Zanetti, 1995: 8 (*Deliphrosoma*; Italy).
  - Zerche, 1997: 51 (*Deliphrosoma*; Croatia; Bosnia-Herzegowina; France).
- ▲ **DISTRIBUTION:** Germany, France, Switzerland, Italy, Austria, Croatia, Bosnia Hercegovina, Albania.

**pechlaneri** Lohse, 1963: 172 (*Deliphrosoma*; Type locality: Stuttgarter Hütte im Arlberg-gebiet in etwa 2000 m).

- Lohse, 1964: 57 (*Deliphrosoma*; characters; central Europe).
- Bordoni, 1984: 335 (*Deliphrosoma*).
- Lucht, 1987: 89 (*Deliphrosoma*; checklist; Austria).
- Zanetti, 1987: 317 (*Deliphrosoma*; synonym of *macrocephalum*).
- Zerche, 1991: 316 (*Deliphrosoma*; synonym of *macrocephalum*).
- Assing, Frisch, Kahlen, et al., 1998: 125 (*Deliphrosoma*; synonym of *macrocephalum*).
- Cibulskis, 1999: 36 (*Deliphrosoma*; list; Latvia).

**major** Bernhauer, 1902, see: *fratellum* Rottenberg, 1874.

**majusculum** Fagel, 1971, see: *mandli* Scheerpeltz, 1937.

**mandli** Scheerpeltz, 1937b: 187 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: Bulgarien: ca. 1900 m Höhe im Massiv des Masalat im Schipka-Balkan; [Note: See lectotype designation by Zerche, 1991]).

- Scheerpeltz, 1938: 233 (*Arpedium*; subgenus *Deliphrosoma*; characters in key).
- Scheerpeltz, 1958a: 8 (*Arpedium*; subgenus *Deliphrosoma*; characters).
- Zerche, 1991: 319 (*Deliphrosoma*; lectotype designation; characters; Bulgaria; Turkey).
- Zerche, 1998a: 252 (*Deliphrosoma*; Bulgaria).
- Bordoni, 1999a: 199, 201 (*Deliphrosoma*; characters; notes; Turkey).

▲ **DISTRIBUTION:** Bulgaria, Turkey.

**majusculum** Fagel, 1971: 125 (*Deliphrosoma*; Type locality: Anatolie occidentale: vilayet de Bursa, Uludagh, 1800–1900 m).

- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zerche, 1991: 319 (*Deliphrosoma*; synonym of *mandli*).

**morvani** Jarrige, 1971: 489 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: Iran: Man-zadéran, vallée de Chalus, versant N., 1700 m).

— Bordoni, 1984: 335 (*Deliphrosoma*).

— Zerche, 1991: 327 (*Deliphrosoma*; Iran).

▲ **DISTRIBUTION:** Iran.

*pechlaneri* Lohse, 1963, see: *macrocephalum* Eppelsheim, 1873.

**pirinense** Zerche, 1991: 323 (*Deliphrosoma*; Type locality: Bulgaria: Pirin-Gebirge, Hütte Wichren, 2050 m).

— Zerche, 1998a: 252 (*Deliphrosoma*; notes; Bulgaria).

▲ **DISTRIBUTION:** Bulgaria.

**platyophthalmum** C. Koch, 1937: 84 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: Italy: Mte. Pollino, Lucania, a circa 2200 m).

— Scheerpeltz, 1938: 233 (*Arpedium*; subgenus *Deliphrosoma*; characters in key).

— Scheerpeltz, 1958a: 8 (*Arpedium*; subgenus *Deliphrosoma*; characters).

— Zanetti, 1978: 176 (*Deliphrosoma*; characters; notes; variation; Italy).

— Bordoni, 1984: 335 (*Deliphrosoma*).

— Zanetti, 1987: 318 (*Deliphrosoma*; characters; Italy).

— Zanetti, 1995: 8 (*Deliphrosoma*; Italy).

— Zerche, 1997: 51 (*Deliphrosoma*; Italy).

▲ **DISTRIBUTION:** Italy.

**prolongatum** Rottenberg, 1873: 204 (*Lathrimaeum*; Type locality: Altvater; [Note: See lectotype designation by Zerche, 1991]. Also cited from Melzer Grund im Riesengebirge).

— Ganglbauer, 1895: 723 (*Lathrimaeum*; characters; Europe).

— Reitter, 1909: 187 (*Deliphrosoma*; characters; Germany).

— Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).

— Scheerpeltz, 1933: 1061 (*Arpedium*; catalog).

— Scheerpeltz, 1938: 232 (*Arpedium*; subgenus *Deliphrosoma*; characters in key).

— Scheerpeltz, 1958a: 8 (*Arpedium*; subgenus *Deliphrosoma*; characters).

— Horion, 1963: 120 (*Arpedium*; subgenus *Deliphrosoma*; Czech Republic; Slovakia; Carpathians; Germany; Austria).

— Lohse, 1964: 52 (*Lathrimaeum*; characters; central Europe).

— Zanetti, 1978: 176, 180 (*Deliphrosoma*; characters).

— Tóth, 1982: 79 (*Lathrimaeum*; characters).

— Bordoni, 1984: 335 (*Deliphrosoma*).

— Lucht, 1987: 88 (*Lathrimaeum*; checklist; Germany; Poland; Czechoslovakia; Austria).

— Zanetti, 1987: 318 (*Deliphrosoma*; characters).

— Zerche, 1991: 320 (*Deliphrosoma*; lectotype designation: Altvater; characters; Czech Republic; Slovakia; Germany; France; Switzerland; Italy; Austria; Bosnia; Bulgaria).

— Boháč, 1993: 41 (*Deliphrosoma*; Slovakia; Czech Republic).

— Zanetti, 1995: 8 (*Deliphrosoma*; Italy).

— Zerche, 1997: 51 (*Deliphrosoma*; Ukraine; Austria; Switzerland; France).

— Zerche, 1998a: 251 (*Deliphrosoma*; characters; key to subspecies).

— Assing, Frisch, Kahlen, et al., 1998: 125 (*Deliphrosoma*).

▲ **DISTRIBUTION:** Europe.

*australe* Zerche, 1998a: 247 (*Deliphrosoma*; subspecies of *prolongatum*; Type locality: Bulgarien: N-Pirin, Hütte Jaworow, 2060 m, 41°48'43 N, 23°22'14 E).

*rhilense* Zerche, 1998a: 248 (*Deliphrosoma*; subspecies of *prolongatum*; Type locality: Bulgarien: SW-Rila, Malak Metschi [Vrch], SW Hütte Makedonia, N-Seite, Biosphären-reservat Parangaliza, 2200 m, 42°02'41 N, 23°13'31 E).

*balcanicum* Zerche, 1998a: 249 (*Deliphrosoma*; subspecies of *prolongatum*; Type locality: Bulgarien: Stara Planina, Botev, Schneefeld, 2300 m).

*vitoschaense* Zerche, 1998a: 250 (*Deliphrosoma*; subspecies of *prolongatum*; Type locality: Sofia: Vitoscha Gebirge, Malak Resen, 2000 m).

*rhilense* Zerche, 1998, see: *prolongatum* Rottenberg, 1873.

**skalitzkyi** Bernhauer, 1902d: 703 (*Arpedium*; subspecies of *fratellum*; Type locality: Caucasus, Araxesthal; [Note: See lectotype designation by Zerche, 1991]).

- Reitter, 1909: 187 (*Deliphrosoma*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; variety of *fratellum*).
- Scheerpeltz, 1933: 1061 (*Arpedium*; catalog).
- Scheerpeltz, 1938: 231 (*Arpedium*; subgenus *Deliphrosoma*; characters in key).
- Scheerpeltz, 1958a: 7 (*Arpedium*; subgenus *Deliphrosoma*; characters).
- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zerche, 1991: 326 (*Deliphrosoma*; lectotype designation; Caucasus).
- Bordoni, 1999a: 202 (*Deliphrosoma*; notes).

▲ **DISTRIBUTION:** Azerbaijan.

**turcicum** Zerche, 1997: 49 (*Deliphrosoma*; Type locality: Armenia turcica, Gümüş Chana [= Gümüşhane, 40.26°N 39.26°O]).

▲ **DISTRIBUTION:** Turkey.

*voschaense* Zerche, 1998, see: *prolongatum* Rottenberg, 1873.

**weiratheri** Scheerpeltz, 1938: 231, 233 (*Arpedium*; subgenus *Deliphrosoma*; Type locality: westliches Kleinasien: Tmolos-Gebirge, Lydischer Taurus; [Note: See lectotype designation by Zerche, 1991]. Also cited from Barla-Gebirge; Akdagh-Gebirge; Owadjik-Gebirge im Pamphyliischen Taurus; Salbakos-Gebirge im Karischen Taurus).

- Scheerpeltz, 1958a: 7 (*Arpedium*; subgenus *Deliphrosoma*; characters).
- Bordoni, 1984: 335 (*Deliphrosoma*).
- Zerche, 1991: 327 (*Deliphrosoma*; lectotype designation: Tmolos Gebirge, Lydien, West Kleinasien).
- Bordoni, 1999a: 199 (*Deliphrosoma*; notes; Turkey).

▲ **DISTRIBUTION:** Turkey.

**wunderlei** Zerche, 1998a: 254 (*Deliphrosoma*; Type locality: Anatolien: Sivas, Kizildag-Gec., 2200 m, Schneefeldrand).

▲ **DISTRIBUTION:** Turkey.

### **Deliphrum**

[5 species; Palaearctic Region]

*Deliphrum* Erichson, 1839a: 627 (species included: *tectum*). **TYPE SPECIES:** *Staphylinus tectus* Paykull, fixed by monotypy.

- Heer, 1839: 186 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 872 (characters).
- Redtenbacher, 1849: 750 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 142 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 637 (characters).
- Jacquelin du Val, 1857: 73 (characters).
- Redtenbacher, 1857: 249 (characters).
- Kraatz, 1857d: 951 (characters).
- Thomson, 1858: 38 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 50 (characters; type species: *tectum*).
- Schaum, 1859: 31 (catalog; European species).
- Thomson, 1861: 197 (characters).
- Gredler, 1863: 123 (list of species from Tirol).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 661 (catalog).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Fauvel, 1871a: 121 [= 1872: 95] (characters; key to species).



- Sharp, 1871d: 14 (list of British species).
  - Redtenbacher, 1874: 269 (characters).
  - Fauvel, 1875a:VI [= 1875b: 208] (catalog).
  - Mulsant and Rey, 1880: 110 (characters; key to French species).
  - Heyden, 1880: 81 (list of species of Siberian region).
  - Mäklin, 1881: 39 (characters).
  - Duvivier, 1883: 196 (catalog).
  - Fowler, 1888: 406 (notes; key to British species).
  - Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
  - Casey, 1894: 419 (notes).
  - Heyden, 1893: 48 (list of species of Siberian region).
  - Ganglbauer, 1895: 723 (characters).
  - Heyden, 1896: 37 (list of species of Siberian region).
  - Luze, 1905c: 241 (characters; key to species).
  - Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).
  - Reitter, 1909: 188 (characters; key to German species).
  - Bernhauer and Schubert, 1910: 63 (world catalog; 6 species).
  - Johansen, 1914: 597 (characters).
  - Leng, 1920: 94 (catalog of North American species).
  - Winkler, 1925: 332 (catalog for Palaearctic region).
  - Porta, 1926: 25 (characters; key to species of Italy).
  - Portevin, 1929: 442 (characters; key to French genera).
  - Roubal, 1930: 312 (catalog; Slovakia).
  - Joy, 1932: 96 (key to British species).
  - Scheerpeltz, 1933: 1054 (world catalog supplement).
  - Kloet and Hincks, 1945: 161 (list of British species).
  - Palm, 1948: 98 (characters; species of Sweden).
  - Tottenham, 1949: 356, 407 (type species: *tectum* Paykull; list of British species).
  - Blackwelder, 1952: 119 (type species: *tectum*).
  - Tottenham, 1954: 29 (characters; British species).
  - Hatch, 1957: 50, 67 (characters; species of Pacific Northwest).
  - Horion, 1963: 102 (list of central European species).
  - Székessy, 1963: 19 (characters).
  - Lohse, 1964: 51 (characters; key to central European species).
  - Scheerpeltz, 1968a: 13 (catalog of Austrian species).
  - Moore, 1966: 55 (synonym of *Anthobium*).
  - Tikhomirova, 1973a: 139 (checklist of species of USSR).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 53 (catalog; Poland).
  - Muona, 1979: 18 (list of Scandinavian species).
  - Tóth, 1982: 75 (characters; habitus; key to species of Hungary).
  - Zanetti, 1987: 285 (characters; habitus; species of Italy).
  - Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
  - Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
  - Siitonen, 1993: 230 (list of Finnish species).
  - Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
  - Zanetti, 1995: 8 (list of species of Italy).
  - M. Hansen, 1996: 95 (list of Danish species).
- Arpediopsis* Ganglbauer, 1895: 723 (subgenus of *Deliphrum*; species included: *algidum*).  
**TYPE SPECIES:** *Deliphrum algidum* Erichson, fixed by monotypy.
- Luze, 1905c: 246 (subgenus of *Deliphrum*; characters).
  - Heyden, Reitter, and Weise, 1906: 133 (subgenus of *Deliphrum*; list of species of Europe and Caucasus).
  - Bernhauer and Schubert, 1910: 63 (subgenus of *Deliphrum*).
  - Scheerpeltz, 1933: 1055 (subgenus of *Deliphrum*).
  - Blackwelder, 1952: 62 (type species: *algidum*).
  - Zanetti, 1987: 285 (subgenus of *Deliphrum*; characters; species of Italy).

*Deliphron* Agassiz, 1847: 118 (emendation of *Deliphrum*). **TYPE SPECIES:** *Staphylinus tectus* Paykull, by objective synonymy with *Deliphrum*.

— Blackwelder, 1952: 119 (type species).

*aequicolle* Casey, 1894, see: *Anthobium*.

**algidum** Erichson, 1840: 874 (*Deliphrum*; Type locality: montes Hercyniae).

— Redtenbacher, 1849: 829 (*Deliphrum*; characters).

— Redtenbacher, 1857: 249 (*Deliphrum*; characters; Germany).

— Kraatz, 1857d: 953 (*Deliphrum*; characters; Germany).

— Fauvel, 1865a: 318 [= 1865b: 68] (*Deliphrum*; habitat; France).

— Fauvel, 1871a: 122 [= 1872: 96] (*Deliphrum*; characters; France; Germany; Austria).

— Redtenbacher, 1874: 270 (*Deliphrum*; characters).

— Seidlitz, 1875: 236 (*Deliphrum*; characters; Baltic region).

— Mulsant and Rey, 1880: 115 (*Deliphrum*; characters; France).

— Ganglbauer, 1895: 724 (*Deliphrum*; subgenus *Arpediopsis*; characters; Austria; Germany; France).

— Luze, 1905c: 246 (*Deliphrum*; subgenus *Arpediopsis*; characters; Germany; Austria).

— Reitter, 1909: 188 (*Deliphrum*; subgenus *Arpediopsis*; characters; Germany).

— Bernhauer and Schubert, 1910: 63 (*Deliphrum*; catalog).

— Portevin, 1929: 442 (*Deliphrum*; characters; France).

— Scheerpeltz, 1933: 1055 (*Deliphrum*; catalog).

— Horion, 1963: 104 (*Deliphrum*; France; Switzerland; Italy; Austria; Germany; Slovakia; Czech Republic).

— Lohse, 1964: 51 (*Deliphrum*; characters; central Europe).

— Tóth, 1982: 76 (*Deliphrum*; characters).

— Zanetti, 1987: 288 (*Deliphrum*; subgenus *Arpediopsis*; characters; Italy).

— Lucht, 1987: 88 (*Deliphrum*; checklist; Germany; Poland; Czechoslovakia; Austria).

— Boháč, 1993: 41 (*Deliphrum*; Slovakia; Czech Republic).

— Zanetti, 1995: 8 (*Deliphrum*; Italy).

▲ **DISTRIBUTION:** Slovakia, Czech Republic, Austria, Italy, Switzerland, France, Germany.

*schatzmayri* Bernhauer, 1906: 123 (*Arpedium*; Type locality: Dobratschgebiet in Kärnten).

— Bernhauer, 1908b: 32 (*Deliphrum*; synonym of *algidum*).

— Bernhauer and Schubert, 1910: 64 (*Deliphrum*; synonym of *algidum*).

— Scheerpeltz, 1933: 1055 (*Deliphrum*; synonym of *algidum*).

— Zanetti, 1987: 288 (*Deliphrum*; synonym of *algidum*).

**alticola** Coiffait, 1977: 265 (*Deliphrum*; Type locality: Environs du col Mahidoela, 5000 m, région de Jumla, Népal occidentale).

▲ **DISTRIBUTION:** Nepal.

*angustatus* Erichson, 1840, see: *Orochares*.

*arcticum* Erichson, 1840, see: *Mannerheimia*.

*creatoris* Gozis, 1886, see: *Phyllodrepana*.

*expansum* LeConte, 1879, see: *Anthobium*.

**frigidum** J. Sahlberg, 1880: 108 (*Deliphrum*; Type locality: Tolstoinos).

— Luze, 1905c: 245 (*Deliphrum*; characters; Siberia; Altai).

— Bernhauer and Schubert, 1910: 64 (*Deliphrum*; catalog).

▲ **DISTRIBUTION:** Russia, Altai region.

*laeve* Gravenhorst, 1806, see: *tectum* Paykull, 1789.

*micros* Fauvel, 1900, see: *Mannerheimia*.

**nepalicum** Coiffait, 1977: 264 (*Deliphrum*; Type locality: Environs de Maharigaan, 3000–3500 m, région de Jumla, Népal occidentale).

▲ **DISTRIBUTION:** Nepal.

*occiduum* Casey, 1894, see: *Anthobium*.

*schatzmayri* Bernhauer, 1906, see: *algidum* Erichson, 1840.

**tectum** Paykull, 1789: 68 (*Staphylinus*; Type locality: Suecia).

- Paykull, 1792: 147 (*Staphylinus*; characters).
- Olivier, 1795:(42): 36 (*Staphylinus*; characters).
- Paykull, 1800: 411 (*Staphylinus*; characters; Sweden).
- Gravenhorst, 1806: 213 (*Omalium*; characters; Sweden).
- Gyllenhal, 1810: 202 (*Omalium*; characters).
- Olivier, 1811: 478 (*Omalium*; characters; Sweden).
- Gyllenhal, 1827: 464 (*Omalium*).
- C. Sahlberg, 1827: 278 (*Omalium*; characters; Finland).
- Zetterstedt, 1828: 49 (*Omalium*; characters; Lapland).
- Curtis, 1829: 28 (*Anthobium*; catalog; Britain).
- Mannerheim, 1830: 52 (*Omalium*; Finland; Sweden).
- Mannerheim, 1831: 466 (*Omalium*; Finland; Sweden).
- Stephens, 1834: 340 (*Anthobium*; characters; England).
- Lacordaire, 1835: 487 (*Omalium*; characters; France).
- Zetterstedt, 1838: 50 (*Omalium*; characters; habitat; Lapland; Sweden).
- Erichson, 1839a: 627 (*Deliphrum*; characters; Germany).
- Heer, 1839: 187 (*Deliphrum*; characters; Switzerland).
- Stephens, 1839: 426 (*Deliphrum*; characters; England).
- Erichson, 1840: 872 (*Deliphrum*; characters; Germany; Sweden).
- Laporte, 1840: 191 (*Omalium*; characters; France).
- Redtenbacher, 1849: 750 (*Deliphrum*; characters; Austria).
- Hardy, 1851: 58 (*Deliphrum*; notes; England).
- Fairmaire and Laboulbène, 1856: 638 (*Deliphrum*; characters; France).
- Redtenbacher, 1857: 249 (*Deliphrum*; characters; Austria).
- Kraatz, 1857d: 952 (*Deliphrum*; characters; Germany).
- Thomson, 1859: 50 (type species of *Deliphrum*).
- Thomson, 1861: 197 (*Deliphrum*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Deliphrum*; Russia).
- Fauvel, 1871a: 121 [= 1872: 95] (*Deliphrum*; characters; France; Scandinavia; Britain; Germany; Switzerland; Austria; Russia).
- Redtenbacher, 1874: 270 (*Deliphrum*; characters; Austria).
- Seidlitz, 1875: 236 (*Deliphrum*; characters; Baltic region).
- J. Sahlberg, 1876: 214 (*Deliphrum*; Finland).
- Mulsant and Rey, 1880: 117 (*Deliphrum*; characters; France).
- Fowler, 1888: 406 (*Deliphrum*; characters; Britain).
- Ganglbauer, 1895: 723 (*Deliphrum*; characters; north and middle Europe).
- Luze, 1905c: 245 (*Deliphrum*; characters; northern and central Europe; Siberia).
- Reitter, 1909: 188 (*Deliphrum*; characters; Germany).
- Bernhauer and Schubert, 1910: 64 (*Deliphrum*; catalog).
- Johansen, 1914: 597 (*Deliphrum*; characters; Denmark).
- Portevin, 1929: 442 (*Deliphrum*; characters; France).
- Scheerpeltz, 1933: 1055 (*Deliphrum*; catalog).
- Scheerpeltz and Höfler, 1948: 153 (*Deliphrum*; characters; fungus inhabitant).
- Palm, 1948: 98 (*Deliphrum*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 102 (*Deliphrum*; Britain; Denmark; Norway; Sweden; Finland; Russia; Baltic States; Poland; Czech Republic; Slovakia; Romania; Bosnia; Italy; France; Switzerland; Germany; Austria).
- Lohse, 1964: 51 (*Deliphrum*; characters; central Europe).
- Smetana, 1964d: 54 (*Deliphrum*; subgenus *Deliphrum*; Czechoslovakia).
- Legner and Moore, 1977: 175 (*Anthobium*; found under bark).
- Pope, 1977: 22 (*Deliphrum*; Britain).
- Hammond, 1980: 136 (*Deliphrum*; Ireland).
- Filatova, 1981: 17 (*Deliphrum*; Russia).
- Tóth, 1982: 76 (*Deliphrum*; characters; Hungary).

- Zanetti, 1987: 286 (*Deliphrum*; subgenus *Deliphrum*; characters; Italy).
  - Lucht, 1987: 88 (*Deliphrum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Denmark; Sweden).
  - Boháč, 1993: 41 (*Xylostiba*; Slovakia; Czech Republic).
  - Muona and Viramo, 1995: 9 (*Deliphrum*; collected from fungus and dung of dog, Reindeer, and *Ursus arctos*; Finland).
  - Zanetti, 1995: 8 (*Deliphrum*; Italy).
  - Ryabukhin, 1999: 21 (*Deliphrum*; catalog; habitat; distribution; northeastern Russia).
  - Cibulskis, 1999: 35 (*Deliphrum*; list; Latvia).
  - Kashcheev, 1999a: 57 (*Deliphrum*; Kazakhstan).
  - ▲ **DISTRIBUTION:** Finland, Sweden, Ireland, Britain, Denmark, Germany, France, Switzerland, Italy, Austria, Hungary, Czechoslovakia, Poland, Russia.
- laeve* Gravenhorst, 1806: 211 (*Omalium*; Type locality: Borussia).
- Olivier, 1811: 477 (*Omalium*; characters; Prussia).
  - Curtis, 1829: 29 (*Omalium*; catalog; Britain).
  - Stephens, 1834: 352 (*Omalium*; characters; England).
  - C. Sahlberg, 1830: 282 (*Omalium*; synonym of *laeviusculum* Gyllenhal).
  - Erichson, 1839a: 628 (*Deliphrum*; synonym of *tectum*).
  - Heer, 1839: 187 (*Deliphrum*; synonym of *tectum*).
  - Stephens, 1839: 429 (*Omalium*; characters; England).
  - Erichson, 1840: 872 (*Deliphrum*; synonym of *tectum*).
  - Kraatz, 1857d: 952 (*Deliphrum*; synonym of *tectum*).
  - Mulsant and Rey, 1880: 117 (*Deliphrum*; synonym of *tectum*).
  - Ganglbauer, 1895: 723 (*Deliphrum*; synonym of *tectum*).
  - Luze, 1905c: 245 (*Deliphrum*; synonym of *tectum*).
  - Bernhauer and Schubert, 1910: 64 (*Deliphrum*; synonym of *tectum*).

### Emodensia

[1 species; Palaearctic Region]

*Emodensia* Coiffait, 1977: 262 (species included: *nigra*). **TYPE SPECIES:** *Emodensia nigra* Coiffait, fixed by original designation.

**nigra** Coiffait, 1977: 263 (*Emodensia*; Type locality: Environs du Col Mahidacla, 5000 m, région de Jumla, Népal occidental).

▲ **DISTRIBUTION:** Nepal.

### Eucnecosum

[4 species; Nearctic and Palaearctic Regions]

*Eucnecosum* Reitter, 1909: 186 (subgenus of *Arpedium*; species included: *brachypterum*, *gyl-lenhali*). **TYPE SPECIES:** *Omalium brachypterum* Gravenhorst, fixed by subsequent designation by Blackwelder, 1952: 154.

- Scheerpeltz, 1933: 1060 (subgenus of *Arpedium*).
- Lohse, 1963: 170 (valid genus).
- Horion, 1963: 117 (subgenus of *Arpedium*; list of central European species).
- Lohse, 1964: 56 (valid genus; characters; key to central European species).
- Scheerpeltz, 1968a: 15 (catalog of Austrian species).
- Steel, 1970a: 19 (cited as *Arpedium*; larval characters; biological notes).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Burakowski, Mroczkowski, and Stefańska, 1979: 62 (catalog; Poland).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig and Vogler, 1981: 87 (cited as *Eucnecosum*; list of some species collected in Germany; habitat and collecting notes).
- Campbell, 1984: 489 (characters; revision of and key to North American species).
- Muona and Viramo, 1986: 15 (cited as valid genus; list of species of northeastern Finland).
- Zanetti, 1987: 311 (characters; habitus; key to species of Italy).
- Lohse and Lucht, 1989: 127 (notes).

- Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 431 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (3 Nearctic species; notes; characters in key).

*Revelstokea* Hatch, 1957: 49, 57 (species included: *hoppingi*). **TYPE SPECIES:** *Revelstokea hoppingi* Hatch, fixed by original designation and monotypy.

- Steel, 1964a: 250 (synonym of *Arpedium*).
- Campbell, 1984: 489 (synonym of *Eucnecosum*).

*beringense* Van Dyke, 1921, see: *brachypterum* Gravenhorst, 1802.

**brachypterum** Gravenhorst, 1802: 114 (*Omalium*; Type locality: Not cited, but presumably Brunsvigae; [**Note:** See lectotype designation by Campbell, 1984]).

- Latreille, 1804: 372 (*Omalium*; characters; Germany).
- Gravenhorst, 1806: 203 (*Omalium*).
- Olivier, 1811: 476 (*Omalium*; characters; Germany).
- Erichson, 1840: 859 (*Arpedium*; characters; Germany; Lapland; Finland).
- Redtenbacher, 1849: 828 (*Arpedium*; characters).
- Hardy, 1851: 56 (*Arpedium*; characters; notes; England).
- Redtenbacher, 1857: 246 (*Arpedium*; characters; Germany).
- Kraatz, 1857d: 959 (*Arpedium*; characters; Germany).
- Thomson, 1861: 189 (*Arpedium*; characters; Scandinavia).
- Fauvel, 1871a: 113 [= 1872: 87] (*Arpedium*; characters; Lapland; Scandinavia; Germany; Switzerland).
- Redtenbacher, 1874: 270 (*Arpedium*; characters).
- Seidlitz, 1875: 237 (*Arpedium*; characters; Baltic region).
- J. Sahlberg, 1876: 210 (*Arpedium*; Finland).
- Mulsant and Rey, 1880: 151 (*Arpedium*; characters; France).
- Fowler, 1888: 407 (*Arpedium*; characters; Britain).
- Poppius, 1909: 5 (*Arpedium*; Lena Valley, Siberia).
- Reitter, 1909: 187 (*Arpedium*; subgenus *Eucnecosum*; characters; Germany).
- Bernhauer and Schubert, 1910: 67 (*Arpedium*; catalog).
- Johansen, 1914: 601 (*Arpedium*; characters; Denmark).
- Munster, 1933: 259 (*Arpedium*; characters; Norway).
- Scheerpeltz, 1933: 1060 (*Arpedium*; catalog).
- West, 1937: 44 (*Arpedium*; Faroe Islands).
- Palm, 1948: 111 (*Arpedium*; characters; Sweden; Denmark; Norway; Finland).
- Smetana, 1963c: 292 (*Arpedium*; subgenus *Eucnecosum*; Mongolia).
- Horion, 1963: 117 (*Arpedium*; subgenus *Eucnecosum*; Britain; Norway; Sweden; Finland; Russia; Denmark; Estonia; Poland; Czechoslovakia; Romania; Bulgaria; Italy; Switzerland; Germany; Austria).
- Lohse, 1964: 56 (*Eucnecosum*; characters; central Europe).
- Smetana, 1968: 228 (*Arpedium*; subgenus *Eucnecosum*; Mongolia).
- Szujewski, 1969a: 248 (*Arpedium*; notes; Poland).
- Steel, 1970a: 19 (*Arpedium*; larval characters; biological notes).
- Ashworth, 1972: 214 (*Arpedium*; late-glacial subfossil; Britain).
- Smetana 1975c: 159 (*Arpedium*; Mongolia).
- Pope, 1977: 22 (*Arpedium*; Britain).
- Hammond, 1980: 136 (*Arpedium*; Ireland).
- Tóth, 1982: 83 (*Arpedium*; characters).
- Campbell, 1984: 491 (*Eucnecosum*; lectotype designation; characters; Manitoba; Northwest Territories; Yukon Territory; Alaska; Maine; New Hampshire).
- Zanetti, 1987: 312 (*Eucnecosum*; characters; Italy).
- Lucht, 1987: 89 (*Eucnecosum*; checklist; Germany; Poland; Czechoslovakia; Austria; Denmark; Sweden).

- Schülke and Uhlig, 1988: 3 (*Eucnecosum*; notes; Germany).
  - Siitonen, 1993: 230 (*Eucnecosum*; Finland).
  - Boháč, 1993: 41 (*Eucnecosum*; Slovakia; Czech Republic).
  - Zanetti, 1995: 8 (*Eucnecosum*; Italy).
  - Downie and Arnett, 1996: 431 (*Eucnecosum*; characters; USA).
  - Cibulskis, 1998: 67 (*Eucnecosum*; Latvia).
  - Ryabukhin, 1999: 25 (*Eucnecosum*; catalog; habitat; distribution; northeastern Russia).
  - Cibulskis, 1999: 36 (*Eucnecosum*; list; Latvia).
  - ▲ **DISTRIBUTION:** Faroe Islands, Europe, Russia, Mongolia, Canada, USA.
- impressum* Zetterstedt, 1828: 52 (*Omalium*; Type locality: Lapponia Tornensis: alpi Tornensis; Kattilakoski; Juhonpietis; Wittangi).
- Zetterstedt, 1838: 51 (*Omalium*; characters; habitat; Lapland).
  - Erichson, 1840: 859 (*Arpedium*; synonym of *brachypterum*).
  - Kraatz, 1857d: 959 (*Arpedium*; synonym of *brachypterum*).
  - Thomson, 1861: 190 (*Arpedium*; synonym of *brachypterum*).
  - Mulsant and Rey, 1880: 151 (*Arpedium*; synonym of *brachypterum*).
  - Ganglbauer, 1895: 718 (*Arpedium*; synonym of *brachypterum*).
  - Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *brachypterum*).
  - Munster, 1933: 259 (*Arpedium*; synonym of *brachypterum*).
  - Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).
- gyllenhalii* C. Sahlberg, 1830: 286 (*Omalium*; Type locality: Lapponia: Yläne).
- Mannerheim, 1830: 54 (*Anthobium*; Finland).
  - Mannerheim, 1831: 468 (*Anthobium*; Finland).
  - Erichson, 1840: 859 (*Arpedium*; synonym of *brachypterum*).
  - Redtenbacher, 1849: 828 (*Arpedium*; synonym of *brachypterum*).
  - Kraatz, 1857d: 959 (*Arpedium*; synonym of *brachypterum*).
  - Thomson, 1861: 190 (*Arpedium*; synonym of *brachypterum*).
  - Seidlitz, 1875: 237 (*Arpedium*; characters; Baltic region).
  - J. Sahlberg, 1876: 210 (*Arpedium*; synonym of *brachypterum*).
  - Ganglbauer, 1895: 718 (*Arpedium*; synonym of *brachypterum*).
  - Poppius, 1909: 6 (*Arpedium*; Lena Valley, Siberia).
  - Reitter, 1909: 187 (*Arpedium*; subgenus *Eucnecosum*; characters; Germany).
  - Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *brachypterum*).
  - Munster, 1933: 259 (*Arpedium*; variety of *brachypterum*).
  - Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).
- trogodytes* Kiesenwetter, 1847: 77 (*Arpedium*; Type locality: Riesengebirge).
- Redtenbacher, 1849: 828 (*Arpedium*; characters).
  - Redtenbacher, 1857: 246 (*Arpedium*; characters; Germany).
  - Kraatz, 1857d: 959 (*Arpedium*; characters; Germany).
  - Fauvel, 1871a: 113 [= 1872: 87] (*Arpedium*; characters; France).
  - Redtenbacher, 1874: 271 (*Arpedium*; characters).
  - Seidlitz, 1875: 237 (*Arpedium*; characters; Baltic region).
  - Mulsant and Rey, 1880: 152 (*Arpedium*; characters; France).
  - Ganglbauer, 1895: 718 (*Arpedium*; characters; Alps; Scotland; Caucasus).
  - Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *brachypterum*).
  - Portevin, 1929: 441 (*Arpedium*; probably a race of *brachypterum*; characters; France).
  - Munster, 1933: 259 (*Arpedium*; synonym of *brachypterum*).
  - Scheerpeltz, 1933: 1060 (*Arpedium*; synonym of *brachypterum*).
  - Lohse, 1964: 56 (*Eucnecosum*; synonym of *brachypterum*).
  - Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).
  - Zanetti, 1987: 312 (*Eucnecosum*; synonym of *brachypterum*).
- engadinicum* Heyden, 1863: 21 (*Arpedium*; Type locality: Bernina).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; synonym of *brachypterum*).
  - Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).

*mixtum* Bernhauer, 1902d: 702 (*Arpedium*; Type locality: Tartola, Samarovo, Fl. Konda, Fl. Irtisch, Leusch).

- Poppius, 1909: 6 (*Arpedium*; synonym of *tenue*).
- Bernhauer and Schubert, 1910: 69 (*Arpedium*; synonym of *tenue*).
- Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).

*beringense* Van Dyke, 1921: 162 (*Arpedium*; Type locality: St. George Island, Pribilof Islands, Alaska).

- Scheerpeltz, 1933: 1060 (*Arpedium*; catalog).
- Steel, 1964: 249 (*Arpedium*; synonym of *beringense*).
- Campbell, 1984: 491 (*Eucnecosum*; synonym of *brachypterum*).

**brunnescens** J. Sahlberg, 1871a: 423 (*Arpedium*; Type locality: Muonioniska).

- Zetterstedt, 1838: 52 (*Omalium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 68 cited *gyllenhali* Zetterstedt as a synonym of *brunnescens* J. Sahlberg; Zetterstedt did not describe the species as new, he attributed it to Sahlberg]; characters; habitat; Finland).
- J. Sahlberg, 1876: 210 (*Arpedium*; characters; Finland).
- Fauvel, 1878d: 227 [= 1878e: 63] (*Arpedium*; variety of *tenue*; characters; Lake Superior; Lapland).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Fall, 1926: 145 (*Arpedium*; Alaska).
- Munster, 1933: 264 (*Arpedium*; characters; Norway).
- Scheerpeltz, 1933: 1060 (*Arpedium*; catalog).
- Palm, 1948: 113 (*Arpedium*; characters; Sweden; Norway; Finland).
- Steel, 1964a: 249 (*Arpedium*; Canada; Alaska).
- Campbell, 1984: 501 (*Eucnecosum*; characters; Alberta; British Columbia; Manitoba; Northwest Territories; Labrador; Ontario; Quebec; Yukon Territory; Alaska; Colorado; Michigan; New York).
- Elias, 1991: 556 (*Eucnecosum*; Quaternary fossil collection; Colorado).
- Siitonen, 1993: 230 (*Eucnecosum*; Finland).
- Downie and Arnett, 1996: 432 (*Eucnecosum*; characters; Canada; USA).
- Lavoie, Elias, and Payette, 1997: 231 (*Eucnecosum*; Holocene fossil; subarctic Quebec).
- Ryabukhin, 1999: 27 (*Eucnecosum*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Norway, Finland, Canada, USA.

*hoppingi* Hatch, 1957: 49, 57 (*Revelstokea*; Type locality: Revelstoke Mt., B. C. [British Columbia]).

- Steel, 1964: 249 (*Arpedium*; synonym of *brunnescens*).
- Campbell, 1984: 501 (*Eucnecosum*; synonym of *brunnescens*).

*engadinicum* Heyden, 1863, see: *brachypterum* Gravenhorst, 1802.

*gyllenhali* C. Sahlberg, 1830, see: *brachypterum* Gravenhorst, 1802.

*hoppingi* Hatch, 1957, see: *brunnescens* J. Sahlberg, 1871.

*impressum* Zetterstedt, 1828, see: *brachypterum* Gravenhorst, 1802.

*kittilense* Munster, 1933, see: *tenue* LeConte, 1863.

*meybohmi* Lohse, 1963, see: *tenue* LeConte, 1863.

*mixtum* Bernhauer, 1902, see: *brachypterum* Gravenhorst, 1802.

*norvegicum* Munster, 1933, see: *tenue* LeConte, 1863.

**puncticolle** J. Sahlberg, 1880: 106 (*Arpedium*; Type locality: Spirina; Tschemaschevo; Tobolsk; Acinovo; Kurejka; Turuchansk).

- Poppius, 1909: 6 (*Arpedium*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).
- Munster, 1933: 265 (*Arpedium*; characters; Russia).
- Palm, 1948: 111 (*Arpedium*; Siberia; Kola Peninsula).
- Tikhomirova, 1973a: 140 (*Eucnecosum*; checklist; northeastern Europe; Siberia).
- Muona, 1979: 18 (*Eucnecosum*; Finland; Russia).

— Silfverberg, 1992: 22 (*Eucnecosum*; Finland; Russia).

▲ **DISTRIBUTION:** Finland, Russia.

*salaasi* Munster, 1933, see: *tenuis* LeConte, 1863.

**tenuis** LeConte, 1863a: 55 (*Acidota*; Type locality: north shore of Lake Superior).

— Fauvel, 1878d: 226 [= 1878e: 62] (*Arpedium*; characters; Michigan; Lake Superior; British Columbia; Lapland; Siberia).

— Ganglbauer, 1895: 718 (*Arpedium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 69 cited *brachypterum* Ganglbauer as a synonym of *tenuis*; Ganglbauer did not describe the species as new, he attributed it to Gravenhorst]; characters; northern Europe; Switzerland; North America).

— Poppius, 1909: 6 (*Arpedium*; Lena Valley, Siberia).

— Bernhauer and Schubert, 1910: 69 (*Arpedium*; catalog).

— Bernhauer, 1926g: 2 (*Arpedium*; Kamchatka region).

— Scheerpeltz, 1933: 1061 (*Arpedium*; catalog).

— Hatch, 1957: 54 (*Arpedium*; characters; British Columbia).

— Campbell, 1984: 496 (*Eucnecosum*; characters; Alberta; British Columbia; Manitoba; Northwest Territories; Labrador; Ontario; Quebec; Saskatchewan; Yukon Territory; Alaska; Colorado; Michigan; Utah).

— Zanetti, 1987: 314 (*Eucnecosum*; characters; Italy).

— Elias, 1991: 556 (*Eucnecosum*; Quaternary fossil collection; Colorado).

— Siitonen, 1993: 230 (*Eucnecosum*; Finland).

— Zanetti, 1995: 8 (*Eucnecosum*; Italy).

— Downie and Arnett, 1996: 431 (*Eucnecosum*; characters; Canada; USA).

— Ryabukhin, 1999: 26 (*Eucnecosum*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Norway, Sweden, Finland, Russia, Austria, Italy, Canada, USA.

*norvegicum* Munster, 1933: 261 (*Arpedium*; Type locality: Norway [Note: No specific locality cited; on page 264 a paragraph gave a general distribution]).

— Palm, 1948: 112 (*Arpedium*; characters; Sweden; Norway; Finland).

— Lohse, 1964: 57 (*Eucnecosum*; characters; central Europe).

— Steel, 1964: 249 (*Arpedium*; synonym of *tenuis*).

— Campbell, 1984: 496 (*Eucnecosum*; synonym of *tenuis*).

— Lucht, 1987: 89 (*Eucnecosum*; checklist; Austria).

— Zanetti, 1987: 314 (*Eucnecosum*; synonym of *tenuis*).

*kittilense* Munster, 1933: 261 (*Arpedium*; variety of *norvegicum*; Type locality: Norway).

— Palm, 1948: 113 (*Arpedium*; variety of *norvegicum*; characters; Sweden).

— Steel, 1964: 249 (*Arpedium*; synonym of *tenuis*).

— Campbell, 1984: 496 (*Eucnecosum*; synonym of *tenuis*).

*saalasi* Munster, 1933: 261, 263 (*Arpedium*; variety of *norvegicum*; [Note: Cited as *saalasi* on page 261 and as *salaasi* on page 263; the correct spelling is *saalasi* since the species was named for Uunio Saalas]; Type locality: Kittilä in Finnish Lapland).

— Campbell, 1984: 496 (*Eucnecosum*; synonym of *tenuis*).

*meybohmi* Lohse, 1963: 171 (*Eucnecosum*; Type locality: Rätische Alpen, Heidelberger Hütte in etwa 2000 m).

— Lohse, 1964: 57 (*Eucnecosum*; synonym of *norvegicum*).

— Campbell, 1984: 496 (*Eucnecosum*; synonym of *tenuis*).

— Zanetti, 1987: 314 (*Eucnecosum*; synonym of *tenuis*).

*troglydytes* Kiesenwetter, 1847, see: *brachypterum* Gravenhorst, 1802.

### Geodromicus

[123 species; Nearctic, Palaearctic, and Oriental Regions]

*Geodromicus* Redtenbacher, 1857: 244 (replacement name for *Geodromus* Heer; [Note: Redtenbacher cited it again in 1874 as replacement name]). **TYPE SPECIES:** *Staphylinus plagiatus* Fabricius, fixed by objective synonymy with *Geobius*.



- Jacquelin du Val, 1857: 70 (characters).
- Kraatz, 1857d: 925 (group of *Anthophagus*).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 48 (characters; type species: *plagiatus*).
- Schaum, 1859: 31 (subgroup of *Anthophagus*; catalog; European species).
- Thomson, 1861: 180 (characters).
- Gredler, 1863: 121 (list of species from Tirol).
- Gemminger and Harold, 1868: 657 (synonym of *Anthophagus*).
- Fauvel, 1871a: 132 [= 1872: 106] (characters; key to species).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 266 (characters).
- Fauvel, 1875a: VII [= 1875b: 209] (catalog).
- Fauvel, 1878d: 252 [= 1878e: 88] (key to North American species).
- Mulsant and Rey, 1880: 53 (characters; key to French species).
- Heyden, 1880: 81 (list of species of Siberian region).
- Fowler, 1888: 399 (notes; key to British species).
- Casey, 1894: 406 (notes; key to North American species).
- Seidlitz, 1891: 347 (key to some European species).
- Seidlitz, 1891a: 370 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 710 (characters; key to middle European species).
- Luze, 1903: 103 (characters; key to species).
- Heyden, Reitter, and Weise, 1906: 135 (list of species of Europe and Caucasus).
- Reitter, 1909: 183 (characters; key to German species).
- Bernhauer and Schubert, 1910: 75 (world catalog; 26 species).
- Blatchley, 1910: 475 (characters).
- Petri, 1912: 55 (list of species of Siebenbürgen).
- Johansen, 1914: 587 (characters).
- Leng, 1920: 95 (catalog of North American species).
- Winkler, 1925: 335 (catalog for Palaearctic region).
- Cameron, 1925: 12, 104 (catalog of Indian species).
- Porta, 1926: 30 (characters; key to species of Italy).
- Portevin, 1929: 436 (characters; key to French species).
- Cameron, 1930: 160, 455 (characters; key to species of British India).
- Roubal, 1930: 316 (catalog; Slovakia).
- Joy, 1932: 98 (key to British species).
- Scheerpeltz, 1933: 1065 (world catalog supplement).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 121 (characters; species of Sweden).
- Tottenham, 1949: 358, 408 (type species: *plagiatus* Fabricius; list of British species).
- Blackwelder, 1952: 169 (type species).
- Tottenham, 1954: 35 (characters; key to British species).
- Hatch, 1957: 51, 69 (characters; key to species of Pacific Northwest).
- Fagel, 1958b (notes; key to European species).
- Smetana, 1959c (notes; key to species of Czechoslovakia).
- Palm, 1961: 155 (key to Swedish species).
- Horion, 1963: 133 (list of central European species).
- Lohse, 1964: 61 (characters; key to central European species).
- Moore, 1966: 48, 50 (characters; notes).
- Scheerpeltz, 1968a: 17 (catalog of Austrian species).
- Steel, 1970a: 21 (larval characters; biological notes).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Fagel, 1976: 382 (notes on type species; key to species of Turkey).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 309 (larval characters).
- M. Dvořák, 1979: 110 (some species collected in Slovakia).

- Bordoni, 1984a: 19 (characters; discussions; species of Palaearctic region).
- Zerche, 1987a (valid genus; senior generic name).
- Zanetti, 1987: 370 (synonym of *Psephidonus*).
- Iablokov-Khnzorian, 1989: 137 (key to species of Caucasus).
- Lohse and Lucht, 1989: 127 (notes).
- Watanabe, 1990: 265 (synonym of *Psephidonus*).
- Bordoni, 1990a: 100 (characters).
- Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
- Zerche, 1992a: 110, 139 (senior generic name, published September 24, 1856 not 1857; phylogenetic relationships).
- Silfverberg, 1992: 22 (synonym of *Psephidonus*).
- Zanetti, 1995: 9 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- Newton, Thayer, Ashe, and Chandler, 2000: 339 (12 Nearctic species; notes; characters in key).
- Herman, 2001: 57 (discussion; date of publication after that of *Psephidonus*; evidence supports date of publication in 1857; request to Commission to place *Geodromicus* on Official List of Generic Names in Zoology).

*Geobius* Heer, 1839: 193 (species included: *plagiatus*, *kunzei*; **preoccupied** by Dejean, 1831, and Brullé, 1832). **TYPE SPECIES:** *Staphylinus plagiatus* Fabricius, fixed by subsequent designation (see Blackwelder, 1952: 169).

- Heer, 1841: 572 (notes).
- Jacquelin du Val, 1857: 70 (synonym of *Geodromicus*).
- Kraatz, 1857d: 925 (synonym of *Geodromicus*).
- Thomson, 1858: 37 (characters).
- Schaum, 1859: 31 (synonym of *Geodromicus*).
- Ganglbauer, 1895: 710 (synonym of *Geodromicus*).
- Luze, 1903: 103 (synonym of *Geodromicus*).
- Bernhauer and Schubert, 1910: 75 (synonym of *Geodromicus*).
- Cameron, 1930: 160 (synonym of *Geodromicus*).
- Zerche, 1987a (synonym of *Geodromicus*).
- Watanabe, 1990: 265 (synonym of *Psephidonus*).
- Zerche, 1992a: 110 (synonym of *Geodromicus*).

*Geodromus* Heer, 1841: 572 (**preoccupied** by Dejean, 1829; replacement name for *Geobius* Heer). **TYPE SPECIES:** *Staphylinus plagiatus* Fabricius, fixed by objective synonymy with *Geobius*.

- Redtenbacher, 1849: 747 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Fairmaire and Laboulbène, 1856: 629 (characters).
- Jacquelin du Val, 1857: 70 (synonym of *Geodromicus*).
- Kraatz, 1857d: 925 (synonym of *Geodromicus*).
- G. Waterhouse, 1858: 31 (synonym of *Geodromicus*).
- Jacquelin du Val, 1868: 79 (catalog; European species).
- Gemminger and Harold, 1868: 657 (synonym of *Anthophagus*).
- Ganglbauer, 1895: 710 (synonym of *Geodromicus*).
- Luze, 1903: 103 (synonym of *Geodromicus*).
- Bernhauer and Schubert, 1910: 75 (synonym of *Geodromicus*).
- Cameron, 1930: 160 (synonym of *Geodromicus*).
- Scheerpeltz, 1933: 1065 (synonym of *Geodromicus*).
- Blackwelder, 1952: 169 (type species).
- Zerche, 1987a (synonym of *Geodromicus*).
- Watanabe, 1990: 265 (synonym of *Psephidonus*).
- Zerche, 1992a: 110 (synonym of *Geodromicus*).

*Psephidonus* Gistel, 1856: 29 (species included: *kunzei*). **TYPE SPECIES:** *Geobius kunzei* Heer, fixed by monotypy.

- Blackwelder, 1952: 324 (type species: *kunzei*).

- Székessy, 1963: 22 (characters).
- Moore and Legner, 1975: 211 (catalog; North America north of Mexico).
- Shibata, 1976: 116 (checklist of species of Japan).
- Burakowski, Mroczkowski, and Stefańska, 1979: 68 (catalog; Poland).
- Moore and Legner, 1979: 194 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Tóth, 1982: 100 (characters; habitus; key to species of Hungary).
- Yuh, Paik, Kwon, and Lee, 1985: 225 (checklist of species of Korea).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Zerche, 1987a (synonym of *Geodromicus*).
- Zanetti, 1987: 370 (characters; habitus; key to species of Italy).
- Watanabe, 1990: 265 (characters; key to species of Japan).
- Angelini, 1991: 193 (list of species from high elevations of Calabria, Italy).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Zerche, 1992a: 110 (synonym of *Geodromicus*; date of publication December 31, 1856).
- Siitonen, 1993: 230 (list of Finnish species).
- Boháč, 1993: 41 (cited as valid name; list of species of Czech Republic and Slovakia).
- Downie and Arnett, 1996: 434 (characters; key to species of Northeastern North America).
- Herman, 2001: 57, 83 (discussion; date of publication, February 18, 1856, preceded that of *Geodromicus*; request will be made to Commission to place *Psephidonus* on Official List of Rejected Names).

*Brachydromicus* Bordini, 1993: 157 (subgenus of *Geodromicus*; species included: *latiusculus*, *brevicollis*, *constrictus*). **TYPE SPECIES:** *Geodromicus latiusculus* Eppelsheim, fixed by original designation.

- Bordini, 1984a: 23, 24, 54 (subgenus of *Geodromicus*; [**Note:** Cited as a new subgenus but was an unavailable name because it lacked a type species designation (Article 13.3)]; characters).
- Zanetti, 1987: 370 (subgenus of *Psephidonus*; characters).
- Zerche, 1992a: 107, 110 (nomen nudum; synonym of *Geodromicus*).

**abditus**† Scudder, 1900: 77 (*Geodromicus*; fossil; Type locality: Florissant, Colorado).

- Handlirsch, 1907: 730 (*Geodromicus*; catalog; Miocene; Colorado).

▲ **DISTRIBUTION:** USA.

**affinis** Cameron, 1934: 17 (*Geodromicus*; Type locality: Indian Tibet: Kargil).

▲ **DISTRIBUTION:** India.

**afghanicus** Scheerpeltz, 1961b: 36 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Afganistan: Panjao).

- Scheerpeltz, 1960b: 67 (*Geodromicus*; subgenus *Geodromicus*; Afghanistan).
- Scheerpeltz, 1963: 5 (*Geodromicus*; Afghanistan).
- Coiffait, 1982b: 83 (*Geodromicus*; note).
- Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** Afghanistan.

**alticola** Cameron, 1945: 65 (*Geodromicus*; Type locality: Kashmir: Lianmarg, altitude 10,000 feet).

▲ **DISTRIBUTION:** India.

**amamianus** Watanabe, 1990: 284 (*Psephidonus*; Type locality: Japan: Kagoshima Pref.: Shimura, Amami-Oshima Is.).

▲ **DISTRIBUTION:** Japan.

**amnicola** Champion, 1920: 246 (*Geodromicus*; Type locality: Sunderhunga in Kumaon).

- Cameron, 1924b: 173 (*Geodromicus*; characters in key; India).
- Cameron, 1930: 163 (*Geodromicus*; characters; India).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** India.

- anatolicus** Fagel, 1976: 383 (*Geodromicus*; Type locality: S.O. Anatolien: Ost Taurus bei Sürgü).  
— Bordini, 1984a: 38 (*Geodromicus*; Turkey).  
▲ **DISTRIBUTION:** Turkey.
- antennatus* Reitter, 1890, see: *constricticollis* Eppelsheim, 1890.
- anthracinus* Brisout, 1863, see: *plagiatus* Fabricius, 1798.
- aokii** Watanabe, 1972: 111 (*Psephidonus*; Type locality: north cirque, alt. 1800 m, on Mt. Poroshiri-dake in the Hidaka mountains, Hokkaido).  
— Watanabe, 1990: 291 (*Psephidonus*; characters; Japan).  
— J. Li, 1993: 19 (*Psephidonus*; China).  
▲ **DISTRIBUTION:** Japan, China.
- armeniacus** Iablokov-Khnzorian, 1989: 134 (*Geodromicus*; Type locality: ArmSSR: o. Sevlich. 3000 m nad ur. m. byshe Gorisa, u gory Mets Ishkhan).  
▲ **DISTRIBUTION:** Armenia.
- arvernus* Sainte-Claire Deville, 1935, see: *kunzei* Heer, 1839.
- asiaticus** Bernhauer, 1902a: 249 (*Geodromicus*; Type locality: Kleinasien, Bulghar Maaden).  
— Luze, 1903: 110 (*Geodromicus*; characters; Kleinasien).  
— Bernhauer and Schubert, 1910: 75 (*Geodromicus*; catalog).  
— Tikhomirova, 1973a: 140 (*Geodromicus*; checklist; Asia Minor).  
— Bordini, 1984a: 36 (*Geodromicus*; characters; Turkey).  
▲ **DISTRIBUTION:** Turkey.
- baerti** Bordini, 1984a: 52 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Francia centrale: Auvergne, Cantal, Mont Dore).  
▲ **DISTRIBUTION:** France.
- beibienkoi** Tikhomirova, 1973: 156 (*Geodromicus*; Type locality: Suputinskoi zapovednik; Kangauze; okrestnostiakh Vladivostoka; Kedrovaia pad).  
— Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).  
▲ **DISTRIBUTION:** Russia.
- bodemeyeri** Bernhauer, 1902a: 250 (*Geodromicus*; Type locality: Kleinasien, Bulghar Maaden).  
— Luze, 1903: 113 (*Geodromicus*; characters; Kleinsasien).  
— Bernhauer and Schubert, 1910: 75 (*Geodromicus*; catalog).  
— Tikhomirova, 1973a: 140 (*Geodromicus*; checklist; Asia Minor).  
— Bordini, 1984a: 42 (*Geodromicus*; characters; Turkey).  
▲ **DISTRIBUTION:** Turkey.
- brancuccii** Coiffait, 1984: 142 (*Geodromicus*; Type locality: Pakistan: Sharan, 2400–2700 m).  
▲ **DISTRIBUTION:** Pakistan.
- brevicollis** Fauvel, 1875a:vii [= 1875a: 209], note 7 (*Geodromicus*; proposed for Hochhuth's misidentification of *kunzei*; Type locality: Caucase).  
— Hochhuth, 1849: 202 (*Anthrophagus*; [Note: Misidentification: Bernhauer and Schubert, 1910: 76 cited *kunzei* Hochhuth as a synonym of *globulicollis*; Hochhuth did not describe the species as new, he attributed it to Heer. However Fauvel, 1875a:vii proposed a name for Hochhuth's misidentification]; characters; Caucasus; Akhaltzik).  
— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).  
— Bordini, 1984a: 55 (*Geodromicus*; valid species; characters; Caucasus).  
— Iablokov-Khnzorian, 1989: 138 (*Geodromicus*; characters).  
— Bordini, 1993: 157 (*Geodromicus*; subgenus *Brachydromicus*).  
▲ **DISTRIBUTION:** Caucasus.
- brevitarsis** Champion, 1925: 104 (*Geodromicus*; Type locality: Shelshel, N. Kumaon, alt. 15,750 ft.).  
— Cameron, 1930: 162 (*Geodromicus*; characters; India).  
— Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).  
▲ **DISTRIBUTION:** India.

**brunneus** Say, 1823: 158 (*Anthophagus*; Type locality: on the banks of the Missouri above the confluence of the Platte river).

- Erichson, 1840: 854 (*Anthophagus*; characters; Missouri).
- Provancher, 1877: 259 (*Anthophagus*; characters; Quebec).
- Fauvel, 1878d: 254 [= 1878e: 90] (*Geodromicus*; characters; Missouri).
- Casey, 1894: 407 (*Geodromicus*; notes).
- Bernhauer and Schubert, 1910: 75 (*Geodromicus*; catalog).
- Blatchley, 1910: 475 (*Geodromicus*; characters; Indiana).
- Notman, 1919a: 95 (*Geodromicus*; Ontario).
- Notman, 1920a: 180 (*Geodromicus*; New York).
- Downie and Arnett, 1996: 435 (*Psephidonus*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

*caesus* Erichson, 1840: 853 (*Anthophagus*; Type locality: America septentrionalis).

- Fauvel, 1878d: 252 [= 1878e: 88] (*Geodromicus*; characters; Pennsylvania; Illinois; Missouri; Maryland; West Virginia).
- Casey, 1894: 407 (*Geodromicus*; synonym of *brunneus*).
- Bernhauer and Schubert, 1910: 75 (*Geodromicus*; synonym of *brunneus*).

*caesus* Erichson, 1840, see: *brunneus* Say, 1823.

**caliginosus** Sharp, 1889: 470 (*Anthophagus*; Type locality: Hiogo).

- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).
- Nakane, 1963a: 83 (*Psephidonus*; characters; habitus photograph; Japan).
- Yuh, Paik, Kwon, and Lee, 1985: 225 (*Psephidonus*; Korea).
- Watanabe, 1990: 288 (*Psephidonus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*lewisi* Cameron, 1930c: 183 (*Geodromicus*; Type locality: Kobe: Shinowara).

- Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).
- Watanabe, 1990: 289 (*Psephidonus*; synonym of *caliginosus*).

*canaliculatus* Stephens, 1834, see: *globulicollis* Mannerheim, 1830.

**caucasianus** Bordoni, 1984a: 34 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Caucaso occ.: Krasnaja Poljana).

▲ **DISTRIBUTION:** Russia.

**championi** Cameron, 1924b: 171, 174 (*Geodromicus*; Type locality: Chakrata District; Sainj Khud and Binal Gad, 6500 to 8000 feet).

- Cameron, 1930: 163 (*Geodromicus*; characters; India).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** India.

**chinensis** Bernhauer, 1938: 19 (*Geodromicus*; Type locality: China: Provinz Fukien, Foochow).

▲ **DISTRIBUTION:** China.

**cimicoides** Cameron, 1941: 144 (*Geodromicus*; Type locality: Kashmir: Gulmarg).

▲ **DISTRIBUTION:** India.

*concolor* Luze, 1903 [**Note:** *Nomen nudum*], see: *suturalis* Lacordaire, 1835.

**consors** Cameron, 1945: 65 (*Geodromicus*; Type locality: Kashmir: Gulmarg).

▲ **DISTRIBUTION:** India.

**constricticollis** Eppelsheim, 1890: 172 (*Geodromicus*; Type locality: westliches Kaukasusgebiet am Fischt).

- Luze, 1903: 116 (*Geodromicus*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Khnzorian, 1962: 110 (*Geodromicus*; subspecies of *globulicollis*; [**Note:** This change of status seems not to have been followed by others]; characters).
- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Caucasus).

- Bordoni, 1984a: 57 (*Geodromicus*; characters; Caucasus).
- Bordoni, 1993: 157 (*Geodromicus*; subgenus *Brachydromicus*).

▲ **DISTRIBUTION:** Russia.

*antennatus* Reitter, 1890: 189 (*Geodromicus*; Type locality: Cirkassien: Montes Aibgenses).

- Luze, 1903: 116 (*Geodromicus*; synonym of *constricticollis*).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *constricticollis*).

**convexicollis** Luze, 1903: 112 (*Geodromicus*; Type locality: Russisches Zentralasien: Turkestan: Taschkent).

- Luze, 1904: 78 (*Geodromicus*; Turkestan).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Coiffait, 1970d: 144 (*Geodromicus*; Uzbekistan).
- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Central Asia).
- Zerche, 1992a: 111 (*Geodromicus*; characters; Uzbekistan; Tadjikistan).

▲ **DISTRIBUTION:** Uzbekistan, Tajikistan.

*hauserianus* Bordoni, 1984a: 42 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Ost. Buchara: Tschiftschantan, Nufswald).

- Zerche, 1992a: 107, 111 (*Geodromicus*; synonym of *convexicollis*).

**convexus** Khnzorian, 1962: 106 (*Geodromicus*; Type locality: ArmSSR: Sevan).

- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Armenia).

▲ **DISTRIBUTION:** Armenia.

*cordicollis* Petri, 1891, see: *puncticollis* Weise, 1875.

*coriaceus* Cameron, 1924, see: *Hygrodromicus*.

**corsicus** Fagel, 1958b: 223 (*Geodromicus*; Type locality: Corse: forêt de Vizzavona, 850 m).

- Bordoni, 1984a: 27 (*Geodromicus*; notes).
- Zanetti, 1987: 380 (*Psephidonus*; subgenus *Psephidonus*; characters; Italy uncertain).
- Zanetti, 1995: 9 (*Geodromicus*; Sardinia ?).

▲ **DISTRIBUTION:** Corsica, Sardinia ?.

**crassipalpis** Champion, 1920: 245 (*Geodromicus*; Type locality: Sunderhunga in Kumaon, alt. 12,000 ft.).

- Cameron, 1924b: 173 (*Geodromicus*; characters in key; India).
- Cameron, 1930: 164 (*Geodromicus*; characters; India).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** India.

**curtipennis** Fauvel, 1871a: 136 [= 1872: 110] (*Geodromicus*; variety of *plagiatus*; Type locality: Savoie, Alpes de la Vanoise; vallée de la Reuve).

- Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *globulicollis*).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; variety of *globulicollis*).
- Portevin, 1929: 436 (*Geodromicus*; subspecies of *globulicollis*; characters; France).
- Scheerpeltz, 1933: 1066 (*Geodromicus*; variety of *globulicollis*).
- Jarrige, 1968b: 76 (*Geodromicus*; subspecies of *kunzei*; France).
- Bordoni, 1984a: 51 (*Geodromicus*; valid species; characters; France).

▲ **DISTRIBUTION:** France.

**curvipes** Cameron, 1924b: 173, 174 (*Geodromicus*; Type locality: Simla Hills; Gahan, 7000 feet).

- Cameron, 1930: 164 (*Geodromicus*; characters; India).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** India.

**cylindricus** Tronquet, 1981: 74 (*Geodromicus*; Type locality: Afghanistan: Band-I-Amir).

▲ **DISTRIBUTION:** Afghanistan.

**danieli** Smetana, 1959c: 361 (*Geodromicus*; Type locality: Slowakei, Vysoké Tatry, [Hohe Tatra]: Koprová dolina).

- Lohse, 1964: 62 (*Geodromicus*; subspecies of *kunzei*).

- Tóth, 1982: 104 (*Psephidonus*; characters).
- Bordoni, 1984a: 51 (*Geodromicus*; characters; Slovakia).
- Lucht, 1987: 90 (*Geodromicus*; subspecies of *kunzei*; checklist; Poland; Czechoslovakia).
- Lohse and Lucht, 1989: 127 (*Geodromicus*; valid species).
- Boháč, 1993: 41 (*Psephidonus*; Slovakia).

▲ **DISTRIBUTION:** Poland, Slovakia.

**darahensis** Coiffait, 1979d: 565 (*Geodromicus*; Type locality: province de Nangarhar, Darah i Nour, 3000 m).

▲ **DISTRIBUTION:** Afghanistan.

**debilis** Casey, 1894: 409 (*Geodromicus*; Type locality: Colorado).

- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** USA.

**depressus** Cameron, 1941: 143 (*Geodromicus*; Type locality: Kashmir: Gulmarg).

▲ **DISTRIBUTION:** India.

**dolpoensis** Coiffait, 1982: 155 (*Geodromicus*; Type locality: Nepal: Dolpo, Aufstieg zum Namu La, 4300–4450).

▲ **DISTRIBUTION:** Nepal.

**dubiosus** Fagel, 1976: 384 (*Geodromicus*; Type locality: S.O. Anatolien: Ost Taurus bei Sürgü).

- Bordoni, 1984a: 38 (*Geodromicus*; Turkey).

▲ **DISTRIBUTION:** Turkey.

**fauxveli** Casey, 1894: 408 (*Geodromicus*; Type locality: Oregon: The Dalles).

- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).
- Hatch, 1957: 70 (*Geodromicus*; characters; British Columbia; Idaho; Washington; Oregon).

▲ **DISTRIBUTION:** Canada, USA.

*flavipes* Motschulsky, 1860, see: *Trichodromeus*.

**formosanus** Hayashi, 1992a: 110 (*Psephidonus*; Type locality: Taiwan: Mt. Yushan, Chiai Hsien).

▲ **DISTRIBUTION:** Taiwan.

**frigidus** Smetana, 1968: 229 (*Geodromicus*; Type locality: Mongolei: Uburchangaj aimak, Changaj Gebirge, Ongijn gol, 10 km, ONO Arbajcher, 1800 m).

- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Mongolia).
- Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** Mongolia.

*globulicollis* Mannerheim, 1830, see: *plagiatus* Fabricius, 1798.

**gracilicornis** Luze, 1903: 111 (*Geodromicus*; Type locality: Kaukasus: Hochgebirge östlich von Kasbek).

- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Khnzorian, 1962: 108 (*Geodromicus*; characters).
- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Caucasus).
- Bordoni, 1984a: 36 (*Geodromicus*; characters; Caucasus).

▲ **DISTRIBUTION:** Georgia.

**haarlovi** Scheerpeltz, 1961b: 39 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Afghanistan: Afghanistan: Surta).

- Kashcheev, 1999c: 15 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** Afghanistan.

**hammondi** Watanabe, 1990: 269 (*Psephidonus*; Type locality: Japan: Honshu: Gunma Pref.: near Marunuma, Oku-Nikkô).

▲ **DISTRIBUTION:** Japan.

*hauserianus* Bordoni, 1984, see: *convexicollis* Luze, 1903.

- hermani** Watanabe, 1991a: 43 (*Psephidonus*; replacement name for *pusillus* Watanabe).  
 ▲ **DISTRIBUTION:** Japan.  
*pusillus* Watanabe, 1990: 279 (*Psephidonus*; [**preoccupied**]; Type locality: Japan: Honshu: Shizuoka Pref.: Mt. Amagi-san, Izu).
- hoejeri** Palm, 1961: 157 (*Geodromicus*; Type locality: S. Åberg bei Hoburgen auf Gotland).  
 — Muona, 1979: 18 (*Psephidonus*; checklist; Sweden).  
 — Bordoni, 1984a: 48 (*Geodromicus*; characters).  
 — Silfverberg, 1992: 22 (*Psephidonus*; checklist; Sweden).  
 ▲ **DISTRIBUTION:** Sweden.
- humboldtianus** Casey, 1894: 411 (*Geodromicus*; Type locality: California: Humboldt Co.).  
 — Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).  
 ▲ **DISTRIBUTION:** USA.
- iburinus** Watanabe, 1990: 278 (*Psephidonus*; Type locality: Japan: Hokkaido: Kita-Yuzawa, Iburi).  
 ▲ **DISTRIBUTION:** Japan.
- integer** Casey, 1894: 412 (*Geodromicus*; Type locality: Washington State).  
 — Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).  
 — Hatch, 1957: 70 (*Geodromicus*; characters; British Columbia; Washington; Oregon; Idaho).  
 ▲ **DISTRIBUTION:** Canada, USA.
- iranicus** Coiffait, 1981: 20 (*Geodromicus*; Type locality: Iran: Col. de Schalous, dans le Massif de l'Elbrouz, 2600–2900 m).  
 ▲ **DISTRIBUTION:** Iran.
- japonicus** Watanabe, 1990: 280 (*Psephidonus*; Type locality: Japan: Honshu: Tochigi Pref.: near Lake Sainoko, Oku-Nikkô).  
 ▲ **DISTRIBUTION:** Japan.
- jarrigeanus** Fagel, 1976: 390 (*Geodromicus*; Type locality: Col d'Ovit, Rize, 2500 m).  
 — Bordoni, 1984a: 37 (*Geodromicus*; Turkey).  
 ▲ **DISTRIBUTION:** Turkey.  
*ziganensis* Coiffait, 1978d: 171 (*Geodromicus*; Type locality: Col de Zigana, 2000 m).  
 — Coiffait, 1978f: 278 (*Geodromicus*; variety of *jarrigeanus*; characters; Turkey).
- karakorus** Coiffait, 1977: 269 (*Geodromicus*; Type locality: Vallée Nang Mah, Karakorum).  
 ▲ **DISTRIBUTION:** Nepal.
- kashmirensis** Cameron, 1930: 455 (*Geodromicus*; Type locality: Kashmir: Gulmarg, Ferozepur Nala, alt. 6500 feet).  
 — Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).  
 ▲ **DISTRIBUTION:** India.
- kirschenblati* Tikhomirova, 1973, see: *sibiricus* Bernhauer, 1915.
- klimai** Bordoni, 1984a: 32 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Caucasus).  
 — Iablokov-Khnzorian, 1989: 137, 138 (*Geodromicus*; characters).  
 ▲ **DISTRIBUTION:** Caucasus.
- kunduzii** Tronquet, 1981: 72 (*Geodromicus*; Type locality: Afghanistan: versant nord du col de Salang, 2500 m, Hindu-Kush).  
 ▲ **DISTRIBUTION:** Afghanistan.
- kunzei** Heer, 1839: 193 (*Geobius*; Type locality: Glarneralpen; Engadin; Avers; Stelvio; Samnaun; auch auf der Gemmi beim Daubensee).  
 — Heer, 1841: 572 (*Geodromus*).  
 — Märkel and Kiesenwetter, 1848a: 328 (*Anthophagus*; notes; Carpathian Alps).  
 — Kraatz, 1857d: 927 (*Anthophagus*; synonym of *globulicollis*).  
 — Kraatz, 1857d: 927 (*Anthophagus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; Germany).  
 — Mulsant and Rey, 1880: 60 (*Geodromicus*; synonym of *globulicollis*).



- Mulsant and Rey, 1880: 59 (*Geodromicus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; France).
- Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *globulicollis*).
- Ganglbauer, 1895: 711 (*Geodromicus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; northern Europe; Pyrenees; Alps; Carpathians).
- Luze, 1903: 113 (*Geodromicus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; Sweden; Norway; Lapland; Finland; England; Riesengebirge; Hungary; Tirol; Switzerland; Savoy; Caucasus; Armenia).
- Reitter, 1909: 184 (*Geodromicus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; Germany).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).
- Portevin, 1929: 436 (*Geodromicus*; [**Note:** Misidentified as *globulicollis* according to Zanetti, 1987: 381]; characters; France).
- Smetana, 1959c: 360 (*Geodromicus*; valid species; characters; notes; Czechoslovakia).
- Horion, 1963: 136 (*Geodromicus*; France; Switzerland; Italy; Austria; Germany).
- Lohse, 1964: 62 (*Geodromicus*; characters; central Europe).
- Tóth, 1982: 104 (*Psephidonus*; cited as *kunzeni*; characters).
- Bordoni, 1984a: 49 (*Geodromicus*; characters).
- Zanetti, 1987: 381 (*Psephidonus*; subgenus *Psephidonus*; characters; Italy).
- Lucht, 1987: 90 (*Geodromicus*; distribution of nominate subspecies; Germany; Austria).
- Bordoni, 1993: 157 (*Geodromicus*; notes).
- Boháč, 1993: 41 (*Psephidonus*; Czech Republic).
- Zanetti, 1995: 9 (*Geodromicus*; Italy).

▲ **DISTRIBUTION:** Europe.

*arvernus* Sainte-Claire Deville, 1935: 84 (*Geodromicus*; variety of *globulicollis*; Type locality: Mont-Dore).

- Jarrige, 1946a: 111 (*Geodromicus*; subspecies of *globulicollis*; France).
- Jarrige, 1968b: 76 (*Geodromicus*; subspecies of *kunzei*; France).

**languidus** Luze, 1903: 110 (*Geodromicus*; Type locality: Kaukasus: Hochgebirge östlich von Kasbek).

- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Khnzorian, 1962: 108 (*Geodromicus*; characters).
- Tikhomirova, 1973a: 140 (*Geodromicus*; checklist; Caucasus).
- Bordoni, 1984a: 34 (*Geodromicus*; characters; Caucasus).

▲ **DISTRIBUTION:** Georgia.

**lapponicus** Bordoni, 1984a: 29 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Lapponia).

▲ **DISTRIBUTION:** Finland.

**laticollis** Fagel, 1976: 385 (*Geodromicus*; Type locality: S.O. Anatolien: Ost Taurus bei Sürgü).

- Bordoni, 1984a: 38 (*Geodromicus*; Turkey).

▲ **DISTRIBUTION:** Turkey.

**latiusculus** Eppelsheim, 1878: 126 (*Geodromicus*; Type locality: Hochgebirge östlich vom Kasbek in den Gebieten der Chefsuren und Pschawen, 7000'; [**Note:** See lectotype designation by Bordoni, 1984a]).

- Luze, 1903: 115 (*Geodromicus*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Khnzorian, 1962: 110 (*Geodromicus*; characters).
- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Caucasus).
- Bordoni, 1984a: 55 (*Geodromicus*; lectotype designation; characters; Caucasus).
- Bordoni, 1993: 157 (*Geodromicus*; subgenus *Brachydromicus*).

▲ **DISTRIBUTION:** Georgia.

**lebedevianus** Roubal, 1929: 46 (*Geodromicus*; Type locality: Russisch-Asien: Talass-Tal).

- Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).

— Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Central Asia).

▲ **DISTRIBUTION:** Russia.

**ledouxi** Tronquet, 1981: 73 (*Geodromicus*; Type locality: Afghanistan: vallée d'Ajar).

▲ **DISTRIBUTION:** Afghanistan.

**lestevoides** Sharp, 1889: 470 (*Anthophagus*; Type locality: Hakodate).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).

— Bernhauer and Schubert, 1910: 80 (*Anthophagus*; catalog).

— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).

— Nakane, 1963a: 83 (*Psephidonus*; characters; habitus photograph; Japan).

— Watanabe, 1969: 624 (*Psephidonus*; characters; South Korea).

— Yuh, Paik, Kwon, and Lee, 1985: 226 (*Psephidonus*; Korea).

— Watanabe, 1990: 274 (*Psephidonus*; characters; Japan).

— J. Li, 1993: 19 (*Psephidonus*, cited as *Psephidonus*; China).

▲ **DISTRIBUTION:** Japan, Korea, China.

*lestevoides* Reitter, 1900, see: *Hygrodromicus*.

*lewisi* Cameron, 1930, see: *caliginosus* Sharp, 1889.

**libanicus** Coiffait, 1985: 210 (*Geodromicus*; Type locality: Liban: Les Cèdres, 2300 m).

▲ **DISTRIBUTION:** Lebanon.

**litratus** Kraatz, 1857d: 928 (*Anthophagus*; Type locality: Tyrol).

— Redtenbacher, 1874: 266 (*Geodromicus*; characters).

— Ganglbauer, 1895: 711 (*Geodromicus*; characters; Tyrolian and Swiss Alps).

— Luze, 1903: 114 (*Geodromicus*; cited as aberration of *globulicollis*; characters).

— Montandon, 1908: 78 (*Geodromicus*; Romania).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).

— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).

— Horion, 1935: 170 (*Geodromicus*; characters; Austria; Switzerland).

— Lohse, 1964: 62 (*Geodromicus*; variety of *kunzei*).

— Bordoni, 1984a: 28 (*Geodromicus*; characters; Switzerland).

— Lohse and Lucht, 1989: 127 (*Geodromicus*; valid species).

▲ **DISTRIBUTION:** Caucasus, Romania, Austria, Switzerland.

*marginatus* Fauvel, 1871a: 135 [= 1872: 109] (*Geodromicus*; race of *plagiatus*; Type locality: Alpes Suisses; Caucase).

— Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *litratus*).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *litratus*).

*lohsei* Jarrige, 1963, see: *nigrita* P. W. J. Müller, 1821.

**longicornis** Coiffait, 1983: 278 (*Geodromicus*; Type locality: Cachemire: Himachal Pradesh, Mari, 3500 m).

▲ **DISTRIBUTION:** India.

**longipalpis** Coiffait, 1983: 279 (*Geodromicus*; Type locality: Cachemire: Gulmarg, 3000–3500 m).

▲ **DISTRIBUTION:** India.

**longipes** Mannerheim, 1830: 56 (*Lesteva*; Type locality: Suecia: Wetteren; Ostrogothia: Holka-berg).

— Mannerheim, 1831: 470 (*Staphylinus*; Sweden).

— Stephens, 1834: 360 (*Lesteva*; cited as *globulicollis*; [**Note:** Misidentification: This citation probably refers to *longipes*; see Pope, 1977: 22]; characters; Scotland).

— Stephens, 1839: 431 (*Lesteva*; cited as *globulicollis*; [**Note:** Misidentification: This citation probably refers to *longipes*; see Pope, 1977: 22]; characters; Scotland).

— Erichson, 1840: 853 (*Anthophagus*; synonym of *plagiatus*).

— Hardy, 1851: 55 (*Geodromus*; cited as *globulicollis*; [**Note:** Misidentification: This citation probably refers to *longipes*; see Pope, 1977: 22]; synonym of *plagiatus*).

- Kraatz, 1857d: 927 (*Anthophagus*; synonym of *globulicollis*).
- Fauvel, 1869: 493 (*Anthophagus*; synonym of *globulicollis*).
- Fauvel, 1871a: 135 [= 1872: 109] (*Geodromicus*; synonym of *globulicollis*).
- Mulsant and Rey, 1880: 60 (*Geodromicus*; synonym of *globulicollis*).
- Fowler, 1888: 400 (*Geodromicus*; cited as *globulicollis*; [**Note:** Misidentification: This citation probably refers to *longipes*; see Pope, 1977: 22]; characters; Britain).
- Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *globulicollis*).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).
- Palm, 1948: 122 (*Geodromicus*; characters; Sweden; Norway; Finland).
- Larsson and Gågja, 1959: 72 (*Geodromicus*; cited as valid species; biological notes; Iceland).
- Palm, 1961: 156 (*Geodromicus*; characters; Sweden).
- Steel, 1970a: 22 (*Geodromicus*; biological notes).
- Pope, 1977: 22 (*Geodromicus*; Britain).
- Bordoni, 1984a: 46 (*Geodromicus*; characters).
- ▲ **DISTRIBUTION:** Iceland, Sweden, Britain.

**luzianus** Bordoni, 1984a: 35 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Armenia: Schawnabad).

- Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** Armenia.

**macrothorax** Kashcheev, 1999c: 15 (*Geodromicus*; Type locality: Kungei-Alatau, verkhnee techenie reki Chilik, urochishche Sarybastau).

▲ **DISTRIBUTION:** Kazakhstan.

**maderi** Bernhauer, 1943: 72 (*Geodromicus*; Type locality: China: Szechwan mer., Mts. Kin-fushan, 2000 m, am Flusse Sung-Kanho).

▲ **DISTRIBUTION:** China.

**major** Motschulsky, 1860: 550 (*Geodromus*; Type locality: alpes du Caucase en Touchétié).

- Luze, 1903: 109 (*Geodromicus*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).
- Khnzorian, 1962: 108 (*Geodromicus*; characters).
- Fagel, 1963: 426 (*Geodromicus*; Turkey).
- Tikhomirova, 1973a: 140 (*Geodromicus*; checklist; Caucasus).
- Bordoni, 1984a: 32 (*Geodromicus*; characters; Caucasus).
- Iablokov-Khnzorian, 1989: 137, 138 (*Geodromicus*; characters).
- Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** Caucasus, Turkey.

*marginatus* Fauvel, 1871, see: *lituratus* Kraatz, 1857.

*meurguesae* Tronquet, 1981, see: *parallelipennis* Coiffait, 1979.

**miyamorii** Watanabe, 1990: 287 (*Psephidonus*; Type locality: Japan: Hokkaido: Tonkeshi Riv., Iburi).

▲ **DISTRIBUTION:** Japan.

**montenegrinus** Bernhauer, 1941: 210 (*Geodromicus*; Type locality: Montenegro: Ljuboten).

- Zanetti, 1984: 78 (*Geodromicus* ?; characters; notes; Bulgaria).

▲ **DISTRIBUTION:** Bulgaria, Yugoslavia.

**nepalensis** Scheerpeltz, 1976a: 100 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Nepal: Khumbu Lobuche in etwa 4800 m).

▲ **DISTRIBUTION:** Nepal.

**nepalicus** Coiffait, 1977: 267 (*Geodromicus*; Type locality: Rive du tila Khola près Jumla, Népal occidental).

▲ **DISTRIBUTION:** Nepal.

**nigrita** P. W. J. Müller, 1821: 226 (*Anthophagus*; Type locality: Odenbach).

- Germar, 1827: 5 (*Anthophagus*; synonym of *plagiatus*).

- Curtis, 1829: 29 (*Lesteva*; cited as *plagiatus*; catalog; Britain; [**Note:** Misidentification: Probably refers to *nigrita*; *plagiatus* does not occur in Britain; see Pope, 1977: 22]).
- Stephens, 1834: 362 (*Lesteva*; cited as *plagiatus*; characters; England; [**Note:** Misidentification: Probably refers to *nigrita*; *plagiatus* does not occur in Britain; see Pope, 1977: 22]).
- Comolli, 1837: 15 (*Anthophagus*; Italy).
- Stephens, 1839: 431 (*Lesteva*; cited as *plagiatus*; characters; England; Scotland; [**Note:** Misidentification: Probably refers to *nigrita*; *plagiatus* does not occur in Britain; see Pope, 1977: 22]).
- Heer, 1839: 193 (*Geobius*; variety of *plagiatus*; characters; Switzerland).
- Erichson, 1840: 853 (*Anthophagus*; synonym of *plagiatus*).
- Hardy, 1851: 55 (*Geodromus*; synonym of *plagiatus*).
- Hardy, 1851: 55 (*Geodromus*; cited as *plagiatus*; notes; England; [**Note:** Misidentification: Probably refers to *nigrita*; *plagiatus* does not occur in Britain; see Pope, 1977: 22]).
- Fauvel, 1865a: 315 (*Anthophagus*; characters; habitat; France).
- Gemminger and Harold, 1868: 658 (*Anthophagus*; synonym of *plagiatus*).
- Fauvel, 1869: 493 (*Anthophagus*; synonym of *plagiatus*).
- Fauvel, 1871a: 134 [= 1872: 108] (*Geodromicus*; characters; cited as variety  $\beta$  of *plagiatus*; France; Lapland; Scandinavia; Britain; Germany; Switzerland; Austria; Italy; Corsica).
- Mulsant and Rey, 1880: 57 (*Geodromicus*; synonym of *plagiatus*).
- Fowler, 1888: 400 (*Geodromicus*; characters; Britain).
- Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *plagiatus*).
- Luze, 1903: 108 (*Geodromicus*; aberration of *plagiatus*).
- Bernhauer and Schubert, 1910: 77 (*Geodromicus*; aberration of *plagiatus*).
- Notman, 1920: 17 (*Geodromicus*; New York).
- Scheerpeltz, 1933: 1066 (*Geodromicus*; aberration of *plagiatus*).
- Fagel, 1958b: 219 (*Geodromicus*; characters; western Europe; Alps; Spain).
- Lohse, 1958: 52 (*Geodromicus*; valid species; notes).
- Smetana, 1959c: 357 (*Geodromicus*; characters; notes; Czechoslovakia).
- Palm, 1961: 156 (*Geodromicus*; characters; Sweden).
- Horion, 1963: 134 (*Geodromicus*; Sweden; Germany; Switzerland; France; Czechoslovakia; Austria).
- Lohse, 1964: 62 (*Geodromicus*; characters; central Europe).
- Steel, 1970a: 22 (*Geodromicus*; biological notes).
- Pope, 1977: 22 (*Geodromicus*; Britain).
- Hammond, 1980: 136 (*Geodromicus*; notes; Ireland).
- Tóth, 1982: 103 (*Psephidonus*; characters).
- Bordoni, 1984a: 26 (*Geodromicus*; characters; France).
- Zanetti, 1984: 78 (*Geodromicus*; Bulgaria).
- Segers, 1986: 22 (*Geodromicus*; checklist of species; Belgium).
- Zanetti, 1987: 379 (*Psephidonus*; subgenus *Psephidonus*; characters; Italy).
- Lucht, 1987: 90 (*Geodromicus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Sweden).
- Boháč, 1993: 41 (*Psephidonus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Geodromicus*; Italy).

▲ **DISTRIBUTION:** Europe, USA.

*lohsei* Jarrige, 1963: 166 (*Geodromicus*; subspecies of *nigrita*; Type locality: Forêt de Marialle, mousses de la Llipodère, 1700 m).

**nipponensis** Watanabe, 1990: 275 (*Psephidonus*; Type locality: Japan: Honshu: Gunma Pref.: near Nidoage, Asama Plateau).

— Watanabe, 1996a: 9 (*Psephidonus*; cited as *nipponensis*; cave collection; Japan).

▲ **DISTRIBUTION:** Japan.

**niveus** Bernhauer, 1941: 210 (*Geodromicus*; Type locality: Siera [sic] Nevada: Picachode Plakeria).

▲ **DISTRIBUTION:** Spain.

- nubilatus** Casey, 1894: 408 (*Geodromicus*; Type locality: New Mexico: Las Vegas).  
 — Fall and Cockerell, 1907: 168 (*Geodromicus*; New Mexico).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).  
 ▲ **DISTRIBUTION:** USA.
- ohkurai** Hayashi, 1992a: 107 (*Psephidonus*; Type locality: Taiwan: Mt. Houfuan, Nantou Hsien).  
 ▲ **DISTRIBUTION:** Taiwan.  
*yushanensis* Hayashi, 1992a: 110 (*Psephidonus*; subspecies of *ohkurai*; Type locality: Taiwan: Mt. Yushan, Chiayi Hsien).
- ovalis* Luze, 1904, see: *Hygrodromicus*.
- ovipennis** LeConte, 1878: 452 (*Geodromicus*; Type locality: Leavenworth Valley, above Georgetown, Colo., 9000 to 10,000 feet).  
 — Fauvel, 1878d: 253 [= 1878e: 89] (*Geodromicus*; characters; Colorado).  
 — Casey, 1894: 408 (*Geodromicus*; notes).  
 — Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *plagiatus*).  
 — Fall and Cockerell, 1907: 168 (*Geodromicus*; New Mexico).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; synonym of *plagiatus*).  
 — Fall, 1926: 145 (*Geodromicus*; notes Yukon Territory).  
 — Moore and Legner, 1975: 211 (*Psephidonus*; cited as valid species; checklist; USA).  
 — Downie and Arnett, 1996: 435 (*Psephidonus*; characters; USA).  
 ▲ **DISTRIBUTION:** USA, Canada.
- pakistanus** Coiffait, 1984: 143 (*Geodromicus*; Type locality: Pakistan: Murree-Abbottabad, 2200–2500 m).  
 ▲ **DISTRIBUTION:** Pakistan.
- palpalis** Coiffait, 1977: 271 (*Geodromicus*; Type locality: Dampalek près Jumla, Népal occidental).  
 ▲ **DISTRIBUTION:** Nepal.
- parallelipennis** Coiffait, 1979d: 564 (*Geodromicus*; Type locality: vallée du Parum, 2400–2800 m).  
 — Tronquet, 1981: 69 (*Geodromicus*; Afghanistan).  
 ▲ **DISTRIBUTION:** Afghanistan.  
*meurguesae* Tronquet, 1981: 75 (*Geodromicus*; subspecies of *parallelipennis*; Type locality: Afghanistan: Kahr-Shah-Foladi).
- paramerus** Shavrin, 2000: 87 (*Geodromicus*; Type locality: Chitinskaia Obl., Krasno-Chikoiskii r-n, pos. Malaia Kudara).  
 ▲ **DISTRIBUTION:** Russia.
- pedemontanus** Fagel, 1958b: 221 (*Geodromicus*; Type locality: Alpes maritimes piémontaises: Limone, torrente Vermenagna, 1000–1100 m).  
 — Bordoni, 1984a: 26 (*Geodromicus*; characters; notes; France; Italy).  
 — Zanetti, 1987: 377 (*Psephidonus*; characters; Italy).  
 — Zanetti, 1995: 9 (*Geodromicus*; Italy).  
 ▲ **DISTRIBUTION:** France, Italy.
- peraffinis** Cameron, 1945: 65 (*Geodromicus*; Type locality: Kashmir: Lianmarg, altitude 10,000 feet).  
 ▲ **DISTRIBUTION:** India.
- perplexus** Cameron, 1941: 144 (*Geodromicus*; Type locality: Kashmir: Lobzang).  
 ▲ **DISTRIBUTION:** India.
- plagiatus** Fabricius, 1798: 180 (*Staphylinus*; Type locality: Europa borealis).  
 — Paykull, 1800: 387 (*Staphylinus*; characters; Sweden).  
 — Fabricius, 1801: 597 (*Staphylinus*; characters).  
 — Gravenhorst, 1802: 123, 189 (*Anthophagus*; characters).  
 — Latreille, 1804: 368 (*Lesteva*; characters; Sweden; Germany).

- Gravenhorst, 1806: 222 (*Anthophagus*; characters; Sweden).
- Gyllenhal, 1810: 195 (*Anthophagus*; characters; Sweden).
- Gyllenhal, 1827: 461 (*Anthophagus*).
- C. Sahlberg, 1827: 276 (*Anthophagus*; characters; Finland).
- Germar, 1827: 5 (*Anthophagus*; characters).
- Zetterstedt, 1828: 44 (*Anthophagus*; characters; Lapland).
- Mannerheim, 1830: 56 (*Lesteva*; Finland; Sweden).
- Mannerheim, 1831: 470 (*Lesteva*; Finland; Sweden).
- Runde, 1835: 24 (*Lesteva*; characters; Germany).
- Lacordaire, 1835: 482 (*Lesteva*; characters; France).
- Zetterstedt, 1838: 47 (*Anthophagus*; characters; Lapland; Sweden).
- Heer, 1839: 193 (characters).
- Erichson, 1840: 852 (*Anthophagus*; characters; Europe).
- Hochhuth, 1849: 202 (*Anthophagus*; characters; Iberia).
- Fairmaire and Laboulbène, 1856: 629 (*Geodromus*; characters; France).
- Redtenbacher, 1857: 244 (*Geodromicus*; characters; Austria).
- Kraatz, 1857d: 925 (*Anthophagus*; characters; Germany).
- Thomson, 1859: 48 (type species of *Geodromicus*).
- Thomson, 1861: 181 (*Geodromicus*; characters; Scandinavia).
- Hochhuth, 1862: 102 (*Anthophagus*; Russia).
- Fauvel, 1871a: 133 [= 1872: 107] (*Geodromicus*; characters; France; Lapland; Scandinavia; Germany; Switzerland; Austria).
- Redtenbacher, 1874: 266 (*Geodromicus*; characters; Austria).
- Seidlitz, 1875: 241 (*Anthophagus*; characters; Baltic region).
- J. Sahlberg, 1876: 208 (*Geodromicus*; Finland).
- Mulsant and Rey, 1880: 56 (*Geodromicus*; characters; France).
- Ganglbauer, 1895: 711 (*Geodromicus*; characters; north and middle Europe; Siberia; North America).
- Luze, 1903: 108 (*Geodromicus*; characters; north and central Europe; Siberia; Caucasus; North America).
- Sainte-Claire Deville, 1906: 72 (*Geodromicus*; Corsica).
- Sainte-Claire Deville, 1907: 50 (*Geodromicus*; characters; France).
- Reitter, 1909: 183 (*Geodromicus*; characters; Germany).
- Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).
- Johansen, 1914: 587 (*Geodromicus*; characters; Denmark).
- Portevin, 1929: 436 (*Geodromicus*; characters; France).
- Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).
- Palm, 1948: 121 (*Geodromicus*; characters; Sweden; Denmark; Norway; Finland).
- Fagel, 1958b: 217 (*Geodromicus*; characters; notes; Scandinavia; Alpes).
- Smetana, 1959c: 358 (*Geodromicus*; characters; notes; Czechoslovakia).
- Palm, 1961: 155 (*Geodromicus*; characters; Sweden).
- Khnzorian, 1962: 109 (*Geodromicus*; characters).
- Horion, 1963: 133 (*Geodromicus*; Caucasus; Siberia; Germany; Austria; Hungary; Norway; Sweden; Czech Republic; Slovakia; Italy; Britain; Belgium; France; Switzerland; Italy; Corsica; Sardinia; Bosnia Hercegovina; Romania; Denmark; Holland).
- Lohse, 1964: 62 (*Geodromicus*; characters; central Europe).
- Tóth, 1982: 101 (*Psephidonus*; characters).
- Frank, 1982: 8 (*Geodromicus*; list of parasites).
- Bordoni, 1984a: 24 (*Geodromicus*; characters; notes).
- Zanetti, 1987: 377 (*Psephidonus*; subgenus *Psephidonus*; characters; Italy).
- Lucht, 1987: 90 (*Geodromicus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Denmark; Sweden).
- Boháč, 1993: 41 (*Psephidonus*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Geodromicus*; Italy).
- Ryabukhin, 1999: 29 (*Geodromicus*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Europe, Russia, Canada, USA.

- globulicollis* Mannerheim, 1830: 56 (*Lesteva*; Type locality: Finlandia orientalis: Saima).  
 — Mannerheim, 1831: 470 (*Lesteva*; Finland).  
 — Zetterstedt, 1838: 49 (*Anthophagus*; characters; habitat; Lapland; Finland).  
 — Erichson, 1840: 853 (*Anthophagus*; synonym of *plagiatus*).  
 — Erichson, 1840: 852, 853 (*Anthophagus*; variety a, e; [**Note:** Bernhauer and Schubert, 1910: 76 cited *plagiatus* variety a and e Erichson as synonyms of *globulicollis* but neither varietal name is available]; characters).  
 — Thomson, 1861: 181 (*Geodromicus*; characters; Scandinavia).  
 — Hochhuth, 1862: 102 (*Anthophagus*; Russia).  
 — Fauvel, 1865a: 315 (*Anthophagus*; habitat; France).  
 — Fauvel, 1865a: 316 (*Anthophagus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 76 cited *lituratus* Fauvel as a synonym of *globulicollis*; Fauvel attributed it to Kraatz]; habitat; France).  
 — Fauvel, 1871a: 135 [= 1872: 109] (*Geodromicus*; variety of *plagiatus*; [**Note:** Bernhauer and Schubert, 1910: 76 cited *plagiatus* variety  $\epsilon$  as a synonym of *globulicollis*; there is no available name]; characters; France; Lapland; Scandinavia; Britain; Switzerland; Germany; Austria; Caucasus).  
 — Redtenbacher, 1874: 266 (*Geodromicus*; characters).  
 — J. Sahlberg, 1876: 208 (*Geodromicus*; Finland).  
 — Bernhauer and Schubert, 1910: 76 (*Geodromicus*; catalog).  
 — Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).  
 — Smetana, 1959c: 359 (*Geodromicus*; characters; notes; Czechoslovakia).  
 — Khnzorian, 1962: 110 (*Geodromicus*; characters).  
 — Lohse, 1964: 62 (*Geodromicus*; synonym of *plagiatus*).  
 — Boháč, 1993: 41 (*Psephidonus*; cited as valid species; Czech Republic ?).
- verticalis* Say, 1831: 49 [= 1834: 463] (*Anthophagus*; Type locality: Pennsylvania).  
 — Erichson, 1840: 854 (*Anthophagus*; characters; Pennsylvania).  
 — LeConte, 1850: 220 (*Anthophagus*; Lake Superior).  
 — LeConte, 1866: 375 (*Anthophagus*; notes; Lake Superior; Pennsylvania).  
 — Fauvel, 1878d: 254 [= 1878e: 90] (*Geodromicus*; synonym of *nigrita*).  
 — Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *plagiatus*).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; synonym of *plagiatus*).
- canaliculatus* Stephens, 1834: 360 (*Lesteva*; Type locality: Scotland; Cumberland; near Edinburgh).  
 — Stephens, 1839: 431 (*Lesteva*; characters; England, Scotland).  
 — G. Waterhouse, 1858: 31 (*Geodromicus*; synonym of *globulicollis*).
- anthracinus* Brisout, 1863: 40 (*Geodromicus*; Type locality: Mont-Louis).  
 — Gemminger and Harold, 1868: 658 (*Anthophagus*; synonym of *plagiatus*).  
 — Fauvel, 1871a: 134 [= 1872: 108] (*Geodromicus*; synonym of *plagiatus* variety  $\beta$ ).  
 — Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *plagiatus*).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; synonym of *plagiatus*).
- subnigritus* Lohse, 1958: 53 (*Geodromicus*; aberration of *plagiatus*; [**Note:** **Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).  
 — Palm, 1961: 156 (*Geodromicus*; aberration of *plagiatus*; characters; Sweden).  
 — Zanetti, 1987: 378 (*Psephidonus*; synonym of *plagiatus*).
- ponticus** Fagel, 1976: 388 (*Geodromicus*; Type locality: N. E. Anatolie: Bicik, Giresum, 1600 m).  
 — Bordoni, 1984a: 37 (*Geodromicus*; characters; Turkey).  
 ▲ **DISTRIBUTION:** Turkey.
- puncticollis** Weise, 1875: 364 (*Anthophagus*; subgenus *Geodromicus*; Type locality: Luhy).  
 — Eppelsheim, 1887b: 432 (*Geodromicus*; synonym of *globulicollis*).  
 — Ganglbauer, 1895: 711 (*Geodromicus*; characters; Europe).  
 — Luze, 1903: 111 (*Geodromicus*; characters; Hungary; Siebenbürgen; Balkans).  
 — Montandon, 1908: 78 (*Geodromicus*; Romania).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

- Smetana, 1959c: 362 (*Geodromicus*; characters; notes; Ukrainian Carpathians).
- Tóth, 1982: 104 (*Psephidonus*; characters).
- Bordoni, 1984a: 54 (*Geodromicus*; characters; Ukraine).
- Zerche, 1988a: 362 (types listed).

▲ **DISTRIBUTION:** Ukraine, Romania.

*cordicollis* Petri, 1891: 18 (*Geodromicus*; Type locality: Schässburg).

- Ganglbauer, 1895: 711 (*Geodromicus*; synonym of *puncticollis*).
- Bernhauer and Schubert, 1910: 77 (*Geodromicus*; synonym of *puncticollis*).

*punctulatus* Luze, 1904, see: *Paratrichodromeus*.

**pusillus** Coiffait, 1983: 279 (*Geodromicus*; Type locality: Cachemire: Rohtang Pass, 4000 m).

▲ **DISTRIBUTION:** India.

*pusillus* Watanabe, 1990, see: *hermani* Watanabe, 1991.

**pyrenaicus** Jarrige, 1963: 166 (*Geodromicus*; Type locality: Gave d'Holçarté, Larrau, 600 m, Basses Pyrénées).

- Bordoni, 1984a: 27 (*Geodromicus*; characters; France).

▲ **DISTRIBUTION:** France.

**recticollis** Cameron, 1924: 172, 173 (*Geodromicus*; Type locality: Chakrata District; Sainj Khud, 6500 feet).

- Cameron, 1930: 163 (*Geodromicus*; characters; India).
- Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).

▲ **DISTRIBUTION:** India.

*reitteri* Scheerpeltz, 1933, see: *Hygrodrumicus*.

**rivularis** Khnzorian, 1962: 107 (*Geodromicus*; Type locality: ArmSSR: Megri, u berega Araksa).

- Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Armenia).
- Iablokov-Khnzorian, 1989: 137, 138 (*Geodromicus*; characters).

▲ **DISTRIBUTION:** Armenia.

**robusticornis** Bernhauer, 1941: 209 (*Geodromicus*; Type locality: Bulgarien: Rila Musala).

▲ **DISTRIBUTION:** Bulgaria.

**rousi** Bordoni, 1984a: 39 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Caucaso).

- Iablokov-Khnzorian, 1989: 137, 138 (*Geodromicus*; characters).

▲ **DISTRIBUTION:** Caucasus.

**ruficornis** Cameron, 1941: 143 (*Geodromicus*; Type locality: Kashmir: Gulmarg, Lianmarg, altitude 8000–10,000 feet).

▲ **DISTRIBUTION:** India.

**rufipennis** Van Dyke, 1924: 16 (*Geodromicus*; Type locality: Brooks Falls, Naknek Lake, Alaska Peninsula).

▲ **DISTRIBUTION:** USA.

**salangensis** Tronquet, 1981: 76 (*Geodromicus*; Type locality: Afghanistan: versant nord du col de Salang, 3000–3200 m).

▲ **DISTRIBUTION:** Afghanistan.

**schoenmanni** Bordoni, 1984a: 31 (*Geodromicus*; subgenus *Geodromicus*; Type locality: Caucaso).

- Iablokov-Khnzorian, 1989: 137, 138 (*Geodromicus*; characters).

▲ **DISTRIBUTION:** Caucasus.

**schubertorum** Scheerpeltz, 1937b: 197 (*Geodromicus*; cited as *schuberti* [**Note:** Incorrect original spelling; named for two people named Schubert]; Type locality: Bulgarien: Massiv des Jumruktschal, Zentral-Balkan, 1400–1800 m; Rosalito-polje, Schipka-Balkan, ca. 1900 m).

- Zanetti, 1984: 78 (*Geodromicus*; cited as *schuberti*; characters; Bulgaria).

▲ **DISTRIBUTION:** Bulgaria.



- schultzi** Hatch, 1957: 70 (*Geodromicus*; Type locality: Washington: Kittitas Co.: Swauk Cr. Also cited from Idaho and British Columbia).  
▲ **DISTRIBUTION:** Canada, USA.
- sibiricus** Bernhauer, 1915c: 69 (*Geodromicus*; Type locality: Ostsibirien: Chitaizki Sterena).  
— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).  
— Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; eastern Siberia).  
— Gusarov, 1992a: 775 [= 1993a: 62] (*Geodromicus*; synonymic notes).  
— Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).  
▲ **DISTRIBUTION:** Russia.
- kirschenblati* Tikhomirova, 1973: 155 (*Geodromicus*; Type locality: Suputinskii zapovednik).  
— Coiffait, 1974a: 198 (*Geodromicus*; Siberia).  
— Gusarov, 1992a: 775 [= 1993a: 63] (*Geodromicus*; synonym of *sibiricus*).
- similis** Cameron, 1930: 455 (*Geodromicus*; Type locality: Kashmir: Gulmarg, Ferozepur Nala, alt. 6500 feet).  
— Cameron, 1934: 18 (*Geodromicus*; Indian Tibet).  
— Cameron, 1935b: 288 (*Geodromicus*; India).  
— Coiffait, 1982: 43 (*Geodromicus*; India).  
▲ **DISTRIBUTION:** India.
- sinuatocollis** Bernhauer, 1938b: 50 (*Geodromicus*; Type locality: Mandschurei: Tcheuly-Nord: Nanye-li).  
▲ **DISTRIBUTION:** China.
- sinuatus** Sharp, 1889: 470 (*Anthophagus*; Type locality: Sapporo).  
— Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).  
— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).  
— Watanabe, 1990: 282 (*Psephidonus*; characters; Japan).  
— J. Li, 1993: 19 (*Psephidonus*; China).  
▲ **DISTRIBUTION:** Japan, China.
- sprius** Watanabe, 1990: 272 (*Psephidonus*; Type locality: Japan: Honshu: Kanagawa Pref.: Kojiri, Hakone).  
▲ **DISTRIBUTION:** Japan.
- stiricidii**† Scudder, 1895: 43 (*Geodromicus*; fossil, interglacial clays; Type locality: Scarborough, Ontario).  
▲ **DISTRIBUTION:** Canada.
- striatus** Khnzorian, 1962: 105 (*Geodromicus*; Type locality: ArmSSR: Gekhard, Kotaikskii r-n).  
— Tikhomirova, 1973a: 141 (*Geodromicus*; checklist; Armenia).  
▲ **DISTRIBUTION:** Armenia.
- strictus** Fauvel, 1889a: 126 (*Geodromicus*; named for species misidentified as *nigrita* by Fauvel; Type locality: New York; Mont Washington).  
— Fauvel, 1878d: 254 [= 1878e: 90] (*Olophrum*; [Note: Misidentification: Bernhauer and Schubert, 1910: 77 cited *nigrita* Fauvel as a synonym of *strictus*; Fauvel did not describe the species as new, he attributed it to Müller]; characters; Michigan; Lake Superior; New York; New Hampshire; Pennsylvania).  
— Casey, 1894: 408 (*Geodromicus*; New York and Massachusetts to Michigan).  
— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).  
— Blatchley, 1910: 475 (*Geodromicus*; cited as *stictus*; characters; Indiana).  
— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).  
— Dearborn and Donahue, 1994: 14 (*Geodromicus*; Maine).  
— Downie and Arnett, 1996: 435 (*Psephidonus*; characters; USA).  
▲ **DISTRIBUTION:** USA.
- suavis** Coiffait, 1979d: 566 (*Geodromicus*; Type locality: Nouristan: haute vallée de l'Agôr Khwar, 3200–3900 m).  
▲ **DISTRIBUTION:** Afghanistan.

*subnigritus* Lohse, 1958 [**Note: Nomen nudum**], see: *plagiatus* Fabricius, 1798.

**subsimplis** Cameron, 1941: 144 (*Geodromicus*; Type locality: Ghum district: Mangpu; Tiger Hill, 8000–10,000 feet).

▲ **DISTRIBUTION:** India.

**suensoni** Bernhauer, 1936g: 304 (*Geodromicus*; Type locality: Japan: Kamikochi, North Alps 5000 ft).

— Watanabe, 1990: 293 (*Psephidonus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**suturalis** Lacordaire, 1835: 483 (*Lesteva*; Type locality: Paris).

— Erichson, 1840: 852 (*Anthophagus*; synonym of *plagiatus*).

— Erichson, 1840: 852 (*Anthophagus*; variety b; [**Note:** Bernhauer and Schubert, 1910: 77 cited *plagiatus* variety b Erichson as synonym of *suturalis*; there is no available name]; characters).

— Kraatz, 1857d: 926 (*Anthophagus*; [**Note:** Bernhauer and Schubert, 1910: 77 cited *plagiatus* variety a Kraatz as a synonym of *suturalis* but there is no available name]; characters; Germany).

— Jacquelin du Val, 1857: pl. 25, fig. 123 (*Geodromicus*; [**Note:** Misidentification, cited by Bernhauer and Schubert, 1910: 77 as synonym of *suturalis* but Jacquelin du Val attributed the species to Fabricius]; illustration).

— Fauvel, 1865a: 315 (*Anthophagus*; habitat; France).

— Fauvel, 1871a: 133 [= 1872: 107] (*Geodromicus*; variety of *plagiatus*; [**Note:** Bernhauer and Schubert, 1910: 77 cited *plagiatus* variety α as a synonym of *suturalis*; there is no available name]; characters; France; Switzerland; Austria).

— Mulsant and Rey, 1880: 57 (*Geodromicus*; synonym of *plagiatus*).

— Ganglbauer, 1895: 711 (*Geodromicus*; characters; Alps; Pyrenees).

— Luze, 1903: 107 (*Geodromicus*; characters; Alps; Pyrenees).

— Reitter, 1909: 183 (*Geodromicus*; characters; Germany).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

— Scheerpeltz, 1933: 1066 (*Geodromicus*; catalog).

— Fagel, 1958b: 224 (*Geodromicus*; characters; Alpes and Pyrenees).

— Smetana, 1959c: 359 (*Geodromicus*; characters; notes; Czechoslovakia).

— Horion, 1963: 134 (*Geodromicus*; France; Italy; Switzerland; Germany; Austria; Romania; Czech Republic).

— Lohse, 1964: 61 (*Geodromicus*; characters; central Europe).

— Tóth, 1982: 102 (*Psephidonus*; characters).

— Bordoni, 1984a: 27 (*Geodromicus*; notes).

— Zanetti, 1987: 375 (*Psephidonus*; subgenus *Psephidonus*; characters; Italy).

— Lucht, 1987: 90 (*Geodromicus*; checklist; Germany; Austria; Switzerland).

— Boháč, 1993: 41 (*Psephidonus*; Slovakia; Czech Republic).

— Zanetti, 1995: 9 (*Geodromicus*; Italy).

— Kashcheev, 1999c: 16 (*Geodromicus*; characters in key).

▲ **DISTRIBUTION:** France, Switzerland, Germany, Czechoslovakia, Austria, Italy.

**concolor** Luze, 1903: 107 (*Geodromicus*; aberration of *suturalis*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; aberration of *suturalis*).

— Scheerpeltz, 1933: 1066 (*Geodromicus*; synonym of *suturalis*).

— Tóth, 1982: 102 (*Psephidonus*; aberration of *suturalis*; characters).

— Zanetti, 1987: 376 (*Psephidonus*; synonym of *suturalis*).

**svaneticus** Iablokov-Khnzorian, 1989: 134 (*Geodromicus*; Type locality: GSSR: Svanetia, okr. Mestii).

▲ **DISTRIBUTION:** Georgia.

**szechwanensis** Bernhauer, 1943: 73 (*Geodromicus*; Type locality: China).

▲ **DISTRIBUTION:** China: Szechwan mer., Mts. Kinfushan, 2000 m, am Flusse Sung-Kanho.

- temporalis** Casey, 1894: 410 (*Geodromicus*; Type locality: California: Sonoma Co.).  
 — Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).  
 — Hatch, 1957: 70 (*Geodromicus*; characters; British Columbia; Washington; Oregon).  
 ▲ **DISTRIBUTION:** Canada, USA.
- torrentis** Puthz, 1973j: 517 (*Geodromicus*; Type locality: Pakistan: Swat Region: Guhral Spring).  
 ▲ **DISTRIBUTION:** Pakistan.
- transversus* Motschulsky, 1860, see: *Trichodromeus*.
- trapezipennis** Coiffait, 1979d: 563 (*Geodromicus*; Type locality: Nouristan, vallée de l'Agôr Khwar, 2000–3000 m).  
 ▲ **DISTRIBUTION:** Afghanistan.
- trisulcatus** Coiffait, 1983: 278 (*Geodromicus*; Type locality: Cachemire: Pahalgam, Kolakoi, 3400 m).  
 ▲ **DISTRIBUTION:** India.
- tumidus* Luze, 1903, see: *Trichodromeus*.
- verticalis* Say, 1831, see: *plagiatus* Fabricius, 1798.
- yushanensis* Hayashi, 1992, see: *ohkurai* Hayashi, 1992.
- ziganensis* Coiffait, 1978, see: *jarrigeanus* Fagel, 1976.
- zwickianus** Fagel, 1976: 387 (*Geodromicus*; Type locality: S.O. Anatolien: Ost Taurus bei Sürgü).  
 — Bordoni, 1984a: 37 (*Geodromicus*; cited as *zwickianus*; Turkey).  
 ▲ **DISTRIBUTION:** Turkey.

### Hygodromicus

[14 species; Palearctic Region]

- Hygodromicus* Tronquet, 1981: 72 (species included: *obesus*; [**Note:** When Tronquet published his new species, *Hygodromicus obesus*, the generic name was cited in a footnote as “*Hygodromicus* Coiffait, genre nouveau (sous presse)” but Tronquet published a few generic characters at the end of his description of *obesus* thereby validating the name. Tronquet’s use of the generic name appeared on September 9, 1981 and Coiffait’s on October 30, 1981]). **TYPE SPECIES:** *Hygodromicus obesus* Tronquet, fixed by monotypy.  
 — Zerche, 1992a: 107, 112, 120, 139 (key to species; phylogenetic relationships).
- Hygodromicus* Coiffait, 1981c: 258, 259 (species included: *meurguesae*). **TYPE SPECIES:** *Hygodromicus meurguesae* Coiffait, fixed by original designation and monotypy.  
 — Bordoni, 1990a: 100 (characters).  
 — Zerche, 1992a: 107 (synonym of *Hygodromicus* Tronquet).
- behnei** Zerche, 1992a: 117 (*Hygodromicus*; Type locality: Asia cent., Dushanbe, Tadshik., Warsob-Tal/Hissar-Geb., 2000–3000 m).  
 ▲ **DISTRIBUTION:** Tajikistan.
- cachemicus** Coiffait, 1983: 286 (*Hygodromicus*; Type locality: Cachemire: Badrinath, 3500).  
 ▲ **DISTRIBUTION:** India.
- coriaceus** Cameron, 1924b: 172, 173 (*Geodromicus*; Type locality: Chakrata District; Chulli Khud and Binal Gad, 7000 to 8000 feet).  
 — Cameron, 1930: 162 (*Geodromicus*; characters; India).  
 — Scheerpeltz, 1933: 1065 (*Geodromicus*; catalog).  
 — Zerche, 1992a: 120 (*Hygodromicus*).  
 ▲ **DISTRIBUTION:** India.
- klapperichi** Coiffait, 1982b: 83 (*Hygodromicus*; Type locality: Afghanistan: Nouristan: Bashgultal, 2700 m).  
 ▲ **DISTRIBUTION:** Afghanistan.

**ledouxi** Coiffait, 1983: 285 (*Hygrodromicus*; Type locality: Cachemire: Himachal Pradesh, Mari, 3500 m).

▲ **DISTRIBUTION:** India.

*lestevoides* Reitter, 1900, see: *reitteri* Scheerpeltz, 1933.

**meurguesae** Coiffait, 1981c: 260 (*Hygrodromicus*; Type locality: Cachemire, Badrinath, 3500 m).

— Coiffait, 1983: 275 (*Hygrodromicus*; Kashmir).

▲ **DISTRIBUTION:** India.

**obesus** Tronquet, 1981: 71 (*Hygrodromicus*; Type locality: Afghanistan: versant nord du col de Salang, 2500 m, Hindu-Kush).

▲ **DISTRIBUTION:** Afghanistan.

**ovalis** Luze, 1904: 78 (*Geodromicus*; Type locality: Turkestan: Jagnob Kol; [**Note:** See lectotype designation by Zerche, 1992a]. Also cited from Iskander-kul: Karakul-darja).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

— Zerche, 1992a: 119 (*Hygrodromicus*; lectotype designation: TRKST. Jagnob Kol; characters; Uzbekistan; Tajikistan).

▲ **DISTRIBUTION:** Uzbekistan, Tajikistan.

**palliditarsis** Coiffait, 1983: 287 (*Hygrodromicus*; Type locality: Cachemire: Gangria, 3500 m).

▲ **DISTRIBUTION:** India.

**punctatissimus** Coiffait, 1983: 286 (*Hygrodromicus*; Type locality: Cachemire: Gangria, 3500 m).

▲ **DISTRIBUTION:** India.

**reitteri** Scheerpeltz, 1933: 1066 (*Geodromicus*; replacement name for *lestevoides* Reitter).

— Zerche, 1992a: 114 (*Hygrodromicus*; characters; Turkestan; Tadzhikistan).

▲ **DISTRIBUTION:** Tajikistan, Uzbekistan.

*lestevoides* Reitter, 1900b: 228 (*Geodromicus*; [**preoccupied**]; Type locality: Bokhara, Turkestan; [**Note:** See lectotype designation by Zerche, 1992a]).

— Luze, 1903: 116 (*Geodromicus*; characters; Russian central Asia: Buchara).

— Scheerpeltz, 1933: 1066 (*Geodromicus*; synonym of *reitteri*).

— Zerche, 1992a: 107, 114 (*Hygrodromicus*; lectotype designation: Bokhara, Turkestan; synonym of *reitteri*).

**splendidus** Zerche, 1992a: 116 (*Hygrodromicus*; Type locality: USSR: Tadzhikistan, Pamir, Muksu-Gebiet, Hochfläche bei Kishlak Ljarsch, 3000–4000 m).

▲ **DISTRIBUTION:** Tajikistan.

**wittmeri** Coiffait, 1984: 145 (*Hygrodromicus*; Type locality: Cachemire: Pahalgam, 2200–3000 m).

▲ **DISTRIBUTION:** India.

**wrasei** Zerche, 1992a: 113 (*Hygrodromicus*; Type locality: Asia centr., Duschambe, Tadshikistan, Warsob-Tal/Hissar-Gebirge, 2000–2500 m).

▲ **DISTRIBUTION:** Tajikistan.

### Hygrogeus

[12 species; Palaearctic Region]

*Hygrogeus* Mulsant and Rey, 1880: 56 (species included: *aemulus*). **TYPE SPECIES:** *Anthophagus aemulus* Rosenhauer, fixed by monotypy.

— Heyden, Reitter, and Weise, 1891: 118 (subgenus of *Geodromicus*; list of species of Europe and Caucasus).

— Ganglbauer, 1895: 710 (characters).

— Luze, 1902d: 529 (characters).

— Heyden, Reitter, and Weise, 1906: 135 (list of species of Europe and Caucasus).

— Bernhauer and Schubert, 1910: 78 (world catalog; 1 species).

— Winkler, 1925: 335 (catalog for Palaearctic region).

- Cameron, 1925: 104 (catalog of Indian species).
- Porta, 1926: 30 (characters; key to species of Italy).
- Cameron, 1930: 165 (characters; key to species of British India).
- Scheerpeltz, 1933: 1067 (world catalog supplement).
- Blackwelder, 1952: 193 (type species: *aemulus*).
- Horion, 1963: 137 (list of central European species).
- Lohse, 1964: 63 (characters; key to central European species).
- Scheerpeltz, 1968a: 17 (catalog of Austrian species).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Zanetti, 1987: 384 (characters; habitus; species of Italy).
- Zerche, 1992a: 139 (phylogenetic relationship).
- Zanetti, 1995: 9 (list of species of Italy).

**aemulus** Rosenhauer, 1847: 12 (*Anthophagus*; Type locality: Steinach in Tyrol).

- Kraatz, 1857d: 929 (*Anthophagus*; characters; Austria).
- Fauvel, 1865a: 316 [= 1865b: 66] (*Anthophagus*; characters; France).
- Fauvel, 1871a: 139 [= 1872: 113] (*Anthophagus*; characters; France; Italy).
- Redtenbacher, 1874: 266 (*Geodromicus*; characters; Austria).
- Fauvel, 1876a: 54 [= 1876: 239] (*Anthophagus*; Switzerland).
- Mulsant and Rey, 1880: 61 (*Geodromicus*; subgenus *Hygrogeus*; characters; France).
- Ganglbauer, 1895: 710 (*Hygrogeus*; characters; Alps).
- Luze, 1902d: 529 (*Hygrogeus*; characters; Alps).
- Bernhauer and Schubert, 1910: 78 (*Hygrogeus*; catalog).
- Portevin, 1929: 433 (*Anthophagus*; characters; France).
- Scheerpeltz, 1933: 1067 (*Hygrogeus*; catalog).
- Horion, 1935: 170 (*Hygrogeus*; characters; Alps; Austria).
- Horion, 1963: 137 (*Hygrogeus*; France; Switzerland; Italy; Germany; Austria).
- Lohse, 1964: 63 (*Hygrogeus*; characters; central Europe).
- Jarrige, 1968b: 76 (*Hygrogeus*; France).
- Zanetti, 1987: 384 (*Hygrogeus*; characters; Italy).
- Lucht, 1987: 90 (*Hygrogeus*; checklist; Germany; Austria).
- Zanetti, 1995: 9 (*Hygrogeus*; Italy).

▲ **DISTRIBUTION:** Germany, France, Switzerland, Italy, Austria.

*cenisius* Fairmaire, 1861a: 647 (*Anthophagus*; Type locality: Mont Cenis).

- Fauvel, 1865a: 316 [= 1865b: 66] (*Anthophagus*; synonym of *aemulus*).
- Fauvel, 1871a: 139 [= 1872: 113] (*Anthophagus*; synonym of *aemulus*).
- Mulsant and Rey, 1880: 61 (*Geodromicus*; synonym of *aemulus*).
- Ganglbauer, 1895: 710 (*Hygrogeus*; synonym of *aemulus*).
- Luze, 1902d: 529 (*Hygrogeus*; synonym of *aemulus*).
- Bernhauer and Schubert, 1910: 78 (*Geodromicus*; synonym of *aemulus*).

**alticola** Coiffait, 1983: 283 (*Hygrogeus*; Type locality: Cachemire: Bradinath [**Note:** Should spelling be Badrinath], 3500 m).

▲ **DISTRIBUTION:** India.

*armatus* Cameron, 1941, see: *Trichodromeus*.

*atrocaeruleus* Champion, 1925, see: *cyanipennis* Cameron, 1924.

*brevisulcus* Champion, 1925, see: *Trichodromeus*.

*cenisius* Fairmaire, 1861, see: *aemulus* Rosenhauer, 1847.

**coeruleipennis** Coiffait, 1983: 280 (*Hygrogeus*; Type locality: Cachemire: Badrinath, 3500 m).

▲ **DISTRIBUTION:** India.

**cyanipennis** Cameron, 1924b: 174 (*Hygrogeus*; Type locality: Chulli Khud, Charata District, 8000 feet).

- Cameron, 1930: 165 (*Hygrogeus*; characters; India).
- Scheerpeltz, 1933: 1067 (*Hygrogeus*; catalog).

▲ **DISTRIBUTION:** India.

*atrocaeruleus* Champion, 1925: 105 (*Hygrogeus*; variety of *cyanipennis*; Burphu, Gori Valley, alt. 11,500 ft., and Laptel, alt. 15,000 ft., both in N.E. Kumaon).

— Cameron, 1930: 165, 166 (*Hygrogeus*; variety of *cyanipennis*; characters; India).

— Scheerpeltz, 1933: 1067 (*Hygrogeus*; variety of *cyanipennis*).

**gulgargensis** Coiffait, 1983: 282 (*Hygrogeus*; Type locality: Cachemire: Gulmarg, 3000–3500 m).

▲ **DISTRIBUTION:** India.

*kumaonensis* Champion, 1925, see: *Trichodromeus*.

**languidus** Coiffait, 1983: 283 (*Hygrogeus*; Type locality: Cachemire: Pahalgam, 3000 m).

▲ **DISTRIBUTION:** India.

**ledouxii** Coiffait, 1983: 282 (*Hygrogeus*; Type locality: Cachemire: Pahalgam, Sheshnag, 3000 m).

▲ **DISTRIBUTION:** India.

**meurguesae** Coiffait, 1979d: 567 (*Hygrogeus*; Type locality: Nouristan: Khum Ghar, 3800 m).

▲ **DISTRIBUTION:** Afghanistan.

**minor** Coiffait, 1983: 285 (*Hygrogeus*; Type locality: Cachemire: Rohtang Pass, 4000 m).

▲ **DISTRIBUTION:** India.

**montanus** Coiffait, 1983: 280 (*Hygrogeus*; Type locality: Cachemire: Gangria, 3500 m).

▲ **DISTRIBUTION:** India.

*penicillatus* Reitter, 1900, see: *Trichodromeus*.

**rugosicollis** Coiffait, 1983: 284 (*Hygrogeus*; Type locality: Cachemire: Badrinath, 3500 m).

▲ **DISTRIBUTION:** India.

**sulcicollis** Coiffait, 1983: 284 (*Hygrogeus*; Type locality: Cachemire: Pahalgam, Sheshnag, 3800 m).

▲ **DISTRIBUTION:** India.

### Lesteva

[97 species (2 doubtful); Nearctic, Palaearctic, and Oriental Regions]

*Lesteva* Latreille, 1797: 75 (without includes species, see Latreille, 1802: 129 for first included species). **TYPE SPECIES:** *Lesteva punctulata* Latreille, fixed by Latreille, 1804: 369 (see Herman, 2001).

— Latreille, 1802: 129 (characters; included species: *abbreviatus*).

— Latreille, 1804: 286, 366 (characters; notes; list of included species: *caraboides*, *testaceus*, *armiger*, *obscurus*, *plagiatus*, *alpinus*, *dichrous*, *dimidiatus*, *staphylinoides*).

— Latreille, 1806: 296 (characters).

— Latreille, 1810: 182, 427 (characters; two species listed).

— Samouelle, 1819: 175 (cited as *Lestiva*; characters).

— Dejean, 1821: 25 (synonym of *Anthophagus*; cited as *Anthophagus*).

— Latreille, 1825: 245 (cited as Lestève; characters).

— Latreille, 1825a: 215 (characters).

— Berthold, 1827: 332 (characters).

— Zetterstedt, 1828: 44 (synonym of *Anthophagus*).

— Curtis, 1829: 29 (catalog; Britain).

— Stephens, 1829a: 25 (catalog; Britain).

— Stephens, 1829: 298 (catalog; Britain).

— Latreille, 1829: 439 (characters).

— Curtis, 1830: pl. 303 (characters; type species).

— Mannerheim, 1830: 10, 55 (key; characters).

— Mannerheim, 1831: 424, 469 (key; characters).

— Griffith and Pidgeon, 1832: 297 (characters).

— Stephens, 1834: 359 (characters).

— Lacordaire, 1835: 479 (characters).

- Westwood, 1838a: 18 (characters; type species).
- Erichson, 1839a: 616 (characters).
- Heer, 1839: 192 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 855 (characters).
- Kolenati, 1846: 27 (synonym of *Anthophagus*).
- Redtenbacher, 1849: 747 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 137 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 630 (characters).
- Gistel, 1856: 389 (list of species).
- Jacquelin du Val, 1857: 71 (characters).
- Redtenbacher, 1857: 244 (characters; key to Austrian species).
- Kraatz, 1857d: 930 (cited as *Lesteua*; characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 48 (characters; type species: *bicolor*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 182 (characters).
- Gredler, 1863: 122 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 35 (list of species; collecting notes; France).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Gemminger and Harold, 1868: 659 (catalog).
- Fauvel, 1871a: 127 [= 1872: 101] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 266 (characters).
- Fauvel, 1875a: VII [= 1875b: 209] (catalog).
- Fauvel, 1878d: 247 [= 1878e: 83] (notes; key to North American species).
- Mulsant and Rey, 1880: 63 (characters; key to French species).
- Heyden, 1880: 81 (list of species of Siberian region).
- Duvivier, 1883: 194 (catalog).
- Fowler, 1888: 401 (notes; key to British species).
- Seidlitz, 1891: 347 (key to some European species).
- Seidlitz, 1891a: 370 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).
- Heyden, 1893: 48 (list of species of Siberian region).
- Ganglbauer, 1895: 712 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Fauvel, 1897d: 248 (catalog of species of Barbary).
- Luze, 1903a: 179 (characters; key to species).
- Heyden, Reitter, and Weise, 1906: 134 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 47 (characters; key to and annotated list of species of Seine Basin, France).
- Reitter, 1909: 184 (characters; key to German species).
- Bernhauer and Schubert, 1910: 71 (world catalog; 24 species).
- Blatchley, 1910: 476 (characters).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Johansen, 1914: 588 (characters; key to Danish species).
- Winkler, 1925: 334 (catalog for Palaearctic region).
- Cameron, 1925: 11, 104 (catalog of Indian species).
- Porta, 1926: 28 (characters; key to species of Italy).
- Portevin, 1929: 437 (characters; key to French species).
- Cameron, 1930: 158 (characters; key to species of British India).
- Joy, 1932: 97 (key to British species).

- Scheerpeltz, 1933: 1062 (world catalog supplement).
- Normand, 1935: 358 (list of species of Tunisia).
- Scheerpeltz, 1937b: 194 (key to species of Balkan region).
- Paulian, 1941: 153 (larval characters).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 116 (characters; key to species of Sweden).
- Jeannel and Jarrige, 1949: 313 (characters; type species: *punctulata* = *longoelytrata*).
- Tottenham, 1949: 357, 408 (type species: *longoelytratus* Goeze = *punctulata* Latreille; list of British species; discussion of early history of name).
- Steel, 1952 (synonyms; discussion; key to British species).
- Tottenham, 1954: 32 (characters; key to British species).
- Lohse, 1955: 504 (key to species of *fontinalis* complex).
- Lohse, 1956a: 51 (key to German species).
- Kocher, 1958: 95 (checklist of species; Morocco).
- Lohse, 1960: 2 (key to species of Iberian Peninsula).
- Lohse, 1961a (elytral reduction and species systematics).
- Ferreira, 1962a: 9 (list of Portuguese species).
- Horion, 1963: 125 (list of central European species).
- Székessy, 1963: 21 (characters).
- Lohse, 1964: 58 (characters; key to central European species).
- Moore, 1966: 48, 50 (characters; notes).
- Kasule, 1968: 133, 136 (larval characters).
- Scheerpeltz, 1968a: 16 (catalog of Austrian species).
- Steel, 1970a: 20 (larval characters; biological notes).
- Tikhomirova, 1973a: 140 (checklist of species of USSR).
- Moore and Legner, 1975: 194 (catalog; North America north of Mexico).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 309 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 65 (catalog; Poland).
- Moore and Legner, 1979: 182 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, 1979: 243 (some species collected in Germany).
- M. Dvořák, 1979: 110 (some species collected in Slovakia).
- Uhlig, Vogel, and Sieber, 1980: 241 (some species collected in Germany).
- Uhlig and Vogler, 1981: 88 (list of some species collected in Germany; habitat and collecting notes).
- Lohse, 1982: 201 (key to species of India).
- Tóth, 1982: 97 (characters; habitus; key to species of Hungary).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Segers, 1986: 22 (checklist of species; Belgium).
- Zanetti, 1987: 336 (characters; habitus; key to species of Italy).
- Lohse and Lucht, 1989: 127 (notes).
- Watanabe, 1990: 149 (characters; key to species of Japan).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 241 (additions to list of Danish species).
- Downie and Arnett, 1996: 438 (characters; key to species of Northeastern North America).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
- Rougemont, 2000: 147 (key to and descriptions of species of China).



- Newton, Thayer, Ashe, and Chandler, 2000: 340 (2 Nearctic species; notes; characters in key).
- Herman, 2001: 7 (type species; discussion; petition submitted to Commission requesting acceptance of designation of *Lesteva punctulata* by Latreille, 1804).

*Tevales* Casey, 1894: 398, 399 (species included: *cribratulus*). **TYPE SPECIES:** *Tevales cribratulus* Casey, fixed by monotypy.

- Bernhauer and Schubert, 1910: 73 (world catalog; 1 species).
- Leng, 1920: 95 (catalog of North American species).
- Scheerpeltz, 1933: 1064 (world catalog supplement).
- Blackwelder, 1952: 383 (type species: *cribratulus*).
- Steel, 1952: 9 (synonym of *Lesteva*).

*Pseudolesteva* Casey, 1894: 398, 399 (species included: *pallipes*, *biguttula*, *picescens*).

**TYPE SPECIES:** *Lesteva pallipes* LeConte, fixed by subsequent designation of its objective synonym *Paralesteva* for which R. Lucas, 1920: 480, designated the type species.

- Blackwelder, 1952: 327 (type species).
- Steel, 1952: 9 (synonym of *Lesteva*).

*Paralesteva* Casey, 1905: 164 (replacement name for *Pseudolesteva* Casey). **TYPE SPECIES:** *Lesteva pallipes* LeConte, fixed by subsequent designation by R. Lucas, 1920: 480.

- Bernhauer and Schubert, 1910: 73 (world catalog; 1 species).
- Leng, 1920: 95 (catalog of North American species).
- Blackwelder, 1952: 290 (type species).
- Steel, 1952: 9 (synonym of *Lesteva*).

*Lestevella* Jeannel and Jarrige, 1949: 313, 315 (subgenus of *Lesteva*; species included: *pubescens*, *pandellei*). **TYPE SPECIES:** *Lesteva pubescens* Mannerheim, fixed by original designation.

*Lestevidia* Jeannel and Jarrige, 1949: 313, 315 (subgenus of *Lesteva*; species included: *punctata*). **TYPE SPECIES:** *Lesteva punctata* Erichson, fixed by original designation and monotypy.

- Zanetti, 1987: 338 (subgenus of *Lesteva*; characters; species of Italy).

*Lesta* Blackwelder, 1952: 218 (replacement named for *Lesteva* Latreille; [**Note:** According to Blackwelder, *Lesta* was needed to replace *Lesteva* since that name was needed for *Anthophagus*]). **TYPE SPECIES:** *Staphylinus longolytrata* Goeze, fixed by original designation.

- Zanetti, 1987: 336 (synonym of *Lesteva*).

*Lestevina* Bordoni, 1999a: 119 ([**Note:** See Bordoni, 1973h for description and list of species included]). **TYPE SPECIES:** *Lesteva sbordonii* Bordoni, fixed by original designation.

- Bordoni, 1973h: 230, 234 (subgenus of *Lesteva*; species included: *corsica*, *foveolata*, *sicula*, *heeri*, *sbordonii*; [**Note:** An unavailable name here, no type species designation (Article 13.3)]).
- Zanetti, 1987: 338, 340 (subgenus of *Lesteva*; characters; key to species of Italy).

**albanica** Bernhauer, 1936g: 304 (*Lesteva*; Type locality: Albanien: Mai i Dajtit).

- Zanetti, 1984: 78 (*Lesteva*; Bulgaria).

▲ **DISTRIBUTION:** Albania, Bulgaria, Cyprus.

**balcanica** Scheerpeltz, 1937b: 191 (*Lesteva*; Type locality: Bulgarien: Massiv des Masalat, Schipka-Balkan, ca. 1900 m).

- Lohse, 1955: 506 (*Lesteva*; characters).
- Coiffait, 1970e: 64 (*Lesteva*; Cyprus).
- Zanetti, 1984: 78 (*Lesteva*; synonymum of *albanica*).

**aterrima** Lohse, 1967: 10 (*Lesteva*; Type locality: Asturias: Covadonga, Cangas de Onis, rio Covadonga).

▲ **DISTRIBUTION:** Spain.

*angusticollis* Mannerheim, 1830, see: *Anthophagus*.

**aureomontis** Rougemont, 2000: 165 (*Lesteva*; Type locality: China: Sichuan: Mt. Emei-shan, Jinding, 3050 m).

▲ **DISTRIBUTION:** China.

*balkanica* Scheerpeltz, 1937, see: *albanica* Bernhauer, 1936.

**balearica** Lohse, 1967: 11 (*Lesteva*; Type locality: Mallorca).

— Pons and Palmer, 1996: 164 (*Lesteva*; Balearic endemic; notes; habitat; Mallorca).

▲ **DISTRIBUTION:** Majorca.

**bavarica** Lohse, 1956a: 59 (*Lesteva*; Type locality: Hochvogelgebiet, Allgäu).

— Horion, 1963: 132 (*Lesteva*; Germany; Austria; Slovenia).

— Lohse, 1964: 61 (*Lesteva*; characters; central Europe).

— Zanetti, 1987: 360 (*Lesteva*; subgenus *Lesteva*; characters; Italy).

— Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Austria).

— Zanetti, 1995: 8 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** Slovenia, Italy, Austria, Germany.

**benicki** Lohse, 1958: 51 (*Lesteva*; Type locality: Kuhfluchtwasserfall bei Farchant, Oberbayern).

— Horion, 1963: 132 (*Lesteva*; Germany; Austria; Slovenia).

— Lohse, 1964: 60 (*Lesteva*; characters; central Europe).

— Jarrige, 1968b: 75 (*Lesteva*; France).

— Zanetti, 1987: 368 (*Lesteva*; subgenus *Lesteva*; characters; Italy).

— Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Austria).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** Slovenia, Austria, Germany, France, Italy.

*bicolor* Paykull, 1789, see: *longoelytrata* Goeze, 1777.

*biguttula* LeConte, 1863, see: *pallipes* LeConte, 1863.

*bimaculatus* Lacordaire, 1835, see: *Anthophagus*.

**binotata** Reitter, 1901: 48 (*Lesteva*; Type locality: Turkestan: Taschkent).

— Luze, 1903a: 192 (*Lesteva*; characters; Turkestan).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Smetana, 1967e: 305 (*Lesteva*; Turkey).

— Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).

— Bordoni, 1984: 331 (*Lesteva*; characters; Lebanon).

▲ **DISTRIBUTION:** Uzbekistan, Turkey, Lebanon.

**brathinoides** Zerche, 2000a: 66 (*Lesteva*; Type locality: Sibirien, Ost-Sajan, Tunkinskije Goltsy, westl. Hauptast der Kyngarga, Hochtal zw. 1700 u. 2000 m).

▲ **DISTRIBUTION:** Russia.

**breiti** Lohse, 1956a: 53, 57 (*Lesteva*; Type locality: Nordtiroler Alpen).

— Horion, 1963: 131 (*Lesteva*; Germany; Austria).

— Lohse, 1964: 61 (*Lesteva*; characters; central Europe).

— Zanetti, 1987: 356 (*Lesteva*; subgenus *Lesteva*; characters; Italy).

— Lucht, 1987: 89 (*Lesteva*; checklist; Germany; Switzerland).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** Germany, Austria, Italy.

**brevipennis** Cameron, 1941: 143 (*Lesteva*; Type locality: Kashmir: Gulmarg, altitude 8000 feet).

— Lohse, 1982: 201, 203 (*Lesteva*; characters; India).

▲ **DISTRIBUTION:** India.

**brondeeli** Lohse and Steel, 1961: 73 (*Lesteva*; Type locality: Crete occident.: Topolia).

▲ **DISTRIBUTION:** Crete.

**bucharica** Fauvel, 1900d: 222 (*Lesteva*; Type locality: Buchara).

— Luze, 1903a: 196 (*Lesteva*; characters; Buchara).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).

— Bordoni, 1987b: 94 (*Lesteva*; characters; Uzbekistan).

▲ **DISTRIBUTION:** Uzbekistan.

*canaliculata* Stephens, 1834, see: *Geodromicus*.

*carinthiaca* Lohse, 1955, see: *omissa* Rey, 1880.

*cavernicola* Scheerpeltz, 1933 [**Note:** **Nomen nudum**], see: *fontinalis* Kiesenwetter, 1950.

**cazorlana** Lohse, 1987: 135 (*Lesteva*; Type locality: Espagne Jaen. Sierra de Cazorla Guadalquivir).

— Coiffait, 1970c: 110 (*Lesteva*; cited in description of *cobosi*; [**Note:** Misidentified as *mateui* according to Lohse, 1970: 135]; Spain).

▲ **DISTRIBUTION:** Spain.

**championi** Lohse, 1982: 203 (*Lesteva*; Type locality: India: Chakrata Dist.: Binal Gad, 7–8000 feet).

▲ **DISTRIBUTION:** India.

*cobosi* Coiffait, 1970, see: *mateui* Jarrige, 1954.

**coiffaiti** Jarrige, 1963: 166 (*Lesteva*; Type locality: Gavarnie, Hautes Pyrénées).

▲ **DISTRIBUTION:** France.

*collina* Haliday, 1855, see: *monticola* Kiesenwetter, 1847.

**cooteri** Rougemont, 2000: 150 (*Lesteva*; Type locality: China: Zhejiang Prov., Anji County, ca. 500 m, Long Wong Shan N.R.).

▲ **DISTRIBUTION:** China.

**cordicollis** Motschulsky, 1860: 549 (*Lesteva*; Type locality: Daourie).

— Hochhuth, 1862: 102 (*Lesteva*; characters; Dauria).

— Luze, 1903a: 187 (*Lesteva*; characters; Transbaikalien, Baikalsee).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Tikhomirova, 1973a: 140 (*Lesteva*; checklist; eastern Siberia).

▲ **DISTRIBUTION:** Russia.

**corsica** Perris, 1869: 8 (*Lesteva*; Type locality: Corse, sur le Monte-Rotondo).

— Fauvel, 1871a: 129 [= 1872: 103] (*Lesteva*; characters; Corsica).

— Mulsant and Rey, 1880: 86 (*Lesteva*; characters; Corsica).

— Luze, 1903a: 186 (*Lesteva*; characters; Corsica; Sardinia).

— Sainte-Claire Deville, 1906: 72 (*Lesteva*; Corsica).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Portevin, 1929: 437 (*Lesteva*; characters; France).

— Scheerpeltz, 1933: 1062 (*Lesteva*; catalog).

— Coiffait, 1968c: 505 (*Lesteva*; Corsica).

— Bordoni, 1973h: 234 (*Lesteva*; subgenus *Lestevina*).

— Zanetti, 1987: 345 (*Lesteva*; subgenus *Lestevina*; characters; Italy).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** France, Italy.

**crassipes** Sharp, 1889: 471 (*Lesteva*; Type locality: Oyayama and Yokohama).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Watanabe, 1990: 167 (*Lesteva*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*cretica* Lohse and Steel, 1961, see: *longoelytrata* Goeze, 1777.

**cribratula** Casey, 1894: 399 (*Tevales*; Type locality: Pennsylvania).

— Bernhauer and Schubert, 1910: 73 (*Tevales*; catalog).

— Scheerpeltz, 1933: 1064 (*Tevales*; catalog).

— Moore and Legner, 1975: 194 (*Lesteva*; catalog).

— Downie and Arnett, 1996: 438 (*Lesteva*; characters; USA).

▲ **DISTRIBUTION:** USA.

- curvipes** Mulsant and Rey, 1880: 78 (*Lesteva*; Type locality: Grande-Chartreuse, les Hautes-Pyrénées).  
 — Ganglbauer, 1895: 714 (*Lesteva*; characters; Pyrenees).  
 — Luze, 1903a: 191 (*Lesteva*; characters; France; Pyrenees).  
 — Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).  
 ▲ **DISTRIBUTION:** France.
- dabashanensis** Rougemont, 2000: 153 (*Lesteva*; Type locality: China: Shaanxi, Langao Xian, Shenxianhe, alt. 1910 m).  
 ▲ **DISTRIBUTION:** China.
- davidiana** Rougemont, 2000: 164 (*Lesteva*; Type locality: China: Sichuan: Baoxing Xian, Yaoqi, Guobaye, Mt. Baiyu-shan, alt. 2400 m).  
 ▲ **DISTRIBUTION:** China.
- dimidiata* Panzer, 1795, see: *longoelytrata* Goeze, 1777.
- distincta** Watanabe, 1990: 178 (*Lesteva*; Type locality: Japan: Honshu: Nara Pref.: Mt. Kasugayama).  
 ▲ **DISTRIBUTION:** Japan.
- dorsalis* Reitter, 1909, see: *longoelytrata* Goeze, 1777.
- dubia** Lacordaire, 1835: 484 (*Lesteva*; [**Note: Nomen dubium**]; Type locality: Paris).  
 ▲ **DISTRIBUTION:** France.
- elegantula** Rougemont, 2000: 160 (*Lesteva*; Type locality: China: Zhejiang, Moganshan).  
 ▲ **DISTRIBUTION:** China.
- fageli** Lohse, 1960: 6 (*Lesteva*; Type locality: Puente del Cerezo).  
 ▲ **DISTRIBUTION:** Spain.
- fasciata** Luze, 1903a: 188 (*Lesteva*; Type locality: Transkaspien, Gr. Balchan).  
 — Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).  
 — Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).  
 ▲ **DISTRIBUTION:** Turkmenistan.
- fenestrata** Sharp, 1874: 97 (*Lesteva*; Type locality: Kawatchi).  
 — Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).  
 — Nakane, 1963a: 83 (*Lesteva*; characters; habitus photograph; Japan).  
 — Watanabe, 1990: 160 (*Lesteva*; characters; Japan).  
 — Watanabe, 1996a: 9 (*Lesteva*; cave collection; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- flavipennis* Lacordaire, 1835, see: *Anthophagus*.
- flavopunctata** Rougemont, 2000: 161 (*Lesteva*; Type locality: China: Zhejiang Prov., Anji County, ca. 1000 m, Long Wang Shan N.R.).  
 ▲ **DISTRIBUTION:** China.
- fluviata** Champion, 1920: 246 (*Lesteva*; Type locality: W. Almora, Kumaon, India; [**Note:** See lectotype designation by Lohse, 1982]. Originally cited from W. Almora and Kosi River, Ranikhet, alt. 3000–6500 ft. in Kumaon).  
 — Cameron, 1930: 160 (*Lesteva*; characters; India).  
 — Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).  
 — Lohse, 1982: 201, 203 (*Lesteva*; lectotype designation: W. Almora, Kumaon, India; characters; India).  
 — Coiffait, 1982: 42 (*Lesteva*; characters; India).  
 ▲ **DISTRIBUTION:** India.
- fontinalis** Kiesenwetter, 1850: 222 (*Lesteva*; Type locality: Mons serratus Cataloniae).  
 — Kiesenwetter, 1851a: 434 (*Lesteva*; characters; Pyrenees).  
 — Fauvel, 1871a: 128 [= 1872: 102] (*Lesteva*; characters; France; Corsica; Spain; Algeria).  
 — Fauvel, 1878: 90 [= 1878a: 10] (*Lesteva*; Algeria).  
 — Mulsant and Rey, 1880: 69 (*Lesteva*; characters; France).

- Fauvel, 1886: 16 [= 1886a: 8] (*Lesteva*; Morocco; Algeria).
- Ganglbauer, 1895: 713 (*Lesteva*; characters; Dalmatia; Piemont; Corsica; Sicily; France; Spain; Algeria).
- Fauvel, 1902b: 56 (*Lesteva*; Morocco; Algeria; Tunisia).
- Luze, 1903a: 195 (*Lesteva*; characters; Italy; France; Spain; Algeria; Sicily; Sardinia; Corsica).
- Sainte-Claire Deville, 1906: 71 (*Lesteva*; Corsica).
- Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).
- Czizek, 1918: 65 (*Lesteva*; [**Note:** Scheerpeltz, 1933: 1063 cited *cavernicola* Czizek as being described in this article as an aberration of *fontinalis*; that name is not in the article]; in caves).
- Portevin, 1929: 438 (*Lesteva*; characters; France).
- Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).
- Lohse, 1955: 505 (*Lesteva*; characters; Iberian Peninsula).
- Lohse, 1960: 5 (*Lesteva*; Iberian Peninsula).
- Scheerpeltz, 1965b: 392 (*Lesteva*; Sicily).
- Zanetti, 1987: 362 (*Lesteva*; characters; France; Spain; Switzerland ?; may not occur in Italy).
- ▲ **DISTRIBUTION:** France, Spain, Morocco.

*nigra* Kraatz, 1857d: 934 (*Lesteva*; Type locality: Sicilien).

- Redtenbacher, 1874: 267 (*Lesteva*; characters; Italy).
- Ganglbauer, 1895: 713 (*Lesteva*; synonym of *fontinalis*).
- Luze, 1903a: 195 (*Lesteva*; synonym of *fontinalis*).
- Bernhauer and Schubert, 1910: 71 (*Lesteva*; synonym of *fontinalis*).
- Scheerpeltz, 1933: 1063 (*Lesteva*; synonym of *fontinalis*).

*cavernicola* Scheerpeltz, 1933: 1063 (*Lesteva*; [**Note:** **Nomen nudum**; Scheerpeltz cited the name as a variety of *fontinalis* described by Czizek, “1917 (1922)”: 65 (= 1918); I cannot find the name in Czizek’s article and Scheerpeltz presented no characters]).

*truncata* Lohse, 1960: 5 (*Lesteva*; subspecies of *fontinalis*; [**preoccupied**]; Type locality: Rio Guadalupejo).

- Herman, 2001: 37 (*Lesteva*; synonym of *fontinalis gustavi*).

*gustavi* Herman, 2001: 37 (*Lesteva*; subspecies of *fontinalis*; replacement name for *fontinalis truncata* Lohse).

**foveolata** Luze, 1903a: 187 (*Lesteva*; Type locality: Apennin, Monte Penna, Ligurischer Apennin).

- Sainte-Claire Deville, 1907: 49 (*Lesteva*; [**Note:** Erroneously cited as *bifoveolata* Luze rather than *foveolata* Luze and cited by Scheerpeltz, 1933: 1063 as a synonym]; notes).
- Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).
- Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).
- Bordoni, 1973h: 234 (*Lesteva*; subgenus *Lestevina*).
- Zanetti, 1987: 344 (*Lesteva*; subgenus *Lestevina*; characters; Italy).
- Zanetti, 1995: 9 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** Italy.

*globulicollis* Mannerheim, 1830, see: *Geodromicus*.

**gracilis** Watanabe, 1990: 157 (*Lesteva*; Type locality: Japan: Honshu: Nara Pref.: Mt. Kasugayama).

- Watanabe, 1993c (*Lesteva*; Sadogashima Island).
- Watanabe, 1996a: 9 (*Lesteva*; cave collection; Japan).

▲ **DISTRIBUTION:** Japan.

**graeca** Scheerpeltz, 1931: 363, 367 (*Lesteva*; Type locality: Voidia-Stock, Peloponnes; also listed from southern Bosnia, Herzegovina, Montenegro, Bulgaria, Macedonia, Thessalia, and Greece).

- Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).
- Scheerpeltz, 1963a: 415 (*Lesteva*; Greece).
- Tóth, 1982: 100 (*Lesteva*; characters).
- Bordoni, 1987b: 92 (*Lesteva*; characters).

— Zanetti, 1987: 348, 359 (*Lesteva*; characters; use by C. Koch, 1937: 86 is misidentification of *luctuosa*).

▲ **DISTRIBUTION:** Greece, Bosnia Herzegovina, Bulgaria, Macedonia.

*gustavi* Herman, 2001, see: *fontinalis* Kiesenwetter, 1850.

**huabeiensis** Rougemont, 2000: 156 (*Lesteva*; Type locality: China: Beijing Panshan).

▲ **DISTRIBUTION:** China.

**hammondi** Watanabe, 1990: 166 (*Lesteva*; Type locality: Japan: Honshu: Nagano Pref.: Shimashima Val.).

▲ **DISTRIBUTION:** Japan.

**hanseni** Lohse, 1953: 588 (*Lesteva*; Type locality: Horster Mühle).

— Lohse, 1955: 507 (*Lesteva*; characters; Spain; France; Great Britain; Germany; Denmark).

— Lohse, 1956a: 55 (*Lesteva*; characters; Germany).

— Lohse, 1960: 4 (*Lesteva*; Iberian Peninsula).

— Horion, 1963: 129 (*Lesteva*; Spain; France; Britain; Denmark; western North Africa; Germany).

— Lohse, 1964: 59 (*Lesteva*; characters; central Europe).

— Steel, 1970a: 21 (*Lesteva*; biological notes).

— Coiffait, 1973a: 270 (*Lesteva*; Morocco).

— Pope, 1977: 22 (*Lesteva*; Britain).

— Hammond, 1980: 136 (*Lesteva*; Ireland).

— Frank, 1982: 8 (*Lesteva*; list of parasites).

— Zanetti, 1987: 363 (*Lesteva*; subgenus *Lesteva*; characters; Italy).

— Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Benelux; Denmark; Sweden).

— Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; Slovakia; Czech Republic).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

▲ **DISTRIBUTION:** Ireland, Britain, Denmark, Germany, France, Italy, Spain, Morocco.

*heeri* Fauvel, 1871, see: *sicula* Erichson, 1840.

*hookeri* Stephens, 1834, see: *Anthophagus*.

**ihsseni** Lohse, 1956a: 58 (*Lesteva*; Type locality: Schachen im Wettersteingebirge).

— Horion, 1963: 131 (*Lesteva*; Austria; Germany; Switzerland).

— Lohse, 1964: 61 (*Lesteva*; characters; central Europe).

— Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Austria; Switzerland).

▲ **DISTRIBUTION:** Austria, Germany, Switzerland.

*impressa* Stephens, 1834, see: *longoelytrata* Goeze, 1777.

*intermedia* Gravenhorst, 1806, see: *longoelytrata* Goeze, 1777.

**japonica** Watanabe, 1990: 172 (*Lesteva*; Type locality: Japan: Honshu: Tochigi Pref.: near Lake Sainoko, Oku-Nikkô).

▲ **DISTRIBUTION:** Japan.

**juno** Smetana, 1967e: 303 (*Lesteva*; Type locality: Türkei: Sultan dag, 2000 m).

▲ **DISTRIBUTION:** Turkey.

**kargilensis** Cameron, 1934: 17 (*Lesteva*; Type locality: Indian Tibet: Kargil).

— Lohse, 1982: 201, 204 (*Lesteva*; characters; India).

— Coiffait, 1982: 42 (*Lesteva*; characters; India).

▲ **DISTRIBUTION:** China, India.

*karnoschizkyi* Scheerpeltz, 1937, see: *monticola* Kiesenwetter, 1847.

**kirbii** Stephens, 1834: 363 (*Lesteva*; [Note: **Nomen dubium**]; Type locality: North Wales).

— Stephens, 1839: 432 (*Lesteva*; characters; Wales).

▲ **DISTRIBUTION:** Britain.

**kojohamana** Watanabe, 1990: 157 (*Lesteva*; Type locality: Japan: Hokkaido: Kojôhama, Iburî).

▲ **DISTRIBUTION:** Japan.

**latipes** Lohse and Steel, 1961: 74 (*Lesteva*; Type locality: Cyprus: Prodomos, Trikouche).  
— Assing and Wunderle, 2001: 36 (*Lesteva*; Cyprus).

▲ **DISTRIBUTION:** Cyprus.

*leachii* Curtis, 1830, see: *Deleaster*.

**lepontia** Baudi, 1870: 401 (*Lesteva*; Type locality: Alpi Lepontii Domodossola; [**Note:** See lectotype designation by Zanetti, 1986]).

— Mulsant and Rey, 1880: 80 (*Lesteva*; synonym of *pandellei*).

— Ganglbauer, 1895: 713 (*Lesteva*; synonym of *fontinalis*).

— Luze, 1903a: 195 (*Lesteva*; synonym of *pandellei*).

— Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *pandellei*).

— Zanetti, 1986: 97 (*Lesteva*; lectotype designation).

— Zanetti, 1987: 365 (*Lesteva*; subgenus *Lesteva*; valid species; characters; Italy).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

— Zanetti and Sabella, 1998: 34 (*Lesteva*; notes; Sicily).

▲ **DISTRIBUTION:** Italy.

**lewisi** Cameron, 1930c: 182 (*Lesteva*; Type locality: Kobe: Shinowara).

— Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).

— Watanabe, 1990: 163 (*Lesteva*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**longicornis** Bernhauer, 1929g: 179 (*Lesteva*; Type locality: nordalbanische Alpen, Pajs-Gruppe; Montenegro: Berg Maganik).

— Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).

— Jeannel and Jarrige, 1949: 321 (*Lesteva*; characters; notes; cave species; Serbia).

— Bordoni, 1987b: 90 (*Lesteva*; characters; Albania; Greece).

▲ **DISTRIBUTION:** Albania, Yugoslavia, Greece.

*montenegrina* Bordoni, 1987b: 92 (*Lesteva*; subspecies of *longicornis*; Type locality: Montenegro, Monti Maganik, Crna Gora).

*longipes* Mannerheim, 1830, see: *Geodromicus*.

**longelytrata** Goeze, 1777: 729 (*Staphylinus*; Type locality: Not cited).

— Stephens, 1834: 361 (*Lesteva*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 71 cited *alpina* Fabricius as a synonym of *longelytrata* Goeze; Stephens did not describe the species as new, he attributed it to Fabricius]; characters; England).

— Fauvel, 1871a: 130 [= 1872: 104] (*Lesteva*; characters; France; Europe; Caucasus).

— Fauvel, 1874: 324 [= 1874b: 30] (*Lesteva*; Turkey).

— J. Sahlberg, 1876: 209 (*Lesteva*; Finland).

— Fauvel, 1878: 90 [= 1878a: 10] (*Lesteva*; Algeria).

— Fauvel, 1886: 16 [= 1886a: 8] (*Lesteva*; Algeria).

— Fowler, 1888: 401 (*Lesteva*; characters; Britain).

— Eppelsheim, 1892: 346 (*Lesteva*; Turkmenia).

— Ganglbauer, 1895: 714 (*Lesteva*; characters; Europe).

— Fauvel, 1902b: 56 (*Lesteva*; Algeria).

— Luze, 1903a: 189 (*Lesteva*; characters; Europe; Caucasus).

— Poppus, 1905: 11 (*Lesteva*; Orkney Islands).

— Sainte-Claire Deville, 1906: 71 (*Lesteva*; Corsica).

— Reitter, 1909: 184 (*Lesteva*; cited as *longelytrata*; characters; Germany).

— Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).

— Poppus, 1913: 10 (*Lesteva*; Faroes; Iceland).

— Johansen, 1914: 589 (*Lesteva*; characters; Denmark).

— Portevin, 1929: 437 (*Lesteva*; characters; France).

— Bernhauer, 1931e: 9 (*Lesteva*; Spain).

— Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).

— West, 1937: 43 (*Lesteva*; Faroe Islands).

— C. Koch, 1940: 373 (*Lesteva*; Spain).

— C. Koch, 1941: 54 (*Lesteva*; Morocco).

- Palm, 1948: 119 (*Lesteva*; characters; Sweden; Denmark; Norway; Finland).
- Jeannel and Jarrige, 1949: 320 (*Lesteva*; characters; notes; cave species; France; Spain; Romania; Yugoslavia).
- Lohse, 1956a: 56 (*Lesteva*; characters; Germany).
- Larsson and Gígja, 1959: 70 (*Lesteva*; biological notes; Iceland).
- Lohse, 1960: 3 (*Lesteva*; Iberian Peninsula).
- Scheerpeltz, 1961d: 117 (*Lesteva*; Italy).
- Horion, 1963: 129 (*Lesteva*; Caucasus; Turkey; Scotland; Norway; Sweden; Finland; Russia; Mediterranean from Portugal to Greece; Germany; Austria).
- Lohse, 1964: 59 (*Lesteva*; characters; central Europe).
- Smetana, 1964d: 55 (*Lesteva*; Czechoslovakia).
- Scheerpeltz, 1965b: 392 (*Lesteva*; Sicily).
- Coiffait, 1970e: 64 (*Lesteva*; cited as *longelytrata*; Cyprus).
- Coiffait, 1973a: 269 (*Lesteva*; cited as *longelytrata*; Morocco).
- Pope, 1977: 22 (*Lesteva*; Britain).
- Coiffait, 1978d: 166 (*Lesteva*; cited as *longelytrata*; Turkey).
- Hammond, 1980: 136 (*Lesteva*; Ireland).
- Tóth, 1982: 99 (*Lesteva*; cited as *longelytrata*; characters; Hungary).
- Bordoni, 1984: 331 (*Lesteva*; cited as *longelytrata*; Lebanon).
- Zanetti, 1984: 77 (*Lesteva*; cited as *longelytrata*; Bulgaria).
- Zanetti, 1987: 353 (*Lesteva*; subgenus *Lesteva*; characters; Italy; Asia Minor ?; Caucasus; North Africa ?).
- Ádám, 1987: 138 (*Lesta*; collecting notes; Hungary).
- Lucht, 1987: 89 (*Lesteva*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; Slovakia; Czech Republic).
- Dettner and Reissenweber, 1991 (*Lesteva*; defensive secretions: chemistry and systematics).
- Sadler and Dugmore, 1995: 144 (*Lesteva*; habitat notes; Iceland).
- Sparacio, 1995: 143 (*Lesteva*; characters; notes; Sicily).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- Zanetti and Sabella, 1998: 33 (*Lesteva*; Sicily).
- Bordoni and Oromi, 1998: 1157 (*Lesteva*; facultative cave species; Europe; caves of Romania).
- Assing, Frisch, Kahlen, et al., 1998: 125 (*Lesteva*; note).
- Outerelo, Gamarra, and Salgado, 1998: 124 (*Lesteva* (*Lestevidia*); collected from cave; Spain; Portugal).
- ▲ **DISTRIBUTION:** Iceland, Orkney Islands, Faroe Islands, Europe, Russia, Georgia, Armenia, Azerbaijan, Turkmenistan, Turkey, Lebanon, Algeria, Morocco.

*macroclytron* Geoffroy, 1785: 164 (*Staphylinus*; Type locality: Paris).

- Villers, 1789: 421 (*Staphylinus*; characters).
- Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
- Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
- Fauvel, 1871a: 130 [= 1872: 104] (*Lesteva*; synonym of *longoelytrata*).
- Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
- Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).

*bicolor* Paykull, 1789: 21 (*Staphylinus*; [**Note:** This name is rarely cited with Paykull as author; Fabricius cited the species in 1793: 529 and that reference is usually cited as the original description]; Type locality: Not cited).

- Fabricius, 1793: 529 (*Staphylinus*; [**Note:** This reference is usually cited as the original description of *bicolor* but Fabricius attributed the species to Paykull]; characters; France).
- Paykull, 1800: 381 (*Staphylinus*; characters; Sweden).
- Fabricius, 1801: 600 (*Staphylinus*; characters; France).
- Turton, 1802: 514 (*Staphylinus*; characters; France).
- Gyllenhal, 1810: 196 (*Anthophagus*; [**Note:** Gyllenhal attributed *bicolor* to Fabricius who attributed it to Paykull]; synonym of *obscurus*).



- Gyllenhal, 1810: 350 (*Staphylinus*; synonym of *longiceps* Gravenhorst).
  - C. Sahlberg, 1830: 331 (*Staphylinus*; synonym of *longiceps* Gravenhorst).
  - Erichson, 1839a: 616 (*Lesteva*; [**Note:** Cited as *bicolor* Fabricius but the species was not described by Fabricius; he attributed it to Paykull]; characters; Germany).
  - Heer, 1839: 192 (*Lesteva*; synonym of *obscura*).
  - Erichson, 1840: 855 (*Lesteva*; characters; Europe).
  - Laporte, 1840: 192 (*Anthophagus*; synonym of *obscurus*).
  - Kolenati, 1846: 27 (*Anthophagus*; Caucasus; Transcaucasus).
  - Hochhuth, 1849: 203 (*Lesteva*; characters; Caucasus).
  - Redtenbacher, 1849: 747 (*Lesteva*; characters; Austria).
  - Kiesenwetter, 1851a: 434 (*Lesteva*; Pyrenees).
  - Hardy, 1851: 55 (*Lesteva*; notes; England).
  - Fairmaire and Laboulbène, 1856: 630 (*Lesteva*; characters; France).
  - Staudinger, 1857: 286 (*Lesteva*; notes; Iceland).
  - Redtenbacher, 1857: 244 (*Lesteva*; [**Note:** Cited as *bicolor* Fabricius]; characters; Austria).
  - Kraatz, 1857d: 932 (*Lesteva*; characters; Germany).
  - Thomson, 1859: 48 (type species of *Lesteva*).
  - Thomson, 1861: 182 (*Lesteva*; characters; Scandinavia).
  - Fauvel, 1871a: 130 [= 1872: 104] (*Lesteva*; synonym of *longoelytrata*).
  - Redtenbacher, 1874: 267 (*Lesteva*; characters; Austria).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; characters; France).
  - Ganglbauer, 1895: 714 (*Lesteva*; [**Note:** Attributed to Fabricius]; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; [**Note:** Attributed to Fabricius]; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 71 (*Lesteva*; attributed to Fabricius; synonym of *longoelytrata*).
  - Scheerpeltz, 1933: 1063 (*Lesteva*; attributed to Fabricius; synonym of *longoelytrata*).
  - Zanetti, 1987: 353 (*Lesteva*; synonym of *longoelytrata*).
- dimidiata* Panzer, 1795: 367 (*Carabus*; Type locality: Austria).
- Panzer, 1796d: 3 (*Carabus*; [**Note:** Bernhauer and Schubert, 1910: 72 cited this reference as the original description but Panzer referred to his earlier work]; characters; illustrations; Austria).
  - Latreille, 1804: 369 (*Lesteva*; synonym of *punctulata* Latreille).
  - Latreille, 1806: 297 (*Lesteva*; synonym of *punctulata* Latreille).
  - Panzer, 1808a: 3 (*Carabus*; characters; illustrations; Austria).
  - Curtis, 1830: pl. 303 (*Lesteva*; synonym of *obscura* Paykull).
  - Heer, 1839: 192 (*Lesteva*; synonym of *obscura*).
  - Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
  - Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- multipunctata* Block, 1799: 117 (*Staphylinus*; Type locality: Plauischer Grund bei Dresden).
- Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - Zerche, 2000: 52 (*Lesteva*; synonym of *longoelytrata*).
- obscura* Paykull, 1800: 388 (*Staphylinus*; [**preoccupied**]; Type locality: Suecia; Germania).
- Gravenhorst, 1802: 122 (*Anthophagus*; characters).
  - Latreille, 1804: 368 (*Lesteva*; characters).
  - Gravenhorst, 1806: 221 (*Anthophagus*).
  - Gyllenhal, 1810: 196 (*Anthophagus*; characters).
  - Gyllenhal, 1827: 461 (*Anthophagus*).
  - C. Sahlberg, 1827: 276 (*Anthophagus*; characters; Finland).
  - Zetterstedt, 1828: 47 (*Anthophagus*; characters; Lapland).
  - Curtis, 1829: 29 (*Lesteva*; catalog; Britain).
  - Curtis, 1830: pl. 303 (*Lesteva*; habitat; Britain).

- Mannerheim, 1830: 57 (*Lesteva*; Finland; Sweden).
  - Mannerheim, 1831: 471 (*Lesteva*; Finland; Sweden).
  - Stephens, 1834: 361 (*Lesteva*; characters; England).
  - Runde, 1835: 24 (*Lesteva*; characters; Germany).
  - Lacordaire, 1835: 483 (*Lesteva*; characters; France).
  - Zetterstedt, 1838: 49 (*Anthophagus*; characters; habitat; Lapland; Sweden).
  - Heer, 1839: 192 (*Lesteva*; characters; Switzerland).
  - Stephens, 1839: 431 (*Lesteva*; characters; England).
  - Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Laporte, 1840: 192 (*Anthophagus*; characters; France).
  - Kolenati, 1846: 27 (*Anthophagus*; synonym of *bicolor*).
  - Redtenbacher, 1849: 747 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - G. Waterhouse, 1858: 31 (*Lesteva*; synonym of *bicolor*).
  - Seidlitz, 1875: 241 (*Lesteva*; characters; Baltic region).
  - J. Sahlberg, 1876: 209 (*Lesteva*; synonym of *longoelytrata*).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
  - Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- staphylinoides* Marsham, 1802: 464 (*Carabus*; Type locality: Britain).
- Latreille, 1804: 369 (*Lesteva*; synonym of *punctulata* Latreille).
  - Latreille, 1806: 297 (*Lesteva*; synonym of *punctulata* Latreille).
  - Curtis, 1830: pl. 303 (*Lesteva*; synonym of *obscura* Paykull).
  - Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
  - Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- punctulata* Latreille, 1804: 369 (*Lesteva*; Type locality: France; Paris; Angleterre).
- Latreille, 1806: 297 (*Lesteva*; characters; France).
  - Leach, 1815: 92 (*Anthophagus*; characters; France; England).
  - Samouelle, 1819: 175 (*Lesteva*, cited as *Lestiva*; characters).
  - Heer, 1839: 192 (*Lesteva*; synonym of *obscura*).
  - Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
  - Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- intermedia* Gravenhorst, 1806: 221 (*Anthophagus*; Type locality: Brunsvigae).
- Heer, 1839: 192 (*Lesteva*; synonym of *obscura*).
  - Erichson, 1840: 855 (*Lesteva*; synonym of *bicolor*).
  - Redtenbacher, 1849: 747 (*Lesteva*; synonym of *bicolor*).
  - Kraatz, 1857d: 932 (*Lesteva*; synonym of *bicolor*).
  - Mulsant and Rey, 1880: 72 (*Lesteva*; synonym of *bicolor*).
  - Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
  - Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- longula* Mannerheim, 1830: 57 (*Lesteva*; Type locality: Willnäs).
- Mannerheim, 1831: 471 (*Lesteva*; Finland).
  - Erichson, 1840: 857 (*Lesteva*; characters; Finland).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).

- rufitarsis* Stephens, 1834: 362 (*Lesteva*; Type locality: Charlton Wood; Devonshire).  
 — Stephens, 1839: 431 (*Lesteva*; characters; England).  
 — G. Waterhouse, 1858: 31 (*Lesteva*; synonym of *bicolor*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- impressa* Stephens, 1834: 363 (*Lesteva*; Type locality: London; Somersetshire; Barham).  
 — Stephens, 1839: 432 (*Lesteva*; characters; England).  
 — Hardy, 1851: 55 (*Lesteva*; notes; England).  
 — G. Waterhouse, 1858: 31 (*Lesteva*; synonym of *bicolor*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- nigripes* Stephens, 1834: 363 (*Lesteva*; Type locality: London).  
 — Stephens, 1839: 432 (*Lesteva*; characters; England).  
 — G. Waterhouse, 1858: 31 (*Lesteva*; synonym of *bicolor*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- planipennis* Stephens, 1834: 363 (*Lesteva*; Type locality: Yorkshire; Bristol).  
 — Holme, 1837: 64 (*Lesteva*; Scilly Islands).  
 — Stephens, 1839: 432 (*Lesteva*; characters; England).  
 — G. Waterhouse, 1858: 31 (*Lesteva*; synonym of *bicolor*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- maura* Erichson, 1840: 856 (*Lesteva*; Type locality: Sardinia).  
 — Redtenbacher, 1849: 747 (*Lesteva*; characters; Austria).  
 — Redtenbacher, 1857: 244 (*Lesteva*; characters; Austria).  
 — Kraatz, 1858b: 128 (*Lesteva*; Crete; Greece).  
 — Fauvel, 1865a: 317 [= 1865b: 67] (*Lesteva*; habitat; France).  
 — Redtenbacher, 1874: 266 (*Lesteva*; characters; Austria).  
 — Mulsant and Rey, 1880: 75 (*Lesteva*; characters; Corsica; Sicily).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; “infraspecies” of *longoelytrata*; [Note: Luze did not specify whether this taxon was a subspecies, variety, form or aberration]; Sardinia).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; variety of *longoelytrata*).  
 — Scheerpeltz, 1933: 1063 (*Lesteva*; variety of *longoelytrata*).  
 — Pope, 1977: 22 (*Lesteva*; synonym of *longoelytrata*).  
 — Tóth, 1982: 99 (*Lesteva*; variety of *longoelytrata*; characters; Hungary).  
 — Zanetti, 1987: 353 (*Lesteva*; subgenus *Lesteva*; subspecies of *longoelytrata*; characters; Sardinia; Corsica).  
 — Zanetti, 1995: 9 (*Lesteva*; subspecies of *longoelytrata*; Italy).
- oblonga* Motschulsky, 1857a: 493 (*Lesteva*; Type locality: chateau Starnberg en Baviere).  
 — Fauvel, 1871a: 130 [= 1872: 104] (*Lesteva*; synonym of *longoelytrata*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- major* Mulsant and Rey, 1870: 117 [= 1871: 93] (*Lesteva*; Type locality: Mont-Pilat, Loire).  
 — Fauvel, 1871a: 128 [= 1872: 102] (*Lesteva*; synonym of *fontinalis*).  
 — Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- dorsalis* Reitter, 1909: 184 (*Lesteva*; variety of *longoelytrata*; Type locality: Araxestal).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; variety of *longoelytrata*).

*cretica* Lohse and Steel, 1961: 76 (*Lesteva*; subspecies of *longoelytrata*; Type locality: Crete: Antr. Jovis, Mt. Ida, 2200 m).

— Zanetti, 1987: 353 (*Lesteva*; subgenus *Lesteva*; subspecies of *longoelytrata*; characters; Crete).

*longula* Mannerheim, 1830, see: *longoelytrata* Goeze, 1777.

**luctuosa** Fauvel, 1871a: 129 [= 1872: 103] (*Lesteva*; Type locality: Guiers-Mort, près la Grande-Chartreuse; [Note: See lectotype designation by Zanetti, 1986]).

— Ganglbauer, 1895: 713 (*Lesteva*; characters; French Alps).

— Luze, 1903a: 193 (*Lesteva*; characters; France; Caucasus).

— Bernhauer and Schubert, 1910: 72 (*Lesteva*; catalog).

— Portevin, 1929: 438 (*Lesteva*; characters; France).

— Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).

— Jeannel and Jarrige, 1949: 318 (*Lesteva*; characters; cave species; France).

— Horion, 1956: 3 (*Lesteva*; notes).

— Lohse, 1956a: 58 (*Lesteva*; characters; Germany).

— Horion, 1963: 132 (*Lesteva*; France; Germany; Austria; Slovakia; Germany; Austria).

— Lohse, 1964: 60 (*Lesteva*; characters; central Europe).

— Smetana, 1964c: 164 (*Lesteva*; Czechoslovakia).

— Jarrige, 1968b: 75 (*Lesteva*; France).

— Tóth, 1982: 100 (*Lesteva*; characters).

— Zanetti, 1986: 97 (*Lesteva*; lectotype designation).

— Zanetti, 1987: 358 (*Lesteva*; subgenus *Lesteva*; characters; Italy).

— Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Czechoslovakia; Austria).

— Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; Slovakia).

— Zanetti, 1995: 9 (*Lesteva*; Italy).

— Burakowski, Mroczkowski, and Stefańska, 2000: 42 (*Lesteva*; catalog; Poland).

▲ **DISTRIBUTION:** France, Germany, Czechoslovakia, Italy, Bulgaria, Greece, Macedonia, Bosnia Hercegovina, Yugoslavia, Caucasus.

*peeziana* Scheerpeltz, 1957b: 481 (*Lesteva*; Type locality: Umgebung von Brixen).

— Lohse, 1964: 60 (*Lesteva*; synonym of *luctuosa*).

— Zanetti, 1987: 358 (*Lesteva*; synonym of *luctuosa*).

**lusitana** Lohse, 1955a: 513 (*Lesteva*; Type locality: Covilhao).

— Lohse, 1960: 3 (*Lesteva*; Iberian Peninsula).

▲ **DISTRIBUTION:** Portugal.

*macroclytron* Geoffroy, 1785, see: *longoelytrata* Goeze, 1777.

**maculipennis** Luze, 1903a: 189 (*Lesteva*; “infraspecies” of *longoelytrata*; [Note: Luze did not specify whether this taxon was a subspecies, variety, form or aberration]; Type locality: Kleinasien, bithynischer Olymp bei Brussa).

— Bernhauer and Schubert, 1910: 72 (*Lesteva*; variety of *longoelytrata*).

— Smetana, 1967e: 302 (*Lesteva*; valid species; characters; Turkey).

▲ **DISTRIBUTION:** Turkey.

*major* Rey, 1870, see: *longoelytrata* Goeze, 1777.

**mariei** Jarrige, 1963: 164 (*Lesteva*; Type locality: Bagnères de Bigorre, Hautes Pyrénées).

▲ **DISTRIBUTION:** France.

**mateui** Jarrige, 1954: 77 (*Lesteva*; Type locality: Spain: Sierra Nevada, Corral del Veleta).

▲ **DISTRIBUTION:** Spain.

*cobosi* Coiffait, 1970c: 110 (*Lesteva*; Type locality: Fuente Bermejo, La Iruela, Sierra de Cazorla, Andalousie).

— Outerelo, 1980a: 54 (*Lesteva*; Spain).

— Lohse, 1987: 135 (*Lesteva*; synonym of *mateui*).

*maura* Erichson, 1840, see: *longoelytrata* Goeze, 1777.

**minima** Watanabe, 1990: 153 (*Lesteva*; Type locality: Japan: Honshu: Tokyo Pref.: Nippara, Oku-Tama).

▲ **DISTRIBUTION:** Japan.

**miyabi** Watanabe, 1990: 175 (*Lesteva*; Type locality: Japan: Honshu: Gunma Pref.: near Marunuma, Oku-Nikkô).

▲ **DISTRIBUTION:** Japan.

**miyamorii** Watanabe, 1990: 174 (*Lesteva*; Type locality: Japan: Hokkaido: Muroran Iburi).

▲ **DISTRIBUTION:** Japan.

**mollis** Rougemont, 2000: 151 (*Lesteva*; Type locality: China: Zhejiang Prov., Anji County, ca. 500 m, Long Wang Shan N.R.).

▲ **DISTRIBUTION:** China.

**monticola** Kiesenwetter, 1847: 77 (*Lesteva*; Type locality: Riesengebirge).

- Redtenbacher, 1849: 828 (*Lesteva*; characters).
  - Redtenbacher, 1857: 245 (*Lesteva*; characters; Germany).
  - Kraatz, 1857d: 933 (*Lesteva*; characters; Germany).
  - Fauvel, 1865a: 317 [= 1865b: 67] (*Lesteva*; habitat; France).
  - Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; characters; France; Britain; Germany; Switzerland).
  - Redtenbacher, 1874: 267 (*Lesteva*; characters; Germany).
  - Mulsant and Rey, 1880: 75 (*Lesteva*; characters; France).
  - Ganglbauer, 1895: 714 (*Lesteva*; characters; Europe).
  - Luze, 1903a: 190 (*Lesteva*; characters; central Europe).
  - Poppus, 1905: 11 (*Lesteva*; Shetland Islands).
  - Reitter, 1909: 184 (*Lesteva*; characters; Germany).
  - Bernhauer and Schubert, 1910: 72 (*Lesteva*; catalog).
  - Portevin, 1929: 437 (*Lesteva*; characters; France).
  - Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
  - Palm, 1948: 120 (*Lesteva*; characters; Sweden; Norway; Finland).
  - Lohse, 1956a: 56 (*Lesteva*; characters; Germany).
  - Lohse, 1960: 4 (*Lesteva*; Iberian Peninsula).
  - Horion, 1963: 130 (*Lesteva*; Iceland; Britain; Norway; Sweden; Finland; Czech Republic; Slovakia; Poland; Austria; Germany; Italy; Switzerland; France; Belgium; Bosnia; Greece).
  - Lohse, 1964: 60 (*Lesteva*; characters; central Europe).
  - Jarrige, 1968b: 75 (*Lesteva*; France).
  - Steel, 1970a: 21 (*Lesteva*; biological notes).
  - Pope, 1977: 22 (*Lesteva*; Britain).
  - Hammond, 1980: 136 (*Lesteva*; need confirmation in Ireland).
  - Tóth, 1982: 100 (*Lesteva*; characters).
  - Zanetti, 1984: 77 (*Lesteva*; Bulgaria).
  - Zanetti, 1987: 355 (*Lesteva*; subgenus *Lesteva*; characters; Italy).
  - Lucht, 1987: 89 (*Lesteva*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
  - Siitonen, 1993: 227 (*Lesteva*; notes; Finland).
  - Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; Slovakia; Czech Republic).
  - Zanetti, 1995: 9 (*Lesteva*; Italy).
  - Zanetti and Sabella, 1998: 33 (*Lesteva*; Sicily).
  - Assing, Frisch, Kahlen, et al., 1998: 125 (*Lesteva*; note).
- ▲ **DISTRIBUTION:** Europe, Turkey.

**collina** Haliday, 1855: 11 (*Lesteva*; variety of *bicolor*; Type locality: Lugnaquilla and Brandon).

- Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; synonym of *monticola*).
- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *monticola*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *monticola*).

**sharpi** Rye, 1866: 124 (*Lesteva*; Type locality: Scotland: Gareloch-head; Rannoch).

- Fauvel, 1869: 493 (*Lesteva*; synonym of *monticola*).
- Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; synonym of *monticola*).
- Mulsant and Rey, 1880: 76 (*Lesteva*; synonym of *monticola*).
- Fowler, 1888: 401 (*Lesteva*; characters; Britain).

- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *monticola*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *monticola*).
- Scheerpeltz, 1933: 1064 (*Lesteva*; synonym of *monticola*).
- Pope, 1977: 22 (*Lesteva*; synonym of *monticola*).

*nivicola* Fauvel, 1871a: 130 [= 1872: 104] (*Lesteva*; Fauvel cited *nivicola* as a manuscript name of Kraatz and as a synonym of *longoelytrata* but Fauvel also cited characters for the species; Type locality: Not cited).

- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *longoelytrata*).
- Luze, 1903a: 189 (*Lesteva*; synonym of *longoelytrata*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *longoelytrata*).
- Lohse, 1956a: 56 (*Lesteva*; cited as valid species; characters; Germany).
- Horion, 1963: 131 (*Lesteva*; Holland; Belgium; Germany; Austria; Italy; Switzerland).
- Lohse, 1964: 60 (*Lesteva*; characters; central Europe).
- Smetana, 1967e: 303 (*Lesteva*; Turkey).
- Jarrige, 1968b: 75 (*Lesteva*; notes; France).
- Korge, 1971a: 6 (*Lesteva*; Turkey).
- Tóth, 1982: 99 (*Lesteva*; characters).
- Zanetti, 1984: 77 (*Lesteva*; valid species? or ecological race? of *monticola*; Bulgaria).
- Zanetti, 1987: 355 (*Lesteva*; synonym of *monticola*).
- Lucht, 1987: 89 (*Lesteva*; checklist; Germany; Poland; Austria; Switzerland; Benelux).
- Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; [Note: I assume the synonymy with *monticola* was overlooked]; Slovakia; Czech Republic).
- Assing, Frisch, Kahlen, et al., 1998: 125 (*Lesteva*; synonym of *monticola*).

*pandellei* Fauvel, 1871: 18 (*Lesteva*; Type locality: Gavarnie, Hautes-Pyrénées).

- Fauvel, 1871a: 129 [= 1872: 103] (*Lesteva*; characters; France).
- Fauvel, 1876a: 53 [= 1876: 238] (*Lesteva*; Spain).
- Mulsant and Rey, 1880: 79 (*Lesteva*; characters; France).
- Ganglbauer, 1895: 713 (*Lesteva*; characters; Italian and French Alps; Pyrenees).
- Fauvel, 1902b: 56 (*Lesteva*; Algeria).
- Luze, 1903a: 195 (*Lesteva*; characters; Pyrenees; France and Italian Alps; Dalmatia).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; catalog).
- Portevin, 1929: 438 (*Lesteva*; characters; France).
- Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
- Horion, 1935: 170 (*Lesteva*; characters; Germany).
- Jeannel and Jarrige, 1949: 315, 317 (*Lesteva*; subgenus *Lestevella*; characters; cave species; Spain).
- Zanetti, 1987: 355 (*Lesteva*; synonym of *monticola*).

*karnoschizkyi* Scheerpeltz, 1937b: 192 (*Lesteva*; Type locality: Bulgarien: Massiv des Masalat, Schipka-Balkan, ca. 1900 m).

- Zanetti, 1984: 77 (*Lesteva*; synonym of *monticola*).
- Zanetti, 1987: 355 (*Lesteva*; synonym of *monticola*).

*montenegrina* Bordoni, 1987, see: *longicornis* Bernhauer, 1929.

**morvani** Jarrige, 1971: 489 (*Lesteva*; Type locality: Iran: Elbourz, Massif du Kuh-I-Kahar, à 10 km de Gash-I-Sar, alt. 3000 m. versant N.).

▲ **DISTRIBUTION:** Iran.

*multipunctata* Block, 1799, see: *longoelytrata* Goeze, 1777.

*muscorum* Jacquelin du Val, 1859, see: *punctata* Erichson, 1839.

*nigra* Kraatz, 1857, see: *fontinalis* Kiesenwetter, 1850.

*nigripes* Stephens, 1834, see: *longoelytrata* Goeze, 1777.

**nipponica** Watanabe, 1990: 164 (*Lesteva*; Type locality: Japan: Honshu: Nara Pref.: Mt. Kasuga-yama).

▲ **DISTRIBUTION:** Japan.

- nitidicollis** Lohse and Steel, 1961: 72 (*Lesteva*; Type locality: Crete: Antr. Jovis, Mt. Ida).  
 ▲ **DISTRIBUTION:** Crete.
- nivalis** Rougemont, 2000: 151 (*Lesteva*; Type locality: China: W. Sichuan [15], Daxue Shan, Hailuogou Glacier Park, Camp 2, 2550–2700 m, 29.35.16N, 102.01.53E).  
 ▲ **DISTRIBUTION:** China.
- nivicola* Fauvel, 1871, see: *monticola* Kiesenwetter, 1847.
- nova** Bernhauer, 1902c: 60 (*Lesteva*; Type locality: Turkestan, Aulie Ata).  
 — Luze, 1903a: 191 (*Lesteva*; characters; Russisches Zentralasien, Provinz Sir Daja, Aulie Ata).  
 — Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; catalog).  
 ▲ **DISTRIBUTION:** Kazakhstan.
- oblonga* Motschulsky, 1857, see: *longoelytrata* Goeze, 1777.
- obscura* Paykull, 1800, see: *longoelytrata* Goeze, 1777.
- omissa** Mulsant and Rey, 1880: 71 (*Lesteva*; Type locality: Corse).  
 — Ganglbauer, 1895: 713 (*Lesteva*; synonym of *fontinalis*).  
 — Luze, 1903a: 195 (*Lesteva*; synonym of *fontinalis*).  
 — Bernhauer and Schubert, 1910: 71 (*Lesteva*; synonym of *fontinalis*).  
 — Lohse, 1955: 510 (*Lesteva*; characters; Corsica; Italy).  
 — Zanetti, 1987: 363 (*Lesteva*; subgenus *Lesteva*; characters; Italy).  
 — Zanetti, 1995: 9 (*Lesteva*; Italy).  
 — Zanetti and Sabella, 1998: 34 (*Lesteva*; notes; Sicily).  
 — Assing, Frisch, Kahlen, et al., 1998: 125 (*Lesteva*; note).  
 ▲ **DISTRIBUTION:** Corsica, Italy, Germany, Austria, Switzerland.
- carinthiaca* Lohse, 1955: 508 (*Lesteva*; Type locality: Millstadt in Kärnten).  
 — Lohse, 1956a: 55 (*Lesteva*; characters; Germany).  
 — Horion, 1963: 128 (*Lesteva*; Germany; Austria; Italy; Switzerland).  
 — Lohse, 1964: 59 (*Lesteva*; characters; central Europe).  
 — Jarrige, 1968b: 75 (*Lesteva*; France).  
 — Zanetti, 1986: 96 (*Lesteva*; subspecies of *omissa*).  
 — Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Austria; Switzerland).  
 — Zanetti, 1987: 363 (*Lesteva*; subgenus *Lesteva*; subspecies of *omissa*; characters; Italy).  
 — Zanetti, 1995: 9 (*Lesteva*; subspecies of *omissa*; Italy).  
 — Assing, Frisch, Kahlen, et al., 1998: 125 (*Lesteva*; synonym of *omissa*).
- peezi* Scheerpeltz, 1957b: 478 (*Lesteva*; Type locality: Altprags; Plabach bei Brixen).  
 — Lohse, 1964: 59 (*Lesteva*; synonym of *carinthiaca*).  
 — Zanetti, 1987: 363 (*Lesteva*; synonym of *omissa carinthiaca*).
- pakistana** Coiffait, 1984: 141 (*Lesteva*; Type locality: Pakistan: Murree-Abbottabad, 2200–2500 m).  
 ▲ **DISTRIBUTION:** Pakistan.
- pallipes** LeConte, 1863a: 55 (*Lesteva*; Type locality: Pennsylvania; Maryland).  
 — Fauvel, 1878d: 248 [= 1878e: 84] (*Lesteva*; characters; Lake Superior; Pennsylvania; Alabama; Maryland; Massachusetts; New Hampshire).  
 — Casey, 1894: 399 (*Pseudolesteva*).  
 — Bernhauer and Schubert, 1910: 73 (*Paralesteva*; catalog).  
 — Blatchley, 1910: 476 (*Lesteva*; characters; Indiana).  
 — Notman, 1920a: 180 (*Paralesteva*; New York).  
 — Moore and Legner, 1975: 194 (*Lesteva*; catalog).  
 — Campbell and Davies, 1991: 90 (*Lesteva*; checklist of species; Canada).  
 — Downie and Arnett, 1996: 438 (*Lesteva*; characters; USA).  
 ▲ **DISTRIBUTION:** Canada, USA.
- biguttula* LeConte, 1863a: 55 (*Lesteva*; Type locality: north shore of Lake Superior).  
 — Bernhauer and Schubert, 1910: 73 (*Paralesteva*; synonym of *pallipes*).

- picescens* LeConte, 1863a: 55 (*Lesteva*; Type locality: Alabama).  
 — Bernhauer and Schubert, 1910: 73 (*Paralesteva*; synonym of *pallipes*).
- pandellei* Fauvel, 1871, see: *monticola* Kiesenwetter, 1847.
- peezi* Scheerpeltz, 1957, see: *omissa* Rey, 1880.
- peezi* Scheerpeltz, 1957, see: *luctuosa* Fauvel, 1871.
- persimilis** Cameron, 1930c: 182 (*Lesteva*; Type locality: Kobe).  
 — Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).  
 — Watanabe, 1990: 162 (*Lesteva*; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- picescens* LeConte, 1863, see: *pallipes* LeConte, 1863.
- plagiata** Sharp, 1889: 472 (*Lesteva*; Type locality: Yokohama, Oyayama, Miyanoshita).  
 — Bernhauer and Schubert, 1910: 72 (*Lesteva*; catalog).  
 — Cameron, 1949b: 460 (*Lesteva*; Japan, Formosa).  
 — Nakane, 1963a: 83 (*Lesteva*; characters; habitus photograph; Japan).  
 — Watanabe, 1990: 155 (*Lesteva*; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- planipennis* Stephens, 1834, see: *longoelytrata* Goeze, 1777.
- pourtoyi** Jarrige, 1972: 158 (*Lesteva*; Type locality: Cirque de Mahourat, Pyr.-Atl.).  
 ▲ **DISTRIBUTION:** France.
- praeses** Fauvel, 1900: 223 (*Lesteva*; Type locality: Corse; [**Note:** See lectotype designation by Zanetti, 1986]).  
 — Luze, 1903a: 184 (*Lesteva*; characters; Corsica).  
 — Sainte-Claire Deville, 1906: 71 (*Lesteva*; Corsica).  
 — Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).  
 — Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).  
 — Zanetti, 1986: 97 (*Lesteva*; lectotype designation).  
 — Zanetti, 1987: 357 (*Lesteva*; subgenus *Lesteva*; characters; Corsica).  
 ▲ **DISTRIBUTION:** Corsica.
- pubescens** Mannerheim, 1830: 57 (*Lesteva*; Type locality: Sweden: Wetteren).  
 — Mannerheim, 1831: 471 (*Lesteva*; Sweden).  
 — Erichson, 1839a: 617 (*Lesteva*; characters; Germany).  
 — Heer, 1839: 192 (*Lesteva*; characters; Switzerland).  
 — Erichson, 1840: 856 (*Lesteva*; characters; Germany).  
 — Redtenbacher, 1849: 748 (*Lesteva*; characters; Austria).  
 — Kiesenwetter, 1851a: 434 (*Lesteva*; France).  
 — Fairmaire and Laboulbène, 1856: 630 (*Lesteva*; characters; France).  
 — Motschulsky, 1858d: 72 (*Lesteva*; synonym of *bicolor*).  
 — Redtenbacher, 1857: 244 (*Lesteva*; characters; Austria).  
 — Kraatz, 1857d: 931 (*Lesteva*; characters; Germany).  
 — Thomson, 1861: 183 (*Lesteva*; characters; Scandinavia).  
 — Fauvel, 1865a: 317 [= 1865b: 67] (*Lesteva*; habitat; France).  
 — Fauvel, 1871a: 127 [= 1872: 101] (*Lesteva*; characters; France; Scandinavia; Britain; Germany; Switzerland; Austria; Italy).  
 — Fauvel, 1874: 323 [= 1874b: 29] (*Lesteva*; Russia).  
 — Redtenbacher, 1874: 267 (*Lesteva*; characters; Austria).  
 — Seidlitz, 1875: 241 (*Lesteva*; characters; Baltic region).  
 — Mulsant and Rey, 1880: 66 (*Lesteva*; characters; France).  
 — Fowler, 1888: 402 (*Lesteva*; characters; Britain).  
 — Ganglbauer, 1895: 713 (*Lesteva*; characters; north and middle Europe).  
 — Luze, 1903a: 196 (*Lesteva*; characters; northern and central Europe).  
 — Reitter, 1909: 184 (*Lesteva*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).  
 — Johansen, 1914: 589 (*Lesteva*; characters; Denmark).



- Portevin, 1929: 437 (*Lesteva*; characters; France).
- Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
- Palm, 1948: 120 (*Lesteva*; characters; Sweden; Denmark; Norway).
- Jeannel and Jarrige, 1949: 315, 316 (*Lesteva*; subgenus *Lestevella*; characters; notes; cave species; France).
- Lohse, 1956a: 55 (*Lesteva*; characters; Germany).
- Horion, 1963: 127 (*Lesteva*; Britain; Norway; Sweden; Finland; Denmark; Holland; Belgium; Switzerland; France; Spain; Sardinia; Italy; Romania; Hungary; Czechoslovakia; Poland; Russia; Germany; Austria).
- Lohse, 1964: 60 (*Lesteva*; characters; central Europe).
- Jarrige, 1968b: 75 (*Lesteva*; France).
- Steel, 1970a: 21 (*Lesteva*; biological notes).
- Pope, 1977: 22 (*Lesteva*; Britain).
- Tóth, 1982: 100 (*Lesteva*; characters; Hungary).
- Frank, 1982: 8 (*Lesteva*; list of parasites).
- Zanetti, 1987: 366 (*Lesteva*; subgenus *Lesteva*; characters; Italy).
- Lucht, 1987: 90 (*Lesteva*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Lesteva*; subgenus *Lesteva*; Slovakia; Czech Republic).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- Bordoni and Oromi, 1998: 1157 (*Lesteva*; facultative cave species; caves in France).

▲ **DISTRIBUTION:** Europe, Russia.

*subaptera* Mulsant and Rey, 1880: 69 (*Lesteva*; variety of *pubescens*; Type locality: Not cited).

- Ganglbauer, 1895: 713 (*Lesteva*; variety of *pubescens*).
- Luze, 1903a: 196 (*Lesteva*; synonym of *pubescens*).
- Bernhauer and Schubert, 1910: 73 (*Lesteva*; synonym of *pubescens*).
- Jarrige, 1946a: 111 (*Lesteva*, cited as *Lestera*; subspecies of *pubescens*; France).
- Jarrige, 1968b: 75 (*Lesteva*; synonym of *pubescens*).
- Zanetti, 1987: 367 (*Lesteva*; synonym of *pubescens*).

*reyi* Jarrige, 1968b: 75 (*Lesteva*; subspecies of *pubescens*; Type locality: Pyrénées, up to 1200 m).

- Zanetti, 1987: 367 (*Lesteva*; synonym of *pubescens*).

**pulcherrima** Rougemont, 2000: 164 (*Lesteva*; Type locality: China: Zhejiang Prov., Anji County, ca. 1000 m, Long Wang Shan N.R.).

▲ **DISTRIBUTION:** China.

**punctata** Erichson, 1839a: 618 (*Lesteva*; Type locality: Mark Brandenburg).

- Erichson, 1840: 857 (*Lesteva*; characters; Germany).
- Redtenbacher, 1849: 747 (*Lesteva*; characters; Austria).
- Hardy, 1851: 55 (*Lesteva*; synonym of *impressa*).
- Fairmaire and Laboulbène, 1856: 630 (*Lesteva*; characters; France).
- Redtenbacher, 1857: 244 (*Lesteva*; characters; Austria).
- Kraatz, 1857d: 934 (*Lesteva*; characters; Germany).
- Fauvel, 1865a: 317 [= 1865b: 67] (*Lesteva*; habitat; France).
- Thomson, 1867: 310 (*Lesteva*; characters; Scandinavia).
- Thomson, 1867a: 48 (*Lesteva*; characters; Scandinavia).
- Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; characters; France; Britain; Switzerland; Italy; Austria).
- Redtenbacher, 1874: 266 (*Lesteva*; characters; Austria).
- Fauvel, 1876a: 53 [= 1876: 238] (*Lesteva*; Germany).
- Seidlitz, 1875: 241 (*Lesteva*; characters; Baltic region).
- Mulsant and Rey, 1880: 82 (*Lesteva*; characters; France).
- Fowler, 1888: 402 (*Lesteva*; characters; Britain).
- Ganglbauer, 1895: 714 (*Lesteva*; characters; middle Europe).
- Luze, 1903a: 184 (*Lesteva*; characters; central Europe; Caucasus).

- Reitter, 1909: 184 (*Lesteva*; characters; Germany).
- Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).
- Johansen, 1914: 590 (*Lesteva*; characters; Denmark).
- Portevin, 1929: 438 (*Lesteva*; characters; France).
- Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
- Palm, 1948: 118 (*Lesteva*; characters; Sweden; Denmark; Norway).
- Tottenham, 1949: 408 (*Lesteva*; checklist; Britain).
- Jeannel and Jarrige, 1949: 313, 322 (*Lesteva*; subgenus *Lestevidia*; characters; notes; cave species; Serbia).
- Lohse, 1956a: 54 (*Lesteva*; characters; Germany).
- Horion, 1963: 125 (*Lesteva*; Britain; Norway; Sweden; Denmark; Holland; Belgium; Switzerland; France; Iberian Peninsula ?; Italy; Dalmatia; Bosnia Hercegovina; Bulgaria; Serbia; Macedonia; Greece; Turkey; Romania; Hungary; Czechoslovakia; Poland; Russia; Germany; Austria).
- Lohse, 1964: 59 (*Lesteva*; characters; central Europe).
- Smetana, 1967e: 300 (*Lesteva*; Turkey).
- Scheerpeltz, 1968a: 16 (*Lesteva*; catalog; Austria).
- Tikhomirova, 1973a: 140 (*Lesteva*; checklist; USSR).
- Pope, 1977: 22 (*Lesteva*; Britain).
- Zanetti, 1978b: 84 (*Lesteva*; collecting notes; Italy).
- Muona, 1979: 18 (*Lesteva*; Sweden; Norway; Denmark).
- Burakowski, Mroczkowski, and Stefańska, 1979: 67 (*Lesteva*; catalog; Poland).
- Hammond, 1980: 136 (*Lesteva*; Ireland).
- Tóth, 1980: 98 (*Lesteva*; subgenus *Lestevidia*; Hungary).
- Tóth, 1982: 98 (*Lesteva*; characters; Hungary).
- Bordoni, 1982b: 27 (*Lesteva*; subgenus *Lestevidia*; collected from moss; ecological notes; Italy).
- Zanetti, 1984: 77 (*Lesteva*; Bulgaria).
- Terlutter, 1984: 29, 42 (*Lesteva*; notes; Germany).
- Lucht, 1987: 87 (*Lesteva*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Belgium; Netherlands; Luxembourg; Denmark; Sweden).
- Zanetti, 1987: 339 (*Lesteva*; subgenus *Lestevidia*; characters; Italy).
- Gusarov, 1989: 6 (*Lesteva*; habitat notes; Ukraine).
- K. Koch, 1989: 232 (*Lesteva*; habitat).
- Silfverberg, 1992: 22 (*Lesteva*; Sweden; Norway; Denmark; Estonia).
- Boháč, 1993: 41 (*Lesteva*; subgenus *Lestevidia*; Czech Republic; Slovakia).
- Kocian, 1993b: 92 (*Lesteva*; Czech Republic).
- Gerardi and Zanetti, 1995: 143 (*Lesteva*; collecting notes; Italy).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 241 (*Lesteva*; Denmark).
- M. Hansen, 1996: 95 (*Lesteva*; checklist; Denmark).
- Ádám, 1996: 239 (*Lestevidia*; synonym of *villosa*).
- Anderson, Nash, and O'Connor, 1997: 16 (*Lesteva*; Ireland).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (*Lesteva*; Denmark).
- Zanetti and Sabella, 1998: 33 (*Lesteva*; notes; Sicily).
- Herman, 2001: 20 (*Lesteva*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).

▲ **DISTRIBUTION:** Europe, Turkey.

*villosa* Walth, 1838: 268 (*Anthophagus*; [**Note:** This name is older than *punctata*]; Type locality: Bayern).

- Erichson, 1840: 933 (*Lesteva*; synonym of *punctata*).
- Kraatz, 1857d: 934 (*Lesteva*; synonym of *punctata*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *punctata*).
- Ádám, 1996: 239 (*Lestevidia*; valid name; Hungary).
- Herman, 2001: 20 (*Lesteva*; synonym of *punctata*).

*riparia* Heer, 1839: 193 (*Lesteva*; Type locality: Genf).

- Heer, 1841: 572 (*Lesteva*; variety of *punctata*).
- Kraatz, 1857d: 934 (*Lesteva*; synonym of *punctata*).
- Fauvel, 1869: 493 (*Lesteva*; synonym of *punctata*).
- Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; synonym of *punctata*).
- Mulsant and Rey, 1880: 82 (*Lesteva*; synonym of *punctata*).
- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *punctata*).
- Luze, 1903a: 184 (*Lesteva*; synonym of *punctata*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *punctata*).

*muscorum* Jacquelin du Val, 1859: 37 (*Lesteva*; Type locality: Pyrénées Orientales).

- Fauvel, 1871a: 131 [= 1872: 105] (*Lesteva*; synonym of *punctata*).
- Mulsant and Rey, 1880: 82 (*Lesteva*; synonym of *punctata*).
- Fowler, 1888: 402 (*Lesteva*; synonym of *punctata*).
- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *punctata*).
- Luze, 1903a: 184 (*Lesteva*; synonym of *punctata*).
- Bernhauer and Schubert, 1910: 72 (*Lesteva*; synonym of *punctata*).

*punctulata* Latreille, 1804, see: *longoelytrata* Goeze, 1777.

*reyi* Jarrige, 1968, see: *pubescens* Mannerheim, 1830.

*riparia* Heer, 1839, see: *punctata* Erichson, 1839.

**rufimarginata** Rougemont, 2000: 168 (*Lesteva*; Type locality: China: Shaanxi, Qin Ling Shan, Mountain W pass at Autoroute at km 70, 46 km S. Xian, 108.47E, 33.51 N, 2300–2500 m).

▲ **DISTRIBUTION:** China.

*rufitarsis* Stephens, 1834, see: *longoelytrata* Goeze, 1777.

**rufopunctata** Rougemont, 2000: 162 (*Lesteva*; Type locality: China: Zhejiang, Moganshan).

▲ **DISTRIBUTION:** China.

**sajanensis** Zerche, 2000a: 68 (*Lesteva*; Type locality: Zap. Sajan, Chrebet Kulumys und Ojskij pereval im Ermakovskij Rajon).

▲ **DISTRIBUTION:** Russia.

**sbordonii** Bordoni, 1973h: 230 (*Lesteva*; subgenus *Lestevina*; Type locality: Campania, Grava dei Gentili, S. Angelo a Fasanella, Salerno).

- Zanetti, 1987: 346 (*Lesteva*; subgenus *Lestevina*; characters; Italy).
- Bordoni, 1987b: 94 (*Lesteva*; characters).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- Bordoni and Oromi, 1998: 1150 (*Lesteva*; subgenus *Lestevina*; cave species; notes).

▲ **DISTRIBUTION:** Italy.

**septemmaculata** Rougemont, 2000: 167 (*Lesteva*; Type locality: China: Shaanxi, Qin Ling Shan, 118 km E. Xian, 110.06E, 34.27N, 1200–1400 m).

▲ **DISTRIBUTION:** China.

*sharpi* Rye, 1866, see: *monticola* Kiesenwetter, 1847.

**shikokuana** Watanabe, 1990: 160 (*Lesteva*; Type locality: Japan: Khikoku: Ehime Pref.: Omogokei).

▲ **DISTRIBUTION:** Japan.

**shibatai** Watanabe, 1990: 158 (*Lesteva*; Type locality: Japan: Honshu: Tochigi Pref.: near Kôtoku-numa).

- Watanabe and Baba 1973: 260 (*Lesteva*; [Note: Misidentified as *plagiata* according to Watanabe, 1996a: 9]; collected in gold mines; Japan).
- Watanabe, 1996a: 9 (*Lesteva*; mine collection; Japan).

▲ **DISTRIBUTION:** Japan.

**sicula** Erichson, 1840: 857 (*Lesteva*; Type locality: Sicilia).

- Jacquelin du Val, 1857: pl. 25, fig. 124 (*Lesteva*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 71 cited *punctata* Jacquelin du Val as a synonym of *heeri*; Jacquelin du Val did not describe the species as new, he attributed it to Erichson]; illustration).
- Fauvel, 1886: 96 [= 1886a: 88] (*Lesteva*; notes; Algeria).
- Fowler, 1888: 402 (*Lesteva*; characters; Britain).
- Fauvel, 1902b: 56 (*Lesteva*; Algeria; Tunisia).
- Luze, 1903a: 185 (*Lesteva*; characters; Europe).
- Reitter, 1909: 184 (*Lesteva*; characters; Germany).
- Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).
- Johansen, 1914: 590 (*Lesteva*; characters; Denmark).
- Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
- Lohse, 1960: 3 (*Lesteva*; Iberian Peninsula).
- Scheerpeltz, 1961d: 117 (*Lesteva*; Italy).
- Bordoni, 1973h: 234 (*Lesteva*; subgenus *Lestevina*).
- Pope, 1977: 22 (*Lesteva*; synonym of *heeri*).
- Zanetti, 1987: 342 (*Lesteva*; subgenus *Lestevina*; characters; Italy).
- Lucht, 1987: 89 (*Lesteva*; checklist).
- L. Hansen and Sagvolden, 1995: 134 (*Lesteva*; collection notes; Norway).
- Sparacio, 1995: 142 (*Lesteva*; characters; notes; Sicily).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- Zanetti and Sabella, 1998: 33 (*Lesteva*; Sicily).
- ▲ **DISTRIBUTION:** Europe, Algeria, Tunisia.

**heeri** Fauvel, 1871a: 132 [= 1872: 106] (*Lesteva*; Type locality: Lille; Paris; Caen; Morlaix; Tarbes; Scandinavia; Britain; Germany).

- Seidlitz, 1875: 241 (*Lesteva*; characters; Baltic region).
- Mulsant and Rey, 1880: 84 (*Lesteva*; characters; France).
- Ganglbauer, 1895: 714 (*Lesteva*; synonym of *sicula*).
- Ganglbauer, 1895: 714 (*Lesteva*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 71 cited *sicula* Ganglbauer as a synonym of *heeri*; Ganglbauer did not describe the species as new, he attributed it to Erichson]; characters; Europe).
- Luze, 1903a: 185 (*Lesteva*; synonym of *sicula*).
- Bernhauer and Schubert, 1910: 71 (*Lesteva*; catalog).
- Portevin, 1929: 438 (*Lesteva*; characters; France).
- Scheerpeltz, 1933: 1063 (*Lesteva*; catalog).
- Palm, 1948: 119 (*Lesteva*; characters; Sweden; Denmark).
- Lohse, 1956a: 54 (*Lesteva*; characters; Germany).
- Horion, 1963: 126 (*Lesteva*; subspecies of *sicula*; Spain; France; Belgium; Holland; Britain; Denmark; Sweden; Germany).
- Lohse, 1964: 59 (*Lesteva*; subspecies of *sicula*; characters; central Europe).
- Kasule, 1968: 136 (*Lesteva*; larval characters).
- Kasule, 1968a: 70 (*Lesteva*; life history).
- Steel, 1970a: 21 (*Lesteva*; cited as valid species; biological notes).
- Bordoni, 1973h: 234 (*Lesteva*; subgenus *Lestevina*).
- Pope, 1977: 22 (*Lesteva*; Britain).
- Hammond, 1980: 136 (*Lesteva*; Ireland).
- Tóth, 1982: 98 (*Lesteva*; subspecies of *sicula*; characters).
- Frank, 1982: 8 (*Lesteva*; list of parasites).
- Zanetti, 1987: 342 (*Lesteva*; subgenus *Lestevina*; subspecies of *sicula*; characters; Italy).
- Lucht, 1987: 89 (*Lesteva*; subspecies of *sicula*; checklist; Germany; France; Benelux; Denmark; Sweden).
- Welch, 1993: 227 (*Lesteva*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Lesteva*; subgenus *Lestevina*; subspecies of *sicula*; Slovakia).
- M. Hansen, 1996: 95 (*Lesteva*; synonym of *sicula*).
- Dauphin, Laguerre, Tamisier, and Teissier, 1997: 20 (*Lesteva*; subspecies of *sicula*; France).
- Owen, 1997a: 148 (*Lesteva*; cited as valid species; collecting sites; Ireland).

- soror** Smetana, 1967e: 300 (*Lesteva*; Type locality: Türkei: Yeniköy, Toros).  
 ▲ **DISTRIBUTION:** Turkey.
- staphylinooides* Marsham, 1802, see: *longoelytrata* Goeze, 1777.
- steeli** Lohse, 1982: 203 (*Lesteva*; Type locality: India: Kashmir, Gulmarg).  
 ▲ **DISTRIBUTION:** India.
- subaptera* Mulsant and Rey, 1880, see: *pubescens* Mannerheim, 1830.
- submaculata** Rougemont, 2000: 160 (*Lesteva*; Type locality: China: Zhejiang Prov., Anji County, ca 500 m, Long Wang Shan N.R.).  
 ▲ **DISTRIBUTION:** China.
- suturalis* Lacordaire, 1835, see: *Geodromicus*.
- syriaca** Luze, 1903a: 192 (*Lesteva*; Type locality: Syrien: Beirut, Appl).  
 — Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).  
 ▲ **DISTRIBUTION:** Lebanon.
- szekessyi** Lohse and Steel, 1961: 74 (*Lesteva*; Type locality: Crete: Antr. Jovis, Mt. Ida, 2200 m).  
 ▲ **DISTRIBUTION:** Crete.
- taygetana** Lohse, 1955a: 512 (*Lesteva*; subgenus *Lestevidia*; Type locality: Taygetos, Peloponnes).  
 ▲ **DISTRIBUTION:** Greece.
- torrentum** Cameron, 1924b: 171 (*Lesteva*; Type locality: Mussorie District, 6500 to 7000 feet).  
 — Cameron, 1930: 159 (*Lesteva*; characters; India).  
 — Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).  
 — Lohse, 1982: 201, 204 (*Lesteva*; characters; India).  
 ▲ **DISTRIBUTION:** India.
- transcaspica** Bernhauer, 1935a: 39 (*Lesteva*; Type locality: Transkaspien: Ljutfabad).  
 — Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).  
 ▲ **DISTRIBUTION:** Turkmenistan.
- truncata* Casey, 1885, see: *Unamis*.
- truncata* Lohse, 1960, see: *fontinalis* Kiesenwetter, 1850.
- tsushimae** Watanabe, 1990: 170 (*Lesteva*; Type locality: Japan: Nagasaki Pref.: Tsushima Is., Izuhara).  
 ▲ **DISTRIBUTION:** Japan.
- turcica** Smetana, 1967e: 305 (*Lesteva*; Type locality: Türkei: Yeniköy, Toros).  
 — Tikhomirova, 1973a: 140 (*Lesteva*; cited as *turcica* Smetana, 1937; checklist; Central Asia).  
 ▲ **DISTRIBUTION:** Turkey.
- turkestanica** Luze, 1904: 76 (*Lesteva*; Type locality: Seravschan: Boschara).  
 — Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).  
 — Tikhomirova, 1973a: 140 (*Lesteva*; checklist; Central Asia).  
 — Bordoni, 1987b: 92 (*Lesteva*; notes).  
 ▲ **DISTRIBUTION:** Uzbekistan.
- uhligi** Zanetti, 1984: 79 (*Lesteva*; Type locality: Bulgaria: Stara Planina, 8 km S. of Botev, 1200 m).  
 ▲ **DISTRIBUTION:** Bulgaria.
- villardi** Mulsant and Rey, 1880: 413 (*Lesteva*; Type locality: la grotte du Brudou, à Lente-en-Royans, Drôme).  
 — Ganglbauer, 1895: 713 (*Lesteva*; characters; France).  
 — Luze, 1903a: 194 (*Lesteva*; characters; France).  
 — Bernhauer and Schubert, 1910: 73 (*Lesteva*; catalog).  
 — Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).

- Jeannel and Jarrige, 1949: 319 (*Lesteva*; characters; notes; cave species; France).
- Jarrige, 1968b: 75 (*Lesteva*; France).
- Frank, 1982: 8 (*Lesteva*; list of parasites).
- Zanetti, 1987: 361 (*Lesteva*; subgenus *Lesteva*; characters; Italy).
- Zanetti, 1995: 9 (*Lesteva*; Italy).
- Bordoni and Oromi, 1998: 1157 (*Lesteva*; facultative cave species; caves in France and Italy).
- ▲ **DISTRIBUTION:** France, Italy.

*villosa* Walzl, 1838, see: *punctata* Erichson, 1839.

**yunnanicola** Rougemont, 2000: 166 (*Lesteva*; Type locality: China: Yünnan, ca. 100 km NNE Kunming, Liangwang Shan, ca. 2300 m).

▲ **DISTRIBUTION:** China.

**zolotarevi** Roubal, 1910: 99, 100 (*Lesteva*; Type locality: Caucasus occ.: Kluchor, in der Höhe von etwa 2200 m).

- Scheerpeltz, 1933: 1064 (*Lesteva*; catalog).
- Tikhomirova, 1973a: 140 (*Lesteva*; checklist; western Caucasus).

▲ **DISTRIBUTION:** Russia.

### **Liophilydrodes**

[8 species; Palaearctic Region]

*Liophilydrodes* Nakane, 1983: 148 (replacement name for *Lioplax* Nakane and Sawada; [**Note:** Nakane attributed the name to both himself and Sawada, but in the paragraph preceding the name wrote, "I propose a new name for our *Lioplax* herein"]]). **TYPE SPECIES:** *Philydrodes pullus* Nakane and Sawada, fixed by objective synonymy with *Lioplax* for which the type species had already been fixed.

- Watanabe, 1990: 295 (characters; key to species of Japan).
- Watanabe, 1995: 329 (characters).

*Lioplax* Nakane and Sawada, 1956a: 183 (subgenus of *Philydrodes*; species included: *pulla*, *puncticollis*, *troglophila*, *subtilis*; **preoccupied** by Troschel, 1857). **TYPE SPECIES:** *Philydrodes pullus* Nakane and Sawada, fixed by original designation.

- Nakane, 1983: 148 (synonym of *Liophilydrodes*).
- Watanabe, 1990: 295 (synonym of *Liophilydrodes*).

**flavipennis** Watanabe, 1990: 303 (*Liophilydrodes*; Type locality: Japan: Honshu: Yamanashi Pref.: Mt. Senjô-ga-take, S. Jpn. Alps).

▲ **DISTRIBUTION:** Japan.

**pullus** Nakane and Sawada, 1956a: 184 (*Philydrodes*; subgenus *Lioplax*; Type locality: Japan: Mt. Ontake, Nagano).

- Watanabe, 1990: 298 (*Liophilydrodes*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**puncticollis** Nakane and Sawada, 1956a: 183 (*Philydrodes*; subgenus *Lioplax*; Type locality: Japan: Hokkaido: Nukabira).

- Watanabe and Shibata, 1965: 317 (*Philydrodes*, cited as *Phylidrodes*; subgenus *Lioplax*; Japan).
- Watanabe, 1990: 306 (*Liophilydrodes*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**subtilis** Sharp, 1889: 471 (*Anthophagus*; Type locality: summit of Iwakisan).

- Bernhauer and Schubert, 1910: 81 (*Anthophagus*; catalog).
- Scheerpeltz, 1933: 1067 (*Philydrodes*; catalog).
- Nakane and Sawada, 1956a: 184 (*Philydrodes*; subgenus *Lioplax*; characters from original description; Japan).
- Watanabe, 1990: 302 (*Liophilydrodes*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**suzukii** Watanabe, 1990: 305 (*Liophilydrodes*; Type locality: Japan: Honshu: Gifu Pref.: Kagami-daira on Mt. Yumiori-dake, N. Jpn. Alps).

▲ **DISTRIBUTION:** Japan.

- trogophilus** Nakane and Sawada, 1956a: 184 (*Philydrodes*; subgenus *Lioplax*; Type locality: Japan: Tokyo, Okutama, Nippara cave).  
 — Watanabe, 1990: 306 (*Liophilydrodes*; characters; Japan).  
 — Watanabe, 1996a: 9 (*Liophilydrodes*; cave collection; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- uenoi** Watanabe, 1995: 329 (*Liophilydrodes*; Type locality: Jiuzhai Gou, Chang Hai, 3100 m, Nanping Xian, Sichuan Sheng, Southwest China).  
 ▲ **DISTRIBUTION:** China.
- yamanakai** Watanabe, 1990: 301 (*Liophilydrodes*; Type locality: Japan: Honshu: Toyama Pref.: Mt. Tateyama).  
 ▲ **DISTRIBUTION:** Japan.

### Mannerheimia

[19 species; Palaearctic and Nearctic Regions]

*Mannerheimia* Mäklin, 1880: 80 (species included: *divergens*, *affine*, *confusum*, *saginatum*).

**TYPE SPECIES:** *Omalium divergens* Mäklin, fixed by subsequent designation by R. Lucas, 1920: 392.

- Heyden, 1880: 82 (list of species of Siberian region).  
 — Mäklin, 1881: 39 (characters; [**Note:** Published without citation of earlier reference as though a new genus]).  
 — Duvivier, 1883: 196 (catalog).  
 — Heyden, Reitter, and Weise, 1891: 119 (subgenus of *Deliphrum*; list of species of Europe and Caucasus).  
 — Ganglbauer, 1895: 725 (characters).  
 — Luze, 1905c: 251 (characters; key to species).  
 — Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).  
 — Bernhauer and Schubert, 1910: 63 (world catalog; 3 species).  
 — Gridelli, 1924c (notes; key to Italian species).  
 — Winkler, 1925: 332 (catalog for Palaearctic region).  
 — Porta, 1926: 24 (characters; key to species of Italy).  
 — Cameron, 1930: 149 (characters).  
 — Scheerpeltz, 1933: 1054 (world catalog supplement).  
 — Palm, 1948: 94 (characters; key to species of Sweden).  
 — Blackwelder, 1952: 230 (type species).  
 — Horion, 1963: 100 (list of central European species).  
 — Székessy, 1963: 18 (characters).  
 — Lohse, 1964: 50 (characters; key to central European species).  
 — Scheerpeltz, 1968a: 12 (catalog of Austrian species).  
 — Tikhomirova, 1973a: 139 (checklist of species of USSR).  
 — Muona, 1979: 18 (list of Scandinavian species).  
 — Coiffait, 1982: 150 (key to species of Kashmir and Nepal).  
 — Zanetti, 1983: 429 (characters).  
 — Zanetti, 1987: 273 (characters; habitus; key to species of Italy).  
 — Muona and Viramo, 1986: 15 (list of species of northeastern Finland).  
 — Watanabe, 1990: 77 (characters; key to species of Japan).  
 — Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).  
 — Siitonen, 1993: 230 (list of Finnish species).  
 — Zanetti, 1995: 8 (list of species of Italy).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 340 (1 undescribed Nearctic species; notes; characters in key).

*affinis* Mäklin, 1878, see: *arctica* Erichson, 1840.

**afghanica** Coiffait, 1982b: 82 (*Mannerheimia*; Type locality: Afghanistan: Nouristan: Kamdesch, 2000 m).

▲ **DISTRIBUTION:** Afghanistan.

- aprutiana** Gridelli, 1924c: 135, 136 (*Mannerheimia*; Type locality: Maiella, Abruzzo).  
 — Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).  
 — Zanetti, 1987: 276 (*Mannerheimia*; characters; Italy).  
 — Zanetti, 1995: 8 (*Mannerheimia*; Italy).  
 ▲ **DISTRIBUTION:** Italy.
- arctica** Erichson, 1840: 873 (*Deliphrum*; Type locality: Lapland).  
 — Thomson, 1861: 198 (*Deliphrum*; characters; Scandinavia).  
 — Seidlitz, 1875: 236 (*Deliphrum*; characters; Baltic region).  
 — J. Sahlberg, 1876: 214 (*Deliphrum*; Finland).  
 — J. Sahlberg, 1880: 108 (*Mannerheimia*; characters; Siberia).  
 — Ganglbauer, 1895: 725 (*Mannerheimia*; characters; Palaearctic region).  
 — Luze, 1905c: 253 (*Mannerheimia*; characters; Sweden; Norway; Finland; Lapland; Arctic Siberia; southern Alps).  
 — Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; catalog).  
 — Gridelli, 1924c: 135, 136 (*Mannerheimia*; key characters; notes; Italy).  
 — Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).  
 — Horion, 1935: 173 (*Mannerheimia*; characters; northern Europe; Siberia; southern Alps; Germany).  
 — Palm, 1948: 96 (*Mannerheimia*; characters; Sweden; Norway; Finland).  
 — Horion, 1963: 100 (*Mannerheimia*; Norway; Sweden; Finland; Russia; Austria).  
 — Lohse, 1964: 50 (*Mannerheimia*; characters; central Europe).  
 — Tikhomirova, 1973a: 139 (*Mannerheimia*; checklist; Alps; northern Europe; Siberia).  
 — Zanetti, 1987: 274 (*Mannerheimia*; characters; Italy).  
 — Lucht, 1987: 88 (*Mannerheimia*; checklist; Austria).  
 — Zanetti, 1995: 8 (*Mannerheimia*; Italy).  
 — Kashcheev, 1999: 143 (*Mannerheimia*; characters).  
 ▲ **DISTRIBUTION:** Sweden, Norway, Finland, Russia, Austria, Italy.
- affinis** Mäklin, 1878: 27 [= 1878a: 303] (*Omalium*, cited as *Homalium*; [**preoccupied**]; Type locality: Werschinskoj, 68°45' n. lat.).  
 — J. Sahlberg, 1880: 108 (*Mannerheimia*; synonym of *arctica*).  
 — Mäklin, 1881: 40 (*Mannerheimia*; [**Note:** Cited by Bernhauer and Schubert, 1910: 63 as the first reference for the species]; characters; Siberia).  
 — Ganglbauer, 1895: 725 (*Mannerheimia*; synonym of *arctica*).  
 — Luze, 1905c: 253 (*Mannerheimia*; synonym of *arctica*).  
 — Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; synonym of *arctica*).
- confusa** Mäklin, 1878: 27 [= 1878a: 303] (*Omalium*, cited as *Homalium*; Type locality: Chantaiskoj, 68°5' n. lat.).  
 — J. Sahlberg, 1880: 108 (*Mannerheimia*; synonym of *arctica*).  
 — Mäklin, 1881: 40 (*Mannerheimia*; [**Note:** Cited by Bernhauer and Schubert, 1910: 63 as the first reference for the species]; characters; Siberia).  
 — Ganglbauer, 1895: 725 (*Mannerheimia*; synonym of *arctica*).  
 — Luze, 1905c: 253 (*Mannerheimia*; synonym of *arctica*).  
 — Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; synonym of *arctica*).
- saginata** Mäklin, 1878: 28 [= 1878a: 304] (*Omalium*, cited as *Homalium*; Type locality: Krasnojarsk och Tomsk).  
 — J. Sahlberg, 1880: 108 (*Mannerheimia*; synonym of *arctica*).  
 — Mäklin, 1881: 41 (*Mannerheimia*; [**Note:** Cited by Bernhauer and Schubert, 1910: 63 as the first reference for the species]; characters; Siberia).  
 — Ganglbauer, 1895: 725 (*Mannerheimia*; synonym of *arctica*).  
 — Luze, 1905c: 253 (*Mannerheimia*; synonym of *arctica*).  
 — Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; synonym of *arctica*).
- asiatica** Kashcheev, 1999: 142 (*Mannerheimia*; Type locality: Tian'shan', Khr. Kungei-Alatau, ushch., Kul'bastau, 2500-3000 m).  
 ▲ **DISTRIBUTION:** Kazakhstan.



**brevipennis** Motschulsky, 1860: 545 (*Omalium*; [**preoccupied**]; Type locality: Mt. Ula Tau, Kazakh Uplands; [**Note**: See lectotype designation by Hammond, 1970]).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Hammond, 1970: 67, 70 (*Mannerheimia*, transferred from *Omalium*; lectotype designation: Mt. Ula Tau, Kazakh Uplands; characters; northern Scandinavia, northern Russia, northern Siberia; Alps; Tyrol; Apennines, Altai Range, Himalaya).

— Herman, 2001: 37 (*Mannerheimia*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION**: Russia, Sweden, Austria, Italy, Himalaya, Altai region.

**divergens** Mäklin, 1878: 26 [= 1878a: 302] (*Omalium*, cited as *Homalium*; Type locality: Seliwaninskoj, 65°55' n. lat; Baklanowskij, 64°25' n. lat.).

— J. Sahlberg, 1880: 108 (*Mannerheimia*; characters; Siberia).

— Mäklin, 1881: 39 (*Mannerheimia*; characters; Siberia).

— Luze, 1905c: 254 (*Mannerheimia*; characters; Siberia; Sweden; Altai region).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; [**Note**: The species was cited twice by Bernhauer and Schubert, once in *Omalium* and once in *Mannerheimia* but for the latter the original reference is cited incorrectly as Mäklin, 1880]; catalog).

— Gridelli, 1924c: 135, 137 (*Mannerheimia*; characters; Altai region; Siberia; Sweden).

— Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).

— Palm, 1948: 96 (*Mannerheimia*; characters; Sweden).

— Hammond, 1970: 67, 70 (*Mannerheimia*; synonym of *brevipenne*).

— Kashcheev, 1999: 143 (*Mannerheimia*; cited as valid species; characters).

**cachemirica** Coiffait, 1982: 146 (*Mannerheimia*; Type locality: Inde: Cachemire, Aru).

▲ **DISTRIBUTION**: India.

**confusa** Mäklin, 1878, see: *arctica* Erichson, 1840.

**curtella** Sharp, 1889: 473 (*Omalium*; Type locality: Miyanosita).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Cameron, 1949b: 460 (*Omalium*; Japan).

— Watanabe, 1990: 81 (*Mannerheimia*; characters; Japan).

▲ **DISTRIBUTION**: Japan.

**divergens** Mäklin, 1878, see: *brevipennis* Motschulsky, 1860.

**doderoi** Gridelli, 1924: 135, 137 (*Mannerheimia*; Type locality: Valsavaranche, Valle d'Aosta, Alpi Graie).

— Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).

— Horion, 1963: 101 (*Mannerheimia*; Italy).

— Lohse, 1964: 50 (*Mannerheimia*; characters; central Europe).

— Hammond, 1970: 68 (*Mannerheimia*; may be synonym of *divergens*).

— Zanetti, 1987: 277 (*Mannerheimia*; characters; Italy).

— Lucht, 1987: 88 (*Mannerheimia*; checklist; Austria).

— Zanetti, 1995: 8 (*Mannerheimia*; Italy).

— Kashcheev, 1999: 143 (*Mannerheimia*; characters).

— Assing, Frisch, Kahlen, et al., 1998: 124 (*Mannerheimia*; Austria).

▲ **DISTRIBUTION**: Austria, Italy.

**emodensa** Coiffait, 1977: 266 (*Mannerheimia*; Type locality: Environs de Alm Darghari près de Maharigaon, 4000 m région de Jumla, Népal occidentale).

— Coiffait, 1982: 42 (*Mannerheimia*; Nepal).

— Coiffait, 1982: 150 (*Mannerheimia*; characters).

▲ **DISTRIBUTION**: Nepal.

**goriensis** Champion, 1925: 103 (*Mannerheimia*; Type locality: Gori Valley, E. Kumaon, alt. 7000 ft.).

— Cameron, 1930: 150 (*Mannerheimia*; characters; India).

— Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).

— Coiffait, 1982: 150 (*Mannerheimia*; characters).

— Coiffait, 1984: 118 (*Mannerheimia*; Pakistan).

▲ **DISTRIBUTION:** India, Pakistan.

**japonica** Watanabe, 1990: 87 (*Mannerheimia*; Type locality: Japan: Honshu: Miyagi Pref.: Mt. Ushiroeboshi-dake on Zaō Mts.).

▲ **DISTRIBUTION:** Japan.

**evias** Watanabe, 1990: 84 (*Mannerheimia*; Type locality: Japan: Honshu: Gifu Pref.: Mt. Sugoroku-dake on northern Japanese Alps).

▲ **DISTRIBUTION:** Japan.

**kirschenblatti** Khnzorian, 1956: 138 (*Mannerheimia*; Type locality: ArmSSR: Verkhniĭ Gukasian [Gukasianskii r-n], na zapalnykh kechutskikh ros, 2500 m).

— Tikhomirova, 1973a: 139 (*Mannerheimia*; checklist; Armenia).

— Kashcheev, 1999: 143 (*Mannerheimia*; characters).

▲ **DISTRIBUTION:** Armenia.

**obscura** Coiffait, 1982: 148 (*Mannerheimia*; Type locality: Inde: Cachemire, Chandanwari, près Pahalgam, 2800–3100 m).

— Coiffait, 1983: 274 (*Mannerheimia*; Kashmir).

▲ **DISTRIBUTION:** India.

**micros** Fauvel, 1900d: 222 (*Deliphrum*; subgenus *Mannerheimia*; Type locality: Turkestan: Monts Alai).

— Luze, 1905c: 255 (*Mannerheimia*; characters; Turkestan).

— Bernhauer and Schubert, 1910: 63 (*Mannerheimia*; catalog).

— Gridelli, 1924c: 138 (*Mannerheimia*; characters; Turkestan).

— Scheerpeltz, 1933: 1054 (*Mannerheimia*; catalog).

— Hammond, 1970: 68 (*Mannerheimia*; may be synonym of *divergens*).

— Tikhomirova, 1973a: 139 (*Mannerheimia*; checklist; Central Asia).

— Kashcheev, 1999: 143 (*Mannerheimia*; characters).

▲ **DISTRIBUTION:** Kyrgyzstan.

*saginata* Mäklin, 1878, see: *arctica* Erichson, 1840.

**scutellata** Coiffait, 1982: 149 (*Mannerheimia*; Type locality: Inde: Cachemire, Sonamarg, Himalaya-Hauptkette, Nichinai Tal, 3100–3200 m).

▲ **DISTRIBUTION:** India.

**tsurumii** Watanabe, 1990: 83 (*Mannerheimia*; Type locality: Japan: Honshu: Tochigi Pref.: near Yunoko Lake, Oku-Nikkō).

▲ **DISTRIBUTION:** Japan.

**vicina** Coiffait, 1982: 146 (*Mannerheimia*; Type locality: Inde: Cachemire, Chandanwari, près Pahalgam, 2800–3100 m).

▲ **DISTRIBUTION:** India.

**yasudai** Watanabe, 1990: 86 (*Mannerheimia*; Type locality: Japan: Hokkaido: Mt. Kurodake on Daisetsu Mts.).

▲ **DISTRIBUTION:** Japan.

### Microedus

[7 species; Nearctic Region]

*Microedus* LeConte, 1874: 273 (species included: *austinianus*). **TYPE SPECIES:** *Microedus austinianus* LeConte, fixed by monotypy.

— Fauvel, 1878d: 250 [= 1878e: 86] (characters).

— Duvivier, 1883: 194 (catalog).

— Bernhauer and Schubert, 1910: 75 (world catalog; 2 species).

— Leng, 1920: 95 (catalog of North American species).

— Blackwelder, 1952: 245 (type species: *austinianus*).

— Hatch, 1957: 51, 70 (characters; key to species of Pacific Northwest).

- Moore, 1966: 48, 49 (characters; notes).
- Moore and Legner, 1972a: 75 (key to species).
- Moore and Legner, 1975: 197 (catalog; North America north of Mexico).
- Campbell, 1978: 1 (moved to Anthophagini).
- Moore and Legner, 1979: 184 (characters; notes).
- Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
- Downie and Arnett, 1996: 435 (characters; species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (7 Nearctic species; notes; characters in key).

**austinianus** LeConte, 1874: 273 (*Microedus*; Type locality: White Mountains [New Hampshire], Vancouver Island).

- Fauvel, 1878d: 250 [= 1878e: 86] (*Microedus*; characters; New Hampshire; Vancouver Island).
- Bernhauer and Schubert, 1910: 75 (*Microedus*; catalog).
- Van Dyke, 1924: 16 (*Microedus*; cited as *austianus*; Alaska).
- Fall, 1926: 145 (*Microedus*; Alaska).
- Hatch, 1957: 71 (*Microedus*; characters; British Columbia; Idaho; Washington; Oregon).
- Moore and Legner, 1972a: 75 (*Microedus*; characters).
- Downie and Arnett, 1996: 435 (*Microedus*; characters; Canada; USA).

▲ **DISTRIBUTION:** Canada, USA.

**ewingi** Hatch, 1957: 72 (*Microedus*; Type locality: Washington: Mt. Rainier, below Sluskin Falls).

- Moore and Legner, 1972a: 75 (*Microedus*; characters).

▲ **DISTRIBUTION:** USA.

**fenderi** Hatch, 1957: 72 (*Microedus*; Type locality: Washington: Olympic Hot Springs. Also cited from British Columbia).

- Moore and Legner, 1972a: 75 (*Microedus*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**giulianii** Moore, 1972a: 75 (*Microedus*; Type locality: South Fork of Big Pine Creek, Inyo County, California, 8500 feet).

▲ **DISTRIBUTION:** USA.

**laticollis** Mannerheim, 1843b: 234 (*Anthophagus*; Type locality: insula Sitkha).

- Mannerheim, 1852: 319 (*Anthophagus*; characters; Sitka).
- Fauvel, 1878d: 251 [= 1878e: 87] (*Microedus*; characters; Alaska).
- Bernhauer and Schubert, 1910: 75 (*Microedus*; catalog).
- Fall, 1926: 145 (*Microedus*; Alaska).
- Hatch, 1957: 71 (*Microedus*; characters; British Columbia; Washington; Oregon; Idaho).
- Moore and Legner, 1972a: 75 (*Microedus*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**porterae** Hatch, 1957: 71 (*Microedus*; Type locality: Washington: Olympic Hot Springs. Also cited from Oregon, Idaho, and British Columbia).

- Moore and Legner, 1972a: 75 (*Microedus*; cited as *porteri*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**rogersi** Hatch, 1957: 71 (*Microedus*; Type locality: Washington: Olympic Hot Springs. Also cited from British Columbia).

- Moore and Legner, 1972a: 75 (*Microedus*; characters).

▲ **DISTRIBUTION:** Canada, USA.

### Olophrum

[54 species (1 doubtful); Nearctic and Palearctic Regions]

*Olophrum* Erichson, 1839a: 622 (species included: *piceum*, *fuscum*, *assimile*). **TYPE SPECIES:** *Omalium piceum* Gyllenhal, fixed by subsequent designation by Westwood, 1840: 156.

- Heer, 1839: 189 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 863 (characters).

- Redtenbacher, 1849: 749 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 140 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 634 (characters).
- Gistel, 1856: 389 (list of species).
- Jacquelin du Val, 1857: 74 (characters).
- Redtenbacher, 1857: 247 (characters).
- Kraatz, 1857d: 939 (characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 49 (characters; type species: *piceum*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 192 (characters).
- Gredler, 1863: 123 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 660 (catalog).
- Jacquelin du Val, 1868: 80 (catalog; European species).
- Fauvel, 1871a: 123 [= 1872: 97] (characters; key to species).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 267 (characters; key to Austrian species).
- Fauvel, 1875a:VI [= 1875b: 208] (catalog).
- Fauvel, 1878d: 242 [= 1878e: 78] (key to North American species).
- Mulsant and Rey, 1880: 132 (characters; key to French species).
- Heyden, 1880: 81 (list of species of Siberian region).
- Duvivier, 1883: 195 (catalog).
- Fowler, 1888: 404 (notes; key to British species).
- Seidlitz, 1891: 345 (key to some European species).
- Seidlitz, 1891a: 367 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Heyden, 1893: 48 (list of species of Siberian region).
- Ganglbauer, 1895: 719 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Luze, 1905: 33 (characters; revision of and key to Palaearctic species).
- Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 44 (characters; key to and annotated list of species of Seine Basin, France).
- Reitter, 1909: 185 (characters; key to German species).
- Bernhauer and Schubert, 1910: 65 (world catalog; 18 species).
- Blatchley, 1910: 478 (characters).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Johansen, 1914: 592 (characters; key to Danish species).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 333 (catalog for Palaearctic region).
- Porta, 1926: 26 (characters; key to species of Italy).
- Scheerpeltz, 1929 (monograph; discussion; taxonomic history; key to species groups and to species; characters; illustrations; zoogeography; catalog).
- Portevin, 1929: 440 (characters; key to French genera).
- Roubal, 1930: 313 (catalog; Slovakia).
- Joy, 1932: 95 (key to British species).
- Scheerpeltz, 1933: 1056 (world catalog supplement).
- Munster, 1935 (discussion of Scheerpeltz's revision; key to some species).
- Palm, 1948: 103 (characters; key to species of Sweden).
- Tottenham, 1949: 357, 407 (type species: *piceum* Gyllenhal; list of British species).
- Blackwelder, 1952: 272 (type species).

- Tottenham, 1954: 30 (characters; key to British species).
  - Hatch, 1957: 50, 61 (characters; key to species of Pacific Northwest).
  - Horion, 1963: 109 (list of central European species).
  - Székessy, 1963: 20 (characters).
  - Lohse, 1964: 53 (characters; key to central European species).
  - Smetana, 1964c: 170 (key to Czechoslovakian species).
  - Moore, 1966: 48, 55 (characters; notes).
  - Pototskaia, 1967: 20 (larval characters).
  - Kasule, 1968: 133, 134 (larval characters).
  - Scheerpeltz, 1968a: 14 (catalog of Austrian species).
  - Steel, 1970a: 18 (larval characters; biological notes).
  - Tikhomirova, 1973a: 139 (checklist of species of USSR).
  - Moore and Legner, 1975: 199 (catalog; North America north of Mexico).
  - Shibata, 1976: 108 (checklist of species of Japan).
  - Pope, 1977: 22 (list of British species).
  - Coiffait, 1978f: 277 (key to species of France).
  - Coiffait, 1978f: 277 (*Olophrum*; characters; France).
  - Topp, 1978: 308 (larval characters).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 57 (catalog; Poland).
  - Moore and Legner, 1979: 186 (characters; notes).
  - Muona, 1979: 18 (list of Scandinavian species).
  - Uhlig, 1979: 242 (some species collected in Germany).
  - M. Dvořák, 1979: 109 (some species collected in Slovakia).
  - Uhlig, Vogel, and Sieber, 1980: 241 (some species collected in Germany).
  - Uhlig and Vogler, 1981: 87 (list of some species collected in Germany; habitat and collecting notes).
  - Waterston, Owen, Welch, Bacchus and Hammond, 1981: 273 (list of species of Outer Hebrides).
  - Spahr, 1981: 95 (references to specimens from amber and copal).
  - Tóth, 1982: 83 (characters; habitus; key to species of Hungary).
  - Campbell, 1983 (characters; habitus; revision of and key to North American species; discussion).
  - Ádám, 1985: 251 (list of species from southeast Hungary).
  - Segers, 1986: 21 (checklist of species; Belgium).
  - Zanetti, 1987: 298 (characters; habitus; key to species of Italy).
  - Ádám, 1987: 137 (list of two species with collecting notes; Hungary).
  - Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
  - Lohse and Lucht, 1989: 126 (notes).
  - Watanabe, 1990: 126 (characters; key to species of Japan).
  - Ryabukhin, 1991b: 13 (characters; key to species of northeastern Russia).
  - Campbell and Davies, 1991: 89 (checklist of species; Alaska and Canada).
  - Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
  - Siitonen, 1993: 230 (list of Finnish species).
  - Welch, 1993: 227 (ovariole number and ovary structure).
  - Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
  - M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
  - Zanetti, 1995: 8 (list of species of Italy).
  - M. Hansen, 1996: 95 (list of Danish species).
  - Downie and Arnett, 1996: 432 (characters; key to species of Northeastern North America).
  - M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
  - Newton, Thayer, Ashe, and Chandler, 2000: 340 (7 Nearctic species; notes; characters in key).
- Lathrium* LeConte, 1850: 221 (species included: *convexicolle*). **TYPE SPECIES:** *Lathrium convexicolle* LeConte, fixed by monotypy.
- Lacordaire, 1854: 142 (characters; notes; list of species).
  - LeConte, 1861a: 71 (synonym of *Olophrum*).

- Gemminger and Harold, 1868: 660 (synonym of *Olophrum*).
- Fauvel, 1871a: 123 [= 1872: 97] (synonym of *Olophrum*).
- Bernhauer and Schubert, 1910: 66 (synonym of *Olophrum*).
- Blackwelder, 1952: 209 (type species: *convexicolle*).
- Campbell, 1983: 579 (synonym of *Olophrum*).

*alpestre* Erichson, 1840, see: *consimile* Gyllenhal, 1810.

*alpinum* Heer, 1839, see: *consimile* Gyllenhal, 1810.

**aragatzense** Khnzorian, 1962: 103 (*Olophrum*; Type locality: ArmSSR: Aragats u ozera Kari-lich, 3200 m).

▲ **DISTRIBUTION:** Armenia.

**arcanum**† Scudder, 1900a: 86 (*Olophrum*; pleistocene fossil; Type locality: Scarborough).

▲ **DISTRIBUTION:** Canada.

**arrowi** Scheerpeltz, 1929: 105 (*Olophrum*; Type locality: Japan).

- Nakane, 1963a: 82 (*Olophrum*, cited as *Omalium*; characters; habitus photograph; Japan).
- Hasegawa and Kanie, 1992: 19 (*Olophrum*; seashore collection; Japan).
- Watanabe, 1990: 130 (*Olophrum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**arvernium** Coiffait, 1978f: 275 (*Olophrum*; Type locality: Puy de Sancy, Puy-de-Dôme).

▲ **DISTRIBUTION:** France.

**assimile** Paykull, 1800: 409 (*Staphylinus*; Type locality: Suecia).

- Gyllenhal, 1810: 202 (*Omalium*; characters).
- Gyllenhal, 1827: 463 (*Omalium*).
- C. Sahlberg, 1827: 278 (*Omalium*; characters; Finland).
- Curtis, 1829: 28 (*Anthobium*; catalog; Britain).
- Mannerheim, 1830: 51 (*Omalium*; Sweden).
- Mannerheim, 1831: 465 (*Omalium*; Sweden).
- Erichson, 1839a: 624 (*Olophrum*; characters; Germany).
- Heer, 1839: 189 (*Olophrum*; characters; Switzerland).
- Erichson, 1840: 865 (*Olophrum*; characters; Germany; Sweden).
- Laporte, 1840: 191 (*Omalium*; characters; Sweden; France).
- Redtenbacher, 1849: 749 (*Olophrum*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 635 (*Olophrum*; characters; France).
- Redtenbacher, 1857: 248 (*Olophrum*; characters; Austria).
- Kraatz, 1857d: 942 (*Olophrum*; characters; Germany).
- Thomson, 1861: 194 (*Olophrum*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Olophrum*; Russia).
- Fauvel, 1871a: 124 [= 1872: 98] (*Olophrum*; characters; France; Scandinavia; Germany; Switzerland; Austria; Russia; Syria).
- Redtenbacher, 1874: 268 (*Olophrum*; characters; Austria).
- Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).
- J. Sahlberg, 1876: 213 (*Olophrum*; Finland).
- Mulsant and Rey, 1880: 139 (*Olophrum*; characters; France).
- Ganglbauer, 1895: 720 (*Olophrum*; characters; north and middle Europe).
- Luze, 1905: 41 (*Olophrum*; characters; central and northern Europe; Caucasus).
- Reitter, 1909: 186 (*Olophrum*; characters; Germany).
- Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).
- Johansen, 1914: 593 (*Olophrum*; characters; Denmark).
- Scheerpeltz, 1929: 113 (*Olophrum*; characters; Bosnia, Serbia, Dalmatia, Romania, Ukraine, Alps, Austria, Poland, Germany, Holland, Belgium, France, Denmark, Sweden, Norway, Finland, Russia, Caucasus).
- Portevin, 1929: 440 (*Olophrum*; characters; France).
- Munster, 1936: 101 (*Olophrum*; characters; notes).
- Palm, 1948: 108 (*Olophrum*; characters; Sweden; Denmark; Norway; Finland).

- Horion, 1963: 113 (*Olophrum*; Caucasus; Syria; Russia; Finland; Sweden; Norway; Scotland; Denmark; Baltic states; Poland; Czechoslovakia; Hungary; Romania; Yugoslavia; Slovenia; Italy ?; France; Switzerland; Belgium; Germany; Austria).
- Lohse, 1964: 54 (*Olophrum*; characters; central Europe).
- Smetana, 1964c: 171 (*Olophrum*; characters).
- Smetana, 1964d: 54 (*Olophrum*; Czechoslovakia).
- Iablokoff-Khuzorian, 1964: 159 (*Olophrum*; characters).
- Szujewski, 1968a: 712 (*Olophrum*; Poland).
- Pope, 1977: 22 (*Olophrum*; Britain).
- Coiffait, 1978f: 277 (*Olophrum*; characters; France).
- Tóth, 1982: 88 (*Olophrum*; characters; Hungary).
- Zanetti, 1987: 303 (*Olophrum*; characters; Italy).
- Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Olophrum*; Slovakia; Czech Republic).
- Zanetti, 1995: 8 (*Olophrum*; Italy ?).
- Cibulskis, 1999: 35 (*Olophrum*; list; Latvia).
- Assing, 2001: 75 (*Olophrum*; collected from xerothermous site; Germany).

▲ **DISTRIBUTION:** Europe, Russia, Georgia, Syria.

**austriacum** Scheerpeltz, 1929: 35 (*Olophrum*; Type locality: Traunauen bei Ebelsberg bei Linz in Oberösterreich).

- Horion, 1935: 171 (*Olophrum*; characters; Germany).
- Horion, 1963: 110 (*Olophrum*; Germany; Austria).
- Lohse, 1964: 54 (*Olophrum*; characters; central Europe).
- Smetana, 1964c: 171 (*Olophrum*; characters).
- Tóth, 1982: 85 (*Olophrum*; characters; Hungary).
- Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Austria).

▲ **DISTRIBUTION:** Germany, Austria, Hungary.

**bernhaueri** Scheerpeltz, 1929: 80 (*Olophrum*; Type locality: Kaukasus, Kasbekp.).

▲ **DISTRIBUTION:** Georgia.

*bernhauerianum* Scheerpeltz, 1929, see: *consimile* Gyllenhal, 1810.

*blattoides* Ahrens, 1812, see: *piceum* Gyllenhal, 1810.

**bodemeyeri** Scheerpeltz, 1929: 94 (*Olophrum*; Type locality: Luristan, Persien).

▲ **DISTRIBUTION:** Iran.

**boreale** Paykull, 1792: 146 (*Staphylinus*; Type locality: Bothnia occidentali).

- Paykull, 1800: 411 (*Staphylinus*; [**Note:** Bernhauer and Schubert, 1910: 66 cited the female of *boreale* Paykull, 1800 as a synonym of *consimile*]; characters; Sweden).
- Gravenhorst, 1806: 213 (*Omalium*; synonym of *quadrum* Gravenhorst).
- Gyllenhal, 1810: 198 (*Omalium*; characters; western Bothnia region).
- Gyllenhal, 1827: 461 (*Omalium*).
- C. Sahlberg, 1827: 277 (*Omalium*; characters; Lapland).
- Zetterstedt, 1828: 48 (*Omalium*; characters; Lapland).
- Mannerheim, 1830: 51 (*Omalium*; Lapland).
- Mannerheim, 1831: 465 (*Omalium*; Lapland).
- Zetterstedt, 1838: 49 (*Omalium*; characters; habitat; Lapland).
- Erichson, 1840: 866 (*Olophrum*; characters; Finland).
- Thomson, 1861: 193 (*Olophrum*; characters; Scandinavia).
- Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).
- J. Sahlberg, 1876: 212 (*Olophrum*; Finland).
- Luze, 1905: 43 (*Olophrum*; characters; Lapland; Finland; Norway).
- Poppius, 1909: 5 (*Olophrum*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).
- Scheerpeltz, 1929: 124 (*Olophrum*; characters; Norway, Sweden, Finland, Russia).
- Blair, 1933: 94 (*Olophrum*; Quebec).
- Munster, 1935: 25, 29 (*Olophrum*; characters; notes).

- Palm, 1948: 107 (*Olophrum*; characters; Sweden; Norway; Finland).
- Ashworth, 1972: 214 (*Olophrum*; late-glacial subfossil; Britain).
- Campbell, 1983: 602 (*Olophrum*; characters; Alberta; British Columbia; Manitoba; Northwest Territories; Quebec; Yukon Territory; Alaska; Montana; Utah; Wyoming).
- Lohse and Lucht, 1989: 126 (*Olophrum*; note).
- Ryabukhin, 1991b: 14 (*Olophrum*; characters; Russia).
- Elias, 1991: 556 (*Olophrum*; Quaternary fossil collection; Colorado).
- Downie and Arnett, 1996: 432 (*Olophrum*; characters; Canada; USA).
- Lemdahl and Gustavsson, 1997: 181 (*Olophrum*; collected in lateglacial and middle Holocene deposits; Sweden).
- Ryabukhin, 1999: 23 (*Olophrum*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Sweden, Norway, Finland, Russia, Canada, USA.
- nigropiceum* Motschulsky, 1860b: 119 (*Olophrum*; Type locality: Kamtschatka).
  - Motschulsky, 1859: 491 (*Olophrum*; Amur River).
  - Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).
  - Scheerpeltz, 1929: 120 (*Olophrum*; characters; Siberia, Norway).
  - Munster, 1935: 29, 30 (*Olophrum*; characters; variety of *boreale*; notes).
  - Steel, 1964a: 248 (*Olophrum*; confirmation of synonymy with *nigropiceum*).
  - Campbell, 1983: 602 (*Olophrum*; synonym of *boreale*).
- minor* Poppius, 1909a: 15 (*Olophrum*; variety of *boreale*; [**preoccupied**]; Type locality: Tarhanowa).
- helleni* Scheerpeltz, 1929: 128 (*Olophrum*; Type locality: nördlichstes Norwegen: Finmarken, Varanger-Fjord, Tana-Fjord, Vadsö; nördlichstes Schweden: Torne-Träsk; nördlichstes Finnland: Enare-See; Halbinse Kola; Halbinsel Kanin).
  - Munster, 1935: 29, 30 (*Olophrum*; variety of *boreale*; notes).
  - Campbell, 1983: 603 (*Olophrum*; synonym of *boreale*).
- quesneli* Hatch, 1957: 62 (*Olophrum*; Type locality: B. C. [British Columbia]: Barkerville).
  - Campbell, 1983: 603 (*Olophrum*; synonym of *boreale*).
- brevicolle* Bernhauer, 1903, see: *latum* Mäklin, 1853.
- bulgaricum* Scheerpeltz, 1929: 37 (*Olophrum*; Type locality: Kalofer, Tundza, Nordbulgarien).
  - ▲ **DISTRIBUTION:** Bulgaria.
- cascadense* Campbell, 1983: 596 (*Olophrum*; Type locality: California: Mt. Lassen N. P., Kings Creek, 7500 feet. Also cited from Oregon).
  - ▲ **DISTRIBUTION:** USA.
- caucasicum* Fauvel, 1875a: VII [= 1875b: 209] (*Olophrum*; Type locality: Caucase).
  - Luze, 1905: 39 (*Olophrum*; characters; Caucasus).
  - Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).
  - Scheerpeltz, 1929: 67 (*Olophrum*; characters; Caucasus).
  - Tikhomirova, 1973a: 139 (*Olophrum*; checklist; Caucasus).
  - ▲ **DISTRIBUTION:** Georgia, Azerbaijan.
- celatum*† Scudder, 1900a: 86 (*Olophrum*; pleistocene fossil; Type locality: Scarborough).
  - ▲ **DISTRIBUTION:** Canada.
- consimile* Gyllenhal, 1810: 199 (*Omalium*; Type locality: Bothnia occidentalis).
  - Paykull, 1800: 411 (*Staphylinus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 66 cited the female of *boreale* Paykull, 1800 as a synonym of *consimile*]; characters; Sweden).
  - Gyllenhal, 1827: 461 (*Omalium*).
  - C. Sahlberg, 1827: 277 (*Omalium*; characters; Finland).
  - Zetterstedt, 1828: 48 (*Omalium*; characters; Lapland).
  - Mannerheim, 1830: 51 (*Omalium*; Finland).
  - Mannerheim, 1831: 465 (*Omalium*; Finland).
  - Stephens, 1834: 341 (*Anthobium*; characters; Scotland).
  - Zetterstedt, 1838: 49 (*Omalium*; characters; habitat; Lapland).



- Stephens, 1839: 427 (*Olophrum*; characters; England).
  - Erichson, 1840: 867 (*Olophrum*; characters; Lapland; Russia).
  - Redtenbacher, 1857: 993 (*Olophrum*; characters; Austria).
  - Kraatz, 1857d: 941 (*Olophrum*; characters; Germany).
  - Thomson, 1861: 193 (*Olophrum*; characters; Scandinavia).
  - Fauvel, 1871a: 125 [= 1872: 99] (*Olophrum*; characters; Britain; Germany; Russia; Lapland; Scandinavia).
  - LeConte, 1873: 327 (*Omalium*; characters).
  - Redtenbacher, 1874: 268 (*Olophrum*; characters).
  - Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).
  - J. Sahlberg, 1876: 212 (*Olophrum*; Finland).
  - Fowler, 1888: 405 (*Olophrum*; characters; Britain).
  - Ganglbauer, 1895: 721 (*Olophrum*; characters; north Europe; England; Germany).
  - Luze, 1905: 45 (*Olophrum*; characters; Germany; Finland; Sweden; Norway; England; Lapland; Russia; Siberia).
  - Poppus, 1909: 5 (*Olophrum*; Lena Valley, Siberia).
  - Reitter, 1909: 186 (*Olophrum*; characters; Germany).
  - Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).
  - Notman, 1919a: 95 (*Olophrum*; Ontario).
  - Bernhauer, 1926g: 2 (*Olophrum*; Kamchatka region).
  - Scheerpeltz, 1929: 155 (*Olophrum*; characters; Germany; Sweden; Norway; Finland; Russia; Urals; Siberia; Alaska; Vancouver; Alberta; Quebec; Maine; New York).
  - Munster, 1936: 97 (*Olophrum*; characters; notes).
  - Palm, 1948: 107 (*Olophrum*; characters; Sweden; Norway; Finland).
  - Hatch, 1957: 61 (*Olophrum*; characters; British Columbia; Oregon; Idaho).
  - Horion, 1963: 115 (*Olophrum*; Russia; Finland; Sweden; Norway; Britain; Poland; Czech Republic; Germany).
  - Lohse, 1964: 54 (*Olophrum*; characters; central Europe).
  - Steel, 1964a: 248 (*Olophrum*; notes).
  - Smetana, 1964c: 171 (*Olophrum*; characters).
  - Pope, 1977: 22 (*Olophrum*; Britain).
  - Schwert and Morgan, 1980: 101 (*Olophrum*; late glacial fossil; New York).
  - Miller and Morgan, 1982: 264 (*Olophrum*; Postglacial fossils; New York).
  - Campbell, 1983: 586 (*Olophrum*; characters; Alberta; British Columbia; Manitoba; Northwest Territories; Quebec; Saskatchewan; Yukon Territory; Alaska; Arizona; Colorado; Idaho; Michigan; Montana; Nevada; Oregon; South Dakota; Utah; Washington; Wyoming).
  - Schwert, Anderson, Morgan, and Karrow, 1985: 216 (*Olophrum*; Quaternary fossil; Ontario).
  - Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia; Austria; Sweden).
  - Schülke and Uhlig, 1988: 3 (*Olophrum*; notes; Germany).
  - Ryabukhin, 1991b: 17 (*Olophrum*; characters; Russia).
  - Elias, 1991: 556 (*Olophrum*; Quaternary fossil collection; Colorado).
  - Boháč, 1993: 41 (*Olophrum*; Czech Republic).
  - Zanetti, 1995: 8 (*Olophrum*; Italy).
  - Downie and Arnett, 1996: 433 (*Olophrum*; characters; Canada; USA).
  - Lavoie, Elias, and Payette, 1997: 231 (*Olophrum*; Holocene fossil; subarctic Quebec).
  - Ryabukhin, 1999: 22 (*Olophrum*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Europe, Russia, Canada, USA.

*marginatum* Kirby, 1837: 89 (*Omalium*; [**preoccupied**]; Type locality: America Borealis; Lat. 65°).

- Fauvel, 1878d: 244 [= 1878e: 80] (*Olophrum*; characters; Alaska; Lake superior; Michigan).
- LeConte, 1879: 510 (*Olophrum*; characters; Colorado; Alaska).
- Bernhauer and Schubert, 1910: 65 (*Lathrimaeum*; synonym of *sordidum*).
- Blair, 1933: 94 (*Olophrum*; synonym of *boreale*).
- Moore, 1966: 55 (*Anthobium*).
- Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).

- alpinum* Heer, 1839: 190 (*Acidota*; Type locality: Seeloch auf der Alp Mühlebach; auf dem Luchmanier; Zaportalp; Canälpass am Gletscherrand; St. Bernhard; Chamouni).  
 — Fairmaire and Laboulbène, 1856: 635 (*Olophrum*; characters; France).  
 — Kraatz, 1857d: 941 (*Olophrum*; synonym of *alpestre*).  
 — Fauvel, 1871a: 125 [= 1872: 99] (*Olophrum*; characters; France; Switzerland; Germany).  
 — Mulsant and Rey, 1880: 141 (*Olophrum*; characters; France).  
 — Ganglbauer, 1895: 720 (*Olophrum*; characters; Alps; Pyrenees; Sudeten).  
 — Luze, 1905: 44 (*Olophrum*; characters; Alps; Pyrenees; Sudeten).  
 — Reitter, 1909: 186 (*Olophrum*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 132 (*Olophrum*; characters; Alps).  
 — Portevin, 1929: 440 (*Olophrum*; characters; France).  
 — Munster, 1936: 97–100 (*Olophrum*; variety of *consimile*; discussion).  
 — Palm, 1948: 107 (*Olophrum*; characters; Sweden).  
 — Horion, 1963: 114 (*Olophrum*; Italy; France; northern Carpathians; Czech Republic; Austria).  
 — Lohse, 1964: 55 (*Olophrum*; characters; central Europe).  
 — Smetana, 1964c: 171 (*Olophrum*; characters).  
 — Coiffait, 1978f: 278 (*Olophrum*; characters; France).  
 — Tóth, 1982: 86 (*Olophrum*; characters).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).  
 — Zanetti, 1987: 305 (*Olophrum*; characters; Italy).  
 — Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia; Austria).  
 — Boháč, 1993: 41 (*Olophrum*; cited as valid species; Slovakia; Czech Republic).  
 — Zanetti, 1995: 8 (*Olophrum*; synonym of *consimile*).
- alpestre* Erichson, 1840: 867 (*Olophrum*; Type locality: Helvetiae alpes).  
 — Heer, 1841: 571 (*Olophrum*; synonym of *alpina*).  
 — Redtenbacher, 1849: 828 (*Olophrum*; characters; Austria).  
 — Fairmaire and Laboulbène, 1856: 635 (*Olophrum*; synonym of *alpinum*).  
 — Redtenbacher, 1857: 248 (*Olophrum*; characters; Austria).  
 — Kraatz, 1857d: 941 (*Olophrum*; characters; Germany).  
 — Fauvel, 1865a: 318 [= 1865b: 68] (*Olophrum*; habitat; France).  
 — Fauvel, 1871a: 125 [= 1872: 99] (*Olophrum*; synonym of *alpinum*).  
 — Redtenbacher, 1874: 268 (*Olophrum*; characters; Austria).  
 — Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).  
 — Mulsant and Rey, 1880: 142 (*Olophrum*; synonym of *alpinum*).  
 — Ganglbauer, 1895: 720 (*Olophrum*; synonym of *alpinum*).  
 — Luze, 1905: 44 (*Olophrum*; synonym of *alpinum*).  
 — Bernhauer and Schubert, 1910: 66 (*Olophrum*; synonym of *alpinum*).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).  
 — Zanetti, 1987: 305 (*Olophrum*; synonym of *alpinum*).
- parvulum* Mäklin, 1853: 195 (*Olophrum*; Type locality: lacum Thkujabna in peninsula Kenai; [**Note:** See lectotype designation by Campbell, 1983]).  
 — Fauvel, 1878d: 245 [= 1878e: 81] (*Olophrum*; characters; Alaska).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 149 (*Olophrum*; characters; Alaska).  
 — Steel, 1964a: 248, 250 (*Olophrum*; appears to be small form and synonym of *consimile*).  
 — Campbell, 1983: 586 (*Olophrum*; lectotype designation; synonym of *consimile*).
- marginatum* Mäklin, 1853: 196 (*Olophrum*; [**preoccupied**]; Type locality: peninsula Kenai; [**Note:** See lectotype designation by Campbell, 1983]).  
 — Fauvel, 1869: 493 (*Olophrum*; synonym of *consimile*).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 152 (*Olophrum*; characters; Alaska).  
 — Munster, 1936: 100 (*Olophrum*; variety of *consimile*).  
 — Steel, 1964a: 248 (*Olophrum*; synonym of *consimile*).  
 — Campbell, 1983: 586 (*Olophrum*; lectotype designation; synonym of *consimile*).

- minor* J. Sahlberg, 1876: 213 (*Olophrum*; variety of *consimile*; Type locality: Muonioniska).  
 — J. Sahlberg, 1871a: 424 (*Olophrum*; characters; unnamed variety of *consimile*; [**Note:** Bernhauer and Schubert, 1910: 66 cited this reference as the original description but without the year and with an incorrect volume and page number; there was no available name]).  
 — Luze, 1905: 45 (*Olophrum*; synonym of *consimile*).  
 — Bernhauer and Schubert, 1910: 66 (*Olophrum*; synonym of *consimile*).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).
- limbatum* Mäklin, 1878: 23 [= 1878a: 299] (*Olophrum*; Type locality: Jarzowa Selo, 60°10' N. lat.).  
 — Mäklin, 1881: 39 (*Olophrum*; characters; Jarzowa Selo, lat. bor 60°10').  
 — Ganglbauer, 1895: 721 (*Olophrum*; synonym of *consimile*).  
 — Luze, 1905: 45 (*Olophrum*; synonym of *consimile*).  
 — Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 160 (*Olophrum*; characters; Siberia).  
 — Munster, 1936: 99, 100 (*Olophrum*; monstrosity of *consimile*).  
 — Steel, 1964a: 248 (*Olophrum*; note).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).
- parvipenne* Scheerpeltz, 1929: 134 (*Olophrum*; variety of *alpinum*; Type locality: various localities in Alps).  
 — Coiffait, 1978f: 278 (*Olophrum*; characters; France).  
 — Tóth, 1982: 87 (*Olophrum*; variety of *alpinum*; characters).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).
- recticolle* Scheerpeltz, 1929: 141 (*Olophrum*; Type locality: various localities in Alps).  
 — Horion, 1935: 172 (*Olophrum*; characters; East Alps; Sudeten; Carpathians).  
 — Horion, 1963: 115 (*Olophrum*; Austria; Switzerland; Czech Republic; Carpathians; Romania).  
 — Lohse, 1964: 55 (*Olophrum*; characters; central Europe).  
 — Smetana, 1964c: 171 (*Olophrum*; characters).  
 — Coiffait, 1978f: 277 (*Olophrum*; characters; France).  
 — Tóth, 1982: 87 (*Olophrum*; characters).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).  
 — Zanetti, 1987: 306 (*Olophrum*; characters; Italy).  
 — Lucht, 1987: 89 (*Olophrum*; checklist; Poland; Czechoslovakia; Austria).  
 — Lohse and Lucht, 1989: 126 (*Olophrum*; synonym of *alpinum*).  
 — Boháč, 1993: 41 (*Olophrum*; synonym of *alpinum*).  
 — Zanetti, 1995: 8 (*Olophrum*; synonym of *consimile*).
- curtipenne* Scheerpeltz, 1929: 143 (*Olophrum*; variety of *recticolle*; Type locality: various localities in Alps).  
 — Coiffait, 1978f: 278 (*Olophrum*; variety of *recticolle*; characters; France).  
 — Tóth, 1982: 87 (*Olophrum*; variety of *recticolle*; characters; Hungary).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).
- bernhauerianum* Scheerpeltz, 1929: 146 (*Olophrum*; Type locality: Dolomiten: Schlern).  
 — Horion, 1963: 115 (*Olophrum*; Switzerland; Italy; Austria).  
 — Lohse, 1964: 55 (*Olophrum*; characters; central Europe).  
 — Campbell, 1983: 586 (*Olophrum*; synonym of *consimile*).  
 — Zanetti, 1987: 307 (*Olophrum*; characters; Italy).  
 — Lucht, 1987: 89 (*Olophrum*; checklist; Austria; Switzerland).  
 — Lohse and Lucht, 1989: 126 (*Olophrum*; note).  
 — Zanetti, 1995: 8 (*Olophrum*; synonym of *consimile*).
- marginicolle* Blair, 1933: 95 (*Olophrum*; replacement name for *marginatum* Mäklin).
- convexicolle* LeConte, 1850, see: *rotundicolle* C. Sahlberg, 1830.
- convexum* Mäklin, 1853, see: *rotundicolle* C. Sahlberg, 1830.
- crenulatum* Hatch, 1957, see: *Acidota*.
- curtipenne* Scheerpeltz, 1929, see: *consimile* Gyllenhal, 1810.

**dejectum**† Scudder, 1900a: 86 (*Olophrum*; pleistocene fossil; Type locality: Scarborough).

▲ **DISTRIBUTION:** Canada.

*emarginatum* Erichson, 1840, see: *obtectum* Erichson, 1840.

**eppelsheimi** Scheerpeltz, 1929: 73 (*Olophrum*; Type locality: Kasbek, Kaukasus).

▲ **DISTRIBUTION:** Georgia.

**erevanicum** Iablokoff-Khinzorian, 1964: 155 (*Olophrum*; Type locality: ArmSSR: Dzhrvezh, okr. Erevana).

▲ **DISTRIBUTION:** Armenia.

**fimosum** Gistel, 1857: 34 (*Olophrum*; [Note: **Nomen dubium**]; Type locality: Deutschland).

▲ **DISTRIBUTION:** Germany.

**florae** Scheerpeltz, 1935: 1 (*Olophrum*; Type locality: Hohen Tauern Salzburgs).

— Lohse, 1964: 54 (*Olophrum*; characters; Austria).

— Lucht, 1987: 89 (*Olophrum*; checklist; Austria).

▲ **DISTRIBUTION:** Austria.

**foveatum** Roubal, 1911a: 272 (*Olophrum*; Type locality: Kaukasus: Gudaur, in der Höhe von 7000 bis 8000').

— Scheerpeltz, 1929: 78 (*Olophrum*; characters; Caucasus).

▲ **DISTRIBUTION:** Caucasus.

**fuscum** Gravenhorst, 1806: 211 (*Omalium*; Type locality: Norimberga).

— Olivier, 1811: 478 (*Omalium*; characters; Germany).

— Erichson, 1839a: 623 (*Olophrum*; characters; Germany).

— Stephens, 1839: 427 (*Olophrum*; characters; England).

— Erichson, 1840: 865 (*Olophrum*; characters; Germany).

— Redtenbacher, 1849: 828 (*Olophrum*; characters; Austria).

— Redtenbacher, 1857: 248 (*Olophrum*; characters; Austria).

— Kraatz, 1857d: 940 (*Olophrum*; characters; Germany).

— Hochhuth, 1862: 103 (*Olophrum*; Russia).

— Thomson, 1884: 1033 (*Olophrum*; characters; Sweden).

— Fauvel, 1871a: 124 [= 1872: 98] (*Olophrum*; characters; France; Britain; Germany; Austria; Russia; Siberia).

— Redtenbacher, 1874: 268 (*Olophrum*; characters; Austria).

— Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).

— Mulsant and Rey, 1880: 138 (*Olophrum*; characters; France).

— Fowler, 1888: 404 (*Olophrum*; characters; Britain).

— Ganglbauer, 1895: 720 (*Olophrum*; characters; north and middle Europe; Caucasus; Siberia; Alaska).

— Luze, 1905: 39 (*Olophrum*; characters; central and northern Europe; Siberia; Mongolia; Alaska).

— Poppus, 1909: 5 (*Olophrum*; Lena Valley, Siberia).

— Reitter, 1909: 186 (*Olophrum*; characters; Germany).

— Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).

— Johansen, 1914: 593 (*Olophrum*; characters; Denmark).

— Van Dyck, 1921: 164 (*Olophrum*; Pribilof Islands, Alaska).

— Scheerpeltz, 1929: 58 (*Olophrum*; characters; Alps; Bohemia; Germany; France; Holland; Belgium; Denmark; England; Ireland; Scotland; Sweden; Iran).

— Munster, 1935: 26 (*Olophrum*; characters; discussion).

— Palm, 1948: 105 (*Olophrum*; characters; Sweden; Denmark; Norway; Finland).

— Horion, 1963: 111 (*Olophrum*; Britain; Denmark; Norway; Sweden; Finland; Russia; Baltic region; Poland; Czech Republic; Slovakia; Italy; France; Switzerland ?; Belgium; Holland; Germany; Austria).

— Lohse, 1964: 54 (*Olophrum*; characters; central Europe).

— Smetana, 1964c: 171 (*Olophrum*; characters).

— Steel, 1970a: 18 (*Olophrum*; larval characters; biological notes).

— Hammond, 1971: 167 (*Olophrum*; notes; characters; Britain).

- Ashworth, 1972: 214 (*Olophrum*; late-glacial subfossil; Britain).
- Pope, 1977: 22 (*Olophrum*; Britain).
- Coiffait, 1978f: 277 (*Olophrum*; characters; France).
- Hammond, 1980: 136 (*Olophrum*; Ireland).
- Waterston, Owen, Welch, Bacchus and Hammond, 1981: 273 (*Olophrum*; Outer Hebrides).
- Tóth, 1982: 86 (*Olophrum*; characters).
- Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia; Austria; Denmark; Sweden).
- Boháč, 1993: 41 (*Olophrum*; Slovakia; Czech Republic).
- Lemdahl and Gustavsson, 1997: 181 (*Olophrum*; collected in lateglacial and middle Holocene deposits; Sweden).
- Cibulskis, 1998: 67 (*Olophrum*; Latvia).
- Cibulskis, 1999: 35 (*Olophrum*; list; Latvia).
- ▲ **DISTRIBUTION:** Europe, Russia, Iran, Mongolia, USA.

*laticolle* J. Sahlberg, 1876: 211 (*Olophrum*; Type locality: Kavantholm i Viborgs; Lohikoski nära Jyväskylä).

- Fowler, 1888: 405 (*Olophrum*; synonym of *fuscum*).
- Ganglbauer, 1895: 720 (*Olophrum*; synonym of *fuscum*).
- Luze, 1905: 39 (*Olophrum*; synonym of *fuscum*).
- Bernhauer and Schubert, 1910: 66 (*Olophrum*; synonym of *fuscum*).
- Scheerpeltz, 1929: 61 (*Olophrum*; characters; Sweden; Norway; Finland).
- Munster, 1935: 26, 28 (*Olophrum*; variety of *fuscum*; notes).
- Palm, 1948: 105 (*Olophrum*; variety of *fuscum*).

*nicholsoni* Donisthorpe, 1910: 139 (*Olophrum*; Type locality: Wicken Fen).

- Scheerpeltz, 1929: 50 (*Olophrum*; characters; England).
- Munster, 1935: 28, 29 (*Olophrum*; monstrosity of *fuscum* variety *laticolle*; notes).
- Hammond, 1971: 166, 170 (*Olophrum*; synonym of *fuscum*).
- Pope, 1977: 22 (synonym of *fuscum*).

*schusteri* Scheerpeltz, 1929: 32 (*Olophrum*; Type locality: nördlichstes Norwegen).

- Munster, 1935: 25, 28, 29 (*Olophrum*; notes; cited variety, extreme form, and aberration of *laticolle*).

*helleni* Scheerpeltz, 1929, see: *boreale* Paykull, 1792.

**henryi** Herman, 2001: 37 (*Olophrum*; replacement name for *interglaciale* Wickham).

▲ **DISTRIBUTION:** USA.

*interglaciale*† Wickham, 1917: 145 (*Olophrum*; [**preoccupied**]; Pleistocene Fossil; Type locality: peat seam on the north bank of the Sangamon River near Mahomet, Campaign County, Illinois).

- Herman, 2001: 37 (*Olophrum*; synonym of *henryi*).

**idahoense** Campbell, 1983: 599 (*Olophrum*; Type locality: Idaho: Elmore Co.: Trinity Lks. region, spring nr. Big Trinity Lk., 8400 feet).

▲ **DISTRIBUTION:** USA.

**interglaciale**† Mjöberg, 1904: 493 (*Olophrum*; subfossil; Type locality: Sweden).

- Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).

▲ **DISTRIBUTION:** Sweden.

*interglaciale* Wickham, 1917, see: *henryi* Herman, 2001.

**japonicum** Scheerpeltz, 1929: 110 (*Olophrum*; Type locality: Japonia, Kioto).

- Watanabe, 1990: 137 (*Olophrum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**kasbekianum** Scheerpeltz, 1929: 75 (*Olophrum*; Type locality: Kasbek, Kaukasus).

▲ **DISTRIBUTION:** Georgia.

**kashmiricum** Cameron, 1941: 142 (*Olophrum*; Type locality: Kashmir: Gulmarg).

▲ **DISTRIBUTION:** India.

*parvum* Cameron, 1941: 142 (*Olophrum*; subspecies *parvum*; Type locality: Kashmir: Gulmarg).

**kondarensis** Iablokoff-Khnzorian, 1964: 157 (*Olophrum*; Type locality: Tadzhikskaja SSR: dolina Varzoba).

▲ **DISTRIBUTION:** Tajikistan.

*laticolle* J. Sahlberg, 1876, see: *fuscum* Gravenhorst, 1806.

**latum** Mäklin, 1853: 194 (*Olophrum*; Type locality: insula St. Georgii; Nicolajevsk peninsulae Kenai).

— Fauvel, 1878d: 245 [= 1878e: 81] (*Olophrum*; characters; Alaska).

— Ganglbauer, 1895: 720 (*Olophrum*; synonym of *fuscum*).

— Luze, 1905: 39 (*Olophrum*; synonym of *fuscum*).

— Bernhauer and Schubert, 1910: 66 (*Olophrum*; synonym of *fuscum*).

— Scheerpeltz, 1929: 56 (*Olophrum*; characters; Alaska).

— Campbell, 1983: 611 (*Olophrum*; characters; Northwest Territories; Yukon Territory; Alaska).

— Ryabukhin, 1991b: 18 (*Olophrum*; characters; Russia).

— Ryabukhin, 1999: 24 (*Olophrum*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Mongolia, Altai region, Russia, Canada, USA.

*brevicolle* Bernhauer, 1903b: 190 (*Olophrum*; Type locality: Central Altai).

— Luze, 1905: 40 (*Olophrum*; characters; Altai).

— Bernhauer and Schubert, 1910: 66 (*Olophrum*; catalog).

— Scheerpeltz, 1929: 42 (*Olophrum*; characters; Altai region).

— Smetana 1975c: 159 (*Olophrum*; Mongolia).

— Campbell, 1983: 611 (*Olophrum*; synonym of *latum*).

**lederi** Scheerpeltz, 1929: 87 (*Olophrum*; Type locality: Kasbek, Caucasus).

▲ **DISTRIBUTION:** Georgia.

**leechi** Hatch, 1957: 63 (*Olophrum*; Type locality: B. C. [British Columbia]: Grouse Mt. Also cited from Oregon and Idaho).

▲ **DISTRIBUTION:** Canada, USA.

**leleupi** Fagel, 1948: 2 (*Olophrum*; Type locality: Belgique: Wavreille).

— Horion, 1963: 110 (*Olophrum*; characters; Belgium).

— Lohse, 1964: 53 (*Olophrum*; characters; central Europe).

— Lucht, 1987: 89 (*Olophrum*; checklist; Benelux).

▲ **DISTRIBUTION:** Belgium.

**leonhardi** Scheerpeltz, 1929: 137 (*Olophrum*; Type locality: Bulg. Rila Geb. Vrlika).

— Zanetti, 1984: 76 (*Olophrum*; Bulgaria).

▲ **DISTRIBUTION:** Bulgaria.

*limbatum* Mäklin, 1878, see: *consimile* Gyllenhal, 1810.

**luzei** Scheerpeltz, 1929: 70 (*Olophrum*; Type locality: Kaukasus, Letschgum).

▲ **DISTRIBUTION:** Caucasus.

*marginatum* Kirby, 1837, see: *consimile* Gyllenhal, 1810.

*marginatum* Mäklin, 1853, see: *consimile* Gyllenhal, 1810.

*marginicolle* Blair, 1933, see: *consimile* Gyllenhal, 1810.

**mesmini** Scheerpeltz, 1929: 117 (*Olophrum*; Type locality: Geok-Tapa, Caucasus).

— Iablokoff-Khnzorian, 1964: 159 (*Olophrum*; characters).

▲ **DISTRIBUTION:** Caucasus.

*minor* J. Sahlberg, 1876, see: *consimile* Gyllenhal, 1810.

*minor* Poppius, 1909, see: *boreale* Paykull, 1792.

**mutatum** Scheerpeltz, 1929: 100 (*Olophrum*; Type locality: Japan).

— Watanabe, 1990: 129 (*Olophrum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*nicholsoni* Donisthorpe, 1910, see: *fuscum* Gravehorst, 1806.

*nigropiceum* Motschulsky, 1860, see: *boreale* Paykull, 1792.

**obtectum** Erichson, 1840: 865 (*Olophrum*; Type locality: America septentrionalis; [**Note:** See lectotype designation by Campbell, 1983]).

- Fauvel, 1869: 493 (*Olophrum*; synonym of *emarginatum*).
- Fauvel, 1878d: 242 [= 1878e: 78] (*Olophrum*; characters; Michigan; Massachusetts; Missouri).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).
- Blatchley, 1910: 479 (*Olophrum*; characters; Indiana).
- Scheerpeltz, 1929: 45 (*Olophrum*; characters; New Jersey, New York, Pennsylvania, Maine, New Hampshire, Massachusetts).
- Campbell, 1983: 608 (*Olophrum*; lectotype designation; characters; Ontario; Quebec; Connecticut; Illinois; Indiana; Kansas; Kentucky; Maryland; Massachusetts; Michigan; New Jersey; New York; North Carolina; Ohio; Pennsylvania; Tennessee; Virginia; West Virginia; Wisconsin).
- Levesque and Levesque, 1996: 290 (*Olophrum*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 432 (*Olophrum*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

*rotundicolle* Say, 1832: 50 [= 1834: 464] (*Omalium*; [**preoccupied**]; Type locality: Pennsylvania).

- Erichson, 1840: 868 (*Olophrum*; synonym of *emarginatum*).
- Melsheimer, 1844: 43 (*Olophrum*; synonym of *emarginatum* Erichson).
- Fauvel, 1878d: 242 [= 1878e: 78] (*Olophrum*; synonym of *obtectum*).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; synonym of *obtectum*).
- Campbell, 1983: 608 (*Olophrum*; synonym of *obtectum*).

*emarginatum* Erichson, 1840: 868 (*Olophrum*; [**Note:** Not so stated but presumably a replacement name for *rotundicolle* Say]).

- Melsheimer, 1844: 43 (*Olophrum*; characters; found on blossoms of Red Maple).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; synonym of *obtectum*).
- Campbell, 1983: 608 (*Olophrum*; synonym of *obtectum*).

**paphlagonicum** Coiffait, 1978d: 172 (*Olophrum*; Type locality: Col de l'Ilgaz Dag, 1800 m).

▲ **DISTRIBUTION:** Turkey.

*parvipenne* Scheerpeltz, 1929, see: *consimile* Gyllenhal, 1810.

*parvulum* Mäklin, 1853, see: *consimile* Gyllenhal, 1810.

*parvum* Cameron, 1941, see: *kashmiricum* Cameron, 1941.

**piceum** Gyllenhal, 1810: 200 (*Omalium*; Type locality: Westmannia).

- Gyllenhal, 1827: 461 (*Omalium*; notes).
- Zetterstedt, 1828: 49 (*Omalium*; characters; Lapland).
- Curtis, 1829: 28 (*Anthobium*; catalog; Britain).
- Mannerheim, 1830: 51 (*Omalium*; Sweden).
- Mannerheim, 1831: 465 (*Omalium*; Sweden).
- Runde, 1835: 21 (*Omalium*; characters; Germany).
- Lacordaire, 1835: 485 (*Omalium*; characters; France).
- Erichson, 1839a: 623 (*Olophrum*; characters; Germany).
- Heer, 1839: 189 (*Olophrum*; characters; Switzerland).
- Stephens, 1839: 426 (*Olophrum*; characters; England).
- Erichson, 1840: 864 (*Olophrum*; characters; Germany; Hungary; England; Sweden).
- Laporte, 1840: 191 (*Omalium*; characters; Sweden; France).
- Hochhuth, 1849: 203 (*Olophrum*; characters; Caucasus).
- Redtenbacher, 1849: 749 (*Olophrum*; characters; Austria).
- Hardy, 1851: 57 (*Olophrum*; notes; England).
- Fairmaire and Laboulbène, 1856: 635 (*Olophrum*; characters; France).
- Redtenbacher, 1857: 247 (*Olophrum*; characters; Austria).
- Kraatz, 1857d: 939 (*Olophrum*; characters; Germany).
- Thomson, 1859: 49 (type species of *Olophrum*).

- Thomson, 1861: 193 (*Olophrum*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Olophrum*; Russia).
- Fauvel, 1871a: 123 [= 1872: 97] (*Olophrum*; characters; France; Scandinavia; Britain; Switzerland; Germany; Austria).
- Fauvel, 1873b: 118 [= 1873c: 11] (*Olophrum*; Sardinia; Russia).
- Redtenbacher, 1874: 268 (*Olophrum*; characters; Austria).
- Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).
- Mulsant and Rey, 1880: 135 (*Olophrum*; characters; France).
- Fowler, 1888: 404 (*Olophrum*; characters; Britain).
- Ganglbauer, 1895: 720 (*Olophrum*; characters; north and middle Europe).
- Luze, 1905: 38 (*Olophrum*; characters; central and northern Europe).
- Reitter, 1909: 186 (*Olophrum*; characters; Germany).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).
- Sharp and Muir, 1912: 501 (*Olophrum*; characters of male genitalia).
- Johansen, 1914: 592 (*Olophrum*; characters; Denmark).
- Scheerpeltz, 1929: 29 (*Olophrum*; characters; Czech Republic, Germany, Holland, Belgium, France, Denmark, England, Sweden, Spain).
- Portevin, 1929: 440 (*Olophrum*; characters; France).
- Munster, 1935: 25 (*Olophrum*; characters; notes; Sweden).
- Paulian, 1941: 152 (*Olophrum*; larval characters; France).
- Palm, 1948: 105 (*Olophrum*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 109 (*Olophrum*; Britain; Norway; Sweden; Finland; Denmark; Holland; Belgium; France; Switzerland; Italy; Baltic region; Czech Republic; Slovakia; Spain; Germany; Austria).
- Lohse, 1964: 53 (*Olophrum*; characters; central Europe).
- Smetana, 1964c: 170 (*Olophrum*; characters).
- Smetana, 1964d: 54 (*Olophrum*; Czechoslovakia).
- Pototskaia, 1967: 20 (*Olophrum*; larval characters).
- Kasule, 1968a: 72 (*Olophrum*; life history).
- Hammond, 1971: 167 (*Olophrum*; notes; characters; Britain).
- Pope, 1977: 22 (*Olophrum*; Britain).
- Hammond, 1980: 136 (*Olophrum*; Ireland).
- Tóth, 1982: 84 (*Olophrum*; characters; Hungary).
- Zanetti, 1987: 301 (*Olophrum*; characters; Italy).
- Lucht, 1987: 88 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Welch, 1993: 227 (*Olophrum*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Olophrum*; Slovakia; Czech Republic).
- Zanetti, 1995: 8 (*Olophrum*; Italy).
- Owen, 1997a: 148 (*Olophrum*; collecting sites; Ireland).
- Cibulskis, 1999: 35 (*Olophrum*; list; Latvia).
- ▲ **DISTRIBUTION:** Europe, Russia.

*blattoides* Ahrens, 1812: 20 (*Silpha*, cited as *Sylpha*; Type locality: im Harze).

- Erichson, 1839a: 623 (*Olophrum*; synonym of *piceum*).
- Heer, 1839: 189 (*Olophrum*; synonym of *piceum*).
- Redtenbacher, 1849: 749 (*Olophrum*; synonym of *piceum*).
- Erichson, 1840: 864 (*Olophrum*; synonym of *piceum*).
- Kraatz, 1857d: 940 (*Olophrum*; synonym of *piceum*).
- Mulsant and Rey, 1880: 136 (*Olophrum*; synonym of *piceum*).
- Ganglbauer, 1895: 720 (*Olophrum*; synonym of *piceum*).
- Luze, 1905: 38 (*Olophrum*; synonym of *piceum*).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; synonym of *piceum*).

**puncticolle** Eppelsheim, 1880a: 212 (*Olophrum*; Type locality: Südungarn).

- Ganglbauer, 1895: 720 (*Olophrum*; characters; Hungary; Bosnia).
- Luze, 1905: 42 (*Olophrum*; characters; Hungary; Austria; Croatia; Bosnia; Asia Minor; Syria).
- Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).



- Scheerpeltz, 1929: 97 (*Olophrum*; characters; Croatia; Siebenbürgen; Bosnia; Herzegovina).
- Tóth, 1982: 86 (*Olophrum*; characters; Hungary).
- ▲ **DISTRIBUTION:** Austria, Hungary, Bosnia Hercegovina, Croatia, Romania, Turkey, Syria.

*quesneli* Hatch, 1957, see: *boreale* Paykull, 1792.

*recticolle* Scheerpeltz, 1929, see: *consimile* Gyllenhal, 1810.

**reitteri** Scheerpeltz, 1929: 83 (*Olophrum*; Type locality: Russia merid.).

- ▲ **DISTRIBUTION:** Russia.

*rotundicolle* Say, 1832, see: *obtectum* Erichson, 1840.

**rotundicolle** C. Sahlberg, 1830: 281 (*Omalium*; Type locality: Lapponia).

- Mannerheim, 1830: 51 (*Omalium*; Lapland).
  - Mannerheim, 1831: 465 (*Omalium*; Lapland).
  - Runde, 1835: 21 (*Omalium*; characters; Germany).
  - Zetterstedt, 1838: 49 (*Omalium*; characters; habitat; Lapland).
  - Erichson, 1840: 866 (*Olophrum*; characters; Finland).
  - Thomson, 1861: 194 (*Olophrum*; characters; Scandinavia).
  - Seidlitz, 1875: 240 (*Olophrum*; characters; Baltic region).
  - J. Sahlberg, 1876: 213 (*Olophrum*; Finland).
  - Fauvel, 1878d: 243 [= 1878e: 79] (*Olophrum*; characters; Lake Superior).
  - Ganglbauer, 1895: 721 (*Olophrum*; characters; Sudeten; Finland; Lapland; North America).
  - Luze, 1905: 46 (*Olophrum*; characters; Lithuania; Russia; Finland; Lapland; Norway; North America).
  - Reitter, 1909: 186 (*Olophrum*; characters).
  - Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).
  - Blatchley, 1910: 479 (*Olophrum*; characters; Ohio).
  - Scheerpeltz, 1929: 163 (*Olophrum*; characters; Sudeten; Norway; Sweden; Finland; Russia).
  - Munster, 1936: 101 (*Olophrum*; characters; notes).
  - Palm, 1948: 108 (*Olophrum*; characters; Sweden; Norway; Finland).
  - Hatch, 1957: 63 (*Olophrum*; characters; British Columbia).
  - Horion, 1963: 116 (*Olophrum*; Russia; Finland; Sweden; Norway; Germany; Poland; Czech Republic).
  - Lohse, 1964: 53 (*Olophrum*; characters; central Europe).
  - Smetana, 1964c: 164 (*Olophrum*; Czechoslovakia).
  - Smetana, 1964c: 172 (*Olophrum*; characters).
  - Smetana, 1966: 325 (*Olophrum*; notes; Czechoslovakia).
  - Ashworth, 1972: 214 (*Olophrum*; late-glacial subfossil; Britain).
  - Schwert and Morgan, 1980: 101 (*Olophrum*; late glacial fossil; New York).
  - Miller and Morgan, 1982: 264 (*Olophrum*; Postglacial fossils; New York).
  - Campbell, 1983: 615 (*Olophrum*; characters; Alberta; British Columbia; Manitoba; Newfoundland; Northwest Territories; Ontario; Quebec; Saskatchewan; Yukon Territory; Alaska; Minnesota; New York).
  - Lucht, 1987: 89 (*Olophrum*; checklist; Germany; Poland; Czechoslovakia).
  - Ryabukhin, 1991b: 23 (*Olophrum*; characters; Russia).
  - Elias, 1991: 556 (*Olophrum*; Quaternary fossil collection; Colorado).
  - Boháč, 1993: 41 (*Olophrum*; Czech Republic).
  - Downie and Arnett, 1996: 432 (*Olophrum*; characters; Canada; USA).
  - Lavoie, Elias, and Payette, 1997: 231 (*Olophrum*; Holocene fossil; subarctic Quebec).
  - Ryabukhin, 1999: 23 (*Olophrum*; catalog; habitat; distribution; northeastern Russia).
  - ▲ **DISTRIBUTION:** Lithuania, Finland, Norway, Sweden, Germany, Poland, Czech Republic, Russia, Canada, USA.
- convexicolle* LeConte, 1850: 221 (*Lathrium*; Type locality: Eagle Harbor, Lake Superior; [Note: See lectotype designation by Campbell, 1983]).
- Fauvel, 1878d: 242 [= 1878e: 79] (*Olophrum*; synonym of *rotundicolle*).
  - Ganglbauer, 1895: 721 (*Olophrum*; synonym of *rotundicolle*).
  - Luze, 1905: 46 (*Olophrum*; synonym of *rotundicolle*).

- Bernhauer and Schubert, 1910: 67 (*Olophrum*; synonym of *rotundicolle*).  
 — Campbell, 1983: 615 (*Olophrum*; lectotype designation; synonym of *rotundicolle*).
- convexum* Mäklin, 1853: 195 (*Olophrum*; Type locality: peninsula Kenai; [Note: See lectotype designation by Campbell, 1983]).  
 — Fauvel, 1878d: 244 [= 1878e: 80] (*Olophrum*; characters; Alaska).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 168 (*Olophrum*; characters; Alaska).  
 — Steel, 1964a: 248 (*Olophrum*; synonym of *rotundicolle*).  
 — Campbell, 1983: 615 (*Olophrum*; lectotype designation; synonym of *rotundicolle*).
- roubali** Scheerpeltz, 1929: 47 (*Olophrum*; Type locality: Nordkaukasus, Talsystem des Teberda-Flusses; Gebiet des Kluchor-Passes).  
 ▲ **DISTRIBUTION:** Russia.
- roubalianum** Scheerpeltz, 1929: 53 (*Olophrum*; Type locality: Nordkaukasus, Talsystem des Teberda).  
 ▲ **DISTRIBUTION:** Russia.
- scheerpeltzi** Bernhauer, 1938: 18 (*Olophrum*; Type locality: China: Provinz Fukien, Foochow).  
 ▲ **DISTRIBUTION:** China.
- schusteri* Scheerpeltz, 1929, see: *fuscum* Gravenhorst, 1806.
- simplex** Sharp, 1874: 97 (*Olophrum*; Type locality: Nagasaki).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 108 (*Olophrum*; characters; Japan).  
 — Watanabe, 1990: 139 (*Olophrum*; characters; Japan).  
 — J. Li, 1993: 19 (*Olophrum*; China).  
 ▲ **DISTRIBUTION:** Japan, China.
- sinense** Scheerpeltz, 1929: 28, 64 (*Olophrum*; Type locality: Umgebung von Shanghai).  
 ▲ **DISTRIBUTION:** China.
- stouti** Hatch, 1957: 63 (*Olophrum*; Type locality: Washington: Chehalis. Also cited from Oregon and British Columbia).  
 ▲ **DISTRIBUTION:** Canada, USA.
- subsolanum** Watanabe, 1990: 132 (*Olophrum*; Type locality: Japan: Honshu: Shizuoka Pref.: Odaru-onsen, Izu).  
 ▲ **DISTRIBUTION:** Japan.
- tadashii** Watanabe, 1990: 135 (*Olophrum*; Type locality: Japan: Honshu: Tochigi Pref.: near Sainoko Lake, Oku-Nikkô).  
 ▲ **DISTRIBUTION:** Japan.
- transversicolle** Luze, 1905: 41 (*Olophrum*; Type locality: Osttirol, Taufers, 850 m).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; synonym of *fuscum*).  
 — Scheerpeltz, 1929: 40 (*Olophrum*; characters; Alps).  
 — Munster, 1935: 28 (*Olophrum*; variety of *fuscum*; notes).  
 — Horion, 1935: 170 (*Olophrum*; characters; Austria).  
 — Horion, 1963: 110 (*Olophrum*; Austria; Italy).  
 — Lohse, 1964: 54 (*Olophrum*; characters; central Europe).  
 — Smetana, 1964c: 164, 171 (*Olophrum*; notes; characters; Czechoslovakia).  
 — Zanetti, 1987: 302 (*Olophrum*; characters; Italy).  
 — Lucht, 1987: 89 (*Olophrum*; checklist; Austria).  
 — Boháč, 1993: 41 (*Olophrum*; Slovakia; Czech Republic).  
 — Zanetti, 1995: 8 (*Olophrum*; Italy).  
 ▲ **DISTRIBUTION:** Italy, Austria, Czechoslovakia.
- vicinum** Sharp, 1889: 472 (*Olophrum*; Type locality: Iwakisan).  
 — Bernhauer and Schubert, 1910: 67 (*Olophrum*; catalog).  
 — Scheerpeltz, 1929: 103 (*Olophrum*; characters; Japan).  
 — Watanabe, 1990: 133 (*Olophrum*; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.

**viennense** Scheerpeltz, 1929: 90 (*Olophrum*; Type locality: Mariabrunn b. Wien. Also cited from Slovakia, Hungary).

- Horion, 1963: 112 (*Olophrum*; Austria; Czech Republic; Slovakia; Hungary).
- Lohse, 1964: 54 (*Olophrum*; characters; central Europe).
- Smetana, 1964c: 171 (*Olophrum*; characters).
- Tóth, 1982: 86 (*Olophrum*; characters; Hungary).
- Lucht, 1987: 89 (*Olophrum*; checklist; Czechoslovakia; Austria).
- Boháč, 1993: 41 (*Olophrum*; Slovakia; Czech Republic).

▲ **DISTRIBUTION:** Austria, Hungary, Slovakia.

**yasudai** Watanabe, 1990: 139 (*Olophrum*; Type locality: Japan: Hokkaido: Mt. Kurodake on Daisetsu Mts.).

▲ **DISTRIBUTION:** Japan.

### **Omalorphanus**

[1 species; Nearctic Region]

*Omalorphanus* Campbell and Chandler, 1987: 315 (species included: *aenigma*). **TYPE SPECIES:** *Omalorphanus aenigma* Campbell and Chandler, fixed by original designation and monotypy.

- Newton, Thayer, Ashe, and Chandler, 2000: 340 (1 Nearctic species; notes; characters in key).

**aenigma** Campbell and Chandler, 1987: 325 (*Omalorphanus*; Type locality: Oregon: Lane Co., H. J. Andrews Exp. For., Road 1506, 4000 feet).

▲ **DISTRIBUTION:** USA.

### **Orobanus**

[7 species; Nearctic Region]

*Orobanus* LeConte, 1878: 453 (species included: *simulator*). **TYPE SPECIES:** *Orobanus simulator* LeConte, fixed by monotypy.

- Fauvel, 1878d: 249 [= 1878e: 83] (characters).
- Duvivier, 1883: 194 (catalog).
- Casey, 1886: 247 (key to species).
- Casey, 1894: 405 (notes; key to North American species).
- Bernhauer and Schubert, 1910: 74 (world catalog; 3 species).
- Leng, 1920: 95 (catalog of North American species).
- Mank, 1934: 123 (key to species).
- Blackwelder, 1952: 277 (type species: *simulator*).
- Hatch, 1957: 51, 72 (characters; key to species of Pacific Northwest).
- Moore, 1966: 48 (characters; notes).
- Moore and Legner, 1975: 203 (catalog; North America north of Mexico).
- Campbell, 1978: 1 (moved to Anthophagini).
- Moore and Legner, 1979: 187 (characters; notes).
- Campbell and Davies, 1991: 90 (checklist of species; Canada).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (7 Nearctic species; notes; characters in key).

**densus** Casey, 1886: 246 (*Orobanus*; Type locality: California: San Diego).

- Casey, 1894: 406 (*Orobanus*; characters; Sonoran region).
- Bernhauer and Schubert, 1910: 74 (*Orobanus*; catalog).
- Mank, 1934: 123 (*Orobanus*; characters in key).

▲ **DISTRIBUTION:** USA.

**falli** Mank, 1934: 122 (*Orobanus*; Type locality: Redwood Park, Contra Costa Co., California).

- Hatch, 1957: 73 (*Orobanus*; characters; British Columbia; Washington; Oregon).

▲ **DISTRIBUTION:** Canada, USA.

**montanus** Mank, 1934: 121 (*Orobanus*; Type locality: Lake St. Mary near Sun Camp, Glacier National Park, Montana).

▲ **DISTRIBUTION:** USA.

**mormonus** Mank, 1934: 122 (*Orobanus*; Type locality: Ogden, Ut[ah]).

▲ **DISTRIBUTION:** USA.

**rufipes** Casey, 1886: 245 (*Orobanus*; Type locality: California: Hoopa Val., Humboldt Co.).

— Casey, 1894: 406 (*Orobanus*; characters; Pacific region).

— Bernhauer and Schubert, 1910: 74 (*Orobanus*; catalog).

— Mank, 1934: 123 (*Orobanus*; characters in key).

— Hatch, 1957: 72 (*Orobanus*; characters; British Columbia; Washington; Oregon; Idaho).

▲ **DISTRIBUTION:** Canada, USA.

**simulator** LeConte, 1878: 453 (*Orobanus*; Type locality: Leavenworth Valley, 9000 to 10,000 feet; Vancouver Island; Gilroy and Holcomb Valley, California).

— Fauvel, 1878d: 249 [= 1878e: 83] (*Orobanus*; characters; Colorado; California; Vancouver Island).

— Casey, 1894: 405 (*Orobanus*; characters; Rocky Mts.).

— Bernhauer and Schubert, 1910: 74 (*Orobanus*; catalog).

— Mank, 1934: 123 (*Orobanus*; characters in key).

— Hatch, 1957: 73 (*Orobanus*; characters; British Columbia; Washington; Oregon).

▲ **DISTRIBUTION:** Canada, USA.

**tarsalis** Hatch, 1957: 73 (*Orobanus*; Type locality: Oregon: McMinnville. Also cited from British Columbia and Washington).

▲ **DISTRIBUTION:** Canada, USA.

### Orochares

[6 species; Nearctic and Palaeartic Regions]

*Orochares* Kraatz, 1857d: 955 (species included: *angustatus*). **TYPE SPECIES:** *Deliphrum angustatum* Erichson, fixed by monotypy.

— Redtenbacher, 1857: 993 (characters).

— Schaum, 1859: 31 (catalog; European species).

— Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).

— Gemminger and Harold, 1868: 662 (catalog).

— Fauvel, 1871a: 126 [= 1872: 100] (characters).

— Redtenbacher, 1874: 270 (characters).

— Fauvel, 1875a: VII [= 1875b: 209] (catalog).

— Mulsant and Rey, 1880: 89 (characters).

— Seidlitz, 1891: 342 (key to some European species).

— Seidlitz, 1891a: 364 (key to some European species).

— Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).

— Ganglbauer, 1895: 725 (characters).

— Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).

— Reitter, 1909: 184 (characters).

— Bernhauer and Schubert, 1910: 62 (world catalog; 1 species).

— Johansen, 1914: 591 (characters).

— Leng, 1920: 94 (catalog of North American species).

— Winkler, 1925: 332 (catalog for Palaeartic region).

— Porta, 1926: 24 (characters; species of Italy).

— Joy, 1932: 95 (key to British species).

— Scheerpeltz, 1933: 1053 (world catalog supplement).

— Kloet and Hincks, 1945: 161 (list of British species).

— Palm, 1948: 93 (characters).

— Tottenham, 1949: 356, 407 (type species: *angustatum* Erichson; list of British species).

— Blackwelder, 1952: 277 (type species: *angustata*).

— Tottenham, 1954: 28 (characters; British species).

— Horion, 1963: 99 (list of central European species).

— Székessy, 1963: 16 (characters).

— Lohse, 1964: 50 (characters; key to central European species).

— Moore, 1966: 48, 56 (characters; notes).

- Scheerpeltz, 1968a: 12 (catalog of Austrian species).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Moore and Legner, 1975: 204 (catalog; North America north of Mexico).
- Shibata, 1976: 108 (checklist of species of Japan).
- Pope, 1977: 23 (list of British species).
- Burakowski, Mroczkowski, and Stefańska, 1979: 52 (catalog; Poland).
- Moore and Legner, 1979: 188 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Tóth, 1982: 70 (characters; habitus; species of Hungary).
- Campbell, 1984a: 1234 (characters; review of and key to North American species).
- Zanetti, 1987: 268 (characters; habitus; species of Italy).
- Watanabe, 1990: 260 (characters; species of Japan).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Thayer, 1993: 286 (checklist; synonymy; notes; discussion).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- Downie and Arnett, 1996: 433 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (2 Nearctic species; notes; characters in key).

*Paradeliphrum* Hatch, 1957: 50, 67 (species included: *tumidum*, *inflatum*). **TYPE SPECIES:** *Paradeliphrum tumidum* Hatch, fixed by original designation.

- Moore, 1966: 48, 51 (characters; notes).
- Moore and Legner, 1975: 205 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 189 (characters; notes).
- Campbell, 1984a: 1234 (synonym of *Orochares*).
- Thayer, 1993: 286 (synonym of *Orochares*).

*Osellia* Zanetti, 1983: 423 (species included: *calabra*). **TYPE SPECIES:** *Osellia calabra* Zanetti, fixed by original designation.

- Zanetti, 1987: 278 (characters; habitus; species of Italy).
- Thayer, 1993: 286 (synonym of *Orochares*).

**angustatus** Erichson, 1840: 874 (*Deliphrum*; Type locality: Thuringia, Austria).

- Redtenbacher, 1849: 750 (*Deliphrum*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 638 (*Deliphrum*; characters; France).
- Redtenbacher, 1857: 249 (*Deliphrum*; characters; Austria).
- Kraatz, 1857d: 956 (*Orochares*; characters; Germany).
- Fauvel, 1871a: 126 [= 1872: 100] (*Orochares*; characters; France; Germany; Austria).
- Redtenbacher, 1874: 270 (*Orochares*; characters; Austria).
- Seidlitz, 1875: 236 (*Orochares*; characters; Baltic region).
- Mulsant and Rey, 1880: 91 (*Orochares*; characters; France).
- Ganglbauer, 1895: 726 (*Orochares*; characters; Germany; France; North America).
- Sainte-Claire Deville, 1907: 41 (*Orochares*; characters; France).
- Reitter, 1909: 185 (*Orochares*; characters; Germany).
- Bernhauer and Schubert, 1910: 62 (*Orochares*; catalog).
- Johansen, 1914: 591 (*Orochares*; characters; Denmark).
- Portevin, 1929: 438 (*Orochares*; characters; France).
- Scheerpeltz, 1933: 1054 (*Orochares*; catalog).
- Palm, 1948: 94 (*Orochares*; characters; Denmark).
- Horion, 1963: 99 (*Orochares*; Britain; Denmark; Holland; Belgium; France; Switzerland; Italy; Czechoslovakia; Germany; Austria).
- Lohse, 1964: 50 (*Orochares*; characters; central Europe).
- Pope, 1977: 23 (*Orochares*; Britain).
- Tóth, 1982: 70 (*Orochares*; characters; Hungary).
- Campbell, 1984a: 1237 (*Orochares*; characters; Massachusetts).
- Segers, 1986: 21 (*Orochares*; checklist of species; Belgium).
- Zanetti, 1987: 270 (*Orochares*; characters; Italy).

- Lucht, 1987: 88 (*Orochares*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Thayer, 1993: 286 (*Orochares*; checklist; Europe; eastern USA ?).
- Boháč, 1993: 41 (*Orochares*; Slovakia; Czech Republic).
- Zanetti, 1995: 8 (*Orochares*; Italy).
- Downie and Arnett, 1996: 433 (*Orochares*; characters; USA).
- Cibulskis, 1999: 35 (*Orochares*; list; Latvia).
- ▲ **DISTRIBUTION:** Britain, Denmark, Netherlands, Belgium, Germany, France, Switzerland, Italy, Austria, Hungary, Slovakia, Czech Republic, USA.

**calaber** Zanetti, 1983: 429 (*Osellia*; Type locality: Montalto, Aspromonte, Reggio di Calabria, 1850 m).

- Zanetti, 1987: 280 (*Osellia*; characters; Italy).
- Thayer, 1993: 286 (*Orochares*; checklist; Calabria).
- Sparacio, 1995: 142 (*Osellia*; characters; notes; Sicily).
- Zanetti, 1995: 8 (*Orochares*; Italy).
- ▲ **DISTRIBUTION:** Italy.

*siculus* Zanetti, 1983: 434 (*Osellia*; subspecies of *calabra* [sic]; Type locality: M. Soro, Madonie, Messina, 1840 m).

- Zanetti, 1987: 280 (*Osellia*; subspecies of *calabra* [sic]; characters; Italy).
- Thayer, 1993: 286 (*Orochares*; subspecies of *calaber*; Sicily).
- Zanetti, 1995: 8 (*Orochares*; subspecies of *calaber*; Italy).

**debilis** Sharp, 1889: 472 (*Amphichroum*; Type locality: Yokohama).

- Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).
- Watanabe, 1990: 262 (*Orochares*; characters; Japan).
- Thayer, 1993: 286 (*Orochares*; checklist; Honshu).
- ▲ **DISTRIBUTION:** Japan.

*japonicus* Cameron, 1933a: 168 (*Orochares*; Type locality: Japan: Kobe).

- Thayer, 1993: 286 (*Orochares*; synonym of *debilis*).

*japonicus* Cameron, 1933, see: *debilis* Sharp, 1889.

*siculus* Zanetti, 1983, see: *calaber* Zanetti, 1983.

**suteri** Campbell, 1984a: 1240 (*Orochares*; Type locality: USA: Wisconsin: Kenosha Co.: County Line Woods. Also cited from Illinois).

- Thayer, 1993: 286 (*Orochares*; checklist; Wisconsin; Illinois).
- Downie and Arnett, 1996: 433 (*Orochares*; characters; USA).
- ▲ **DISTRIBUTION:** USA.

**tumidus** Hatch, 1957: 67 (*Paradeliphrum*; Type locality: Oregon: McMinnville. Also cited from British Columbia).

- Campbell, 1984a: 1239 (*Orochares*; characters; British Columbia; Oregon).
- Campbell and Davies, 1991: 91 (*Orochares*; checklist of species; Canada).
- Thayer, 1993: 286 (*Orochares*; checklist; Oregon; British Columbia).
- ▲ **DISTRIBUTION:** Canada, USA.

**villiersi** Jarrige, 1971: 488 (*Orochares*; Type locality: Iran: Dacht Argen, 60 km O. de Chiraz).

- Thayer, 1993: 286 (*Orochares*; checklist; Iran).
- ▲ **DISTRIBUTION:** Iran.

### **Paramannerheimia**

[1 species; Palaearctic Region]

*Paramannerheimia* Scheerpeltz, 1976: 8 (species included: *janetscheki*). **TYPE SPECIES:** *Paramannerheimia janetscheki* Scheerpeltz, fixed by original designation.

**janetscheki** Scheerpeltz, 1976: 9 (*Paramannerheimia*; Type locality: Nepal: Tarnga [= Danke] nach Ringmo, 3800–4370 m).

- ▲ **DISTRIBUTION:** Nepal.

**Paratrichodromeus**

[2 species; Palaearctic Region]

*Paratrichodromeus* Zerche, 1992a: 122 (species included: *sukranensis*, *punctulatus*). **TYPE SPECIES:** *Paratrichodromeus sukranensis* Zerche, fixed by original designation.

**punctulatus** Luze, 1904: 77 (*Geodromicus*; Type locality: Seravschan: Kschut: Artutsch; Jagnob: Varsaut).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

— Zerche, 1992a: 123 (*Paratrichodromeus*; Tadjhikistan).

▲ **DISTRIBUTION:** Tajikistan, Uzbekistan.

**sukranensis** Zerche, 1992a: 124 (*Paratrichodromeus*; Type locality: Asia centr., Tadsch., Dschirgatalski Raj., Sukran-Schlucht, 2590 m/ Burs-Gletscher-Fuss).

▲ **DISTRIBUTION:** Tajikistan.

**Pelecomalium**

[12 species; Nearctic Region]

*Pelecomalium* Casey, 1886: 241 (species included: *binotatum*, *modestum*). **TYPE SPECIES:** *Pelecomalium binotatum* Casey, fixed by subsequent designation by Blackwelder, 1952: 296.

— Casey, 1894: 412 (notes; key to North American species).

— Bernhauer and Schubert, 1910: 75 (world catalog; 13 species).

— Leng, 1920: 95 (catalog of North American species).

— Hatch, 1957: 49, 55 (characters; key to species of Pacific Northwest).

— Moore, 1966: 48, 49 (characters; notes).

— Moore and Legner, 1975: 206 (catalog; North America north of Mexico).

— Moore and Legner, 1979: 190 (characters; notes).

— Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).

— Downie and Arnett, 1996: 432 (characters; species of Northeastern North America).

— Newton, Thayer, Ashe, and Chandler, 2000: 340 (12 Nearctic species; notes; characters in key).

*Heterops* Mannerheim, 1843b: 234 1852: 380 (species included: *testaceus*; [**preoccupied** by Blanchard, 1842]; [**Note:** This name was first published in 1843 as a junior synonym but was made available in a 1852 catalog citation when an available nominal species, “*testaceus* Eschscholtz”, was included. The second included nominal species was unavailable]. **TYPE SPECIES:** *Arpedium testaceum* Mannerheim, fixed by monotypy by Mannerheim, 1843b.

— 1852: 380 (catalog; name made available by inclusion of available nominal species).

— Blackwelder, 1952: 185 (type species; synonym of *Pelecomalium*).

*Pelekyomalium* Eichelbaum, 1909: 100 (emendation of *Pelecomalium*; synonym of *Amphichroum*). **TYPE SPECIES:** *Pelecomalium binotatum* Casey, fixed by objective synonymy with *Pelecomalium*.

— Blackwelder, 1952: 297 (type species; synonym of *Pelecomalium*).

**alutaceum** Casey, 1886: 236 (*Amphichroum*; Type locality: California: Marin Co.).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

*binotatum* Casey, 1886, see: *testaceum* Mannerheim, 1843.

**crassicorne** Casey, 1886: 239 (*Amphichroum*; Type locality: California: Siskiyou Co.).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

**flavescens** Casey, 1894: 414 (*Pelecomalium*; Type locality: California: Lake Tahoe).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

**laevicolle** LeConte, 1866: 375 (*Amphichroum*; Type locality: Lycoming County, Pennsylvania).

— Fauvel, 1878d: 238 [= 1878e: 74] (*Amphichroum*; characters; Pennsylvania).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

— Downie and Arnett, 1996: 432 (*Pelecomalium*; characters; USA).

▲ **DISTRIBUTION:** USA.

*modestum* Casey, 1886, see: *veterator* Casey, 1886.

*nigrum* Hatch, 1957 [**Note: Nomen nudum**], see: *testaceum* Mannerheim, 1843.

**opaculum** Fauvel, 1878d: 241 [= 1878e: 77] (*Amphichroum*; Type locality: Californie, Mariposa).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

— Hatch, 1957: 56 (*Pelecomalium*; characters; Washington).

▲ **DISTRIBUTION:** USA.

*pallior* Hatch, 1957: 56 (*Pelecomalium*; aberration of *opaculum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Seattle, Washington).

**pallidum** Casey, 1894: 415 (*Pelecomalium*; Type locality: California: Lake Tahoe; Nevada: Reno).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

*pallior* Hatch, 1957 [**Note: Nomen nudum**], see: *opaculum* Fauvel, 1878.

**pilosellum** Casey, 1886: 237 (*Amphichroum*; Type locality: California: Lake Co.).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

**puberulum** Fauvel, 1878d: 240 [= 1878e: 76] (*Amphichroum*; Type locality: Californie, San Diego).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

— Hatch, 1957: 55 (*Pelecomalium*; characters; British Columbia; Washington; Oregon; Idaho).

▲ **DISTRIBUTION:** Canada, USA.

*ruficeps* Motschulsky, 1860, see: *Anthophagus*.

**scutatum** Fauvel, 1878d: 238 [= 1878e: 74] (*Amphichroum*; Type locality: Californie, Mariposa).

— Casey, 1894: 414 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

**sparsum** Fauvel, 1878d: 237 [= 1878e: 73<†125>] (*Amphichroum*; Type locality: Californie, Mariposa).

— Casey, 1894: 413 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

▲ **DISTRIBUTION:** USA.

**testaceum** Mannerheim, 1843b: 234 (*Arpedium*; [**Note: Cited with Eschscholtz as author**]; Type locality: insula Sitkha).

— Fauvel, 1878d: 239 [= 1878e: 75] (*Amphichroum*; characters; Alaska; British Columbia; California).

— Casey, 1894: 413 (*Pelecomalium*).

— Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).

— Van Dyke, 1924: 16 (*Amphichroum*; subgenus *Pelecomalium*; Alaska).



- Fall, 1926: 145 (*Pelecomalium*; Alaska).
- Hatch, 1957: 55 (*Pelecomalium*; characters; British Columbia; Washington; Oregon).
- ▲ **DISTRIBUTION:** Canada, USA.

- binotatum* Casey, 1886: 242 (*Pelecomalium*; Type locality: California: Marin Co.).
- Casey, 1894: 413 (*Pelecomalium*).
- Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; cited as *binotatum*; catalog).
- Hatch, 1957: 55 (*Pelecomalium*; aberration of *testaceum*; characters).

- nigrum* Hatch, 1957: 55 (*Pelecomalium*; aberration of *testaceum*; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; localities cited: Washington, British Columbia, Washington, Oregon).

- veterator** Casey, 1886: 238 (*Amphichroum*; Type locality: California: Lake Co.).
- Casey, 1894: 414 (*Pelecomalium*; synonym of *modestum*).
- Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; catalog).
- ▲ **DISTRIBUTION:** USA.

- modestum* Casey, 1886: 242 (*Pelecomalium*; Type locality: California: Lake Co.).
- Casey, 1894: 414 (*Pelecomalium*).
- Bernhauer and Schubert, 1910: 75 (*Pelecomalium*; synonym of *veterator*).

### **Philorinum**

[9 species; Palaearctic, Ethiopian, and Oriental Regions]

- Philorinum* Kraatz, 1857d: 965 (species included: *humile*, *nitidulum*). **TYPE SPECIES:** *Omalium humile* Erichson, fixed by subsequent designation by Jacquelin du Val, 1868: 80.
- Redtenbacher, 1857: 992 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Schaum, 1859: 32 (catalog; European species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 663 (catalog).
- Fauvel, 1871a: 109 [= 1872: 83] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 272 (characters).
- Fauvel, 1875a: VI [= 1875b: 208] (catalog).
- Mulsant and Rey, 1880: 153 (characters).
- Fowler, 1888: 408 (notes; cited as *Philorhinum*).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 727 (characters).
- Heyden, Reitter, and Weise, 1906: 132 (list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 61 (world catalog; 3 species).
- Petri, 1912: 54 (list of species of Siebenbürgen).
- Winkler, 1925: 332 (catalog for Palaearctic region).
- Cameron, 1925: 11 (catalog of Indian species).
- Porta, 1926: 28 (characters; key to species of Italy).
- Portevin, 1929: 442 (characters; key to French species).
- Cameron, 1930: 148 (cited as *Philorhinum*; characters).
- Joy, 1932: 103 (key to British species).
- Scheerpeltz, 1933: 1052 (world catalog supplement).
- Normand, 1935: 357 (list of species of Tunisia).
- Kloet and Hincks, 1945: 161 (list of British species).
- Tottenham, 1949: 356, 407 (type species: *sordidum* Stephens = *humile* Erichson; list of British species).
- Tottenham, 1954: 28 (characters; British species).
- Kocher, 1958: 94 (checklist of species; Morocco).
- Ferreira, 1962a: 9 (list of Portuguese species).
- Horion, 1963: 96 (list of central European species).
- Székessy, 1963: 18 (characters).

- Lohse, 1964: 48 (characters; key to central European species).
- Scheerpeltz, 1968a: 12 (catalog of Austrian species).
- Steel, 1970a: 16 (larval characters; biological notes).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Pope, 1977: 24 (list of British species).
- Topp, 1978: 308 (larval characters).
- Tóth, 1982: 73 (characters; habitus).
- Zanetti, 1987: 326 (characters; habitus; key to species of Italy).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (in list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 8 (list of species of Italy).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).

**afghanicum** Coiffait, 1982b: 80 (*Philorinum*; Type locality: Afghanistan: Nouristan, Kamdesch, 2200 m).

▲ **DISTRIBUTION:** Afghanistan.

**africanum** Bernhauer, 1912f: 178 (*Philorinum*; Type locality: Usambara).

- Scheerpeltz, 1933: 1052 (*Philorinum*; catalog).

▲ **DISTRIBUTION:** Tanzania.

*brevipenne* Luze, 1910, see: *sordidum* Stephens, 1834.

*cadomense* Fauvel, 1863, see: *sordidum* Stephens, 1834.

**chinense** Jarrige, 1948: 39 (*Philorinum*, cited as *Philorhinum*; Type locality: Yunnan: Pe-Yen-Tsing).

▲ **DISTRIBUTION:** China.

*floricola* Champion, 1920, see: *florivagum* Champion, 1923.

**floricola** Wollaston, 1864: 602 (*Philorinum*; Type locality: Grand Canary. Teneriffe: above Agua Mansa; Yeod el Alto; Agua Garcia; Taganana. Palma. Hierro).

- Wollaston, 1865: 521 (*Philorinum*; habitat; notes; Canary Islands).
- Fauvel, 1902b: 55 (*Philorinum*; synonym of *sordidum*).
- Bernhauer and Schubert, 1910: 61 (*Philorinum*; catalog).
- Hernández, Outerelo, and Gamarra, 1994: 187 (*Philorinum*; Canary Islands).
- Assing and Wunderle, 1999: 437 (*Philorinum*; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

**florivagum** Champion, 1923: 80 (*Philorhinum*; replacement name for *floricola* Champion).

- Cameron, 1930: 149 (*Philorinum*, cited as *Philorhinum*; characters; India).
- Scheerpeltz, 1933: 1052 (*Philorinum*; catalog).
- Scheerpeltz, 1960: 1 (*Philorinum*; Pakistan; Afghanistan).
- Coiffait, 1984: 118 (*Philorinum*).

▲ **DISTRIBUTION:** India, Pakistan, Afghanistan.

*floricola* Champion, 1920: 242 (*Philorhinum*; [**preoccupied**]; Type locality: W. Almora in Kumaon; Siuni Gad, Garhwal, alt. 4000 ft.).

- Cameron, 1930: 149 (*Philorinum*; synonym of *florivagum*).
- Scheerpeltz, 1933: 1052 (*Philorinum*; synonym of *florivagum*).

**hopffgarteni** Eppelsheim, 1892a: 297 (*Philorinum*; Type locality: Siebenbürgen; Griechenland, Morea).

- Ganglbauer, 1895: 728 (*Philorinum*; characters; Siebenbürgen; Greece).
- Bernhauer and Schubert, 1910: 61 (*Philorinum*; variety of *sordidum*).
- Tóth, 1982: 74 (*Philorinum*; cited as valid species; characters).

▲ **DISTRIBUTION:** Romania, Greece.

*humile* Erichson, 1840, see: *sordidum* Stephens, 1834.

*maroccanus* Coiffait, 1978, see: *sordidum* Stephens, 1834.

*myops* Haliday, 1841, see: *sordidum* Stephens, 1834.

*nigriventre* Rosenhauer, 1856, see: *sordidum* Stephens, 1834.

*nitidulum* Kraatz, 1857, see: *sordidum* Stephens, 1834.

**pallidicorne** Fairmaire, 1860a: 629 (*Philorinum*; Type locality: Corse).

— Fauvel, 1871a: 110 [= 1872: 84] (*Philorinum*; characters; Corsica).

— Fauvel, 1902b: 56 (*Philorinum*; Tunisia).

— Sainte-Claire Deville, 1906: 70 (*Philorinum*; Corsica).

— Bernhauer and Schubert, 1910: 61 (*Philorinum*; catalog).

— Portevin, 1929: 443 (*Philorinum*; characters; France).

— Scheerpeltz, 1933: 1052 (*Philorinum*; catalog).

— Normand, 1947a: 5 (*Philorinum*; Tunisia).

— Zanetti, 1987: 329 (*Philorinum*; characters; Italy).

— Zanetti, 1995: 8 (*Philorinum*; Italy).

▲ **DISTRIBUTION:** Spain, France, Italy, Tunisia.

*pilosulum* Stephens, 1834, see: *sordidum* Stephens, 1834.

*ruficolle* Schaufuss, 1861, see: *sordidum* Stephens, 1834.

**simplex** Smetana, 1975c: 158 (*Philorinum*; Type locality: Mongolie: Bajanchongor aimak: Cagan Bogd ul Gebirge, Quelle Tooroin bulag, 13 km O vom Grenzposten Caganbulag im Cagan Bogd ul Gebirge, 1500 m).

▲ **DISTRIBUTION:** Mongolia.

**sordidum** Stephens, 1834: 349 (*Omalium*; Type locality: London).

— Stephens, 1839: 428 (*Omalium*; characters; England).

— G. Waterhouse, 1858: 31 (*Philorinum*; synonym of *humile*).

— Fauvel, 1871a: 110 [= 1872: 84] (*Philorinum*; characters; France; Urals; Britain; Germany; Austria; Greece; Madeira).

— Fauvel, 1876a: 51 [= 1876: 236] (*Philorinum*; Algeria).

— Fauvel, 1878: 90 [= 1878a: 10] (*Philorinum*; Algeria).

— Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).

— Fauvel, 1886: 15 [= 1886a: 7] (*Philorinum*; notes; Algeria).

— Fowler, 1888: 408 (*Philorinum*; characters; Britain).

— Ganglbauer, 1895: 727 (*Philorinum*; characters; middle and southern Europe; Urals).

— Fauvel, 1897d: 247 (*Philorinum*; Barbary; Madeira; Canaries).

— Fauvel, 1902b: 55 (*Philorinum*; Algeria; Tunisia; Madeira; Canaries).

— Sainte-Claire Deville, 1907: 40 (*Philorinum*; characters; France).

— Reitter, 1909: 189 (*Micralymma*; characters; Germany).

— Bernhauer and Schubert, 1910: 61 (*Philorinum*; catalog).

— Portevin, 1929: 442 (*Philorinum*; characters; France).

— Bernhauer, 1931e: 9 (*Philorinum*; Spain).

— Scheerpeltz, 1933: 1052 (*Philorinum*; catalog).

— C. Koch, 1940: 373 (*Philorinum*; Spain).

— Horion, 1963: 96 (*Philorinum*; Britain; Holland; Belgium; France; Spain; Balearics; Sicily; Italy; Greece; Germany; Austria).

— Lohse, 1964: 48 (*Philorinum*; characters; central Europe).

— Steel, 1970a: 16 (*Philorinum*; larval characters; biological notes).

— Pope, 1977: 24 (*Philorinum*; Britain).

— Hammond, 1980: 139 (*Philorinum*; Ireland).

— Tóth, 1982: 74 (*Philorinum*; characters).

— Zanetti, 1987: 328 (*Philorinum*; characters; Italy).

— Lucht, 1987: 88 (*Philorinum*; checklist; Germany; Austria; France; Benelux).

— M. Hansen, 1988: 19 (*Philorinum*; characters; Denmark).

— Haghebaert, Bruge, and Drugmand, 1990: 36 (*Philorinum*; Belgium).

- Welch, 1993: 227 (*Philorinum*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Philorinum*; Slovakia).
- Zanetti, 1995: 8 (*Philorinum*; Italy).
- Zanetti and Sabella, 1998: 33 (*Philorinum*; Sicily).
- ▲ **DISTRIBUTION:** Russia, Europe, Tunisia, Algeria, Morocco, Madeira Islands.
- subpubescens* Stephens, 1834: 350 (*Omalium*; Type locality: London; Yorkshire; Suffolk).
  - Stephens, 1839: 428 (*Omalium*; characters; England).
  - Hardy, 1851: 57 (*Arpedium*; notes; England).
  - G. Waterhouse, 1858: 31 (*Philorinum*; synonym of *humile*).
  - Fauvel, 1869: 493 (*Philorinum*; synonym of *sordidum*).
  - Rye, 1870a: 89 (*Philorinum*; notes; Britain).
  - Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).
  - Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
  - Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
- pilosulum* Stephens, 1834: 353 (*Omalium*; Type locality: Yorkshire; near London; Somersetshire).
  - Stephens, 1839: 429 (*Omalium*; characters; England).
  - G. Waterhouse, 1858: 31 (*Philorinum*; synonym of *humile*).
  - Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).
  - Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
  - Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
- humile* Erichson, 1840: 860 (*Arpedium*; Type locality: montes Uralensi).
  - Hardy, 1851: 57 (*Arpedium*; synonym of *subpubescens*).
  - Redtenbacher, 1857: 246 (*Arpedium*; characters; Austria).
  - Redtenbacher, 1857: 993 (*Philorinum*).
  - Kraatz, 1857d: 966 (*Philorinum*; characters; Austria).
  - Wollaston, 1860: 106 (*Philorinum*, cited as *Philorhinum*; Madeira).
  - Wollaston, 1865: 521 (*Philorinum*; Madeira Islands).
  - Fauvel, 1873b: 117 [= 1873c: 10] (*Philorinum* synonym of *sordidum*).
  - Redtenbacher, 1874: 272 (*Philorinum*; characters; Austria).
  - Mulsant and Rey, 1880: 155 (*Philorinum*; characters; France).
  - Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
  - Fauvel, 1902b: 55 (*Philorinum*; synonym of *sordidum*).
  - Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
  - Scheerpeltz, 1933: 1052 (*Philorinum*; synonym of *sordidum*).
  - Zanetti, 1987: 328 (*Philorinum*; synonym of *sordidum*).
- myops* Haliday, 1841: 187 (*Arpedium*; Type locality: Not cited).
  - Kiesenwetter, 1851a: 435 (*Arpedium*; France).
  - Hardy, 1851: 57 (*Arpedium*; synonym of *subpubescens*).
  - Fairmaire and Laboulbène, 1856: 633 (*Arpedium*; characters; France).
  - Kraatz, 1857d: 966 (*Philorinum*; characters; Germany).
  - G. Waterhouse, 1858: 31 (*Philorinum*; synonym of *humile*).
  - Mulsant and Rey, 1880: 156 (*Philorinum*; synonym of *humile*).
  - Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
  - Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
- nigriventre* Rosenhauer, 1856: 86 (*Omalium*; [**Note:** This name is older than *pallidicorne*]; Type locality: Malaga).
  - Fauvel, 1876a: 51 [= 1876: 236] (*Philorinum*; synonym of *sordidum*).
  - Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).
  - Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
  - Fauvel, 1902b: 55 (*Philorinum*; synonym of *sordidum*).
  - Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
  - Scheerpeltz, 1933: 1052 (*Philorinum*; synonym of *sordidum*).
  - Normand, 1947a: 5 (*Philorinum*; variety of *sordidum*; Tunisia).
  - Zanetti, 1987: 329 (*Philorinum*; synonym of *sordidum*).

*nitidulum* Kraatz, 1857d: 966, note (*Philorinum*; Type locality: Griechenland).

- Kraatz, 1858b: 128 (*Philorinum*; characters; Greece).
- Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).
- Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
- Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).
- Scheerpeltz, 1933: 1052 (*Philorinum*; synonym of *sordidum*).

*ruficolle* Schaufuss, 1861: 47 (*Philorinum*; cited as *rufieolle*; Type locality: Hisp. mer.).

- Fauvel, 1876a: 51 [= 1876: 236] (*Philorinum*; synonym of *sordidum*).
- Mulsant and Rey, 1880: 158 (*Philorinum*; synonym of *humile*).
- Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
- Fauvel, 1902b: 55 (*Philorinum*; synonym of *sordidum*).
- Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).

*cadomense* Fauvel, 1863a: 42 (*Philorinum*; Type locality: Calvados, Ille-et-Vilaine).

- Mulsant and Rey, 1880: 156 (*Philorinum*; synonym of *humile*).
- Ganglbauer, 1895: 727 (*Philorinum*; synonym of *sordidum*).
- Bernhauer and Schubert, 1910: 61 (*Philorinum*; synonym of *sordidum*).

*brevipenne* Luze, 1910: 240 (*Anthobium*; Type locality: Andalusien).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- C. Koch, 1940: 372 (*Anthobium*; characters; Spain).
- Zanetti, 1986: 95 (*Philorinum*; synonym of *sordidum*).

*marocanum* Coiffait, 1978r: 271 (*Eusphalerum*; Type locality: Maroc: Sidi Bettache).

- Zanetti, 1991a: 29 (*Philorinum*; synonym of *sordidum*).

*subpubescens* Stephens, 1834, see: *sordidum* Stephens, 1834.

### **Philhydrodema**

[1 species; Palaearctic Region]

*Philhydrodema* Scheerpeltz, 1976: 11 (species included: *longelytratum*). **TYPE SPECIES:** *Philhydrodema longelytratum* Scheerpeltz, fixed by original designation.

**longelytratum** Scheerpeltz, 1976: 12 (*Philhydrodema*; Type locality: Nepal: Nare-Glacier [= Ama-Dablam-Gletscher] oberhalb der Green Hut der Hillary-Makalu-Expedition, 5570 m).

▲ **DISTRIBUTION:** Nepal.

### **Philydrodes**

[26 species; Palaearctic Region]

*Philydrodes* Bernhauer, 1929g: 179 (species included: *aquatilis*). **TYPE SPECIES:** *Anthophagus aquatilis* Sharp, fixed by original designation and monotypy.

- Scheerpeltz, 1933: 1067 (world catalog supplement).
- Blackwelder, 1952: 303 (type species: *aquatilis*).
- Nakane and Sawada, 1956a: 179 (characters; key to Japanese species; type species: *aquatilis*).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Shibata, 1976: 119 (checklist of species of Japan).
- Watanabe, 1990: 309 (characters; key to species of Japan).
- Kashcheev, 1999: 146 (characters).

*Minyphilydrodes* Watanabe, 1990: 334 (subgenus of *Philydrodes*; species included: *watanabei*, *asamanis*, *parallelus*, *maculatus*, *ishidai*, *biguttatus*, *flavidus*, *shimomurai*, *chichibunis*, *niger*). **TYPE SPECIES:** *Philydrodes watanabei* R. Dvořák, fixed by original designation.

**aquatilis** Sharp, 1889: 469 (*Anthophagus*; Type locality: Hakone).

- Bernhauer and Schubert, 1910: 79 (*Anthophagus*; catalog).
- Bernhauer, 1929g: 180 (*Philydrodes*).
- Scheerpeltz, 1933: 1067 (*Philydrodes*; catalog).
- Nakane and Sawada, 1956a: 179, 180 (*Philydrodes*; characters in key; Japan).

- Nakane, 1963a: 83 (*Philydroides*; characters; habitus photograph; Japan).
- Watanabe, 1990: 314 (*Philydroides*; characters; Japan).
- Watanabe, 1996a: 9 (*Philydroides*; cave collection; Japan).

▲ **DISTRIBUTION:** Japan.

*japonicus* Yoshida and Nomura, 1952: 6 (*Coryphium*; Type locality: Aoiwa L. S. C., Kanto-Mountainland, Japan).

- Shibata, 1970: 57 (suggested transfer from *Coryphium* to *Philydroides*).
- Watanabe, 1990: 314 (*Philydroides*; synonym of *aquatilis*).
- Zerche, 1990: 18 (*Philydroides*).

**asamanis** Watanabe, 1990: 337 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Gunma Pref.: near Nidoage).

▲ **DISTRIBUTION:** Japan.

**biguttatus** Watanabe, 1990: 343 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Nagano Pref.: Hakuba-mura).

▲ **DISTRIBUTION:** Japan.

**chichibunis** Watanabe, 1990: 347 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Saitama Pref.: Kawamata, Chichibu).

▲ **DISTRIBUTION:** Japan.

**dewanus** Watanabe, 1990: 325 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Honshu: Yamagata Pref.: Tachiyazawa, Higashitagawa).

▲ **DISTRIBUTION:** Japan.

**flavidus** Watanabe, 1990: 344 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Yamanashi Pref.: Mt. Kitazawa-tôge, S. Jpn. Alps).

▲ **DISTRIBUTION:** Japan.

**gigas** Watanabe, 1990: 317 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Honshu: Shizuoka Pref.: Umegashima Spa).

▲ **DISTRIBUTION:** Japan.

**grandis** Nakane and Sawada, 1956a: 181 (*Philydroides*; Type locality: Japan: Kyushu: Chinoike-jigoku, Beppu).

- Watanabe, 1990: 320 (*Philydroides*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**hikosanensis** Nakane and Sawada, 1956a: 180 (*Philydroides*; Type locality: Japan: Kyushu: Hikosan).

- Nakane, 1963a: 83 (*Philydroides*; characters; habitus photograph; Japan).
- Watanabe, 1990: 318 (*Philydroides*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**horioi** Nakane and Sawada, 1956a: 180 (*Philydroides*; Type locality: Japan: Sampuku Pass, Nagano).

- Watanabe, 1990: 316 (*Philydroides*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**ishidai** Nakane and Sawada, 1956a: 182 (*Philydroides*; Type locality: Kamikochi, Nagano).

- Nakane, 1963a: 83 (*Philydroides*; characters; habitus photograph; Japan).
- Watanabe, 1990: 342 (*Philydroides*; subgenus *Minyphilydroides*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*japonicus* Yoshida and Nomura, 1952, see: *aquatilis* Sharp, 1889.

**kawaseorum** Hayashi, 1994a: 133 (*Philydroides*, cited as *Phylidroides*; Type locality: Japan: Mie: Jirakura).

▲ **DISTRIBUTION:** Japan.

**maculatus** Watanabe, 1990: 340 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Yamanashi Pref.: Hironawara, foot of Mt. Kitadake).

▲ **DISTRIBUTION:** Japan.

- michikoe** Watanabe, 1990: 323 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Honshu: Yamagata Pref.: Mt. Atsumidake, Nishitagawa).  
▲ **DISTRIBUTION:** Japan.
- minipunctatus** Watanabe, 1990: 321 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Honshu: Nagano Pref.: Kamikôchi).  
▲ **DISTRIBUTION:** Japan.
- niger** Watanabe, 1990: 349 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Yamanashi Pref.: Hirogawara, foot of Mt. Kitadake).  
▲ **DISTRIBUTION:** Japan.
- parallelus** Watanabe, 1990: 338 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Nagano Pref.: Kamikôchi).  
▲ **DISTRIBUTION:** Japan.
- pulla* Nakane and Sawada, 1956, see: *Liophilydroides*.
- puncticollis* Nakane and Sawada, 1956, see: *Liophilydroides*.
- rubidus** Nakane and Sawada, 1956a: 180 (*Philydroides*; variety of *aquatilis*; Type locality: Japan: Lake Marunuma, Nikko).  
— Watanabe, 1990: 331 (*Philydroides*; valid species; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- rufescens** Watanabe, 1990: 327 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Shikoku: Ehime Pref.: western ravine of Mt. Shiratsue).  
▲ **DISTRIBUTION:** Japan.
- shimomurai** Watanabe, 1990: 346 (*Philydroides*; subgenus *Minyphilydroides*; Type locality: Japan: Honshu: Mt. Sanpuku-tôge, S. Jpn. Alps).  
▲ **DISTRIBUTION:** Japan.
- similis** Nakane and Sawada, 1956a: 181 (*Philydroides*; subgenus *Philydroides*; variety of *horioi*; Type locality: Japan: Nagano, Sampuku Pass).  
— Watanabe, 1990: 330 (*Philydroides*; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- takaensis** Nakane and Sawada, 1956a: 182 (*Philydroides*; Type locality: Japan: Takaoyama, Tokyo).  
— Watanabe, 1990: 334 (*Philydroides*; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- troglophila* Nakane and Sawada, 1956, see: *Liophilydroides*.
- tsurugisanus** Watanabe, 1990: 326 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Shikoku: Tokushima Pref.: Ryôtsurugi-dans on Mt. Tsurugi-san).  
▲ **DISTRIBUTION:** Japan.
- yoshidai** Watanabe, 1990: 328 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Shikoku: Tokushima Pref.: Ryôtsurugidani on Mt. Tsurugi-san).  
▲ **DISTRIBUTION:** Japan.
- watanabei** R. Dvořák, 1957: 9 (*Philydroides*; Type locality: Itsukaichi, Nishitama, Tokyo, Japan).  
— Watanabe, 1990: 335 (*Philydroides*; subgenus *Minyphilydroides*; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- zipanguensis** Watanabe, 1990: 333 (*Philydroides*; subgenus *Philydroides*; Type locality: Japan: Honshu: Nagano Pref.: Kamikôchi).  
▲ **DISTRIBUTION:** Japan.

### **Phlaeopterus**

[14 species; Nearctic Region]

*Phlaeopterus* Motschulsky, 1853a: 78 (species included: *fusconiger*). **TYPE SPECIES:** *Phlaeopterus fusconiger* Motschulsky, fixed by monotypy.

- Kraatz, 1857d: 930 (synonym of *Lesteva*).
- Gemminger and Harold, 1868: 659 (synonym of *Lesteva*).
- Fauvel, 1871a: 127 [= 1872: 101] (synonym of *Lesteva*).
- Fauvel, 1875a: VII [= 1875b: 209] (synonym of *Lesteva*).
- Bernhauer and Schubert, 1910: 74 (synonym of *Tilea*).
- Scheerpeltz, 1933: 1065 (world catalog supplement).
- Blackwelder, 1952: 303 (type species: *fusciger*).
- Hatch, 1957: 49, 57 (characters; key to species of Pacific Northwest).
- Moore, 1966: 48, 49 (characters; notes).
- Moore and Legner, 1975: 208 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 192 (characters; notes).
- Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (14 Nearctic species; notes; characters in key).

*Tilea* Fauvel, 1878d: 246 [= 1878e: 82] (species included: *cavicollis*). **TYPE SPECIES:** *Tilea cavicollis* Fauvel, fixed by monotypy.

- Duvivier, 1883: 195 (catalog).
- Casey, 1894: 402 (notes; key to North American species).
- Bernhauer and Schubert, 1910: 74 (world catalog; 7 species).
- Leng, 1920: 95 (catalog of North American species).
- Scheerpeltz, 1933: 1065 (synonym of *Phlaeopterus*).
- Blackwelder, 1952: 390 (type species: *cavicollis*; synonym of *Phlaeopterus*).

**brevipennis** Casey, 1894: 404 (*Tilea*; Type locality: Wyoming).

- Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).
- Hatch, 1957: 60 (*Phlaeopterus*; characters; British Columbia; Washington; Oregon; Idaho; Montana).

▲ **DISTRIBUTION:** Canada, USA.

**cascadiensis** Hatch, 1957: 59 (*Phlaeopterus*; Type locality: Washington: Mt. Rainier, Tipsoo L.; British Columbia; Oregon).

▲ **DISTRIBUTION:** Canada, USA.

**castaneus** Casey, 1894: 404 (*Tilea*; Type locality: Colorado).

- Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).

▲ **DISTRIBUTION:** USA.

**cavicollis** Fauvel, 1878d: 246 [= 1878e: 82] (*Tilea*; Type locality: Colombie britannique).

- Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).
- Hatch, 1957: 60 (*Phlaeopterus*; characters; British Columbia; Washington; Idaho).

▲ **DISTRIBUTION:** Canada, USA.

**filicornis** Casey, 1886: 234 (*Phlaeopterus*, cited as *Phloeopterus*; Type locality: California: Placer Co.).

- Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).

▲ **DISTRIBUTION:** USA.

**frosti** Hatch, 1957: 59 (*Phlaeopterus*; Type locality: Washington: Mt. Rainier, below Sluskin Falls. Also cited from British Columbia and Oregon).

▲ **DISTRIBUTION:** Canada, USA.

**fusciger** Motschulsky, 1853a: 78 (*Phlaeopterus*; Type locality: Ounalaschka).

- Mäklin, 1853: 193 (*Lesteva*; characters; Unalaska).
- LeConte, 1866: 375 (*Lesteva*; California).
- Fauvel, 1878d: 248 [= 1878e: 84] (*Lesteva*; characters; Alaska).
- Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).

▲ **DISTRIBUTION:** USA.

**houkai** Hatch, 1957: 58 (*Phlaeopterus*; Type locality: Washington: Mt. Baker Lodge. Also cited from British Columbia).

▲ **DISTRIBUTION:** Canada, USA.



- kootenayensis** Hatch, 1957: 58 (*Phlaeopterus*; Type locality: British Columbia: Bull River, 6 mi. from mouth).  
 ▲ **DISTRIBUTION:** Canada.
- lagrandeuri** Hatch, 1957: 58 (*Phlaeopterus*; Type locality: Seattle, Carkeek Park, Washington. Also cited from Oregon and British Columbia).  
 ▲ **DISTRIBUTION:** Canada, USA.
- loganensis** Hatch, 1957: 60 (*Phlaeopterus*; Type locality: G[lacier] N[atational] P[ark]: Logan Pass, Montana. Also cited from British Columbia and Idaho).  
 ▲ **DISTRIBUTION:** Canada, USA.
- longipalpus** Casey, 1885a: 318 (*Phlaeopterus*, cited as *Phloeopterus*; Type locality: California: Middle Sierras).  
 — Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).  
 — Hatch, 1957: 60 (*Phlaeopterus*; characters; British Columbia; Washington; Oregon; Idaho; Utah).  
 ▲ **DISTRIBUTION:** Canada, USA.
- rufitarsis** Casey, 1894: 403 (*Tilea*; Type locality: California: Siskiyou Co.).  
 — Bernhauer and Schubert, 1910: 74 (*Tilea*; catalog).  
 — Hatch, 1957: 59 (*Phlaeopterus*; characters; British Columbia; California; Montana).  
 ▲ **DISTRIBUTION:** Canada, USA.
- stacesmithi** Hatch, 1957: 60 (*Phlaeopterus*; Type locality: British Columbia: Barkerville, Roundtop Mt., 6000 ft.).  
 ▲ **DISTRIBUTION:** Canada.

### Phyllodrepoidea

[1 species; Palaearctic and Nearctic Regions]

- Phyllodrepoidea* Ganglbauer, 1895: 724 (species included: *crenata*). **TYPE SPECIES:** *Phyllodrepoidea crenata* Ganglbauer, fixed by monotypy (see Herman, 2001).  
 — Luze, 1905c: 247 (characters).  
 — Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).  
 — Reitter, 1909: 188 (characters).  
 — Bernhauer and Schubert, 1910: 63 (world catalog; 1 species).  
 — Petri, 1912: 54 (list of species of Siebenbürgen).  
 — Winkler, 1925: 332 (catalog for Palaearctic region).  
 — Porta, 1926: 24 (characters; species of Italy).  
 — Roubal, 1930: 312 (catalog; Slovakia).  
 — Joy, 1932: 102 (key to British species).  
 — Scheerpeltz, 1933: 1054 (world catalog supplement).  
 — Kloet and Hincks, 1945: 161 (list of British species).  
 — Palm, 1948: 96 (characters; species of Sweden).  
 — Tottenham, 1949: 356, 407 (type species: *crenata* Gravenhorst; list of British species).  
 — Blackwelder, 1952: 307 (type species: *crenata*).  
 — Tottenham, 1954: 28 (characters; British species).  
 — Horion, 1963: 101 (list of central European species).  
 — Székessy, 1963: 18 (characters).  
 — Lohse, 1964: 51 (characters; key to central European species).  
 — Kasule, 1968: 133, 134 (larval characters).  
 — Scheerpeltz, 1968a: 13 (catalog of Austrian species).  
 — Steel, 1970a: 17 (larval characters; biological notes).  
 — Tikhomirova, 1973a: 139 (checklist of species of USSR).  
 — Pope, 1977: 22 (list of British species).  
 — Burakowski, Mroczkowski, and Stefańska, 1979: 52 (catalog; Poland).  
 — Muona, 1979: 18 (list of Scandinavian species).  
 — Tóth, 1982: 74 (characters; habitus; species of Hungary).  
 — Zanetti, 1987: 283 (characters; habitus; species of Italy).

- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 41 (in list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 8 (list of species of Italy).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (1 undescribed Nearctic species; notes; characters in key).
- Herman, 2001: 8 (type species; discussion).

*creatoris* Gozis, 1886, see: *crenata* Gravenhorst, 1802.

- crenata** Ganglbauer, 1895: 724 (*Phyllodrepoidea*; Type locality: Mittel- und Südeuropa).
- Gravenhorst, 1802: 114 (*Omalium*; [Note: Misidentification: Gravenhorst attributed this name to Paykull who attributed it to Fabricius whose species is cited in this catalog in *Acidota*. All subsequent authors have attributed the species to Gravenhorst]).
  - Latreille, 1804: 371 (*Omalium*; characters).
  - Gravenhorst, 1806: 207 (*Omalium*; characters).
  - C. Sahlberg, 1830: 288 (*Omalium*; characters; Finland).
  - Erichson, 1840: 873 (*Deliphrum*; characters; Germany).
  - Redtenbacher, 1849: 829 (*Deliphrum*; characters).
  - Fairmaire and Laboulbène, 1856: 638 (*Deliphrum*; characters; France).
  - Redtenbacher, 1857: 249 (*Deliphrum*; characters; Germany).
  - Kraatz, 1857d: 954 (*Deliphrum*; characters; Germany).
  - Thomson, 1871: 377 (*Deliphrum*; characters; Sweden).
  - Fauvel, 1871a: 122 [= 1872: 96] (*Deliphrum*; characters; France; Britain; Germany; Switzerland; Italy; Austria; Corsica; Sicily).
  - Redtenbacher, 1874: 270 (*Deliphrum*; characters).
  - Mulsant and Rey, 1880: 112 (*Deliphrum*; characters; France).
  - Fowler, 1888: 406 (*Deliphrum*; characters; Britain).
  - Ganglbauer, 1895: 724 (*Phyllodrepoidea*; characters; middle and southern Europe).
  - Luze, 1905c: 249 (*Phyllodrepoidea*; characters; Hungary; Croatia; Bosnia; France, Italy, Greece; Germany; Switzerland; Corsica; Sicily).
  - Sainte-Claire Deville, 1906: 71 (*Phyllodrepoidea*; Corsica).
  - Sainte-Claire Deville, 1907: 42 (*Phyllodrepoidea*; characters; France).
  - Reitter, 1909: 188 (*Phyllodrepoidea*; characters; Germany).
  - Bernhauer and Schubert, 1910: 63 (*Phyllodrepoidea*; catalog).
  - Portevin, 1929: 442 (*Phyllodrepoidea*; characters; France).
  - Scheerpeltz, 1933: 1054 (*Phyllodrepoidea*; catalog).
  - Palm, 1948: 97 (*Phyllodrepoidea*; characters; Sweden; Norway).
  - Blackwelder, 1952: 307 (*Phyllodrepoidea*; type species).
  - Tottenham, 1954: 28 (*Phyllodrepoidea*; characters; Scotland).
  - Székessy, 1963: 17 (*Phyllodrepoidea*; illustration).
  - Horion, 1963: 101 (*Phyllodrepoidea*; Scotland; Norway; Sweden; France; Belgium; Switzerland; Corsica; Sicily; Italy; Greece; Croatia; Bosnia Hercegovina; Hungary; Romania; Slovakia; Germany; Austria).
  - Lohse, 1964: 51 (*Phyllodrepoidea*; characters; central Europe).
  - Kasule, 1968: 134 (*Phyllodrepoidea*; larval characters).
  - Scheerpeltz, 1968a: 13 (*Phyllodrepoidea*; catalog; Austria).
  - Steel, 1970a: 17 (*Phyllodrepoidea*; larval characters; biological notes).
  - Tikhomirova, 1973a: 139 (*Phyllodrepoidea*; checklist; Europe).
  - Pope, 1977: 22 (*Phyllodrepoidea*; Britain).
  - Muona, 1979: 18 (*Phyllodrepoidea*; Sweden; Norway).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 52 (*Phyllodrepoidea*; notes; Poland).
  - Hammond, 1980: 137 (*Phyllodrepoidea*; notes; Ireland).
  - Tóth, 1982: 74 (*Phyllodrepoidea*; characters; Hungary).
  - Crowson, 1982: 125 (*Phyllodrepoidea*; natural history observations; Britain).
  - Terlutter, 1984: 26, 41 (*Phyllodrepoidea*; habitat notes; Germany).
  - Segers, 1986: 21 (*Phyllodrepoidea*; Belgium).
  - Zanetti, 1987: 284 (*Phyllodrepoidea*; characters; Italy).

- Lucht, 1987: 88 (*Phyllodrepoidea*; Germany; Poland; Austria; Switzerland; France; Benelux; Sweden).
- Silfverberg, 1992: 22 (*Phyllodrepoidea*; Sweden; Norway).
- Boháč, 1993: 41 (*Phyllodrepoidea*; Slovakia; Czech Republic).
- Allen, 1994: 247 (*Phyllodrepoidea*; Britain).
- Zanetti, 1995: 8 (*Phyllodrepoidea*; Italy).
- Zanetti and Sabella, 1998: 31 (*Phyllodrepoidea*; notes; Sicily).
- M. Hansen, Pedersen, and Pritzl, 1999: 77 (*Phyllodrepoidea*; characters; notes; Denmark).
- Fowles, Alexander, and Key, 1999: 129 (*Phyllodrepoidea*; saproxylic species; status as endangered or threatened species; Britain).
- Herman, 2001: 8, 21 (*Phyllodrepoidea*; type species of genus; Ganglbauer author species not Gravenhorst who attributed it to Fabricius; nomen protectum).

▲ **DISTRIBUTION:** Europe.

*creatoris* Gozis, 1886: 15 (*Deliphrum*; proposed for Gravenhorst's misidentification of *crenatum*; Type locality: Not cited).

- Bernhauer and Schubert, 1910: 63 (*Phyllodrepoidea*; synonym of *crenata*).
- Herman, 2001: 21 (*Phyllodrepoidea*; synonym of *crenata*; nomen oblitum).

### Porrhodites

[2 species; Nearctic and Palaearctic Regions]

*Porrhodites* Kraatz, 1857d: 961 (species included: *brevicollis*). **TYPE SPECIES:** *Arpedium brevicolle* Mäklin, fixed by monotypy.

- Redtenbacher, 1857: 992 (characters).
- Thomson, 1859: 50 (characters; type species: *fenestralis*).
- Schaum, 1859: 32 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 195 (characters).
- LeConte, 1863: 26 (list of North American species).
- Gemminger and Harold, 1868: 663 (catalog).
- Fauvel, 1871a: 111 [= 1872: 85] (characters).
- Redtenbacher, 1874: 271 (characters).
- Fauvel, 1875a: VI [= 1875b: 208] (catalog).
- Heyden, 1880: 82 (list of species of Siberian region).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 726 (characters).
- Heyden, Reitter, and Weise, 1906: 133 (list of species of Europe and Caucasus).
- Reitter, 1909: 184 (characters).
- Bernhauer and Schubert, 1910: 62 (world catalog; 62 species).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 332 (catalog for Palaearctic region).
- Porta, 1926: 24 (characters; species of Italy).
- Scheerpeltz, 1933: 1053 (world catalog supplement).
- Palm, 1948: 92 (characters; species of Sweden).
- Blackwelder, 1952: 320 (type species: *brevicollis*).
- Hatch, 1957: 50, 69 (characters; species of Pacific Northwest).
- Horion, 1963: 98 (list of central European species).
- Székessy, 1963: 16 (characters).
- Lohse, 1964: 49 (characters; key to central European species).
- Moore, 1966: 48, 51 (characters; notes).
- Scheerpeltz, 1968a: 12 (catalog of Austrian species).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Moore and Legner, 1975: 210 (catalog; North America north of Mexico).
- Burakowski, Mroczkowski, and Stefańska, 1979: 52 (catalog; Poland).
- Moore and Legner, 1979: 193 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).

- Tóth, 1982: 69 (characters; habitus; key to species of Hungary).
- Campbell, 1984a: 1228 (characters; review of and key to North American species).
- Zanetti, 1987: 267 (characters; habitus; species of Italy).
- Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Downie and Arnett, 1996: 433 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (2 Nearctic species; notes; characters in key).

*brevicollis* Mäklin, 1852, see: *fenestralis* Zetterstedt, 1828.

**fenestralis** Zetterstedt, 1828: 50 (*Omalium*; Type locality: Lapponia Tornensis).

- Zetterstedt, 1838: 50 (*Omalium*; characters; habitat; Lapland).
- Erichson, 1840: 888 (*Omalium*; characters; Lapland).
- Kraatz, 1857d: 963 (*Porrhodites*; synonym of *brevicollis*).
- Thomson, 1859: 50 (type species of *Porrhodites*).
- Thomson, 1861: 196 (*Porrhodites*; characters; Scandinavia).
- Fauvel, 1871a: 111 [= 1872: 85] (*Porrhodites*; characters; Switzerland; Lapland; Alaska).
- Fauvel, 1874: 323 [= 1874b: 29] (*Porrhodites*; Finland).
- J. Sahlberg, 1876: 214 (*Porrhodites*; Finland).
- Fauvel, 1878d: 223 [= 1878e: 59] (*Porrhodites*; characters; Alaska; British Columbia; Lake Superior).
- Seidlitz, 1891: 344 (*Porrhodites*; characters; Europe).
- Seidlitz, 1891a: 366 (*Porrhodites*; characters; Europe).
- Ganglbauer, 1895: 726 (*Porrhodites*; characters; Lapland; Finland; Siberia; North America).
- Poppius, 1909: 5 (*Porrhodites*; Lena Valley, Siberia).
- Reitter, 1909: 184 (*Porrhodites*; characters; Germany).
- Bernhauer and Schubert, 1910: 62 (*Porrhodites*; catalog).
- Scheerpeltz, 1933: 1053 (*Porrhodites*; catalog).
- Palm, 1948: 93 (*Porrhodites*; characters; Sweden; Norway; Finland).
- Hatch, 1957: 69 (*Porrhodites*; characters; British Columbia).
- Horion, 1963: 98 (*Porrhodites*; Norway; Sweden; Finland; Russia; Poland; Germany; Czechoslovakia; Austria; Corsica).
- Lohse, 1964: 49 (*Porrhodites*; characters; central Europe).
- Tóth, 1982: 69 (*Porrhodites*; characters).
- Campbell, 1984a: 1230 (*Porrhodites*; characters; Alberta; British Columbia; Manitoba; Newfoundland; Labrador; Northwest Territories; Quebec; Yukon Territory; Alaska; Montana; Oregon; Wyoming).
- Zanetti, 1987: 267 (*Porrhodites*; characters; Italy).
- Lucht, 1987: 88 (*Porrhodites*; checklist; Austria).
- Boháč, 1993: 41 (*Porrhodites*; Czech Republic).
- Downie and Arnett, 1996: 433 (*Porrhodites*; characters; Canada; USA).
- Ryabukhin, 1999: 20 (*Porrhodites*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Norway, Sweden, Finland, Russia, Poland, Germany, Czechoslovakia, Austria, Italy, Switzerland, Corsica, Canada, USA.

*pubescens* Zetterstedt, 1828: 52 (*Omalium*; Type locality: Lapponia: Turtola; Raresuando).

- Zetterstedt, 1838: 52 (*Omalium*; characters; habitat; Lapland).
- Erichson, 1840: 889 (*Omalium*; characters; Lapland).
- Fauvel, 1871a: 111 [= 1872: 85] (*Porrhodites*; synonym of *fenestralis*).
- Seidlitz, 1875: 239 (*Porrhodites*; characters; Baltic region).
- Ganglbauer, 1895: 726 (*Porrhodites*; synonym of *fenestralis*).
- Bernhauer and Schubert, 1910: 62 (*Porrhodites*; synonym of *fenestralis*).
- Campbell, 1984a: 1230 (*Porrhodites*; synonym of *fenestralis*).

*brevicollis* Mäklin, 1852: 320 (*Arpedium*; Type locality: insula Sitkha).

- Mäklin, 1853: 196 (*Deliphrum*; characters; Kenai Peninsula).
- Redtenbacher, 1857: 992 (*Porrhodites*; characters; Austria).
- Kraatz, 1857d: 963 (*Porrhodites*; characters; Germany).
- Fauvel, 1871a: 111 [= 1872: 85] (*Porrhodites*; synonym of *fenestralis*).

- Redtenbacher, 1874: 271 (*Porrhodites*; characters).
- J. Sahlberg, 1876: 214 (*Porrhodites*; synonym of *fenestralis*).
- Fauvel, 1878d: 223 [= 1878e: 59] (*Porrhodites*; synonym of *fenestralis*).
- Ganglbauer, 1895: 726 (*Porrhodites*; synonym of *fenestralis*).
- Bernhauer and Schubert, 1910: 62 (*Porrhodites*; synonym of *fenestralis*).
- Scheerpeltz, 1933: 1053 (*Porrhodites*; synonym of *fenestralis*).
- Campbell, 1984a: 1230 (*Porrhodites*; synonym of *fenestralis*).
- Zanetti, 1987: 267 (*Porrhodites*; synonym of *fenestralis*).

**inflatus** Hatch, 1957: 68 (*Paradeliphrum*; Type locality: B. C. [British Columbia]: Copper Mt.).

- Campbell, 1984a: 1232 (*Porrhodites*; characters; Alberta; British Columbia; Ontario; Quebec; California; Colorado; New Hampshire; New York; Oregon).
- Levesque and Levesque, 1996: 290 (*Porrhodites*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 434 (*Porrhodites*; characters; Canada; USA).

▲ **DISTRIBUTION:** Canada, USA.

*pubescens* Zetterstedt, 1828, see: *fenestralis* Zetterstedt, 1828.

### **Tanyrhinus**

[1 species; Nearctic Region]

*Tanyrhinus* Mannerheim, 1852: 349 (species included: *singularis*). **TYPE SPECIES:** *Tanyrhinus singularis* Mannerheim, fixed by monotypy.

- Gemminger and Harold, 1870: 2062 (cited as *Tanyrrhinus*; catalog).
- Fauvel, 1878d: 230 [= 1878e: 66] (cited as *Tanyrrhinus*; characters).
- Duvivier, 1883: 197 (catalog; cited as *Tanyrrhinus*).
- Bernhauer and Schubert, 1910: 37 (world catalog; 1 species).
- Leng, 1920: 93 (catalog of North American species).
- Scheerpeltz, 1933: 1032 (world catalog supplement).
- Blackwelder, 1952: 374 (type species: *singularis*).
- Hatch, 1957: 50, 68 (characters; species of Pacific Northwest).
- Moore, 1966: 48, 56 (cited as *Tanyrrhinus*; characters; notes).
- Moore and Legner, 1975: 216 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 195 (characters; notes).
- Newton, Thayer, Ashe, and Chandler, 2000: 340 (1 Nearctic species; notes; characters in key).

**singularis** Mannerheim, 1852: 350 (*Tanyrhinus*; Type locality: insula Sitkha).

- Gemminger and Harold, 1870: 2062 (*Tanyrhinus*; cited as *Tanyrrhinus*; catalog).
- Fauvel, 1878d: 230 [= 1878e: 66] (*Tanyrhinus*; cited as *Tanyrrhinus*; characters; Alaska).
- Bernhauer and Schubert, 1910: 37 (*Tanyrhinus*; catalog).
- Scheerpeltz, 1933: 1032 (*Tanyrhinus*; catalog).
- Hatch, 1957: 69 (*Tanyrhinus*; characters; British Columbia; Washington; Oregon).
- Campbell and Davies, 1991: 91 (*Tanyrhinus*; checklist of species; Alaska and Canada).

▲ **DISTRIBUTION:** Canada, USA.

### **Trichodromeus**

[7 species; Palaearctic Region]

*Trichodromeus* Luze, 1903: 116 (subgenus of *Geodromicus*; species included: *penicillatus*, *tumidus*). **TYPE SPECIES:** *Hygrogeus penicillatus* Reitter, fixed by subsequent designation by Blackwelder, 1952: 305.

- Bernhauer and Schubert, 1910: 75 (subgenus of *Geodromicus*).
- Tikhomirova, 1973a: 141 (subgenus of *Geodromicus*; checklist of species of USSR).
- Bordoni, 1984a: 57 (valid genus).
- Bordoni, 1990a: 100 (valid genus; characters).
- Zerche, 1992a: 126, 134 (characters; valid genus; key to some species; phylogeny of species; character polarity; phylogenetic relationship of genus).

*Neogeodromicus* Bordoni, 1985: 373 (species included: *ketmeniensis*). **TYPE SPECIES:** *Neogeodromicus ketmeniensis* Bordoni, fixed by monotypy.

— Zerche, 1992a: 126 (synonym of *Trichodromeus*).

**armatus** Cameron, 1941: 144 (*Hygrogeus*, cited as *Hygrogoeus*; Type locality: Kashmir: Apher Wat, altitude 13,000 feet).

— Zerche, 1992a: 134 (*Trichodromeus*; Pakistan).

▲ **DISTRIBUTION:** India, Pakistan.

*brevisulcus* Champion, 1925, see: *kumaonensis* Champion, 1925.

**flavipes** Motschulsky, 1860: 551 (*Geodromus*; Type locality: Alpes du Caucase en Touchétié; [Note: See lectotype designation by Bordoni, 1993]).

— Gemminger and Harold, 1868: 658 (*Anthophagus*; synonym of *globulicollis*).

— Fauvel, 1869: 493 (*Anthophagus*; synonym of *globulicollis*).

— Fauvel, 1871a: 135 [= 1872: 109] (*Geodromicus*; synonym of *globulicollis*).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).

— Bordoni, 1993: 158 (*Neogeodromicus*; lectotype designation; cited as valid species; characters).

▲ **DISTRIBUTION:** Georgia.

**ketmeniensis** Bordoni, 1985: 374 (*Neogeodromicus*; Type locality: Turkestan: Ketmen-tjube, Sussamir Tan).

— Zerche, 1992a: 128 (*Trichodromeus*; characters; Kirghizia; Turkestan; Kazakhstan; Turkmenia; Transcaspian region).

▲ **DISTRIBUTION:** Kyrgyzstan, Kazakhstan, Turkmenistan.

**kumaonensis** Champion, 1925: 105 (*Hygrogeus*; Type locality: Sheshel, alt. 15,750 ft.).

— Cameron, 1930: 166 (*Hygrogeus*; characters; India).

— Scheerpeltz, 1933: 1067 (*Hygrogeus*; catalog).

— Coiffait, 1983: 275 (*Hygrogeus*; Kashmir).

— Zerche, 1992a: 133 (*Trichodromeus*; Pakistan).

▲ **DISTRIBUTION:** India, Pakistan.

*brevisulcus* Champion, 1925: 106 (*Hygrogeus*; variety of *kumaonensis*; Type locality: N. Kumaon: Laptel, alt. 15,000 ft.).

— Cameron, 1930: 166 (*Hygrogeus*; variety of *kumaonensis*; characters; India).

— Scheerpeltz, 1933: 1067 (*Hygrogeus*; variety of *kumaonensis*).

**penicillatus** Reitter, 1900c: 49 (*Hygrogeus*, cited as *Hygrogaeus*; Type locality: Buchara: Karatak; [Note: See lectotype designation by Zerche, 1992a]).

— Luze, 1903: 116 (*Geodromicus*; subgenus *Trichodromeus*; characters; Buchara; Turkestan).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

— Tikhomirova, 1973a: 141 (*Geodromicus*; subgenus *Trichodromeus*; checklist; Central Asia).

— Bordoni, 1984a: 57 (*Trichodromeus*).

— Bordoni, 1990a: 100 (*Trichodromeus*; characters; notes; Turkestan).

— Zerche, 1992a: 131 (*Trichodromeus*; lectotype designation; characters).

▲ **DISTRIBUTION:** Uzbekistan.

*tumidus* Luze, 1903: 117 (*Geodromicus*; subgenus *Trichodromeus*; Type locality: Russisches Zentralasien: Buchara: Karatagh).

— Luze, 1904: 78 (*Geodromicus*; Turkestan).

— Bernhauer and Schubert, 1910: 77 (*Geodromicus*; catalog).

— Tikhomirova, 1973a: 141 (*Geodromicus*; subgenus *Trichodromeus*; checklist; Central Asia).

— Bordoni, 1984a: 57 (*Trichodromeus*).

— Bordoni, 1990a: 102 (*Trichodromeus*; characters; notes).

— Zerche, 1992a: 131 (*Trichodromeus*; synonym of *penicillatus*).

*sogdianus* Bordoni, 1990a: 104 (*Trichodromeus*; Type locality: Bukara: "Mts. Karateghin, Baldschuan, 924 m).

— Zerche, 1992a: 131 (*Trichodromeus*; synonym of *penicillatus*).

**schmidti** Zerche, 1992a: 130 (*Trichodromeus*; Type locality: Asia centr., Tadsch., Dschirgatal-ski Raj., Sukran-Schlucht, 2590 m/ Burs-Gletscher-Fuss).

▲ **DISTRIBUTION:** Tajikistan.

*sogdianus* Bordoni, 1990, see: *penicillatus* Reitter, 1900.

**transversus** Motschulsky, 1860: 550 (*Geodromus*; Type locality: Alpes du Caucase en Touschéte; [Note: See lectotype designation by Bordoni, 1993]).

— Fauvel, 1871a: 136 [= 1872: 110] (*Geodromicus*; synonym of *globulicollis*).

— Bernhauer and Schubert, 1910: 76 (*Geodromicus*; synonym of *globulicollis*).

— Bordoni, 1993: 158 (*Neogeodromicus*; lectotype designation; cited as valid species; characters).

▲ **DISTRIBUTION:** Caucasus.

*tumidus* Luze, 1903, see: *penicillatus* Reitter, 1900.

### Trigonodemus

[11 species; Nearctic and Palaeartic Regions]

*Trigonodemus* LeConte, 1863a: 56 (species included: *striatus*). **TYPE SPECIES:** *Trigonodemus striatus* LeConte, fixed by monotypy.

— LeConte, 1863: 26 ([nomen nudum]; list of North American species).

— Gemminger and Harold, 1868: 663 (catalog; cited as *Trigonodesmus*).

— Fauvel, 1878d: 231 [= 1878e: 67] (characters).

— Bernhauer and Schubert, 1910: 37 (world catalog; 1 species).

— Leng, 1920: 93 (catalog of North American species).

— Scheerpeltz, 1933: 1032 (world catalog supplement).

— Blackwelder, 1952: 396 (type species: *striatus*).

— Hatch, 1957: 50, 68 (characters; species of Pacific Northwest).

— Moore, 1966: 48, 56 (characters; notes).

— Tikhomirova, 1973a: 137 (checklist of species of USSR).

— Moore and Legner, 1975: 217 (catalog; North America north of Mexico).

— Shibata, 1976: 97 (checklist of species of Japan).

— Moore and Legner, 1979: 196 (characters; notes).

— Watanabe, 1990: 250 (characters; species of Japan).

— Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).

— Smetana, 1996d: 2 (review; characters; notes; key to species).

— Smetana, 1996h: 245 (key to species).

— Downie and Arnett, 1996: 434 (characters; species of Northeastern North America).

— Newton, Thayer, Ashe, and Chandler, 2000: 340 (2 Nearctic species; notes; characters in key).

*Arimimelus* Kraatz, 1877: 104 (species included: *lebioides*). **TYPE SPECIES:** *Arimimelus lebioides* Kraatz, fixed by monotypy.

— Sharp, 1889: 473 (synonym of *Trigonodemus* by citation of *lebioides* in *Trigonodemus*).

— Bernhauer and Schubert, 1910: 37 (synonym of *Trigonodemus*).

— Blackwelder, 1952: 61 (type species: *lebioides*).

— Watanabe, 1990: 250 (synonym of *Trigonodemus*).

— Smetana, 1996d: 2 (synonym of *Trigonodemus*).

— Smetana, 1996h: 245 (key to species).

— Smetana, 2000: 301 (key to species).

*Klapperichianellia* Hlisenkovský, 1962: 455, 456 (species included: *mirabilis*). **TYPE SPECIES:** *Klapperichianellia mirabilis* Hlisenkovský, fixed by original designation and monotypy.

— Thayer, 1987: 389 (may be synonym of *Trigonodemus*).

— Smetana, 1996d: 2 (synonym of *Trigonodemus*).

**audax** Smetana, 1996d: 11 (*Trigonodemus*; Type locality: Taiwan: Nantou Hsien, Yushan N.P., S.W. slope blw. Yushan Mn. Pk. 3650 m).

— Smetana, 1996h: 245 (*Trigonodemus*; characters in key).

— Smetana, 2000: 302 (*Trigonodemus*; characters in key).

▲ **DISTRIBUTION:** Taiwan.

- fasciatus** Leech, 1939: 258 (*Trigonodemus*; Type locality: Vancouver, B. C. [British Columbia]).  
 — Hatch, 1957: 68 (*Trigonodemus*; characters; British Columbia; Oregon).  
 — Smetana, 1996d: 6 (*Trigonodemus*; characters; British Columbia).  
 — Smetana, 1996h: 245 (*Trigonodemus*; characters in key).  
 — Smetana, 2000: 301 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** Canada, USA.
- fungicola** Smetana, 1996d: 9 (*Trigonodemus*; Type locality: China: Sichuan, Gongga Shan, above Camp 3, 3050 m).  
 — Smetana, 1996h: 245 (*Trigonodemus*; characters in key).  
 — Smetana, 2000: 302 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** China.
- lebioides** Kraatz, 1877: 105 (*Arimimelus*; Type locality: Hagi).  
 — Sharp, 1889: 473 (*Trigonodemus*; notes; Japan).  
 — Scheerpeltz, 1933: 1032 (*Trigonodemus*; catalog).  
 — Nakane, 1963a: 82 (*Trigonodemus*; characters; habitus photograph; Japan).  
 — Watanabe, 1990: 253 (*Trigonodemus*; characters; Japan).  
 — J. Li, 1993: 18 (*Trigonodemus*; China).  
 — Smetana, 1996d: 8 (*Trigonodemus*; characters; Japan).  
 — Smetana, 1996h: 245 (*Trigonodemus*; characters in key).  
 — Smetana, 2000: 302 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** Japan, China.
- modestus** Smetana, 2000: 300 (*Trigonodemus*; Type locality: China: W. Sichuan: Ganzi Tibet Aut. Pref., Kangding Co., Daxue Shan, Mu Ge Cuo, ob. See, 15 km NW Kangding, 3700 m, 30°09N, 101°52E).  
 ▲ **DISTRIBUTION:** China.
- montanus** Smetana, 1996h: 241 (*Trigonodemus*; Type locality: China: N. Yunnan, Xue Shan nr. Zhongdian, 4000–4100 m).  
 — Smetana, 2000: 302 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** China.
- mirabilis** Hlisenkovský, 1962: 458 (*Klapperichianellia*; Type locality: China: Fukien, Kuatun, 2300 m, 27.40 nördl. Breite, 114.40 östl. Länge).  
 — Schawaller, 1978: 176, 181, 182, 183 (*Klapperichianellia*; notes; habitus outline; type locality).  
 — Smetana, 1996d: 13 (*Trigonodemus*; characters; China).  
 — Smetana, 1996h: 245 (*Trigonodemus*; characters in key).  
 — Smetana, 2000: 302 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** China.
- pictus** Smetana, 2000: 295 (*Trigonodemus*; Type locality: China: NW Yunnan, Bai Ma Xue Shan, 35 km S. Dêqên, 4300–4800).  
 ▲ **DISTRIBUTION:** China.
- puncticollis** Smetana, 2000: 298 (*Trigonodemus*; Type locality: China: Sichuan, sud Barkam).  
 ▲ **DISTRIBUTION:** China.
- schuelkei** Smetana, 1996h: 244 (*Trigonodemus*; Type locality: China: Shaanxi, Qin Ling Shan, 107.56E, 33.45 N, Autoroute km 93 S of Zhouzhi, 108 km SW Xian Mountain Forest, 1650 m).  
 — Smetana, 2000: 302 (*Trigonodemus*; characters in key).  
 ▲ **DISTRIBUTION:** China.
- striatus** LeConte, 1863a: 57 (*Trigonodemus*; Type locality: Southern States).  
 — Fauvel, 1878d: 232 [= 1878e: 68] (*Trigonodemus*; characters; Canada; West Virginia).  
 — Bernhauer and Schubert, 1910: 37 (*Trigonodemus*; catalog).  
 — Smetana, 1996d: 5 (*Trigonodemus*; characters; Nova Scotia; Ontario; Quebec; New Hampshire; New York).  
 — Smetana, 1996h: 245 (*Trigonodemus*; characters in key).



- Downie and Arnett, 1996: 434 (*Trigonodemus*; characters; USA).  
 — Smetana, 2000: 301 (*Trigonodemus*; characters in key).

▲ **DISTRIBUTION:** Canada, USA.

### Unamis

[5 species; Nearctic Region]

*Unamis* Casey, 1894: 398, 400 (species included: *truncata*). **TYPE SPECIES:** *Lesteva truncata* Casey, fixed by monotypy.

- Bernhauer and Schubert, 1910: 73 (world catalog; 1 species).  
 — Leng, 1920: 95 (catalog of North American species).  
 — Blackwelder, 1952: 402 (type species: *truncata*).  
 — Hatch, 1957: 49, 56 (characters; key to species of Pacific Northwest).  
 — Moore, 1966: 48, 49 (characters; notes).  
 — Moore and Legner, 1972: 21 (characters; key to species).  
 — Moore and Legner, 1975: 218 (catalog; North America north of Mexico).  
 — Moore and Legner, 1979: 198 (characters; notes).  
 — Campbell and Davies, 1991: 90 (checklist of species; Alaska and Canada).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 341 (5 Nearctic species; notes; characters in key).

**bjorkmanae** Hatch, 1957: 57 (*Unamis*; Type locality: Crater L., Oregon).

- Moore and Legner, 1972: 21 (*Unamis*; characters).

▲ **DISTRIBUTION:** USA.

**columbiensis** Hatch, 1957: 56 (*Unamis*; Type locality: Sanca, B. C. [British Columbia]).

- Moore and Legner, 1972: 21 (*Unamis*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**fulvipes** Fall, 1922: 12 (*Unamis*; Type locality: California: Humboldt County: Korbel).

- Hatch, 1957: 57 (*Unamis*; characters; British Columbia).  
 — Moore and Legner, 1972: 21 (*Unamis*; characters).

▲ **DISTRIBUTION:** Canada, USA.

**giulianii** Moore and Legner, 1972: 21 (*Unamis*; Type locality: California: Inyo County, near Finger Lake, 11,300 feet).

▲ **DISTRIBUTION:** USA.

**truncata** Casey, 1885a: 322 (*Lesteva*; Type locality: California: Middle Sierras).

- Casey, 1894: 400 (*Unamis*).  
 — Bernhauer and Schubert, 1910: 73 (*Unamis*; catalog).  
 — Fall, 1922: 13 (*Unamis*; Colorado specimen provisionally referred to genus).  
 — Hatch, 1957: 56 (*Unamis*; characters; Idaho; Washington; Oregon).  
 — Moore and Legner, 1972: 21 (*Unamis*; characters).

▲ **DISTRIBUTION:** USA.

### Uenohadesina

[1 species; Palaearctic Region]

*Uenohadesina* Smetana, 2000a: 285 (species included: *styx*). **TYPE SPECIES:** *Uenohadesina styx* Smetana, fixed by original designation and monotypy.

**styx** Smetana, 2000a: 291 (*Uenohadesina*; Type locality: South Korea: Yong'yeon-gul Cave nr. Hwangji, Changseong-eub, Kangweon-do).

▲ **DISTRIBUTION:** South Korea.

### Vellica

[1 species; Nearctic Region]

*Vellica* Casey, 1885a: 321 (species included: *longipennis*). **TYPE SPECIES:** *Vellica longipennis* Casey, fixed by monotypy.

- Casey, 1894: 401 (notes).  
 — Bernhauer and Schubert, 1910: 74 (world catalog; 1 species).

- Leng, 1920: 95 (catalog of North American species).
- Blackwelder, 1952: 403 (type species: *longipennis*).
- Hatch, 1957: 49, 61 (characters; species of Pacific Northwest).
- Moore, 1966: 48, 49 (characters; notes).
- Moore and Legner, 1975: 219 (catalog; North America north of Mexico).
- Moore and Legner, 1979: 199 (characters; notes).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).

**longipennis** Casey, 1885a: 321 (*Vellica*; Type locality: California: Middle Sierras).

- Bernhauer and Schubert, 1910: 74 (*Vellica*; catalog).
- Hatch, 1957: 61 (*Vellica*; characters; British Columbia).
- Campbell and Davies, 1991: 90 (*Vellica*; checklist of species; Canada).

▲ **DISTRIBUTION:** Canada, USA.

### Xenicopoda

[1 species; Nearctic Region]

*Xenicopoda* Moore and Legner, 1971: 51 (species included: *helenae*). **TYPE SPECIES:** *Xenicopoda helenae* Moore and Legner, fixed by original designation and monotypy.

- Moore and Legner, 1975: 220 (catalog; North America north of Mexico).
- Thayer, 1978: 146 (characters; notes; discussion).
- Moore and Legner, 1979: 200 (characters; notes).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).

**helenae** Moore and Legner, 1971: 53 (*Xenicopoda*; Type locality: Mt. Wilson, Calif.).

- Thayer, 1978: 143 (*Xenicopoda*; characters; notes; California).

▲ **DISTRIBUTION:** USA.

### Tribe Aphaenostemmini

Aphaenostemmini Peyerimhoff, 1914: 248 (genera included: *Aphaenostemmus*). **TYPE GENUS:** *Aphaenostemmus* (see Newton and Thayer, 1992: 55).

- Scheerpeltz, 1933: 1031 (world catalog supplement).
- Peyerimhoff, 1939: 212 (characters in key).
- Scheerpeltz, 1940: 14 (key to Palaearctic genera).
- Newton and Thayer, 1995: 247–286, 295 (phylogenetic relationships; characters; discussion; tribe of Omaliinae; includes *Aphaenostemmus*, *Giulianium*).
- Newton, Thayer, Ashe, and Chandler, 2000: 342 (characters; notes).

Aphaenostemminae Peyerimhoff, 1914.

- Newton and Thayer, 1992: 55 (summary of current classification; notes).

### Aphaenostemmus

[5 species; Oriental and Palaearctic Regions]

*Aphaenostemmus* Peyerimhoff, 1914: 245 (species included: *bordei*). **TYPE SPECIES:**

*Aphaenostemmus bordei* Peyerimhoff, fixed by monotypy.

- Winkler, 1925: 326 (catalog for Palaearctic region).
- Scheerpeltz, 1933: 1031 (world catalog supplement).
- Normand, 1935: 357 (list of species of Tunisia).
- C. Koch, 1936c: 332 (key to species).
- Peyerimhoff, 1939: 211 (characters; key to North African species).
- Blackwelder, 1952: 58 (type species: *bordei*).
- Kocher, 1958: 92 (checklist of species; Morocco).
- Newton and Thayer, 1995: 296 (list of synonyms).

*Torretassoella* C. Koch, 1936b: 126 (species included: *testacea*). **TYPE SPECIES:** *Torretassoella testacea* C. Koch, fixed by monotypy.

- C. Koch, 1936c: 332 (synonym of *Aphaenostemmus*).
- Peyerimhoff, 1939: 211 (synonym of *Aphaenostemmus*).
- Blackwelder, 1952: 391 (type species: *testacea*; synonym of *Aphaenostemmus*).

*Paratriga* Cameron, 1940c: 209 (species included: *indica*, *associata*). **TYPE SPECIES:** *Paratriga indica* Cameron, fixed by original designation.

— Blackwelder, 1952: 294 (type species: *indica*).

— Newton and Thayer, 1995: 296 (synonym of *Aphaenostemmus*).

**associatus** Cameron, 1940c: 209 (*Paratriga*; Type locality: United Provinces: Dehra Dun).

— Newton and Thayer, 1995: 296 (*Aphaenostemmus*).

▲ **DISTRIBUTION:** India.

**bordei** Peyerimhoff, 1914: 248 (*Aphaenostemmus*; Type locality: Biskra).

— Scheerpeltz, 1933: 1031 (*Aphaenostemmus*; catalog).

— C. Koch, 1936c: 332 (*Aphaenostemmus*; characters; Algeria).

— Peyerimhoff, 1939: 213 (*Aphaenostemmus*; characters in key).

▲ **DISTRIBUTION:** Algeria.

**himalayicus** Bernhauer, 1943a: 170 (*Aphaenostemmus*; Type locality: Dehra-Dun: Bhagwan-tung, Himalaya).

▲ **DISTRIBUTION:** India.

**indicus** Cameron, 1940c: 209 (*Paratriga*; Type locality: United Provinces: Dehra Dun).

— Newton and Thayer, 1995: 296 (*Aphaenostemmus*).

▲ **DISTRIBUTION:** India.

**testaceus** C. Koch, 1936b: 126, 133 (*Torretassoella*; Type locality: Aegypten: Wadi Digla. Sinai: Wadi Isla; Wadi Luotaie).

— C. Koch, 1936c: 332 (*Aphaenostemmus*; characters; Egypt).

— Peyerimhoff, 1939: 213 (*Aphaenostemmus*, transferred from *Torretassoella*; characters in key).

— Coiffait, 1979a: 163, 179 (*Aphaenostemmus*; illustrations of forebody and aedeagus; Saudi Arabia).

— Gusarov, 1997: 278 (*Aphaenostemmus*; Oman).

▲ **DISTRIBUTION:** Egypt, Saudi Arabia, Oman.

### Giulianium

[3 species; Nearctic and Palaearctic Regions]

*Giulianium* Moore, 1976: 56 (species included: *campbelli*). **TYPE SPECIES:** *Giulianium campbelli* Moore, fixed by original designation and monotypy.

— Moore and Legner, 1979: 256 (characters; notes).

— Smetana and Campbell, 1980: 1069 (characters).

— Newton and Thayer, 1995: 295 (*Aphaenostemmini*).

— Ahn and Ashe, 1999: 159 (characters; key to species).

— Newton, Thayer, Ashe, and Chandler, 2000: 342 (3 Nearctic species; notes; characters in key).

**alaskanum** Ahn and Ashe, 1999: 162 (*Giulianium*; Type locality: USA: Alaska: Seward. Also cited from Japan).

▲ **DISTRIBUTION:** USA, Japan.

**campbelli** Moore, 1976: 57 (*Giulianium*; Type locality: California: Humboldt County: Bear Harbor).

— Ahn and Ashe, 1999: 162 (*Giulianium*; characters; USA).

▲ **DISTRIBUTION:** USA.

**newtoni** Ahn and Ashe, 1999: 163 (*Giulianium*; Type locality: USA: California: San Mateo Co., Moss Beach).

▲ **DISTRIBUTION:** USA.

### Tribe Corneolabiini

Corneolabiini Steel, 1950: 54 (including key to genera; genera included: *Corneolabium*, *Paracorneolabium*, *Metacorneolabium*). **TYPE GENUS:** *Corneolabium*, by original designation.

— Thayer, 1985: 115 (characters; notes).

— Newton, 1985: 198 (notes on austral distribution).

- Newton and Thayer, 1992: 58 (tribe of Omaliinae).
- Newton and Thayer, 1995: 247–286, 295 (phylogenetic discussion; characters; discussion; includes *Corneolabium*, *Paracorneolabium*; *Metacorneolabium*).
- Klimaszewski, Newton, and Thayer, 1996: 146 (list of New Zealand genera; number of New Zealand species).

### Corneolabium

[1 species; Australian Region]

*Corneolabium* Steel, 1950: 54 (species included: *mandibulare*). **TYPE SPECIES:** *Corneolabium mandibulare* Steel, fixed by original designation and monotypy.

- Thayer, 1985: 115, 163 (characters; phylogenetic relationships).

**mandibulare** Steel, 1950: 56 (*Corneolabium*; Type locality: New Zealand: West Plains).

- Klimaszewski, Newton, and Thayer, 1996: 146 (*Corneolabium*; endemic to New Zealand).

▲ **DISTRIBUTION:** New Zealand.

### Metacorneolabium

[22 species; Neotropical and Australian Regions]

*Metacorneolabium* Steel, 1950: 62 (species included: *minus*, cited as *minor*). **TYPE SPECIES:** *Metacorneolabium minus* Steel, fixed by original designation and monotypy.

- Thayer, 1985: 116, 122, 135, 144, 163 (characters; revision of and key to species; habitats; phylogeny; biogeography).

*Metomalium* Coiffait and Saiz, 1968: 449 (species included: *chilensis*). **TYPE SPECIES:**

*Metomalium chilense* Coiffait and Saiz, fixed by original designation and monotypy.

- Thayer, 1985: 116 (synonym of *Metacorneolabium*).

**alulatum** Thayer, 1985: 137 (*Metacorneolabium*; Type locality: Australia: Tasmania: W side Lake St. Clair, c. 750 m).

▲ **DISTRIBUTION:** Australia.

**batyle** Thayer, 1985: 155 (*Metacorneolabium*; Type locality: Chile: Concepción Prov.: Ramuncho).

▲ **DISTRIBUTION:** Chile.

**bipertica** Thayer, 1985: 159 (*Metacorneolabium*; Type locality: Chile: Osorno Prov.: Parque Nacional Puyehue, Antillanca road, 965 m).

▲ **DISTRIBUTION:** Chile.

**chilense** Coiffait and Saiz, 1968: 450 (*Metomalium*; cited as *chilensis*; Type locality: Chile: Nahuelbuta, Malleco).

- Thayer, 1985: 148 (*Metacorneolabium*; emended to *chilense*; characters; Chile).

▲ **DISTRIBUTION:** Chile.

**convexum** Thayer, 1985: 123 (*Metacorneolabium*; Type locality: New Zealand: NC: 8.0 km S [town of] Arthur's Pass, 670 m).

▲ **DISTRIBUTION:** New Zealand.

**dactylotum** Thayer, 1985: 154 (*Metacorneolabium*; Type locality: Chile: Osorno Prov.: Parque Nacional Puyehue, Antillanca road, 965 m).

▲ **DISTRIBUTION:** Chile.

**darlingtoni** Thayer, 1985: 138 (*Metacorneolabium*; Type locality: Australia: Tasmania: Lower Gordon River, 42.31S, 145.45E – 42.32S, 145.47E7).

▲ **DISTRIBUTION:** Australia.

**diffusum** Thayer, 1985: 156 (*Metacorneolabium*; Type locality: Chile: Llanquihue Prov.: Lago Chapo, 13.5 km E Correntoso, 310 m).

▲ **DISTRIBUTION:** Chile.

**echidna** Thayer, 1985: 142 (*Metacorneolabium*; Type locality: Australia: Victoria: Mt. Buffalo, 500 m).

▲ **DISTRIBUTION:** Australia.

- exochlum** Thayer, 1985: 158 (*Metacorneolabium*; Type locality: Chile: Cautín Prov.: Volcán Villarrica, 1250 m).  
▲ **DISTRIBUTION:** Chile.
- exuberatum** Thayer, 1985: 145 (*Metacorneolabium*; Type locality: Chile: Cautín Prov.: Volcán Villarrica, 1250 m).  
▲ **DISTRIBUTION:** Chile.
- gigas** Thayer, 1985: 124 (*Metacorneolabium*; Type locality: New Zealand: BR: Mt. Murchison, 1420 m).  
▲ **DISTRIBUTION:** New Zealand.
- hokitika** Thayer, 1985: 132 (*Metacorneolabium*; Type locality: New Zealand: WD: Hokitika, Glow Worm Dell, 5 m).  
▲ **DISTRIBUTION:** New Zealand.
- logor** Thayer, 1985: 143 (*Metacorneolabium*; Type locality: Australia: Tasmania: Lower Gordon River, 42.42S, 145.53E-42.41.5S, 145.53E).  
▲ **DISTRIBUTION:** Australia.
- minus** Steel, 1950: 64 (*Metacorneolabium*; cited as *minor*; Type locality: New Zealand: Mount Hutt).  
— Thayer, 1985: 130 (*Metacorneolabium*; emended from *minor* to *minus*; characters; New Zealand).  
— Emberson, 1998: 32 (*Metacorneolabium*; collecting notes; Chatham Islands).  
▲ **DISTRIBUTION:** New Zealand, Chatham Islands.
- pilatum** Thayer, 1985: 153 (*Metacorneolabium*; Type locality: Chile: Osorno Prov.: Parque Nacional Puyehue, Volcán Casa Blanca, 1370 m).  
▲ **DISTRIBUTION:** Chile.
- pyriforme** Thayer, 1985: 125 (*Metacorneolabium*; Type locality: New Zealand: BR: Nelson Lakes N. P., Lake Rotoiti, 600 m).  
▲ **DISTRIBUTION:** New Zealand.
- rangipo** Thayer, 1985: 133 (*Metacorneolabium*; Type locality: New Zealand: TO: Rangipo Intake, 36 road km S Turangi, 900 m).  
▲ **DISTRIBUTION:** New Zealand.
- rivalis** Thayer, 1985: 147 (*Metacorneolabium*; Type locality: Chile: Osorno Prov.: 7.7 km NE Termas de Puyehue, 200 m).  
▲ **DISTRIBUTION:** Chile.
- soror** Thayer, 1985: 161 (*Metacorneolabium*; Type locality: Chile: Malleco Prov.: 12 km E Malalcahuello, 1350 m).  
▲ **DISTRIBUTION:** Chile.
- victas** Thayer, 1985: 135 (*Metacorneolabium*; Type locality: Australia: Tasmania: Rufus Canal, 13.5 km WNW Derwent Bridge, 800 m).  
▲ **DISTRIBUTION:** Australia.
- zanotium** Thayer, 1985: 129 (*Metacorneolabium*; Type locality: New Zealand: SL: Owaka, Glenomaru Reserve).  
▲ **DISTRIBUTION:** New Zealand.

### Paracorneolabium

[1 species; Australian Region]

- Paracorneolabium* Steel, 1950: 59 (species included: *brouni*). **TYPE SPECIES:** *Paracorneolabium brouni* Steel, fixed by original designation and monotypy.  
— Thayer, 1985: 115-116, 162-171 (characters; phylogenetic relationships).
- brouni** Steel, 1950: 60 (*Paracorneolabium*; Type locality: New Zealand: Hollyd.; according to Steel this is probably an abbreviation for Hollyford).  
— Klimaszewski, Newton, and Thayer, 1996: 146 (*Paracorneolabium*; endemic to New Zealand).  
▲ **DISTRIBUTION:** New Zealand.

### Tribe Coryphiini

Coryphiini Jakobson, 1908.

- Portevin, 1929: 430 (key to French genera).
- Joy, 1932: 97 (key to British genera).
- Hatch, 1957: 49 (characters; key to genera of Pacific Northwest).
- Arnett, 1963: 241, 259 (key to North American genera; characters; list of North American genera).
- Campbell, 1978a: 22 (characters; key to genera and species; *Euedectus*, *Haida*, *Pseudohaida* excluded; biological notes).
- Moore and Legner, 1979: 161 (characters; tabular key to genera of North America north of Mexico).
- Muona, 1979: 18 (list of Scandinavian species).
- Outerelo and Gamarra, 1985: 82 (key to genera of Iberian Peninsula).
- Watanabe, 1990: 264, 377 (characters; key to genera of Japan; relationships of genera).
- Zerche, 1989: 27 (supplement to Lohse, 1964).
- Zerche, 1990 (monograph; phylogeny; characters; checklist of and keys to taxa of Palaearctic region; natural history notes; systematic position and taxonomic status of some Nearctic taxa changed).
- Newton and Thayer, 1992: 58 (tribe of Omaliinae).
- Zerche, 1993: 352, 354–357 (*Geodromicus*, *Liophilydrodes* and *Philydrodes* placed in *Hygrogeus* group of Anthophagini; bionomics; Zoogeography).
- Newton and Thayer, 1995: 247–286, 294 (phylogenetic relationships; characters; discussion).
- M. Hansen, 1996: 95 (list of Danish species).
- Newton, Thayer, Ashe, and Chandler, 2000: 285 (key to Nearctic genera).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (characters; notes).

### Subtribe Boreaphilina

- Boreaphilina Zerche, 1990: 22, 158 (genera included: *Archaeoboreaphilus*, *Caloboreaphilus*, *Boreaphilus*, *Niphetodes*, *Hypsonothrus*). **TYPE GENUS:** *Boreaphilus* (see Newton and Thayer, 1992: 58).
- Newton and Thayer, 1992: 58 (subtribe of Coryphiini).
  - Newton, Thayer, Ashe, and Chandler, 2000: 341 (characters; notes).
- Boréaphilaires Mulsant and Rey, 1880: 391 (genera included: *Coryphium*, *Euedectus*, *Boreaphilus*). **TYPE GENUS:** *Boreaphilus* (see Newton and Thayer, 1992: 58).
- Newton and Thayer, 1992: 58 (synonym of Boreaphilina).

### Archaeoboreaphilus

[6 species; Palaearctic Region]

*Archaeoboreaphilus* Zerche, 1990: 158 (species included: *nikkoensis*, *miyamorii*, *tateoi*, *fuscus*, *iwakisanensis*, *yasutoshii*). **TYPE SPECIES:** *Boreaphilus nikkoensis* Sawada, fixed by original designation.

**fuscus** Watanabe, 1988: 53 (*Coryphium*; Type locality: Japan: Honshu: Yamaguchi Pref.: Azami-ga-take, Kanochô).

- Watanabe, 1990: 362 (*Coryphium*; characters; Japan).
- Zerche, 1990: 164 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**iwakisanensis** Watanabe, 1988: 54 (*Coryphium*; Type locality: Japan: Honshu: Aomori Pref.: Mt. Iwakisan).

- Watanabe, 1990: 363 (*Coryphium*; characters; Japan).
- Zerche, 1990: 165 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**miyamorii** Watanabe, 1988: 49 (*Coryphium*; Type locality: Japan: Hokkaido: Horobetsu-kôzan, Ihuri).

- Watanabe, 1990: 359 (*Coryphium*; characters; Japan).
- Zerche, 1990: 163 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**nikkoensis** Sawada, 1964: 36 (*Boreaphilus*; Type locality: Japan: Honshu: Pref. Tochigi: Chuzenji near Nikko).

- Watanabe, 1988: 56 (*Coryphium*; characters; Japan).
- Watanabe, 1990: 364 (*Coryphium*; characters; Japan).
- Zerche, 1990: 159 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**tateoi** Watanabe, 1988: 52 (*Coryphium*; Type locality: Japan: Honshu: Nara Pref.: Tōnomine, Yamato).

- Watanabe, 1990: 361 (*Coryphium*; characters; Japan).
- Zerche, 1990: 164 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**yasutoshii** Watanabe, 1988: 58 (*Coryphium*; Type locality: Japan: Honshu: Gunma Pref.: near Edozawa, Mt. Jōshū-Hotaka).

- Watanabe, 1990: 366 (*Coryphium*; characters; Japan).
- Zerche, 1990: 166 (*Archaeoboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

### **Boreaphilus**

[23 species; Nearctic and Palaeartic Regions]

*Boreaphilus* C. Sahlberg, 1832: 433 (species included: *henningianus*). **TYPE SPECIES:** *Boreaphilus henningianus* C. Sahlberg, fixed by monotypy.

- Zetterstedt, 1838: 72 (characters).
- Erichson, 1840: 899 (characters).
- Haliday, 1841: 186 (characters).
- Schaum, 1852: 31 (list of species; Europe).
- Lacordaire, 1854: 137 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 632 (characters).
- Kraatz, 1857: 39 (characters).
- Jacquelin du Val, 1857: 67 (characters).
- Redtenbacher, 1857: 245 (characters).
- Thomson, 1858: 37 (characters).
- Thomson, 1859: 49 (characters; type species: *henningianus*).
- Schaum, 1859: 32 (catalog; European species).
- Thomson, 1861: 183 (characters).
- Gemminger and Harold, 1868: 664 (catalog).
- Jacquelin du Val, 1868: 79 (catalog; European species).
- Fauvel, 1871a: 106 [= 1872: 80] (characters).
- Redtenbacher, 1874: 273 (characters).
- Fauvel, 1875a:V [= 1875b: 207] (catalog).
- Mulsant and Rey, 1880: 401 (characters).
- Heyden, 1880: 82 (list of species of Siberian region).
- Duvivier, 1883: 197 (catalog).
- Seidlitz, 1891: 349 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).
- Heyden, 1893: 48 (list of species of Siberian region).
- Ganglbauer, 1895: 699 (characters; key to middle European species).
- Heyden, Reitter, and Weise, 1906: 137 (list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 84 (world catalog; 8 species).
- Notman, 1918 (characters; notes).
- Leng, 1920: 95 (catalog of North American species).
- Winkler, 1925: 337 (catalog for Palaeartic region).
- Porta, 1926: 33 (characters; species of Italy).
- Scheerpeltz, 1933: 1072 (world catalog supplement).
- Normand, 1935: 358 (list of species of Tunisia).
- Horion, 1935: 167 (characters; key to species of central Europe).
- Palm, 1948: 129 (characters; species of Sweden).

- Blackwelder, 1952: 83 (type species: *henningianus*).
- Smetana, 1959a: 196 (list of species collected in Albania).
- Horion, 1963: 154 (list of central European species).
- Székessy, 1963: 24 (characters).
- Lohse, 1964: 69 (characters; key to central European species).
- Scheerpeltz, 1968a: 19 (catalog of Austrian species).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Moore and Legner, 1975: 186 (catalog; North America north of Mexico).
- Shibata, 1976: 125 (checklist of species of Japan).
- Campbell, 1978a: 24, 58 (key to species; characters; notes).
- Moore and Legner, 1979: 162 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Tóth, 1982: 107 (characters; habitus; species of Hungary).
- Muona and Viramo, 1986: 16 (list of species of northeastern Finland).
- Zanetti, 1987: 434 (characters; habitus; key to species of Italy).
- Zerche, 1989: 123, 129 (characters; notes; distributional dates discussed).
- Watanabe, 1990: 370 (characters; key to species of Japan).
- Zerche, 1990: 169, 286, 306 (characters; key to species of Palaearctic region; phylogeny; distribution).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Zerche, 1993: 344, 350, 355 (modification of key; phylogeny; distribution; distribution in Nearctic and Palaearctic regions compared).
- Siitonen, 1993: 230 (list of Finnish species).
- Zanetti, 1995: 10 (list of species of Italy).
- Downie and Arnett, 1996: 436 (characters; key to species of Northeastern North America).
- Kashcheev, 1999: 144 (characters).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).

*Chevrieria* Heer, 1839: 188 (species included: *velox*). **TYPE SPECIES:** *Chevrieria velox* Heer, fixed by monotypy.

- Heer, 1841: 571 (notes).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 135 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 631 (characters).
- Jacquelin du Val, 1857: 67 (synonym of *Boreaphilus*).
- Redtenbacher, 1857: 241 (characters).
- Redtenbacher, 1857: 992 (synonym of *Boreaphilus*).
- Schaum, 1859: 32 (synonym of *Boreaphilus*).
- Gemminger and Harold, 1868: 664 (synonym of *Boreaphilus*).
- Fauvel, 1871a: 106 [= 1872: 80] (synonym of *Boreaphilus*).
- Ganglbauer, 1895: 699 (synonym of *Boreaphilus*).
- Bernhauer and Schubert, 1910: 84 (synonym of *Boreaphilus*).
- Scheerpeltz, 1933: 1072 (synonym of *Boreaphilus*).
- Blackwelder, 1952: 99 (type species: *velox*).
- Campbell, 1978a: 59 (synonym of *Boreaphilus*).
- Zanetti, 1987: 434 (synonym of *Boreaphilus*).
- Zerche, 1990: 169 (synonym of *Boreaphilus*).

*Boreaphilus* Agassiz, 1847: 49 (emendation of *Boreaphilus*). **TYPE SPECIES:** *Boreaphilus henningianus* C. Sahlberg, fixed by objective synonymy with *Boreaphilus*.

- Blackwelder, 1952: 84 (type species).
- Campbell, 1978a: 59 (synonym of *Boreaphilus*).

*Catocopa* Gistel, 1856: 29. **TYPE SPECIES:** *Chevrieria velox* Heer, fixed by monotypy.

- Blackwelder, 1952: 96 (synonym of *Boreaphilus*; type species: *velox*).
- Zerche, 1990: 169 (synonym of *Boreaphilus*).

**albanicus** Zerche, 1990: 197 (*Boreaphilus*; Type locality: Nordalban.: Alpen Casa Valbones).

▲ **DISTRIBUTION:** Albania.



*americanus* Notman, 1918, see: *henningianus* C. Sahlberg, 1832.

*angulatus* Fairmaire and Laboulbène, 1856, see: *velox* Heer, 1839.

*angustatus* Jacquelin du Val, 1857, see: *velox* Heer, 1839.

**astur** Sharp, 1873: 266 (*Boreaphilus*; Type locality: Astúrias á mitad de camino próximamente entre Reinosa y Potes).

— Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).

— Zerche, 1990: 208 (*Boreaphilus*; characters; Spain).

▲ **DISTRIBUTION:** Spain.

**bertiae** Zerche, 1990: 203 (*Boreaphilus*; Type locality: Sède de Pau, Basses Pyrénées = Pyrénées-Atlantiques).

— Jarrige, 1946a: 111 (*Boreaphilus*; cited as *astur*; [Note: Misidentified according label date cited by Zerche, 1990: 203]; France).

▲ **DISTRIBUTION:** France.

*birostratus* Handschin, 1920, see: *Coryphium*.

*brevicollis* Haliday, 1841, see: *Coryphium*.

**carinthiacus** Ganglbauer, 1892: 17 (*Boreaphilus*; Type locality: Gipfel der Petzen in Kärnten, 2100 m).

— Ganglbauer, 1895: 700 (*Boreaphilus*; characters; Carinthia).

— Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).

— Horion, 1963: 155 (*Boreaphilus*; Austria).

— Lohse, 1964: 69 (*Boreaphilus*; characters; central Europe).

— Zanetti, 1984a: 50 (*Boreaphilus*; characters).

— Zanetti, 1987: 439 (*Boreaphilus*; characters; not in Italy).

— Lucht, 1987: 91 (*Boreaphilus*; checklist; Austria).

— Zerche, 1990: 194 (*Boreaphilus*; characters; Carinthia).

— Zerche, 1993: 353 (*Boreaphilus*; Austria).

▲ **DISTRIBUTION:** Austria.

**cazorlaensis** Zerche, 1990: 205 (*Boreaphilus*; Type locality: Prov. Jaen, Sierra de Cazorla, 1000 m).

▲ **DISTRIBUTION:** Spain.

**fuelscheri** Zerche, 1990: 221 (*Boreaphilus*; Type locality: Kreta: Lassithi-Hochebene).

▲ **DISTRIBUTION:** Crete.

**graciliformis** Zerche, 1990: 183 (*Boreaphilus*; Type locality: Japan: Yokohama).

— Watanabe, 1990: 375 (*Boreaphilus*; cited as *lewisianus* but spelled as *liwisianus*; [Note: Misidentification according to Zerche, 1993: 352]; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**guadalupensis** Fagel, 1960c: 222 (*Boreaphilus*; Type locality: Espagne: Estrémadure: Guadalupe).

— Zerche, 1990: 212 (*Boreaphilus*; characters; Spain).

▲ **DISTRIBUTION:** Spain.

**guadarramus** Sharp, 1873: 266 (*Boreaphilus*; Type locality: Sierra Guadarrama, am Escorial; [Note: See lectotype designation by Zerche, 1990]).

— Fauvel, 1873b: 117 [= 1873c: 10] (*Boreaphilus*; synonym of *velox*).

— Bernhauer and Schubert, 1910: 85 (*Boreaphilus*; synonym of *velox*).

— Zerche, 1990: 200 (*Boreaphilus*; valid species; lectotype designation: Sierra Guadarrama, am Escorial; characters; Spain; Portugal).

— Outerelo, Gamarra, and Aranda, 1993: 125 (*Boreaphilus*; wing polymorphism; illustrations; Spain).

▲ **DISTRIBUTION:** Spain, Portugal.

**henningianus** C. Sahlberg, 1832: 433 (*Boreaphilus*; Type locality: Lapponia borealis: lacus Mandujärvi; [Note: See lectotype designation by Zerche, 1990]).

— Zetterstedt, 1838: 72 (*Boreaphilus*; characters; habitat; Lapland).

— Erichson, 1840: 899 (*Boreaphilus*; characters; Lapland).

- Haliday, 1841: 187 (*Boreaphilus*; characters; Finland).
  - Motschulsky, 1845a: 38 (*Boreaphilus*; notes; Russia).
  - Kraatz, 1857: 41 (*Boreaphilus*; [**Note:** Bernhauer and Schubert, 1910: 84 cited *henningianus* Kraatz as a synonym of *henningianus* C. Sahlberg; Kraatz did not describe the species as new, he attributed it to Sahlberg]; characters; Lapland; Finland).
  - Redtenbacher, 1857: 245 (*Boreaphilus*; characters; Lapland).
  - Thomson, 1859: 49 (type species of *Boreaphilus*).
  - Hochhuth, 1862: 103 (*Boreaphilus*; Russia).
  - Redtenbacher, 1874: 273 (*Boreaphilus*; characters).
  - Seidlitz, 1875: 243 (*Boreaphilus*; characters; Baltic region).
  - J. Sahlberg, 1876: 209 (*Boreaphilus*; characters; Finland).
  - Poppius, 1909: 7 (*Boreaphilus*; Lena Valley, Siberia).
  - Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).
  - Scheerpeltz, 1933: 1072 (*Boreaphilus*; catalog).
  - Horion, 1935: 168 (*Boreaphilus*; characters; Germany).
  - Palm, 1948: 129 (*Boreaphilus*; characters; Sweden; Norway; Finland).
  - Horion, 1963: 156 (*Boreaphilus*; Norway; Sweden; Finland; Russia; Siberia to Lena valley; Germany).
  - Lohse, 1964: 69 (*Boreaphilus*; cited as *henningianus*; characters; central Europe).
  - Steel, 1964a: 250 (*Boreaphilus*; Alaska).
  - Ashworth, 1972: 214 (*Boreaphilus*; late-glacial subfossil; Britain).
  - Campbell, 1978a: 61 (*Boreaphilus*; characters; Manitoba; New Brunswick; Ontario; Quebec; Yukon Territory; Alaska; Massachusetts; New Hampshire; New Jersey; New York).
  - Lucht, 1987: 91 (*Boreaphilus*; checklist; Germany; Sweden).
  - Zerche, 1989: 129 (*Boreaphilus*; correction of name).
  - Zerche, 1990: 177 (*Boreaphilus*; lectotype designation; characters; Norway; Sweden; Finland; Russia; Mongolia; Germany).
  - Campbell and Davies, 1991: 89 (*Boreaphilus*; checklist of species; Alaska and Canada).
  - Zerche, 1993: 353 (*Boreaphilus*; Germany; Canada).
  - Downie and Arnett, 1996: 436 (*Boreaphilus*; characters; Canada; USA).
  - Lemdahl and Gustavsson, 1997: 181 (*Boreaphilus*; collected in lateglacial and middle Holocene deposits; Sweden).
  - Ryabukhin, 1999: 34 (*Boreaphilus*; catalog; habitat; distribution; northeastern Russia).
  - ▲ **DISTRIBUTION:** Sweden, Norway, Finland, Germany, Russia, Mongolia, Canada, USA.
- longicornis* J. Sahlberg, 1876: 209 (*Boreaphilus*; variety of *henningianus*; Type locality: Finnmarken; [**Note:** See lectotype designation by Zerche, 1990]).
- Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; variety of *henningianus*).
  - Zerche, 1990: 177 (*Boreaphilus*; lectotype designation; synonym of *henningianus*).
- sahlbergi* Poppius, 1904: 106 (*Boreaphilus*; Type locality: Nordost-Sibirien, Umgebungen von Shigansk [67° n. Br.] an der unteren Lena).
- Poppius, 1909: 7 (*Boreaphilus*; Lena Valley, Siberia).
  - Bernhauer and Schubert, 1910: 85 (*Boreaphilus*; catalog).
  - Zerche, 1990: 177 (*Boreaphilus*; synonym of *henningianus*).
- volans* J. Sahlberg, 1911: 47 (*Boreaphilus*; Type locality: prope Helsingforsiam).
- Scheerpeltz, 1933: 1073 (*Boreaphilus*; catalog).
  - Zerche, 1990: 178 (*Boreaphilus*; synonym of *henningianus*).
- americanus* Notman, 1918: 188 (*Boreaphilus*; Type locality: Roselle Park, Union Co., N.J.).
- Scheerpeltz, 1933: 1072 (*Boreaphilus*; catalog).
  - Steel, 1964a: 250 (*Boreaphilus*; may be synonym of *henningianus*).
  - Campbell, 1978a: 61 (*Boreaphilus*; synonym of *henningianus*).
  - Zerche, 1990: 178 (*Boreaphilus*; synonym of *henningianus*).
- spectabilis* Filatova, 1981: 17 (*Boreaphilus*; Type locality: Primorskii Krai, Spasskii r-n, 3 km IUB pos. Evseevka).
- Zerche, 1990: 178 (*Boreaphilus*; synonym of *henningianus*).

**hokkaidensis** Zerche, 1993: 347 (*Boreaphilus*; Type locality: Japan: Hokkaido: Kushiro marsh, Iwahogi, 5 m. Also cited from Sakhalin).

▲ **DISTRIBUTION:** Japan, Russia.

*hummleri* Bernhauer, 1935, see: *velox* Heer, 1839.

**japonicus** Sharp, 1874: 96 (*Boreaphilus*; Type locality: Nagasaki; [Note: See lectotype designation by Zerche, 1990]).

— Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).

— Nakane, 1963a: 83 (*Boreaphilus*; characters; habitus photograph; Japan).

— Watanabe, 1990: 373 (*Boreaphilus*; characters; Japan).

— Zerche, 1990: 185 (*Boreaphilus*; lectotype designation; characters; Japan; Russia).

— Zerche, 1993: 353 (*Boreaphilus*; Japan).

— J. Li, 1993: 19 (*Boreaphilus*; China).

▲ **DISTRIBUTION:** Japan, China, Russia.

*kurentzovi* Tikhomirova, 1973: 157 (*Boreaphilus*; Type locality: Suputinskii zapovednik).

— Zerche, 1990: 185 (*Boreaphilus*; synonym of *japonicus*).

*kurentzovi* Tikhomirova, 1973, see: *japonicus* Sharp, 1874.

**lewisianus** Sharp, 1874: 96 (*Boreaphilus*; Type locality: Kobé).

— Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).

— Zerche, 1990: 175 (*Boreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*longicornis* J. Sahlberg, 1876, see: *henningianus* C. Sahlberg, 1832.

*longicornis* Roubal, 1941, see: *velox* Heer, 1839.

**maroccanus** Zerche, 1990: 223 (*Boreaphilus*; Type locality: Morocco: High Atlas, 55 km S. Marrakech nr. Imlil).

— Outerelo, Gamarra, and Aranda, 1993: 125 (*Boreaphilus*; illustration of aedeagus; Spain).

▲ **DISTRIBUTION:** Morocco, Spain.

**melichari** Jureček, 1910: 3 (*Boreaphilus*; Type locality: Trientiner Alpen bei Folgaria, 1200 m).

— Scheerpeltz, 1933: 1072 (*Boreaphilus*; catalog).

— Horion, 1963: 155 (*Boreaphilus*; Italy; Austria).

— Lohse, 1964: 69 (*Boreaphilus*; characters; central Europe).

— Zanetti, 1984a: 50 (*Boreaphilus*; characters).

— Zanetti, 1987: 437 (*Boreaphilus*; characters; Italy).

— Lucht, 1987: 91 (*Boreaphilus*; checklist; Austria).

— Zerche, 1990: 195 (*Boreaphilus*; characters; Italy; Austria).

— Zanetti, 1995: 10 (*Boreaphilus*; Italy).

▲ **DISTRIBUTION:** Austria, Italy.

*nearcticus* Blair, 1933, see: *Holoboreaphilus*.

*nepalicus* Coiffait, 1977, see: *Coryphium*.

*nikkoensis* Sawada, 1964, see: *Archaeoboreaphilus*.

*nordenskioldi* Mäklin, 1878, see: *Holoboreaphilus*.

**pacci** Zanetti, 1984a: 47 (*Boreaphilus*; Type locality: Sicilia: M. Soro, Monti Nebrodi, 1460 m).

— Zanetti, 1987: 440 (*Boreaphilus*; characters; Italy).

— Zerche, 1990: 199 (*Boreaphilus*; characters; Sicily).

— Sparacio, 1995: 144 (*Boreaphilus*; characters; notes; Sicily).

— Zanetti, 1995: 10 (*Boreaphilus*; Italy).

▲ **DISTRIBUTION:** Italy.

**pyrenaicus** Zerche, 1990: 207 (*Boreaphilus*; Type locality: Larrau Basses Pyrénées–Pyrénées-Atlantiques).

▲ **DISTRIBUTION:** France.

*sahlbergi* Poppius, 1904, see: *henningianus* C. Sahlberg, 1832.

**schereri** Zerche, 1990: 210 (*Boreaphilus*; Type locality: Sierra Nevada).

▲ **DISTRIBUTION:** Spain.

**schawalleri** Zerche, 1993: 345 (*Boreaphilus*; Type locality: USSR: Khabarovsk Province: Slavianka, 20 km N Troitskoye, Amur bank).

▲ **DISTRIBUTION:** Russia.

*spectabilis* Filatova, 1981, see: *henningianus* C. Sahlberg, 1832.

**temporalis** Zerche, 1990: 189 (*Boreaphilus*; Type locality: Japan: Mt. Yoshino, Kinki Distr.).

▲ **DISTRIBUTION:** Japan.

**velox** Heer, 1839: 188 (*Chevrieria*; Type locality: Genf).

- Fairmaire and Laboulbène, 1856: 631 (*Chevrieria*; characters; France).
- Kraatz, 1857: 43 (*Boreaphilus*; characters; Switzerland; France; Italy).
- Thomson, 1861: 183 (*Boreaphilus*; characters; Scandinavia).
- Fauvel, 1871a: 107 [= 1872: 81] (*Boreaphilus*; characters; France; Scandinavia; Switzerland; Italy; Spain).
- Fauvel, 1874: 322 [= 1874b: 28] (*Boreaphilus*; Corsica).
- Redtenbacher, 1874: 273 (*Boreaphilus*; characters).
- Fauvel, 1876a: 50 [= 1876: 236] (*Boreaphilus*; Algeria).
- Seidlitz, 1875: 243 (*Boreaphilus*; characters; Baltic region).
- Fauvel, 1878: 90 [= 1878a: 10] (*Boreaphilus*; Algeria).
- Mulsant and Rey, 1880: 403 (*Boreaphilus*; characters; France).
- Fauvel, 1886: 15 [= 1886a: 7] (*Boreaphilus*; Algeria).
- Ganglbauer, 1895: 700 (*Boreaphilus*; characters; north and middle Europe).
- Fauvel, 1897d: 274 (*Boreaphilus*; Algeria).
- Fauvel, 1902b: 55 (*Boreaphilus*; Algeria).
- Sainte-Claire Deville, 1906: 71 (*Boreaphilus*; Corsica).
- Sainte-Claire Deville, 1907: 53 (*Boreaphilus*; characters; France).
- Bernhauer and Schubert, 1910: 85 (*Boreaphilus*; catalog).
- J. Sahlberg, 1913: 58 (*Boreaphilus*; Syria).
- Portevin, 1929: 430 (*Boreaphilus*; characters; France).
- Scheerpeltz, 1933: 1072 (*Boreaphilus*; catalog).
- Horion, 1935: 167 (*Boreaphilus*; characters).
- Scheerpeltz, 1961d: 118 (*Boreaphilus*; Italy).
- Horion, 1963: 154 (*Boreaphilus*; Tunisia; Algeria; Lebanon; France; Spain; Corsica; Sardinia; Sicily; Italy; Croatia; Dalmatia; Greece; Bosnia Hercegovina; Yugoslavia; Albania; Macedonia; Switzerland; Austria; Germany).
- Lohse, 1964: 69 (*Boreaphilus*; characters; central Europe).
- Tóth, 1982: 108 (*Boreaphilus*; characters).
- Zanetti, 1984a: 50 (*Boreaphilus*; characters).
- Zanetti, 1987: 440 (*Boreaphilus*; characters; Italy).
- Lucht, 1987: 91 (*Boreaphilus*; checklist; Austria; Switzerland).
- Zerche, 1989: 129 (*Boreaphilus*; correction of distributional dates for central Europe).
- Zerche, 1990: 214 (*Boreaphilus*; characters; Portugal; Spain; France; Switzerland; Italy; Yugoslavia; Albania; Greece; Turkey; Cyprus; Lebanon; Israel; Tunisia; Algeria).
- Zerche, 1993: 353 (*Boreaphilus*; Greece; Italy; Switzerland).
- Sparacio, 1995: 144 (*Boreaphilus*; characters; notes; Sicily).
- Zanetti, 1995: 10 (*Boreaphilus*; Italy).
- Zanetti and Sabella, 1998: 34 (*Boreaphilus*; notes; Sicily).
- Assing and Wunderle, 2001: 36 (*Boreaphilus*; Cyprus).

▲ **DISTRIBUTION:** Europe, Algeria, Tunisia, Israel, Lebanon, Turkey.

*angulatus* Fairmaire and Laboulbène, 1856: 631 (*Chevrieria*; Type locality: Cauterets; Bretagne).

- Kraatz, 1857: 43 (*Boreaphilus*; characters).
- Thomson, 1861: 185 (*Eudectus*; synonym of *giraudi*).

- Fauvel, 1869: 493 (*Boreaphilus*; synonym of *velox*).
- Ganglbauer, 1895: 700 (*Boreaphilus*; synonym of *velox*).
- Bernhauer and Schubert, 1910: 85 (*Boreaphilus*; synonym of *velox*).
- Zerche, 1990: 214 (*Boreaphilus*; synonym of *velox*).

*angustatus* Jacquelin du Val, 1857: pl. 24, fig. 119 (*Boreaphilus*; [**Note:** Jacquelin du Val attributed this name to Fairmaire and Laboulbène but I do not find their use of the name. However *angulatus* is not listed in Jacquelin du Val's 1868: 79 catalog, so perhaps it was an error for *angustatus*]; Type locality: Not cited).

- Ganglbauer, 1895: 700 (*Boreaphilus*; synonym of *velox*).
- Bernhauer and Schubert, 1910: 85 (*Boreaphilus*; synonym of *velox*).

*hummleri* Bernhauer, 1935a: 40 (*Boreaphilus*; variety of *velox*; Type locality: Calabrien, Sta. Christina; [**Note:** See lectotype designation by Zerche, 1990]. Also cited from Mte. Pagano).

- Zanetti, 1987: 440 (synonym of *velox*).
- Zerche, 1990: 215 (*Boreaphilus*; lectotype designation: Calabria, Sta. Christina; synonym of *velox*).

*longicornis* Roubal, 1941: 10 (*Boreaphilus*; variety of *velox*; [**preoccupied**]; Type locality: Graecia: Taygetos; [**Note:** See lectotype designation by Zerche, 1990]).

- Zerche, 1990: 215 (*Boreaphilus*; lectotype designation; synonym of *velox*).

*volans* J. Sahlberg, 1911, see: *henningianus* C. Sahlberg, 1832.

*wunderlei* Zerche, 1993: 349 (*Boreaphilus*; Type locality: E. Oviedo, Puerto de la Cubilla, 1400 m).

▲ **DISTRIBUTION:** Spain.

*zanettii* Zerche, 1990: 190 (*Boreaphilus*; Type locality: Amur Region, Zeya State Res.).

▲ **DISTRIBUTION:** Russia.

### **Caloboreaphilus**

[1 species; Palaearctic Region]

*Caloboreaphilus* Zerche, 1990: 166 (species included: *hammondi*). **TYPE SPECIES:** *Caloboreaphilus hammondi* Zerche, 1990, fixed by original designation and monotypy.

**hammondi** Zerche, 1990: 167 (*Caloboreaphilus*; Type locality: China: Shaanxi, ca. 20 m. S. Xian Cuihua Shan).

▲ **DISTRIBUTION:** China.

### **Gnathoryphium**

[1 species; Nearctic Region]

*Gnathoryphium* Campbell, 1978a: 51 (species included: *mandibulare*). **TYPE SPECIES:** *Gnathoryphium mandibulare* Campbell, fixed by original designation.

- Zerche, 1990: 294, 298 (characters; character analysis; sistergroup relationships).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).

**mandibulare** Campbell, 1978a: 52 (*Gnathoryphium*; Type locality: Washington: Mt. Baker, Austin Pass, 4500 ft.).

- Zerche, 1990: 294, 298 (*Gnathoryphium*).
- Zerche, 1993: 356 (*Gnathoryphium*; notes on origin).

▲ **DISTRIBUTION:** USA.

### **Hypsonothrus**

[2 species; Palaearctic Region]

*Hypsonothrus* Ganglbauer, 1896: 177 (subgenus of *Niphedodes*; species included: *deubeli*).

**TYPE SPECIES:** *Niphedodes deubeli* Ganglbauer, fixed by monotypy.

- Bernhauer and Schubert, 1910: 85 (subgenus of *Niphedodes*).
- Blackwelder, 1952: 197 (type species: *deubeli*).

- Tikhomirova, 1973a: 142 (subgenus of *Niphetodes*; checklist of species of USSR).
- Zerche, 1990: 231 (characters; valid genus; key to species of Palaearctic region; phylogenetic relationships; distribution).
- Zerche, 1993: 355 (distribution).

**besucheti** Zerche, 1990: 233 (*Hypsonothrus*; Type locality: Maroc-Rif, Azib de Ketama, 1500 m).

▲ **DISTRIBUTION:** Morocco.

**deubeli** Ganglbauer, 1896: 177, 178 (*Niphetodes*; subgenus *Hypsonothrus*; Type locality: Rodnaer Gebirge, Gipfel des Kuhhorn; [**Note:** See lectotype designation by Zerche, 1990]. Also cited from Bucsecs im südöstlichsten Siebenbürgen).

- Bernhauer and Schubert, 1910: 85 (*Niphetodes*; catalog).
- Scheerpeltz, 1933: 1073 (*Niphetodes*; catalog).
- Walles, 1938: 67, 70 (*Niphetodes*; Poland [locality part of Ukraine]).
- Horion, 1963: 156 (*Niphetodes*; Romania; Slovakia).
- Tóth, 1982: 108 (*Niphetodes*; characters).
- Zerche, 1990: 235 (*Hypsonothrus*; lectotype designation: Rodnaer Gebirge, Gipfel des Kuhhorn; characters; USSR; Romania).

▲ **DISTRIBUTION:** Ukraine, Romania.

**huppenthali** Lokay, 1912: 137, 138 (*Niphetodes*; subgenus *Hypsonothrus*; variety of *deubeli*; Type locality: Ost-Karpaten: Czarnohora Gebiet; [**Note:** See lectotype designation by Zerche, 1990]).

- Scheerpeltz, 1933: 1073 (*Niphetodes*; synonym of *deubeli*).
- Tóth, 1982: 109 (*Niphetodes*; variety of *deubeli*; characters).
- Zerche, 1990: 235 (*Hypsonothrus*; lectotype designation: Czarnohora Cp. Or.; synonym of *deubeli*).

*huppenthali* Lokay, 1912, see: *deubeli* Ganglbauer, 1896.

### Niphetodops

[2 species; Palaearctic Region]

*Niphetodops* Zerche, 1990: 225 (species included: *cyrneus*, *lecoqi*). **TYPE SPECIES:** *Niphetodes cyrneus* Orousset and Lecoq, fixed by original designation.

**cyrneus** Orousset and Lecoq, 1988: 387 (*Niphetodes*; Type locality: Corse: forêt domaniale de Lonca au nord-est de Porto, Corse du Sud, 900 m).

- Zerche, 1990: 226 (*Niphetodops*; characters; Corsica).

▲ **DISTRIBUTION:** Corsica.

**lecoqi** Zerche, 1990: 229 (*Niphetodops*; Type locality: Corse: Val d'Eze, 1600 m).

▲ **DISTRIBUTION:** Corsica.

### Subtribe Coryphiina

Coryphiina Jakobson, 1908: 452 (genera included: *Eudectus*, *Coryphium*, *Coryphiodes*, *Boreaphilus*, *Niphetodes*). **TYPE GENUS:** *Coryphium* (see Newton and Thayer, 1992: 58).

- Zerche, 1990: 22, 26 (characters; cited as new subtribe).
- Newton and Thayer, 1992: 58 (subtribe of Coryphiini).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (characters; notes).

### Altaioniphetodes

[1 species; Palaearctic Region]

*Altaioniphetodes* Zerche, 1993: 333 (species included: *ryvkini*). **TYPE SPECIES:** *Altaioniphetodes ryvkini* Zerche, by original designation and monotypy.

**ryvkini** Zerche, 1993: 334 (*Altaioniphetodes*; Type locality: Altai, chr. [Hütte] Korgon, verch. rutsch, [Oberlauf des Baches] Mochnatyj, prit. Kumira [Zufluss des Kumir], 1700 m).

▲ **DISTRIBUTION:** Altai region.

**Coryphiocnemus**

[1 species; Palaearctic Region]

*Coryphiocnemus* Zerche, 1990: 81 (species included: *venustus*). **TYPE SPECIES:** *Coryphium venustum* Filatova, fixed by original designation and monotypy.

— Ryabukhin, 1999: 32 (represented in northeastern Russia by unidentified specimen).

**venustus** Filatova, 1981a: 119 (*Coryphium*; Type locality: Primorskii Krai, Shkotovskii r-n, pos. Anisimovka).

— Filatova, 1982: 104 (*Coryphium*; English translation of Filatova, 1981a; Russia).

— Zerche, 1990: 82 (*Coryphiocnemus*; characters; Russia).

▲ **DISTRIBUTION:** Russia.

**Coryphiodes**

[9 species; Palaearctic Region]

*Coryphiodes* Bernhauer, 1898a: 531 (species included: *deubeli*). **TYPE SPECIES:** *Coryphiodes deubeli* Bernhauer, fixed by monotypy.

— Heyden, Reitter, and Weise, 1906: 137 (list of species of Europe and Caucasus).

— Bernhauer and Schubert, 1910: 84 (world catalog; 1 species).

— Petri, 1912: 56 (list of species of Siebenbürgen).

— Winkler, 1925: 337 (catalog for Palaearctic region).

— Blackwelder, 1952: 108 (type species: *deubeli*).

— Székessy, 1963: 24 (characters).

— Tikhomirova, 1973a: 141 (checklist of species of USSR).

— Tóth, 1982: 106 (characters; cited as *Coryphioides*; species of Hungary).

— Zerche, 1990: 66 (characters; key to species; phylogeny; distribution).

— Zerche, 1993: 328, 332 (modification of key; phylogeny).

— Kashcheev, 1999: 146 (cited as *Coryphyodes*; characters).

*Polychelus* Luze, 1904: 74 (species included: *aeneipennis*). **TYPE SPECIES:** *Polychelus aeneipennis* Luze, fixed by monotypy.

— Bernhauer, 1905b: 595 (synonym of *Coryphium*).

— Bernhauer and Schubert, 1910: 83 (synonym of *Coryphium*).

— Blackwelder, 1952: 317 (type species: *aeneipennis*).

— Campbell, 1978a: 26 (synonym of *Coryphium*).

— Watanabe, 1988: 46 (synonym of *Coryphium*).

— Watanabe, 1990: 355 (synonym of *Coryphium*).

— Zerche, 1990: 66 (synonym of *Coryphiodes*).

**aeneipennis** Luze, 1904: 75 (*Polychelus*; Type locality: Lac Kulikulan, Turkestan; [**Note:** See lectotype designation by Zerche, 1990]).

— Bernhauer and Schubert, 1910: 83 (*Coryphium*; catalog).

— Zerche, 1990: 76 (*Coryphiodes*; lectotype designation: Lac Kulikulan, Turkestan; characters; Uzbekistan).

▲ **DISTRIBUTION:** Uzbekistan.

**anatolicus** Fagel, 1971: 122 (*Coryphium*; Type locality: Anatolie occidentale: vilayet de Bursa, Uludagh, 2000–2200 m).

— Zerche, 1990: 72 (*Coryphiodes*; characters; Turkey).

▲ **DISTRIBUTION:** Turkey.

**deubeli** Bernhauer, 1898a: 532 (*Coryphiodes*; Type locality: Rodnaergebirge auf dem Gipfel des Koronjis).

— Bernhauer and Schubert, 1910: 84 (*Coryphiodes*; catalog).

— Scheerpeltz, 1966d: 311 (*Coryphiodes*; characters).

— Tóth, 1982: 107 (*Coryphiodes*; characters).

— Zerche, 1990: 69 (*Coryphiodes*; characters; Romania).

▲ **DISTRIBUTION:** Romania.

- franzi** Zerche, 1993: 329 (*Coryphiodes*; Type locality: Kashmir, Aru).  
 — Coiffait, 1982: 43 (*Boreaphilus*; cited as *nepalicus*; [**Note:** Misidentified according to Zerche, 1993]; India).  
 ▲ **DISTRIBUTION:** India.
- jelineki** Zerche, 1990: 74 (*Coryphiodes*; Type locality: N Iran: C Elburz Kuha - ye Tu-Chal, 3600–3900 m).  
 ▲ **DISTRIBUTION:** Iran.
- kelleri** Scheerpeltz, 1966d: 307 (*Coryphiodes*; Type locality: Herzegovina: Bjelasnica).  
 — Zerche, 1990: 71 (*Coryphiodes*; characters; Yugoslavia).  
 ▲ **DISTRIBUTION:** Bosnia Hercegovina.
- oehlkei** Zerche, 1990: 78 (*Coryphiodes*; Type locality: Asia cent.: N Taschkent Gr.[osser] Tschimgan, 2800 m).  
 ▲ **DISTRIBUTION:** Uzbekistan.
- schuelkei** Zerche, 1993: 330 (*Coryphiodes*; Type locality: USSR: Asia cent., Tadzhiestan, Pamir-Alai Hissar-Mts./Ansob-Pass, 3200–3600 m).  
 ▲ **DISTRIBUTION:** Tajikistan.
- usbekistanensis** Zerche, 1990: 80 (*Coryphiodes*; Type locality: Kammaschi [Kamaschi]).  
 ▲ **DISTRIBUTION:** Uzbekistan.

### **Coryphiomorphus**

[2 species; Nearctic and Palaearctic Regions]

- Coryphiomorphus* Zerche, 1988d: 27 (species included: *dieckmanni*, *hyperboreus*). **TYPE SPECIES:** *Coryphiomorphus dieckmanni* Zerche, fixed by original designation.  
 — Lohse and Lucht, 1989: 123 (characters).  
 — Zerche, 1989: 128 (characters).  
 — Zerche, 1990: 87 (characters; key to species of Palaearctic region).  
 — Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).
- dieckmanni** Zerche, 1988d: 30 (*Coryphiomorphus*; Type locality: Czechoslovakia Tatra ca. 4900 feet above Popper See. Also cited from Poland).  
 — Zerche, 1989: 128 (*Coryphiomorphus*; characters; High Tatra).  
 — Zerche, 1990: 92 (*Coryphiomorphus*; characters; Czechoslovakia).  
 — Boháč, 1993: 42 (*coryphiomorphus*; Slovakia).  
 — Burakowski, Mroczkowski, and Stefańska, 2000: 42 (*Coryphiomorphus*; catalog; Poland).  
 ▲ **DISTRIBUTION:** Slovakia, Poland.
- hyperboreus** Mäklin, 1880: 84 (*Cylletron*; Type locality: Novaja Semlja vid södra stranden af Matotschkin).  
 — Mäklin, 1881: 41 (*Cylletron*; [**Note:** Cited without earlier reference as though a new species]; characters; Novaja Semlja vid södra stranden af Matotschkinsundet).  
 — Bernhauer and Schubert, 1910: 84 (*Coryphium*; catalog).  
 — Munster, 1925: 5 (*Coryphium*; notes; Novaya Zemlya).  
 — Scheerpeltz, 1933: 1072 (*Coryphium*; catalog).  
 — Palm, 1948: 128 (*Coryphium*; characters; Sweden; Norway; Finland).  
 — Steel, 1964a: 249 (*Coryphium*; Alaska).  
 — Campbell, 1978a: 28 (*Coryphium*; characters; Yukon Territory; Alaska).  
 — Andersen, 1982: 64 (*Coryphium*; natural history; Norway).  
 — Zerche, 1988d: 27 (*Coryphiomorphus*).  
 — Zerche, 1990: 89 (*Coryphiomorphus*; characters; Norway; Sweden; Finland; Russia).  
 — Zerche, 1993: 353 (*Coryphiomorphus*; Norway; Russia; Canada).  
 — Ryabukhin, 1999: 31 (*Coryphiomorphus*; catalog; habitat; distribution; northeastern Russia).  
 ▲ **DISTRIBUTION:** Sweden, Norway, Finland, Russia, Canada, USA.



*norvegicum* Münster, 1911: 279 (*Coryphium*; Type locality: Fluss Jakobselv im nördlichen Norwegen, an der russischen Grenze in Südvaranger; [**Note:** See lectotype designation by Zerche, 1990]).

- Münster, 1925: 5 (*Coryphium*; synonym of *hyperboreum*).
- Scheerpeltz, 1933: 1072 (*Coryphium*; synonym of *hyperboreum*).
- Campbell, 1978a: 28 (*Coryphium*; synonym of *hyperboreum*).
- Zerche, 1990: 89 (*Coryphiomorphus*; lectotype designation: Jakobselv.; synonym of *hyperboreus*).

*norvegicum* Münster, 1911, see: *hyperboreum* Mäklin, 1880.

### **Coryphiopsis**

[1 species; Palaearctic Region]

*Coryphiopsis* Zerche, 1990: 93 (species included: *indica*). **TYPE SPECIES:** *Coryphiopsis indica* Zerche, fixed by original designation and monotypy.

**indica** Zerche, 1990: 94 (*Coryphiopsis*; Type locality: India: Sikkim, Dzungri, 13,000 ft.).

▲ **DISTRIBUTION:** India.

### **Coryphium**

[15 species (and 3 Nearctic species “incertae sedis”); Palaearctic Region]

*Coryphium* Stephens, 1834: 328, 344 (species included: *angusticolle*; [**Note:** See Commission Opinion 1597]). **TYPE SPECIES:** *Coryphium angusticolle* Stephens, fixed by monotypy.

- Curtis, 1829: 29 (nomen nudum; catalog; Britain).
- Stephens, 1829a: 25 (nomen nudum; catalog; Britain).
- Stephens, 1829: 296 (nomen nudum; catalog; Britain).
- Westwood, 1838a: 18 (characters; type species).
- Stephens, 1839: 422 (characters).
- Schaum, 1852: 31 (list of species; Europe).
- Jacquelin du Val, 1857: 68 (characters).
- Redtenbacher, 1857: 245 (characters).
- Kraatz, 1857d: 968 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 49 (characters; type species: *bifoveolatum*).
- Schaum, 1859: 32 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 186 (characters).
- LeConte, 1863: 26 (list of North American species).
- Gemminger and Harold, 1868: 664 (catalog).
- Jacquelin du Val, 1868: 79 (catalog; European species).
- Fauvel, 1871a: 104 [= 1872: 78] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 272 (characters).
- Fauvel, 1875a:V [= 1875b: 207] (catalog).
- Mulsant and Rey, 1880: 392 (characters).
- Duvivier, 1883: 197 (catalog).
- Fowler, 1888: 409 (notes).
- Seidlitz, 1891: 349 (key to some European species).
- Seidlitz, 1891a: 372 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 701 (characters).
- Heyden, Reitter, and Weise, 1906: 137 (list of species of Europe and Caucasus).
- Reitter, 1909: 182 (characters; key to German species).
- Bernhauer and Schubert, 1910: 83 (world catalog; 5 species).
- Johansen, 1914: 584 (characters).
- Winkler, 1925: 337 (catalog for Palaearctic region).

- Porta, 1926: 33 (characters; species of Italy).
- Roubal, 1930: 319 (catalog; Slovakia).
- Joy, 1932: 97 (key to British species).
- Scheerpeltz, 1933: 1071 (world catalog supplement).
- Kloet and Hincks, 1945: 162 (list of British species).
- Palm, 1948: 127 (characters; species of Sweden).
- Tottenham, 1949: 359, 408 (type species: *angusticolle* Stephens; list of British species).
- Blackwelder, 1952: 109 (type species: *angusticolle*).
- Tottenham, 1954: 36 (characters; British species).
- Horion, 1963: 151 (list of central European species).
- Székessy, 1963: 23 (characters).
- Lohse, 1964: 68 (characters; key to central European species).
- Scheerpeltz, 1968a: 19 (catalog of Austrian species).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Shibata, 1976: 124 (checklist of species of Japan).
- Pope, 1977: 24 (list of British species).
- Campbell, 1978a: 24, 26 (key to species; characters; notes).
- Burakowski, Mroczkowski, and Stefańska, 1979: 78 (catalog; Poland).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, Vogel, and Sieber, 1980: 241 (some species collected in Germany).
- Tóth, 1982: 105 (characters; habitus; species of Hungary).
- Muona and Viramo, 1986: 16 (list of species of northeastern Finland).
- Zanetti, 1987: 427 (characters; habitus; key to species of Italy).
- Zerche, 1988b: 198 (requests conservation of name).
- Watanabe, 1988: 46 (characters; key to species of Japan).
- Thayer, 1989: 44 (supports Zerche's proposal to conserve name and type species).
- Lohse and Lucht, 1989: 123 (characters).
- Zerche, 1989: 127 (key to species to replace that of Lohse, 1964).
- ICZN, 1990: 156 (Opinion 1597, name placed on Official List of Generic Names in Zoology).
- Watanabe, 1990: 355 (characters; key to species of Japan).
- Zerche, 1990: 29, 31 (characters; key to species; only in Palearctic region; Nearctic species excluded; bionomics; phylogeny; distribution).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Campbell and Davies, 1991: 89 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Zerche, 1993: 320, 326 (modification of key to species; phylogeny).
- Siitonen, 1993: 230 (list of Finnish species).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 42 (in list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 10 (list of species of Italy).
- M. Hansen, 1996: 95 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 241 (additions to list of Danish species).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
- Kashcheev, 1999: 146 (characters).
- Ryabukhin, 1999: 31 (represented in northeastern Russia by single unidentified specimen).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (3 Nearctic species; notes; characters in key).
- Harpognatus* Wesmael, 1833: 120 (species included: *robynsii*; [**Note:** By action of the Commission on Zoological Nomenclature, in 1990 Opinion 1597, this name is suppressed for purposes of priority but not homonymy]). **TYPE SPECIES:** *Harpognatus robynii* Wesmael, fixed by monotypy.
- Wesmael, 1834: 76 (cited as *Harpognathus* and, by action of ICZN, 1990: 156, in Opinion 1597, it is an incorrect spelling of *Harpognatus*).
- Jacquelin du Val, 1857: 68 (cited as *Harpognathus*; synonym of *Coryphium*).
- Kraatz, 1857d: 968 (cited as *Harpognathus*; synonym of *Coryphium*).
- G. Waterhouse, 1858: 31 (cited as *Harpognathus*; synonym of *Coryphium*).
- Schaum, 1859: 32 (cited as *Harpognathus*; synonym of *Coryphium*).

- Gemminger and Harold, 1868: 664 (cited as *Harpognathus*; synonym of *Coryphium*).
- Ganglbauer, 1895: 701 (cited as *Harpognathus*; synonym of *Coryphium*).
- Bernhauer and Schubert, 1910: 83 (cited as *Harpognathus*; synonym of *Coryphium*).
- Blackwelder, 1952: 181 (cited as *Harpognathus*; type species: *robysii*).
- Campbell, 1978a: 26 (cited as *Harpognathus*; synonym of *Coryphium*).
- Watanabe, 1988: 46 (cited as *Harpognathus*; synonym of *Coryphium*).
- Zerche, 1988b: 197 (requests suppression for purposes of priority but not homonymy).
- Thayer, 1989: 44 (supports Zerche's proposal to suppress name).
- ICZN, 1990: 156 (Opinion 1597, name is suppressed for purposes of priority but not homonymy).
- Watanabe, 1990: 355 (synonym of *Coryphium*).
- Zerche, 1990: 29 (synonym of *Coryphium*).
- Zerche, 1990: 29 (cited as *Harpognathus*; synonym of *Coryphium*).

*Macropalpus* Cussac, 1852: 613 (species included: *pallipes*; **preoccupied** by Ratzeburg, 1844). **TYPE SPECIES:** *Macropalpus pallipes* Cussac, fixed by monotypy.

- Jacquelin du Val, 1857: 68 (synonym of *Coryphium*).
- Kraatz, 1857d: 968 (synonym of *Coryphium*).
- G. Waterhouse, 1858: 31 (synonym of *Coryphium*).
- Schaum, 1859: 32 (synonym of *Coryphium*).
- Gemminger and Harold, 1868: 664 (synonym of *Coryphium*).
- Ganglbauer, 1895: 701 (synonym of *Coryphium*).
- Bernhauer and Schubert, 1910: 83 (synonym of *Coryphium*).
- Blackwelder, 1952: 229 (type species: *pallipes*).
- Campbell, 1978a: 26 (synonym of *Coryphium*).
- Watanabe, 1988: 46 (synonym of *Coryphium*).
- Watanabe, 1990: 355 (synonym of *Coryphium*).
- Zerche, 1990: 29 (synonym of *Coryphium*).

*anatolicum* Fagel, 1972, see: *Coryphoides*.

**angusticolle** Stephens, 1834: 344 (*Coryphium*; [**Note:** Conserved and placed on Official List by Commission according to ICZN, 1990: 156]; Type locality: London; [**Note:** See lectotype designation by Zerche, 1988b]). Also cited from Suffolk; Ipswich; near Levington).

- Curtis, 1829: 29 (*Coryphium*; nomen nudum; catalog; Britain).
- Westwood, 1838a: 18 (*Coryphium*; type species).
- Stephens, 1839: 427 (*Coryphium*; characters; England).
- Fairmaire and Laboulbène, 1856: 632 (*Boreaphilus*; characters; France).
- Redtenbacher, 1857: 245, 992 (*Coryphium*; characters; France; England).
- Kraatz, 1857d: 971 (*Coryphium*; characters; Germany).
- Fauvel, 1871a: 106 [= 1872: 80] (*Coryphium*; characters; France; Scandinavia; Russia; Britain; Germany; Switzerland).
- Fauvel, 1873b: 117 [= 1873c: 10] (*Coryphium*; Austria).
- Schwarz, 1873: 185 (*Coryphium*; characters).
- Redtenbacher, 1874: 272 (*Coryphium*; characters; Germany).
- Seidlitz, 1875: 242 (*Coryphium*; characters; Baltic region).
- J. Sahlberg, 1876: 210 (*Coryphium*; Finland).
- Mulsant and Rey, 1880: 395 (*Coryphium*; characters; France).
- Fowler, 1888: 409 (*Coryphium*; characters; Britain).
- Ganglbauer, 1895: 702 (*Coryphium*; characters; north and middle Europe).
- Sainte-Claire Deville, 1907: 52 (*Coryphium*; characters; France).
- Reitter, 1909: 182 (*Coryphium*; characters; Germany).
- Bernhauer and Schubert, 1910: 83 (*Coryphium*; catalog).
- Johansen, 1914: 584 (*Coryphium*; characters; Denmark).
- Gridelli, 1924b: 131 (*Coryphium*; characters; Italy).
- Portevin, 1929: 431 (*Coryphium*; characters; France).
- Scheerpeltz, 1933: 1071 (*Coryphium*; catalog).

- Jarrige, 1947: 46, 71 (*Coryphium*; characters).
- Palm, 1948: 128 (*Coryphium*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 151 (*Coryphium*; Italy; Russia; Finland; Sweden; Denmark; Britain; Holland; Belgium; France; Switzerland; Hungary; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 69 (*Coryphium*; characters; central Europe).
- Smetana, 1964d: 55 (*Coryphium*; Czechoslovakia).
- Szujewski, 1969a: 248 (*Coryphium*; notes; Poland).
- Legner and Moore, 1977: 175 (*Coryphium*; found under bark).
- Pope, 1977: 24 (*Coryphium*; Britain).
- Hammond, 1980: 139 (*Coryphium*; Ireland).
- Tóth, 1982: 106 (*Eudectus*; characters).
- Segers, 1986: 23 (*Coryphium*; checklist of species; Belgium).
- Zanetti, 1987: 432 (*Coryphium*; characters; Italy).
- Lucht, 1987: 91 (*Coryphium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Zerche, 1988b: 198 (*Coryphium*; lectotype designation [**Note:** Locality not cited but see Zerche, 1990]; requests conservation of name).
- Schülke and Uhlig, 1988: 3 (*Coryphium*; Germany).
- Thayer, 1989: 44 (*Coryphium*; supports Zerche's proposal to conserve name).
- Zerche, 1989: 127 (*Coryphium*; characters).
- ICZN, 1990: 156 (Opinion 1597, name placed on Official List of Specific Names in Zoology).
- Zerche, 1990: 34 (*Coryphium*; type locality: London; characters; bionomic notes; Norway; Sweden; Denmark; Great Britain; France; Spain; Portugal; Belgium; Luxembourg; Switzerland; Germany; Poland; Czechoslovakia; Austria; Italy; Yugoslavia; Romania; Russia).
- Zerche, 1993: 352 (*Coryphium*; Germany; Czech Republic).
- Welch, 1993: 227 (*Coryphium*; cited as *arigusticolle*; ovariole number and ovary structure).
- Boháč, 1993: 42 (*Coryphium*; Slovakia; Czech Republic).
- Muona and Viramo, 1995: 9 (*Coryphium*; collected from dung of *Ursus arctos*; Finland).
- Sparacio, 1995: 143 (*Coryphium*; characters; notes; Sicily).
- Zanetti, 1995: 10 (*Coryphium*; Italy).
- Fowles, Alexander, and Key, 1999: 129 (*Coryphium*; saproxylic species; status as endangered or threatened species; Britain).
- Lott, 1999: 72 (*Coryphium*; saproxylic species; habitat; endangered status; Britain).
- ▲ **DISTRIBUTION:** Europe, Russia.
- robysii* Wesmael, 1833: 121 (*Harpognatus*; [**Note:** This name was suppressed for purposes of priority but not homonymy by the ICZN, 1990, in Opinion 1597]; Type locality: Bruxelles; [**Note:** See lectotype designation by Zerche, 1988b]).
- Wesmael, 1834: 119 (*Harpognatus*, cited as *Harpognathus*; Belgium).
- G. Waterhouse, 1858: 31 (*Coryphium*; synonym of *angusticolle*).
- Kraatz, 1857d: 971 (*Coryphium*; synonym of *angusticolle*).
- Mulsant and Rey, 1880: 395 (*Coryphium*; synonym of *angusticolle*).
- Ganglbauer, 1895: 702 (*Coryphium*; synonym of *angusticolle*).
- Bernhauer and Schubert, 1910: 84 (*Coryphium*; synonym of *angusticolle*).
- Zerche, 1988b: 197 (*Coryphium*; lectotype designation; requests suppression for purposes of priority but not homonymy).
- ICZN, 1990: 156 (Opinion 1597, name is suppressed for purposes of priority but not homonymy).
- Zerche, 1990: 34 (*Coryphium*; synonym of *angusticolle*).
- brevicolle* Haliday, 1841: 187 (*Boreaphilus*; Type locality: Ireland: Holywood).
- G. Waterhouse, 1858: 31 (*Coryphium*; synonym of *angusticolle*).
- Kraatz, 1857d: 971 (*Coryphium*; synonym of *angusticolle*).
- Mulsant and Rey, 1880: 395 (*Coryphium*; synonym of *angusticolle*).
- Ganglbauer, 1895: 702 (*Coryphium*; synonym of *angusticolle*).
- Bernhauer and Schubert, 1910: 84 (*Coryphium*; synonym of *angusticolle*).
- Zerche, 1990: 35 (*Coryphium*; synonym of *angusticolle*).

- pallipes* Cussac, 1852: 613 (*Macropalpus*; Type locality: environs de Lille).  
 — G. Waterhouse, 1858: 31 (*Coryphium*; synonym of *angusticolle*).  
 — Kraatz, 1857d: 971 (*Coryphium*; synonym of *angusticolle*).  
 — Mulsant and Rey, 1880: 395 (*Coryphium*; synonym of *angusticolle*).  
 — Ganglbauer, 1895: 702 (*Coryphium*; synonym of *angusticolle*).  
 — Bernhauer and Schubert, 1910: 84 (*Coryphium*; synonym of *angusticolle*).  
 — Scheerpeltz, 1933: 1071 (*Coryphium*; synonym of *angusticolle*).  
 — Zerche, 1990: 35 (*Coryphium*; synonym of *angusticolle*).
- melanocephalum* Motschulsky, 1860: 542 (*Coryphium*; Type locality: environs de St. Petersbourg; [Note: See lectotype designation by Zerche, 1990]).  
 — Fauvel, 1869: 493 (*Coryphium*; synonym of *angusticolle*).  
 — Fauvel, 1871a: 106 [= 1872: 80] (*Omalium*, cited as *Homalium*; synonym of *angusticolle*).  
 — Bernhauer and Schubert, 1910: 84 (*Coryphium*; synonym of *angusticolle*).  
 — Zerche, 1990: 35 (*Coryphium*; lectotype designation; synonym of *angusticolle*).
- bifoveolatum* Thomson, 1861: 186 (*Coryphium*; Type locality: Småland).  
 — Thomson, 1859: 49 (type species of *Coryphium*).  
 — Gemminger and Harold, 1868: 664 (*Coryphium*; synonym of *angusticolle*).  
 — Fauvel, 1869: 493 (*Coryphium*; synonym of *angusticolle*).  
 — Fauvel, 1871a: 106 [= 1872: 80] (*Omalium*, cited as *Homalium*; synonym of *angusticolle*).  
 — Schwarz, 1873: 185 (*Coryphium*; characters).  
 — J. Sahlberg, 1876: 210 (*Coryphium*; synonym of *angusticolle*).  
 — Mulsant and Rey, 1880: 395 (*Coryphium*; synonym of *angusticolle*).  
 — Ganglbauer, 1895: 702 (*Coryphium*; synonym of *angusticolle*).  
 — Bernhauer and Schubert, 1910: 83 (*Coryphium*; synonym of *angusticolle*).  
 — Scheerpeltz, 1933: 1071 (*Coryphium*; synonym of *angusticolle*).  
 — Zerche, 1990: 35 (*Coryphium*; synonym of *angusticolle*).
- letzneri* Schwarz, 1873: 183 (*Coryphium*; Type locality: Silesia, in monte Altvater).  
 — Ganglbauer, 1895: 702 (*Coryphium*; characters).  
 — Reitter, 1909: 182 (*Coryphium*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 84 (*Coryphium*; synonym of *angusticolle*).  
 — Gridelli, 1924b: 131 (*Coryphium*; synonym of *angusticolle*).  
 — Scheerpeltz, 1933: 1072 (*Coryphium*; catalog).  
 — Horion, 1935: 168 (*Coryphium*; doubtful species).  
 — Lohse, 1964: 69 (*Coryphium*; characters; central Europe).  
 — Zanetti, 1987: 432 (*Coryphium*; synonym of *angusticolle*).  
 — Lucht, 1987: 91 (*Coryphium*; checklist; Germany; Poland; Czechoslovakia; Austria).  
 — Zerche, 1989: 127 (*Coryphium*; synonym of *angusticolle*).  
 — Zerche, 1990: 35 (*Coryphium*; synonym of *angusticolle*).  
 — Boháč, 1993: 42 (*Coryphium*; synonym of *angusticolle*).
- italicum* Gridelli, 1924b: 132 (*Coryphium*; subspecies of *angusticolle*; Type locality: Mte. Sacro, Vallo Lucano; [Note: See lectotype designation by Zerche, 1990]. Also cited from Mte. Antola, Apennino Ligure; Mte. Marsicano, Abruzzo; Mte. Scuro, Vallo Lucano, Campania).  
 — Scheerpeltz, 1933: 1072 (*Coryphium*; subspecies of *letzneri*).  
 — Jarrige, 1947: 46, 71 (*Coryphium*; subspecies of *angusticolle*; characters in key).  
 — Zanetti, 1986: 95 (*Coryphium*; synonym of *angusticolle*).  
 — Zanetti, 1987: 432 (*Coryphium*; synonym of *angusticolle*).  
 — Zerche, 1990: 35 (*Coryphium*; lectotype designation: Mte. Sacro, Vallo Lucano; synonym of *angusticolle*).
- levasseuri* Jarrige, 1947: 45, 70 (*Coryphium*; Type locality: Massif du Cantal, pentes nord des Fonts d'Alagnon, au pied du Bec de l'Aigle, alt. 1200 m).  
 — Zerche, 1990: 35 (*Coryphium*; synonym of *angusticolle*).
- arizonense** Bernhauer, 1912i: 680 (*Ephelinus*; Type locality: Arizona: Flagstaff; [Note: See lectotype designation by Campbell, 1978a]).

- Scheerpeltz, 1933: 1071 (*Ephelinus*; catalog).
- Hatch, 1957: 75 (*Ephelinus*; characters; British Columbia).
- Campbell, 1978a: 34 (*Coryphium*; lectotype designation; characters; British Columbia; Arizona; Oregon; and doubtfully California).
- Zerche, 1990: 31 (Nearctic species not in *Coryphium*; placement uncertain).

▲ **DISTRIBUTION:** Canada, USA.

**atratum** Breit, 1911: 171 (*Coryphium*; Type locality: Mte. Maggiore bei Abazzia; [**Note:** See lectotype designation by Zerche, 1990]).

- Gridelli, 1924b: 133 (*Coryphium*; characters; Italy).
- Scheerpeltz, 1933: 1071 (*Coryphium*; catalog).
- Zerche, 1990: 45 (*Coryphium*; lectotype designation; characters; bionomic notes; Croatia; Bosnia Hercegovina).
- Zanetti, 1995: 10 (*Coryphium*; Italy).

▲ **DISTRIBUTION:** Italy, Croatia, Bosnia Hercegovina.

**balcanicum** Zerche, 1990: 48 (*Coryphium*; Type locality: Bulgarien: Stara Planina, Botev-Südhang, 2000 m).

- Zanetti, 1984: 79 (*Coryphium*; cited as *atratum* [**Note:** Misidentification of *balcanicum* according to Zerche, 1990]; Bulgaria).
- Zanetti, 1987: 434 (*Coryphium*; cited as *atratum* [**Note:** Misidentification of *balcanicum* according to Zerche, 1990; Zerche did not comment on the Italian record nor does he report the species from Italy]; characters; Italy; Bulgaria; Croatia).

▲ **DISTRIBUTION:** Bulgaria, Croatia.

*bifoveolatum* Thomson, 1861, see: *angusticolle* Stephens, 1834.

*birostratum* Handschin, 1920, see: *gredleri* Kraatz, 1870.

**brachypterum** Zerche, 1990: 60 (*Coryphium*; Type locality: Lac Vens Alpes-Maritimes).

▲ **DISTRIBUTION:** France.

*brevicolle* Haliday, 1841, see: *angusticolle* Stephens, 1834.

**brunneum** Hatch, 1957: 75 (*Ephelinus*; Type locality: Ida.: Bonner Co.: Sagle. Also cited from Canada).

- Campbell, 1978a: 37 (*Coryphium*; characters; British Columbia; Idaho).
- Zerche, 1990: 31 (Nearctic species not in *Coryphium*; placement uncertain).

▲ **DISTRIBUTION:** Canada, USA.

**chobauti** Sainte-Claire Deville, 1909: 347 (*Coryphium*; Type locality: versant Nord du mont Ventoux, Vaucluse, 1500 m; [**Note:** See lectotype designation by Zerche, 1990]).

- Scheerpeltz, 1933: 1072 (*Coryphium*; subspecies of *letzneri*).
- Jarrige, 1947: 45, 70 (*Coryphium*; characters in key).
- Zerche, 1990: 59 (*Coryphium*; lectotype designation; characters; bionomic notes; France).

▲ **DISTRIBUTION:** France.

**dilutipes** Ganglbauer, 1904a: 197 (*Coryphium*; variety of *gredleri*; Type locality: Gipfel des Monte Pari; [**Note:** See lectotype designation by Zerche, 1990]).

- Gridelli, 1924b: 130 (*Coryphium*; cited as valid species; characters; Italy).
- Scheerpeltz, 1933: 1071 (*Coryphium*; catalog).
- Horion, 1963: 154 (*Coryphium*; Italy; Austria).
- Lohse, 1964: 68 (*Coryphium*; characters; central Europe).
- Zanetti, 1987: 431 (*Coryphium*; characters; Italy).
- Lucht, 1987: 91 (*Coryphium*; checklist; Austria).
- Zerche, 1989: 128 (*Coryphium*; characters).
- Zerche, 1990: 56 (*Coryphium*; lectotype designation; characters; bionomic notes; France; Switzerland; Italy; Austria).
- Zerche, 1993: 353 (*Coryphium*; Switzerland).
- Zanetti, 1995: 10 (*Coryphium*; Italy).

▲ **DISTRIBUTION:** France, Switzerland, Austria, Italy.

*fuscum* Watanabe, 1988, see: *Archaeoboreaphilus*.

**gredleri** Kraatz, 1870: 416 (*Coryphium*; Type locality: Kreuzjoch; [Note: See lectotype designation by Zerche, 1990]).

- Schwarz, 1873: 185 (*Coryphium*; characters).
- Redtenbacher, 1874: 272 (*Coryphium*; characters; Tirol).
- Ganglbauer, 1895: 702 (*Coryphium*; characters; Tyrol).
- Reitter, 1909: 182 (*Coryphium*; characters; Germany).
- Bernhauer and Schubert, 1910: 84 (*Coryphium*; catalog).
- Gridelli, 1924b: 129 (*Coryphium*; characters; Italy).
- Scheerpeltz, 1933: 1071 (*Coryphium*; catalog).
- Jarrige, 1947: 45, 70 (*Coryphium*; characters in key).
- Horion, 1963: 153 (*Coryphium*; Austria; Italy; Switzerland; Germany ?).
- Lohse, 1964: 68 (*Coryphium*; characters; central Europe).
- Zanetti, 1987: 431 (*Coryphium*; characters; Italy).
- Lucht, 1987: 91 (*Coryphium*; checklist; Austria).
- Zerche, 1989: 128 (*Coryphium*; characters).
- Zerche, 1990: 52 (*Coryphium*; lectotype designation; characters; bionomic notes; France; Switzerland; Italy; Austria).
- Zerche, 1993: 352 (*Coryphium*; Switzerland; Austria).
- Zanetti, 1995: 10 (*Coryphium*; Italy).

▲ **DISTRIBUTION:** France, Switzerland, Austria, Italy.

*birostratum* Handschin, 1920: 5 (*Boreaphilus*; Type locality: Trübtensee, 2500 m).

- Scheerpeltz, 1933: 1072 (*Coryphium*; synonym of *gredleri*).
- Zerche, 1990: 52 (*Coryphium*; synonym of *gredleri*).

*guttatum* LeConte, 1863, see: *Ephelinus*.

*italicum* Gridelli, 1924, see: *angusticolle* Stephens, 1834.

*iwakisanense* Watanabe, 1988, see: *Archaeoboreaphilus*.

*japonicum* Yoshida and Nomura, 1952, see: *Philydrodes*.

*letzneri* Schwarz, 1873, see: *angusticolle* Stephens, 1834.

*levasseuri* Jarrige, 1947, see: *angusticolle* Stephens, 1834.

**loebli** Zerche, 1993: 323 (*Coryphium*; Type locality: Gorkha Dist., Chuling Khola, Djongshi Kharka, 3050–3400 m).

▲ **DISTRIBUTION:** Nepal.

*melanocephalum* Motschulsky, 1860, see: *angusticolle* Stephens, 1834.

*miyamorii* Watanabe, 1988, see: *Archaeoboreaphilus*.

**nepalicum** Coiffait, 1977: 261 (*Boreaphilus*; Type locality: Environs de Alm Darghari, près Maharigaon, 4000 m région de Jumla, Népal occidental).

- Zerche, 1990: 64 (*Coryphium*; characters; Nepal).

▲ **DISTRIBUTION:** Nepal.

**nigrum** Campbell, 1978a: 30 (*Coryphium*; Type locality: New Hampshire: Mt. Washington. Also cited from Massachusetts and New York).

- Zerche, 1990: 31, 299 (Nearctic species not in *Coryphium*; placement uncertain; may be related to clade with *Coryphiocnemus*, *Planeboreaphilus*, and *Coryphiomorphus*).

▲ **DISTRIBUTION:** USA.

*norvegicum* Münster, 1911, see: *Coryphiomorphus*.

*notatum* LeConte, 1863, see: *Ephelinus*.

**outereloi** Zerche, 1990: 43 (*Coryphium*; Type locality: Mte. los Reales, Malaga).

▲ **DISTRIBUTION:** Spain.

*pallidum* LeConte, 1863, see: *Ephelinus*.

*pallipes* Cussac, 1852, see: *angusticolle* Stephens, 1834.

*parvulum* Poppius, 1904, see: *Platycoryphium*.

*robysii* Wesmael, 1834, see: *angusticolle* Stephens, 1834.

**sikkimense** Zerche, 1990: 62 (*Coryphium*; Type locality: India: Sikkim, Lachen, 8950 ft.).

▲ **DISTRIBUTION:** India.

**smetanaorum** Zerche, 1993: 325 (*Coryphium*; Type locality: Nepal: Bhakta B./Syabnu, 2200–3350 m).

▲ **DISTRIBUTION:** Nepal.

*tateoi* Watanabe, 1988, see: *Archaeoboreaphilus*.

**tchyldebayevi** Kashcheev, 1999: 143 (*Coryphium*; Type locality: Zailiiskii Alatau, pereval Kysylauc).

▲ **DISTRIBUTION:** Kazakhstan.

**turcicum** Zerche, 1993: 322 (*Coryphium*; Type locality: Turquie: Artvin).

▲ **DISTRIBUTION:** Turkey.

**uludaghense** Fagel, 1971: 121 (*Coryphium*; Type locality: Anatolie occidentale: vilayet de Bursa, Uludagh, 1800–1900 m).

— Zerche, 1990: 50 (*Coryphium*; characters; Turkey).

▲ **DISTRIBUTION:** Turkey.

*venustus* Filatova, 1981, see: *Coryphiocnemus*.

*yasutoshii* Watanabe, 1988, see: *Archaeoboreaphilus*.

### **Ephelinus**

[3 species; Nearctic Region]

*Ephelinus* Cockerell, 1906: 241 (replacement name for *Ephelis* Fauvel). **TYPE SPECIES:** *Coryphium pallidum* LeConte, by subsequent designation by R. Lucas, 1920: 267.

— Bernhauer and Schubert, 1910: 83 (world catalog; 3 species).

— Leng, 1920: 95 (catalog of North American species).

— Scheerpeltz, 1933: 1070 (world catalog supplement).

— Blackwelder, 1952: 149 (type species).

— Hatch, 1957: 52, 75 (characters; key to species of Pacific Northwest).

— Moore and Legner, 1975: 188 (catalog; North America north of Mexico).

— Campbell, 1978a: 24, 64 (key to species; characters; notes).

— Moore and Legner, 1979: 163 (characters; notes).

— Frank, 1986a: 365 (checklist of species of Florida).

— Zerche, 1990: 261 (characters discussed; Coryphiini).

— Downie and Arnett, 1996: 435 (characters; key to species of Northeastern North America).

— Lundgren, 1998: 38 (list of species from Florida; records for other States listed for each species).

— Newton, Thayer, Ashe, and Chandler, 2000: 342 (Nearctic species; notes; characters in key).

*Ephelis* Fauvel, 1878d: 219 [= 1878e: 55] (**preoccupied** by Lederer, 1863; species included: *pallida*, *guttata*, *notata*). **TYPE SPECIES:** *Coryphium pallidum* LeConte, fixed by objective synonymy with *Ephelinus* for which R. Lucas fixed the type species.

— Duvivier, 1883: 197 (catalog).

— Bernhauer and Schubert, 1910: 83 (synonym of *Ephelinus*).

— Blatchley, 1910: 481 (characters).

— Scheerpeltz, 1933: 1070 (synonym of *Ephelinus*).

— Blackwelder, 1952: 149 (type species).

— Campbell, 1978a: 64 (synonym of *Ephelinus*).

*arizonensis* Bernhauer, 1912, see: *Coryphium*.

*brunneum* Hatch, 1957, see: *Coryphium*.

**guttatus** LeConte, 1863a: 58 (*Coryphium*; Type locality: Southern States).

— Fauvel, 1878d: 220 [= 1878e: 56] (*Ephelis*; characters; Texas).

— Bernhauer and Schubert, 1910: 83 (*Ephelinus*; catalog).



— Campbell, 1978a: 66 (*Ephelinus*; characters; District of Columbia; North Carolina; South Carolina; Tennessee; Texas; Virginia).

— Downie and Arnett, 1996: 435 (*Ephelinus*; characters; USA).

▲ **DISTRIBUTION:** USA.

**notatus** LeConte, 1863a: 58 (*Coryphium*; Type locality: Pennsylvania).

— Fauvel, 1878d: 221 [= 1878e: 57] (*Ephelis*; characters; Michigan; Pennsylvania; Illinois; South Carolina).

— Bernhauer and Schubert, 1910: 83 (*Ephelinus*; catalog).

— Blatchley, 1910: 482 (*Ephelis*; characters; Indiana).

— Campbell, 1978a: 68 (*Ephelinus*; characters; Alabama; District of Columbia; Florida; Illinois; Maryland; Massachusetts; Michigan; Mississippi; Missouri; Ohio; Pennsylvania; Texas; Virginia).

— Downie and Arnett, 1996: 435 (*Ephelinus*; characters; USA).

▲ **DISTRIBUTION:** USA.

**pallidus** LeConte, 1863a: 57 (*Coryphium*; Type locality: Kansas).

— Fauvel, 1878d: 220 [= 1878e: 56] (*Ephelis*; characters; Kansas).

— Bernhauer and Schubert, 1910: 83 (*Ephelinus*; catalog).

— Campbell, 1978a: 71 (*Ephelinus*; characters; Illinois; Kansas).

— Downie and Arnett, 1996: 435 (*Ephelinus*; characters; USA).

▲ **DISTRIBUTION:** USA.

### **Eudectus**

[7 species; Palaearctic and Nearctic Regions]

*Eudectus* Redtenbacher, 1857: 245 (species included: *giraudi*). **TYPE SPECIES:** *Eudectus giraudi* Redtenbacher, fixed by monotypy.

— Kraatz, 1857: 40 (near *Boreaphilus*).

— Kraatz, 1857d: 972 (*Eudectus*; characters; Germany).

— Schaum, 1859: 32 (catalog; European species).

— Thomson, 1861: 184 (characters).

— Gemminger and Harold, 1868: 664 (catalog).

— Jacquelin du Val, 1868: 79 (catalog; European species).

— Fauvel, 1871a: 104 [= 1872: 78] (characters).

— Redtenbacher, 1874: 272 (characters).

— Fauvel, 1875a:V [= 1875b: 207] (catalog).

— Mulsant and Rey, 1880: 398 (characters).

— Duvivier, 1883: 198 (catalog).

— Leconte, 1884: 4 (characters).

— Fowler, 1888: 408 (notes).

— Heyden, Reitter, and Weise, 1891: 118 (list of species of Europe and Caucasus).

— Ganglbauer, 1895: 703 (characters).

— Heyden, Reitter, and Weise, 1906: 137 (list of species of Europe and Caucasus).

— Reitter, 1909: 181 (characters; key to German species).

— Bernhauer and Schubert, 1910: 82 (world catalog; 5 species).

— Petri, 1912: 55 (list of species of Siebenbürgen).

— Leng, 1920: 95 (catalog of North American species).

— Winkler, 1925: 336 (catalog for Palaearctic region).

— Roubal, 1930: 319 (catalog; Slovakia).

— Joy, 1932: 104 (key to British species).

— Scheerpeltz, 1933: 1070 (world catalog supplement).

— Kloet and Hincks, 1945: 161 (list of British species).

— Palm, 1948: 126 (characters; species of Sweden).

— Tottenham, 1949: 358, 408 (type species: *giraudi* Redtenbacher; list of British species).

— Blackwelder, 1952: 155 (type species: *giraudi*).

— Tottenham, 1954: 36 (characters; key to British species).

— Horion, 1963: 150 (list of central European species).

- Székessy, 1963: 23 (characters).
- Lohse, 1964: 68 (characters; key to central European species).
- Scheerpeltz, 1968a: 19 (catalog of Austrian species).
- Steel, 1970a: 22 (larval characters; biological notes).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Moore and Legner, 1975: 189 (catalog; North America north of Mexico).
- Shibata, 1976: 124 (checklist of species of Japan).
- Pope, 1977: 24 (list of British species).
- Topp, 1978: 308 (larval characters).
- Campbell, 1978: 1, 2 (placed in Anthophagini).
- Burakowski, Mroczkowski, and Stefańska, 1979: 77 (catalog; Poland).
- Moore and Legner, 1979: 164 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Tóth, 1982: 104 (characters; habitus; key to species of Hungary).
- Muona and Viramo, 1986: 16 (list of species of northeastern Finland).
- Zanetti, 1987: 424 (characters; habitus; species of Italy).
- Lohse and Lucht, 1989: 122 (characters).
- Zerche, 1989: 127 (placed in Coryphiini; characters; notes).
- Watanabe, 1990: 351 (characters; species of Japan).
- Zerche, 1990: 142 (placed in Coryphiini; characters; key to species of Palaeartic region; distribution; phylogenetic position).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 42 (list of species of Czech Republic and Slovakia).
- Zerche, 1993: 340, 342 (modification of key; phylogeny).
- Zanetti, 1995: 10 (list of species of Italy).
- Lundgren, 1998: 38 (list of species from Florida; records for other States listed for each species).
- Kashcheev, 1999: 144 (characters).
- Newton, Thayer, Ashe, and Chandler, 2000: 342 (1 Nearctic species; notes; characters in key).

*Eudectoides* Campbell, 1978: 2, 11 (species included: *crassicornis*). **TYPE SPECIES:** *Eudectus crassicornis* LeConte, fixed by original designation.

- Frank, 1986a: 365 (checklist of species of Florida).
- Zerche, 1990: 17, 144 (synonym of *Eudectus*).
- Lundgren, 1998: 38 (list of species from Florida; records for other States listed for each species).

**altaiensis** Zerche, 1990: 155 (*Eudectus*; Type locality: Altai).

▲ **DISTRIBUTION:** Altai region.

**crassicornis** LeConte, 1884: 4 (*Eudectus*; Type locality: Opelousas, La.).

- Bernhauer and Schubert, 1910: 82 (*Eudectus*; catalog).
- Campbell, 1978: 12 (*Eudectoides*; characters; Florida; Louisiana).
- Zerche, 1990: 299 (*Eudectus*; note).
- Zerche, 1993: 342 (*Eudectus*; characters; phylogenetic position; USA).
- Lundgren, 1998: 38 (*Eudectus*; Florida).

▲ **DISTRIBUTION:** USA.

*gerhardti* Pietsch, 1894, see: *giraudi* Redtenbacher, 1857.

**giraudi** Redtenbacher, 1857: 246 (*Eudectus*; Type locality: bei München).

- Kraatz, 1857d: 973 (*Eudectus*; characters; Germany).
- Thomson, 1861: 185 (*Eudectus*; characters; Scandinavia).
- Fauvel, 1871a: 105 [= 1872: 79] (*Eudectus*; characters; Scandinavia; Germany; Switzerland; Britain).
- Redtenbacher, 1874: 273 (*Eudectus*; characters).
- Seidlitz, 1875: 242 (*Coryphium*; characters; Baltic region).
- Mulsant and Rey, 1880: 400 (*Eudectus*; characters; France).
- Weise, 1884a: 271 (*Eudectus*; characters; Europe).

- Seidlitz, 1891a: 372 (*Eudectus*; characters; Europe).
- Ganglbauer, 1895: 703 (*Eudectus*; characters; Germany; Switzerland; Scotland; Sweden).
- Reitter, 1909: 181 (*Eudectus*; characters; Germany).
- Bernhauer and Schubert, 1910: 83 (*Eudectus*; catalog).
- Scheerpeltz, 1933: 1070 (*Eudectus*; catalog).
- Palm, 1948: 127 (*Eudectus*; characters; Sweden; Norway; Finland).
- Horion, 1963: 150 (*Eudectus*; Altai region; Finland; Sweden; Norway; Britain; Germany; Czech Republic; Slovakia; Poland; Hungary; Romania; France; Switzerland; Italy; Austria).
- Lohse, 1964: 68 (*Eudectus*; characters; central Europe).
- Tóth, 1982: 104 (*Eudectus*; characters).
- Zanetti, 1987: 426 (*Eudectus*; characters; Italy).
- Lucht, 1987: 90 (*Eudectus*; checklist; Germany; Poland; Czechoslovakia; Austria; France).
- Zerche, 1990: 147 (*Eudectus*; characters; phylogenetic position; Norway; Sweden; Finland; Russia; Germany; Poland; Czechoslovakia; Romania; Switzerland; Italy; Austria).
- Zerche, 1993: 353 (*Eudectus*; Poland; Austria).
- Boháč, 1993: 42 (*Eudectus*; Slovakia; Czech Republic).
- Zanetti, 1995: 10 (*Eudectus*; Italy).
- ▲ **DISTRIBUTION:** Europe, Russia.

*gerhardti* Pietsch, 1894: 17 (*Eudectus*; Type locality: Reinerz in Schlesien).

- Ganglbauer, 1895: 703 (*Eudectus*; characters; Schlesien).
- Reitter, 1909: 181 (*Eudectus*; characters; Germany).
- Bernhauer and Schubert, 1910: 82 (*Eudectus*; catalog).
- Scheerpeltz, 1933: 1070 (*Eudectus*; catalog).
- Lohse, 1964: 68 (*Eudectus*; characters; central Europe).
- Lucht, 1987: 91 (*Eudectus*; checklist; Poland; Czechoslovakia).
- Zerche, 1989: 127 (*Eudectus*; synonym of *giraudi*).
- Zerche, 1990: 148 (*Eudectus*; synonym of *giraudi*).
- Boháč, 1993: 42 (*Eudectus*; cited as valid species; Slovakia ?).

*kulczynskii* Rybiński, 1902: 4 (*Eudectus*; Type locality: Tatra Gebirge).

- Bernhauer and Schubert, 1910: 83 (*Eudectus*; catalog).
- Scheerpeltz, 1933: 1070 (*Eudectus*; synonym of *giraudi*).
- Tóth, 1982: 105 (*Eudectus*; cited as valid species; characters).
- Zerche, 1990: 148 (*Eudectus*; synonym of *giraudi*).
- Boháč, 1993: 42 (*Eudectus*; cited as valid species; Slovakia).

*japonicus* Zerche, 1990: 157 (*Eudectus*; Type locality: Japan: Hokkaido: Kotani).

▲ **DISTRIBUTION:** Japan.

*kulczynskii* Rybiński, 1902, see: *giraudi* Redtenbacher, 1857.

*novayaezemlyae* Munster, 1925, see: *whitei* Sharp, 1871.

*reductus* Zerche, 1993: 341 (*Eudectus*; Type locality: o. Vrangeljia [ostrov Vrangeljia: Wrangel-Insel]).

- Zerche, 1993: 344 (*Eudectus*; phylogenetic position).
- Ryabukhin, 1999: 30 (*Eudectus*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Wrangel Island.

*rufulus* Weise, 1877: 96 (*Eudectus*; variety of *giraudi*; Type locality: Hagi).

- Weise, 1884a: 271 (*Eudectus*; cited as species; characters; Japan).
- Sharp, 1889: 473 (*Eudectus*; cited as species; Japan).
- Bernhauer and Schubert, 1910: 83 (*Eudectus*; catalog).
- Nakane, 1963a: 83 (*Eudectus*; characters; habitus photograph; Japan).
- Watanabe, 1990: 353 (*Eudectus*; characters; Japan).
- Zerche, 1990: 146 (*Eudectus*; characters; phylogenetic position; Japan).
- Zerche, 1993: 343 (*Eudectus*; phylogenetic position).

▲ **DISTRIBUTION:** Japan.

- whitei** Sharp, 1871b: 73 (*Eudectus*; Type locality: Britain: Ben-a-Bhuird).  
 — Fowler, 1888: 409 (*Eudectus*; characters; Britain).  
 — Ganglbauer, 1895: 703 (*Eudectus*; variety of *giraudi*).  
 — Bernhauer and Schubert, 1910: 83 (*Eudectus*; variety of *giraudi*).  
 — Scheerpeltz, 1933: 1070 (*Eudectus*; catalog).  
 — Steel, 1970a: 22 (*Eudectus*; larval characters; biological notes).  
 — Pope, 1977: 24 (*Eudectus*; Britain).  
 — Zerche, 1990: 153 (*Eudectus*; characters; phylogenetic position; Britain; Russia).  
 — Zerche, 1993: 344 (*Eudectus*; phylogenetic position).  
 — Ryabukhin, 1999: 30 (*Eudectus*; catalog; habitat; distribution; northeastern Russia).  
 ▲ **DISTRIBUTION:** Europe.

- novayaezemlyae* Munster, 1925: 6 (*Eudectus*; Type locality: Novaja Semlja, Ökland; [**Note:** See lectotype designation by Zerche, 1990]. Also cited from Mashigin Fj.; Gribovii Fj.).  
 — Scheerpeltz, 1933: 1070 (*Eudectus*; catalog).  
 — A. Strand, 1951: 104 (*Eudectus*; cited as *novayae zemlyae*; synonym of *whitei*).  
 — Pope, 1977: 24 (*Eudectus*; synonym of *whitei*).  
 — Zerche, 1990: 153 (*Eudectus*; lectotype designation: Novaj. Semlja; synonym of *whitei*).

### Haida

[4 species; Nearctic Region]

*Haida* Keen, 1897: 285 (species included: *keeni*). **TYPE SPECIES:** *Haida keeni* Keen, fixed by monotypy.

- Bernhauer and Schubert, 1910: 50 (world catalog; 1 species).  
 — Leng, 1920: 94 (catalog of North American species).  
 — Blackwelder, 1952: 179 (type species: *keeni*).  
 — Hatch, 1957: 51, 73 (characters; species of Pacific Northwest).  
 — Moore and Legner, 1975: 192 (catalog; North America north of Mexico).  
 — Campbell, 1978: 3 (key to species; characters; should be placed in Anthophagini).  
 — Moore and Legner, 1979: 165 (characters; notes).  
 — Zerche, 1990: 250, 261 (removal from Coryphiini by Campbell, 1978, unjustified).  
 — Newton and Thayer, 1995: 294 (should be in Coryphiini; list of New World genera).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 342 (4 Nearctic species; notes; characters in key).

**bisulcata** Campbell, 1978: 7 (*Haida*; Type locality: Cal.: El Dorado Co: Desol. Valley, Primitive Area below Eagle Lake, 6700 ft.).

▲ **DISTRIBUTION:** USA.

**callosum** Mäklin, 1852: 323 (*Omalium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 208 [= 1878e: 44] (*Omalium*, cited as *Homalium*; characters; Alaska).  
 — Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 342 (*Haida*).

▲ **DISTRIBUTION:** USA.

**insulcata** Campbell, 1978: 8 (*Haida*; Type locality: Oregon: Wasco Co.: 11.1 mi. SE jct. US 26, Ore. 216, 2500 ft.).

▲ **DISTRIBUTION:** USA.

**keeni** Keen, 1897: 285 (*Haida*; Type locality: Massett, Queen Charlotte Island).

- Bernhauer and Schubert, 1910: 50 (*Haida*; catalog).  
 — Brown, 1944: 5 (*Haida*; characters; notes; British Columbia).  
 — Hatch, 1957: 73 (*Haida*; characters; British Columbia; Washington; Oregon).  
 — Campbell, 1978: 4 (*Haida*; characters; British Columbia; Alaska; Oregon; Washington).  
 — Campbell and Davies, 1991: 91 (*Haida*; checklist of species; Alaska and Canada).

▲ **DISTRIBUTION:** Canada, USA.

**Holoboreaphilus**

[1 species; Nearctic and Palaearctic Regions]

*Holoboreaphilus* Campbell, 1978a: 54 (species included: *nordenskioldi*). **TYPE SPECIES:** *Boreaphilus nordenskioldi* Mäklin, fixed by original designation.

- Zerche, 1990: 96 (characters; subfossil records; distribution; characters analysis; phylogenetic relationships).
- Downie and Arnett, 1996: 436 (characters; species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 342 (1 Nearctic species; notes; characters in key).

*nearcticus* Blair, 1933, see: *nordenskioldi* Mäklin, 1878.**nordenskioldi** Mäklin, 1878: 25 [= 1878a: 301] (*Boreaphilus*; Type locality: Insel Sopotschnoj, Sibir. Jeniseie, 70°5' N; [**Note:** See lectotype designation by Zerche, 1990]. Originally cited from Mesenkin, 71°20' n. lat; Briachowskij; Dudino, 69°15' n. lat; Sopotschnoj, 70°5' n. lat.).

- J. Sahlberg, 1880: 106 (*Boreaphilus*; characters; Siberia).
  - Mäklin, 1881: 42 (*Boreaphilus*; characters; Mesenkin, lat. bor. 71°20'; Dudino, lat. bor. 69°15').
  - Poppius, 1909: 6 (*Boreaphilus*; Lena Valley, Siberia).
  - Bernhauer and Schubert, 1910: 84 (*Boreaphilus*; catalog).
  - Munster, 1925: 7 (*Boreaphilus*; Novaya Zemlya).
  - Scheerpeltz, 1933: 1072 (*Boreaphilus*; catalog).
  - Steel, 1964a: 250 (*Boreaphilus*; Canada; Alaska).
  - Campbell, 1978a: 55 (*Holoboreaphilus*; characters; Northwest Territories; Quebec; Yukon Territory; Alaska).
  - Zerche, 1990: 97 (*Holoboreaphilus*; lectotype designation: Ins. Sopotschn. Sibir. Jeniseie; correction of spelling of name; characters; Russia).
  - Elias, 1991: 556 (*Holoboreaphilus*; Quaternary fossil collection; Montana).
  - Campbell and Davies, 1991: 89 (*Holoboreaphilus*; checklist of species; Alaska and Canada).
  - Zerche, 1993: 353 (*Holoboreaphilus*; Alaska).
  - Downie and Arnett, 1996: 436 (*Holoboreaphilus*; characters; Canada; USA).
  - Ryabukhin, 1999: 33 (*Holoboreaphilus*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Russia, Canada, USA.

*nearcticus* Blair, 1933: 95 (*Boreaphilus*; Type locality: Akpatok, Island, Ungava Bay).

- Steel, 1964a: 250 (*Boreaphilus*; synonym of *nordenskioldi*).
- Campbell, 1978a: 55 (*Holoboreaphilus*; synonym of *nordenskioldi*).
- Zerche, 1990: 97 (*Holoboreaphilus*; synonym of *nordenskioldi*).

**Murathus**

[1 species; Palaearctic Region]

*Murathus* Kashcheev, 1999: 144 (species included: *montanus*). **TYPE SPECIES:** *Murathus montanus* Kashcheev, fixed by original designation and monotypy.**montanus** Kashcheev, 1999: 146 (*Murathus*; Type locality: Tian'shan', Khr. Kungei Alatau, ushchel'e Kul'bastau, 2500-3200 m).▲ **DISTRIBUTION:** Kazakhstan.**Niphetodes**

[5 species; Palaearctic Region]

*Niphetodes* Miller, 1868: 16 (species included: *redtenbacheri*). **TYPE SPECIES:** *Niphetodes redtenbacheri* Miller, fixed by monotypy.

- Redtenbacher, 1874: 550 (characters).
- Fauvel, 1875a:V [= 1875b: 207] (catalog).
- Duvivier, 1883: 198 (catalog).
- Heyden, Reitter, and Weise, 1891: 118 (subgenus of *Boreaphilus*; list of species of Europe and Caucasus).
- Ganglbauer, 1895: 700 (subgenus of *Boreaphilus*).

- Ganglbauer, 1896: 174 (characters; notes; key to species).
- Heyden, Reitter, and Weise, 1906: 137 (list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 85 (world catalog; 7 species).
- Petri, 1912: 56 (list of species of Siebenbürgen).
- Winkler, 1925: 337 (catalog for Palaearctic region).
- Roubal, 1930: 320 (catalog; Slovakia).
- Scheerpeltz, 1933: 1073 (world catalog supplement).
- Blackwelder, 1952: 262 (type species: *redtenbacheri*).
- Horion, 1963: 156 (list of central European species).
- Székessy, 1963: 24 (characters).
- Lohse, 1964: 70 (characters).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Burakowski, Mroczkowski, and Stefańska, 1979: 79 (catalog; Poland).
- Tóth, 1982: 108 (characters; habitus; key to species of Hungary).
- Lohse and Lucht, 1989: 123 (characters).
- Zerche, 1989: 129 (complex of 3 genera; not in central Europe).
- Zerche, 1990: 101 (characters; key to species; characters analysis; phylogenetic relationships; distribution).
- Zerche, 1993: 335 (phylogenetic relationships).
- Kashcheev, 1999: 146 (characters).

*apfelbecki* Ganglbauer, 1892, see: *Pareudectus*.

*cyrneus* Orousset and Lecoq, 1988, see: *Niphedodops*.

*deubeli* Ganglbauer, 1896, see: *Hypsonothrus*.

*eppelsheimi* Ganglbauer, 1896, see: *Pareudectus*.

*huppenthali* Lokay, 1912, see: *Hypsonothrus*.

**kreissli** Zerche, 1990: 104 (*Niphedodes*; Type locality: Buleasee [Bîlea Lac]).

▲ **DISTRIBUTION:** Romania.

*leonhardi* Bernhauer, 1905, see: *Pareudectus*.

**redtenbacheri** Miller, 1868: 17 (*Niphedodes*; Type locality: Czerna hora; [**Note:** See lectotype designation by Zerche, 1990]).

- Redtenbacher, 1874: 550 (*Niphedodes*; characters).
- Ganglbauer, 1895: 700 (*Boreaphilus*; subgenus of *Niphedodes*; characters; east Carpathians).
- Ganglbauer, 1896: 177 (*Niphedodes*; characters; notes).
- Bernhauer and Schubert, 1910: 85 (*Niphedodes*; catalog).
- Scheerpeltz, 1933: 1073 (*Niphedodes*; catalog).
- Horion, 1963: 156 (*Niphedodes*; Carpathians).
- Tóth, 1982: 110 (*Niphedodes*; characters).
- Zerche, 1990: 110 (*Niphedodes*; lectotype designation; characters; Ukrainian Carpathians).

▲ **DISTRIBUTION:** Ukrainian Carpathians.

*sahlbergi* Apfelbeck, 1906, see: *Pareudectus*.

**schoenmanni** Zerche, 1990: 113 (*Niphedodes*; Type locality: Rodnaergebirge).

▲ **DISTRIBUTION:** Romania.

**semicarinatus** Zerche, 1990: 106 (*Niphedodes*; Type locality: Rodnaer - Gebirge).

▲ **DISTRIBUTION:** Romania.

**spaethi** Ganglbauer, 1900: 259 (*Niphedodes*; Type locality: Negoii [**Note:** See lectotype designation by Zerche, 1990]. Also cited from Siebenbürgen. Rodnaergebirge, Černahora).

- Bernhauer and Schubert, 1910: 85 (*Niphedodes*; catalog).
- Horion, 1963: 156 (*Niphedodes*; Romania; Slovakia).
- Tóth, 1982: 110 (*Niphedodes*; characters).
- Zerche, 1990: 108 (*Niphedodes*; lectotype designation: Negoii; characters; Romania).

▲ **DISTRIBUTION:** Romania.

*winkleri* Bernhauer, 1929, see: *Pareudectus*.

**Occiophelinus**

[1 species; Nearctic Region]

*Occiophelinus* Hatch, 1957: 52, 75 (species included: *vandykei*). **TYPE SPECIES:** *Occiophelinus vandykei* Hatch, fixed by original designation and monotypy.

- Moore and Legner, 1975: 198 (catalog; North America north of Mexico).
- Campbell, 1978a: 26 (synonym of *Coryphium*).
- Moore and Legner, 1979: 166 (characters; notes).
- Watanabe, 1988: 46 (synonym of *Coryphium*).
- Watanabe, 1990: 355 (synonym of *Coryphium*).
- Zerche, 1990: 31 (valid genus; removed from synonym with *Coryphium*).
- Newton, Thayer, Ashe, and Chandler, 2000: 342 (1 Nearctic species; notes; characters in key).

**vandykei** Hatch, 1957: 75 (*Occiophelinus*; Type locality: Washington: Mt. Rainier, Paradise Park, alt. 6000 ft.).

- Campbell, 1978a: 31 (*Coryphium*; characters; Oregon; Washington).

▲ **DISTRIBUTION:** USA.

**Ophthalmoniphетodes**

[15 species; Palaearctic Region]

*Ophthalmoniphетodes* Zerche, 1990: 115 (species included: *heidemariae*, *doeblerae*, *uhligi*, *behnei*, *ilievi*, *macrocephalus*, *musalensis*, *rhilensis*, *longicornis*, *gracilis*). **TYPE SPECIES:** *Ophthalmoniphетodes longicornis* Zerche, fixed by original designation.

- Zerche, 1993: 336, 339 (modification of key; phylogeny).

**behnei** Zerche, 1990: 123 (*Ophthalmoniphетodes*; Type locality: Sofia, Vitoscha-Gebirge, Malak Resen, 2000 m).

- Zerche, 1993: 353 (*Ophthalmoniphетodes*; Bulgaria).

▲ **DISTRIBUTION:** Bulgaria.

**doeblerae** Zerche, 1990: 121 (*Ophthalmoniphетodes*; Type locality: SW-Bulg.: Rila-Gebirge, Hütte Maljovica, 2100 m).

▲ **DISTRIBUTION:** Bulgaria.

**falakroensis** Assing and Wunderle, 1999a: 477 (*Ophthalmoniphетodes*; Type locality: GR. [NE], Makedhonia, Dráma, Falakró, 1800 m).

▲ **DISTRIBUTION:** Greece.

**gracilis** Zerche, 1990: 131 (*Ophthalmoniphетodes*; Type locality: Bulgarien: Pirin-Geb., Hütte Wichren, 2050 m).

▲ **DISTRIBUTION:** Bulgaria.

**heidemariae** Zerche, 1990: 119 (*Ophthalmoniphетodes*; Type locality: Bulgaria: Pirin-Gebirge, Hütte Wichren, 2050 m).

▲ **DISTRIBUTION:** Bulgaria.

**ilievi** Zerche, 1990: 124 (*Ophthalmoniphетodes*; Type locality: Sofia, Vitoscha-Geb. bei Aleko, 2000 m).

▲ **DISTRIBUTION:** Bulgaria.

**longicornis** Zerche, 1990: 130 (*Ophthalmoniphетodes*; Type locality: Bulgarien: Pirin-Gebirge, Hütte Wichren, 2050 m).

▲ **DISTRIBUTION:** Bulgaria.

**macrocephalus** Zerche, 1990: 126 (*Ophthalmoniphетodes*; Type locality: Bulgarien: Pirin-Gebirge, Hütte Wichren, 2050 m).

▲ **DISTRIBUTION:** Bulgaria.

**maljovicensis** Zerche, 1993: 338 (*Ophthalmoniphетodes*; Type locality: Bulg., Rila-Geb., Umg. Hütte Maljovica, 2100 m).

▲ **DISTRIBUTION:** Bulgaria.

**musalensis** Zerche, 1990: 127 (*Ophthalmoniphетodes*; Type locality: SW-Bulgarien, Rila-Gebirge, Hütte Musala, 2300 m).

▲ **DISTRIBUTION:** Bulgaria.

- pangoensis** Assing and Wunderle, 1999a: 478 (*Ophthalmoniphетodes*; Type locality: GR. [NE], Makedhonia, NW Kavála, Pangéo, 1900 m).  
▲ **DISTRIBUTION:** Greece.
- piger** Zerche, 1993: 337 (*Ophthalmoniphетodes*; Type locality: SW-Bulg., Rila-Geb., Hütte Musala, 2300 m).  
▲ **DISTRIBUTION:** Bulgaria.
- rhilensis** Zerche, 1990: 128 (*Ophthalmoniphетodes*; Type locality: SW-Bulgarien, Rila-Gebirge, Umgebung Granschar, 2185 m).  
▲ **DISTRIBUTION:** Bulgaria.
- uhligi** Zerche, 1990: 122 (*Ophthalmoniphетodes*; Type locality: Bulgarien: Sitnjakowo [Schloss bei Borovez], 1730 m, Tschetér Tepé [Tschadjar Tepe]).  
▲ **DISTRIBUTION:** Bulgaria.
- zerchei** Assing and Wunderle, 1999a: 475 (*Ophthalmoniphетodes*; Type locality: GR. [NE], Makedhonia, Dráma, Falakró, 1800 m).  
▲ **DISTRIBUTION:** Greece.

### Pareudectus

[3 species; Palaearctic Region]

*Pareudectus* Zerche, 1990: 132 (species included: *leonhardi*, *apfelbecki*, *eppelsheimi*). **TYPE SPECIES:** *Niphетodes apfelbecki* Ganglbauer, fixed by original designation.

- apfelbecki** Ganglbauer, 1892: 17 (*Niphетodes*; Type locality: Sarajevo; ca. 1500 m; [**Note:** See lectotype designation by Zerche, 1990]).  
— Ganglbauer, 1895: 701 (*Boreaphilus*; subgenus *Niphетodes*; characters; Bosnia).  
— Ganglbauer, 1896: 177, 178 (*Niphетodes*; characters; notes).  
— Bernhauer and Schubert, 1910: 85 (*Niphетodes*; catalog).  
— Zerche, 1990: 136 (*Pareudectus*; lectotype designation; characters; Yugoslavia).  
— Zerche, 1993: 353 (*Pareudectus*; Bosnia-Herzegovina).  
▲ **DISTRIBUTION:** Bosnia Herzegovina.
- eppelsheimi** Ganglbauer, 1896: 177, 178 (*Niphетodes*; Type locality: Rodnaer Alpen, Gipfel des Koronjjs; [**Note:** See lectotype designation by Zerche, 1990]).  
— Bernhauer and Schubert, 1910: 85 (*Niphетodes*; catalog).  
— Horion, 1963: 156 (*Niphетodes*; Slovakia).  
— Tóth, 1982: 109 (*Niphетodes*; characters).  
— Zerche, 1990: 139 (*Pareudectus*; lectotype designation; characters; USSR; Romania).  
▲ **DISTRIBUTION:** Romania, Ukraine.
- leonhardi** Bernhauer, 1905b: 588 (*Niphетodes*; Type locality: Bjelašnica-Planina an der Grenze Bosniens und der Herzegowina; [**Note:** See lectotype designation by Zerche, 1990]).  
— Bernhauer and Schubert, 1910: 85 (*Niphетodes*; catalog).  
— Scheerpeltz, 1933: 1073 (*Niphетodes*; catalog).  
— Zerche, 1990: 134 (*Pareudectus*; lectotype designation; characters; Yugoslavia).  
▲ **DISTRIBUTION:** Bosnia Herzegovina.
- sahlbergi** Apfelbeck, 1906: 247 (*Niphетodes*; Type locality: Bosna: palnini Ljubični na juгоistoku Bosne na turskoj megji na Treskovici kod Sarajeva [**Note:** See lectotype designation by Zerche, 1990]).  
— Apfelbeck, 1907: 641 (*Niphетodes*; Bosnia).  
— Bernhauer and Schubert, 1910: 85 (*Niphетodes*; catalog).  
— Zerche, 1990: 134 (*Pareudectus*; lectotype designation: Trescavica pl; synonym of *leonhardi*).
- winkleri** Bernhauer, 1929g: 180 (*Niphетodes*; Type locality: Orjengebirge in der nördlichen Herzegowina).  
— Scheerpeltz, 1933: 1073 (*Niphетodes*; catalog).  
— Zerche, 1990: 134 (*Pareudectus*; synonym of *leonhardi*).
- sahlbergi** Apfelbeck, 1906, see: *leonhardi* Bernhauer, 1905.
- winkleri** Bernhauer, 1929, see: *leonhardi* Bernhauer, 1905.



**Planeboreaphilus**

[1 species; Palaearctic Region]

*Planeboreaphilus* Shibata, 1970: 58 (species included: *coriaceoides*). **TYPE SPECIES:** *Planeboreaphilus coriaceoides* Shibata, fixed by original designation and monotypy.

- Shibata, 1976: 126 (checklist of species of Japan).
- Campbell, 1978a: 26 (synonym of *Coryphium*).
- Watanabe, 1988: 46 (synonym of *Coryphium*).
- Watanabe, 1990: 355 (cited as *Plaeboreaphilus*; synonym of *Coryphium*).
- Zerche, 1990: 84 (characters; cited as valid genus; species of Palaearctic region; character analysis; phylogenetic relationships).

**coriaceoides** Shibata, 1970: 59 (*Planeboreaphilus*; Type locality: Japan: Yamanashi Pref.: near Hirogawara, 2400 m. alt., South Alps).

- Campbell, 1978a: 26 (*Coryphium*; [**Note:** Not explicitly transferred by Campbell but done so implicitly because it is the type species of *Planeboreaphilus* which he synonymized with *Coryphium*]).
- Watanabe, 1988: 60 (*Coryphium*; characters; Japan).
- Watanabe, 1990: 369 (*Coryphium*; characters; Japan).
- Zerche, 1990: 85 (*Planeboreaphilus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**Platycoryphium**

[1 species; Palaearctic Region]

*Platycoryphium* Zerche, 1990: 26 (species included: *parvulum*). **TYPE SPECIES:** *Coryphium parvulum* Poppius, fixed by original designation and monotypy.

**parvulum** Poppius, 1904: 107 (*Coryphium*; Type locality: Lena-Gebiet in Nordost-Sibirien: Aldan-Mündung).

- Poppius, 1909: 6 (*Coryphium*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 84 (*Coryphium*; catalog).
- Tikhomirova, 1973a: 141 (*Coryphium*; species uncertain; checklist; northern Siberia).
- Zerche, 1990: 27 (*Platycoryphium*; characters; Russia).
- Ryabukhin, 1999: 32 (*Platycoryphium*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia.

**Pseudohaida**

[1 species; Nearctic Region]

*Pseudohaida* Hatch, 1957: 51, 73 (species included: *rothi*, *ingrata*). **TYPE SPECIES:** *Pseudohaida rothi* Hatch, fixed by original designation.

- Moore and Legner, 1975: 213 (catalog; North America north of Mexico).
- Campbell, 1978: 3, 9 (moved to Anthophagini; key to species; characters).
- Moore and Legner, 1979: 167 (characters; notes).
- Zerche, 1990: 250, 261 (character discussion; removal from Coryphiini by Campbell, 1978, unjustified).
- Newton, Thayer, Ashe, and Chandler, 2000: 341 (1 Nearctic species; notes; characters in key).

*ingrata* Hatch, 1957, see: *Subhaida*.

**rothi** Hatch, 1957: 74 (*Pseudohaida*; Type locality: Oregon: Corvallis, watershed).

- Campbell, 1978: 10 (*Pseudohaida*; characters; Oregon).
- Campbell and Winchester, 1993: 83 (*Pseudohaida*; British Columbia).

▲ **DISTRIBUTION:** Canada, USA.

**Subhaida**

[7 species; Nearctic Region]

*Subhaida* Hatch, 1957: 52, 74 (species included: *rainieri*). **TYPE SPECIES:** *Subhaida rainieri* Hatch, fixed by original designation and monotypy.

- Moore and Legner, 1975: 215 (catalog; North America north of Mexico).
  - Campbell, 1978a: 24, 39 (key to species; characters; notes).
  - Moore and Legner, 1979: 168 (characters; notes).
  - Zerche, 1900: 20 (characters discussed).
  - Campbell and Davies, 1991: 89 (checklist of species; Alaska and Canada).
  - Newton, Thayer, Ashe, and Chandler, 2000: 342 (7 Nearctic species; notes; characters in key).
- aptera** Campbell, 1978a: 44 (*Subhaida*; Type locality: Colorado: Delta Co.: 16 mi. N. Cedaredge, 6 mi. E. Hwy 65, nr. Peak Reservoir, 10,000 ft.).  
**▲ DISTRIBUTION:** USA.
- californica** Campbell, 1978a: 42 (*Subhaida*; Type locality: California: Mono Co.: 6 miles SW Toms Place, 9000 ft.).  
**▲ DISTRIBUTION:** USA.
- ingrata** Hatch, 1957: 74 (*Pseudohaida*; Type locality: Oregon: Corvallis, watershed. Also cited from British Columbia).  
 — Campbell, 1978a: 46 (*Subhaida*; characters; Alberta; British Columbia; Alaska; California; Oregon; Washington).  
**▲ DISTRIBUTION:** Canada, USA.
- monticola** Campbell, 1978a: 45 (*Subhaida*; Type locality: Alberta: Consolation Lk., Banff Nat. Pk., 64–7000 ft.).  
**▲ DISTRIBUTION:** Canada.
- rainieri** Hatch, 1957: 74 (*Subhaida*; Type locality: Washington: Mt. Rainier, Paradise Park, 6000 ft.).  
 — Campbell, 1978a: 40 (*Subhaida*; characters; Oregon; Washington).  
**▲ DISTRIBUTION:** USA.
- sinuata** Campbell, 1978a: 49 (*Subhaida*; Type locality: Oregon: Klamath Co.: 9 mi. NE Bly, Deming Creek, 5000–5800 ft. Also cited from California).  
**▲ DISTRIBUTION:** USA.
- utahensis** Campbell, 1978a: 48 (*Subhaida*; Type locality: Utah: Cache Co.: Logan Canyon).  
**▲ DISTRIBUTION:** USA.

### Tribe Eusphalerini

- Eusphalerini Hatch, 1957: 82 (genera included: *Eusphalerum*, *Onibathum*). **TYPE GENUS:** *Eusphalerum* (see Newton and Thayer, 1992: 58).
- Arnett, 1963: 242, 261 (key to North American genera; characters; list of North American genera).
  - Moore and Legner, 1979: 170 (characters).
  - Muona, 1979: 17 (list of Scandinavian species).
  - Watanabe, 1990: 179, 377 (characters; key to genera of Japan; relationships of genera).
  - Newton and Thayer, 1992: 58 (tribe of Omaliinae).
  - Newton and Thayer, 1995: 247–286, 294 (phylogenetic relationships; characters; includes only *Eusphalerum*).
  - M. Hansen, 1996: 94 (list of Danish species).
  - Newton, Thayer, Ashe, and Chandler, 2000: 338 (characters).
- Anthobiates Mulsant and Rey, 1880: 290 (genera included: *Eusphalerum*, *Anthobium*).  
**TYPE GENUS:** *Anthobium* (misidentification; see Newton and Thayer, 1992: 58).  
 — Newton and Thayer, 1992: 58 (synonym of Eusphalerini).
- Anthobiini Portevin, 1929: 450 (genera included: *Anthobium*). **TYPE GENUS:** *Anthobium* (misidentification; see Newton and Thayer, 1992: 58).  
 — Joy, 1932: 95 (key to British genera).  
 — Outerelo and Gamarra, 1985: 85 (key to genera of Iberian Peninsula).  
 — Newton and Thayer, 1992: 58 (synonym of Eusphalerini).

**Eusphalerum**

[227 species; Nearctic, Palaearctic, and Oriental Regions]

*Eusphalerum* Kraatz, 1857d: 1003 (species included: *triviale*; *oblitum* doubtfully included).**TYPE SPECIES:** *Anthobium triviale* Erichson, fixed by monotypy.

- Erichson, 1839a: 637 (characters; [**Note:** Misidentified as *Anthobium* according to Blackwelder, 1952: 56]).
- Erichson, 1840: 890 (characters; [**Note:** Misidentified as *Anthobium* according to Blackwelder, 1952: 56]).
- Schaum, 1852: 30 (cited as *Anthobium*; list of species; Europe).
- Fairmaire and Laboulbène, 1856: 646 (misidentified as *Anthobium*; characters).
- Gistel, 1856: 267, 390 (list of species; cited as *Anthobium*).
- Redtenbacher, 1857: 254 (misidentified as *Anthobium*; characters; key to Austrian species).
- Redtenbacher, 1857: 995 (characters).
- G. Waterhouse, 1858: 32 (catalog of British species).
- Schaum, 1859: 32 (catalog; European species).
- Jacquelin du Val, 1868: 81 (catalog; European species).
- LeConte, 1861a: 70 (cited as *Anthobium*; characters).
- Gredler, 1863: 125 (list of species from Tirol).
- LeConte, 1863: 26 (cited as *Anthobium*; list of North American species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Wencker and Silbermann, 1866: 37 (cited as *Anthobium*; list of species; collecting notes; France).
- Gemminger and Harold, 1868: 668 (catalog).
- Gemminger and Harold, 1868: 669 (catalog; cited as *Anthobium*).
- Fauvel, 1871a: 60 [= 1872: 34] (characters; key to species).
- Sharp, 1871d: 14 (list of British species; cited both as *Eusphalerum* and *Anthobium*).
- Redtenbacher, 1874: 278 (characters).
- Fauvel, 1875a: III [= 1875b: 205] (synonym of *Anthobium*).
- Fauvel, 1878d: 198 [= 1878e: 34] (cited as *Anthobium*; key to North American species).
- Mulsant and Rey, 1880: 290 (characters; cited as *Anthobium*; key to French species).
- Heyden, 1880: 83 (cited as *Anthobium*; list of species of Siberian region).
- Duvivier, 1883: 200 (catalog; cited as *Anthobium* and *Eusphalerum*).
- Fowler, 1888: 424 (notes).
- Heyden, Reitter, and Weise, 1891: 121 (cited as *Anthobium*; list of species of Europe and Caucasus).
- Casey, 1894: 426 (cited as *Anthobium*; notes; key to some North American species).
- Seidlitz, 1891: 346 (cited as *Anthobium* with *Eusphalerum* as subgenus; key to some European species).
- Seidlitz, 1891a: 368 (cited as *Anthobium* with *Eusphalerum* as subgenus; key to some European species).
- Heyden, 1893: 49 (cited as *Anthobium*; list of species of Siberian region).
- Ganglbauer, 1895: 745 (cited as *Anthobium*; characters; key to middle European species).
- Fauvel, 1897d: 243 (catalog of species of Barbary; cited as *Anthobium*).
- Heyden, Reitter, and Weise, 1906: 128 (cited as *Anthobium*; list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 21 (characters; key to species of Seine Basin, France).
- Reitter, 1909: 195 (cited as *Anthobium*; characters; key to German species).
- Bernhauer and Schubert, 1910: 37 (world catalog; cited as *Anthobium* with *Eusphalerum* as subgenus; 95 species).
- Blatchley, 1910: 481 (characters; cited as *Anthobium*).
- Petri, 1912: 51 (cited as *Anthobium*; list of species of Siebenbürgen).
- Johansen, 1914: 621 (characters; cited as *Anthobium*; key to Danish species).
- Winkler, 1925: 326 (catalog for Palaearctic region; cited as *Anthobium*).
- Cameron, 1925: 10 (catalog of Indian species; cited as *Anthobium*).
- Porta, 1926: 12 (cited as *Anthobium*; characters; key to species of Italy).
- Portevin, 1929: 450 (cited as *Anthobium*; characters; key to French species).

- Cameron, 1930: 134 (cited as *Anthobium*; characters; key to British Indian species).
- Joy, 1932: 96 (cited as *Anthobium*; key to British species).
- Joy, 1932: 103 (key to British species).
- Scheerpeltz, 1933: 1032 (synonym of *Anthobium*).
- Normand, 1935: 357 (cited as *Anthobium*; list of species of Tunisia).
- C. Koch, 1938a: 324 (cited as *Anthobium*; key to European species).
- Tottenham, 1939d: 225 (*Eusphalerum* misidentified as *Anthobium* by previous authors).
- Kloet and Hincks, 1945: 160 (list of British species; cited with *Anthobium* of authors as synonym; type species: *primulae*).
- Palm, 1948: 56 (cited as *Anthobium*; characters; key to species of Sweden).
- Tottenham, 1949: 354, 405 (type species: *primulae* Stephens = *triviale* Erichson; list of British species; notes; *Anthobium* of authors is synonym).
- Tottenham, 1954: 18 (characters; key to British species).
- Hatch, 1957: 52, 82 (characters; key to species of Pacific Northwest).
- Freude, 1957: 102 (cited as *Anthobium*; key to some species of Germany).
- Kocher, 1958: 93 (cited as *Anthobium*; checklist of species; Morocco).
- Coiffait, 1959c (subgeneric and species group classification; key to species of France and nearby regions; list of species).
- Ferreira, 1962a: 9 (cited as *Anthobium*; list of Portuguese species).
- Horion, 1963: 32 (cited as *Anthobium*; list of central European species).
- Székessy, 1963: 12 (cited as *Anthobium*; characters).
- Lohse, 1964: 29 (characters; key to central European species).
- Scheerpeltz, 1968a: 5 (cited as *Anthobium*; catalog of Austrian species).
- Steel, 1970a: 8 (larval characters; biological notes).
- Shibata, 1973c: 28 (checklist of species of Taiwan).
- Tikhomirova, 1973a: 137 (checklist of species of USSR).
- Moore and Legner, 1975: 190 (catalog; North America north of Mexico).
- Scheerpeltz, 1976a: 99 (cited as *Anthobium*; key to species of Himalayan region).
- Shibata, 1976: 98 (checklist of species of Japan).
- Pope, 1977: 23 (list of British species).
- Klinger and Maschwitz, 1977: 402 (morphology and chemical secretions of defensive glands).
- Topp, 1978: 309 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 16 (catalog; Poland).
- Moore and Legner, 1979: 170 (characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Uhlig, 1979: 242 (some species collected in Germany).
- Klinger, 1980 (comparative morphology of abdominal defensive gland and discussion of subgeneric classification).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
- Spahr, 1981: 94 (references to specimens from amber and copal).
- Uhlig and Vogler, 1981: 84 (list of some species collected in Germany; habitat and collecting notes).
- Zanetti, 1982 (revision of subgenera and species Italy and central Europe; discussion of female genitalic characters).
- Tóth, 1982: 35 (characters; habitus; key to species of Hungary).
- Klinger, 1983 (natural history notes; Germany).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Segers, 1986: 18 (checklist of species; Belgium).
- Dettner, 1987: 28 (defensive glands).
- Zanetti, 1987: 46 (characters; habitus; species group classification; key to species of Italy in English and Italian).
- Lohse and Lucht, 1989: 123 (supplement for key to species of Lohse, 1964).
- Watanabe, 1990: 179 (characters; key to species of Japan).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
- Angelini, 1991: 191 (list of species from high elevations of Calabria, Italy).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).

- Zanetti, 1991: 291 (key to species of Soviet central Asia).
  - Campbell and Davies, 1991: 87 (checklist of species; Alaska and Canada).
  - Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
  - Zanetti, 1993 (key to species of Caucasus, Turkey, Iran, and Lebanon; new species; synonyms; catalog).
  - Siitonen, 1993: 230 (list of Finnish species).
  - Welch, 1993 (ovariole structure and development).
  - Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
  - M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
  - Zanetti, 1995: 5 (list of species of Italy).
  - M. Hansen, 1996: 94 (list of Danish species).
  - M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
  - Downie and Arnett, 1996: 438 (characters; key to species of Northeastern North America).
  - M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
  - Zanetti, 1998: 154 (key to species from Taiwan).
  - Assing, Frisch, Kahlen, et al., 1998: 121 (supplement to key for species in Lohse, 1964).
  - Newton, Thayer, Ashe, and Chandler, 2000: 338 (27 Nearctic species; notes; characters in key).
  - Naomi, Kuranishi, Saito, and Maruyama, 2000: 102 (collected from Kamchatka).
- Abinothum* Tottenham, 1939d: 225 (proposed for “*Anthobium* pars sensu Kraatz”; subgenus of *Eusphalerum*). **TYPE SPECIES:** *Anthobium longipenne* Erichson, by original designation and monotypy.
- Blackwelder, 1952: 32 (type species: *longipenne*).
  - Zanetti, 1982: 98 (synonym of *Eusphalerum*).
  - Zanetti, 1987: 56 (synonym of *Eusphalerum*).
  - Boháč, 1993: 40 (subgenus of *Eusphalerum*).
- Onibathum* Tottenham, 1939d: 225 (proposed for “*Anthobium* pars sensu Kraatz”; subgenus of *Eusphalerum*). **TYPE SPECIES:** *Silpha minutum* Fabricius, by original designation.
- Tottenham, 1949: 354, 405 (type species: *minutum* Fabricius; list of British species; subgenus of *Eusphalerum*).
  - Blackwelder, 1952: 275 (type species: *minutum*).
  - Hatch, 1957: 82 (subgenus of *Eusphalerum*; characters; key to species of Pacific Northwest).
  - Zanetti, 1982: 98 (synonym of *Eusphalerum*).
  - Zanetti, 1987: 56 (synonym of *Eusphalerum*).
- Pareusphalerum* Coiffait, 1959c: 216, 248 (subgenus of *Eusphalerum*; species included: *viertli*, *atrum*, *florale*). **TYPE SPECIES:** *Omalium atrum* Heer, fixed by original designation.
- Zanetti, 1982: 99 (subgenus of *Eusphalerum*).
  - Zanetti, 1987: 50, 152 (subgenus of *Eusphalerum*; characters; key to species of Italy).
  - Zanetti, 1993: 260 (*Eusphalerum*; subgenus of *Eusphalerum*; characters).
  - Boháč, 1993: 40 (subgenus of *Eusphalerum*).
  - Assing, Frisch, Kahlen, et al., 1998: 122 (subgenus of *Eusphalerum*; characters).
- abdominale* Gravenhorst, 1806, see: *semicoleoptratum* Panzer, 1795.
- adultum* Kiesenwetter, 1851, see: *torquatum* Marsham, 1802.
- adustum* Heer, 1839, see: *limbatum* Erichson, 1840.
- adustum* Kiesenwetter, 1851, see: *torquatum* Marsham, 1802.
- aetolicum** Kraatz, 1858b: 129 (*Anthobium*; Type locality: Griechenland: Ätolische Alpen).
- Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog; Dalmatia; Greece; Hercegovina; Austria).
  - Scheerpeltz, 1933: 1032 (*Anthobium*; catalog; Caucasus).
  - Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Abinotum*; Caucasus).
- ▲ **DISTRIBUTION:** Greece, Bosnia Hercegovina, Caucasus.
- afghanicum** Herman, 2001: 36 (*Eusphalerum*; replacement name for *nuristanicum* Coiffait).
- ▲ **DISTRIBUTION:** Afghanistan.

*nuristanicum* Coiffait, 1982b: 77 (*Eusphalerum*; subgenus *Eusphalerum*; [**preoccupied**];  
Type locality: Afghanistan: Nouristan, Kamdesch, 2000 m).

— Herman, 2001: 36 (*Eusphalerum*; synonym of *afghanicum*).

*africanum* Roubal, 1915, see: *luteicorne* Erichson, 1840.

**akikoe** Watanabe, 1999: 263 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: China:  
Guangxi Province: Xing'an Xian, Mt. Miao'er Shan, near Tieshan Ping).

▲ **DISTRIBUTION:** China.

**albertae** Zanetti, 1981: 207 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Svizzera:  
Laquintal, dint. Simplon-Village, Valais, 1000 m).

— Zanetti, 1987: 132 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Lohse and Lucht, 1989: 125 (*Eusphalerum*; characters).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy, Switzerland.

**albipile** Fauvel, 1900d: 219 (*Anthobium*; Type locality: Tyrol).

— Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog).

— Zanetti, 1982: 105 (*Eusphalerum*; characters; Italy).

— Zanetti, 1987: 116 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Austria, Italy.

*alpestre* Heer, 1839, see: *robustum* Heer, 1839.

*alpestre* Motschulsky, 1857, see: *alpinum* Heer, 1839.

**alpinum** Heer, 1839: 180 (*Omalium*; [**preoccupied**]; Type locality: Glarneralpen; Berneralpen;  
Moloja; Valserberg; Genferalpen).

— Heer, 1841: 569 (*Omalium*; characters; Switzerland).

— Fairmaire and Laboulbène, 1856: 649 (*Anthobium*; characters; France).

— Kraatz, 1857d: 1012 (*Anthobium*; synonym of *alpinum*).

— Fauvel, 1869: 494 (*Anthobium*; synonym of *montanum*).

— Fauvel, 1871a: 74 [= 1872: 48] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy;  
Austria).

— Mulsant and Rey, 1880: 349 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 755 (*Anthobium*; characters; central Europe).

— Reitter, 1909: 197 (*Anthobium*; characters; Germany).

— Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog).

— Portevin, 1929: 454 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1032 (*Anthobium*; catalog).

— Freude, 1957: 106 (*Anthobium*; Germany).

— Smetana, 1958: 57 (*Anthobium*; notes).

— Coiffait, 1959c: 220 (*Eusphalerum*; characters; France).

— Horion, 1963: 33 (*Anthobium*; Pyrenees; Balkans; Germany; Austria).

— Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).

— Scheerpeltz, 1968a: 5 (*Anthobium*; catalog; Austria).

— Tikhomirova, 1973a: 137 (*Eusphalerum*; checklist; USSR).

— Zerche, 1977a: 8 (*Eusphalerum*; Germany).

— Burakowski, Mroczkowski, and Stefańska, 1979: 16 (*Eusphalerum*; catalog; Poland).

— Blum, 1979: 242 (*Eusphalerum*; elytral reduction; abdominal mobility; morphology).

— Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive  
gland).

— Herger and Uhlig, 1981: 81 (*Eusphalerum*; habitat notes; Switzerland).

— Zanetti, 1982: 108 (*Eusphalerum*; characters; central Europe; Romania).

— Tóth, 1982: 39 (*Eusphalerum*; characters).

— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).

— Zanetti, 1984: 75 (*Eusphalerum*; Bulgaria).

— Terlutter, 1984: 10, 36 (*Eusphalerum*; notes; Germany).

— Uhlig, Vogel, and Herger, 1986: 3, 6 (*Eusphalerum*; habitat notes; Switzerland).

- Zanetti, 1987: 95 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
  - Lucht, 1987: 85 (*Eusphalerum*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
  - K. Koch, 1989: 217 (*Eusphalerum*; habitat).
  - Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothium*; subspecies *alpinum*; Czech Republic).
  - Zanetti, 1995: 5 (*Eusphalerum*; Italy).
  - Pašník, 1998: 69 (*Eusphalerum*; habitat; Poland).
  - Herman, 2001: 36 (*Eusphalerum*; nomen protectum).
  - ▲ **DISTRIBUTION:** Europe, Algeria.
- montanum* Erichson, 1840: 897 (*Anthobium*; [**Note:** This name is older than *alpinum*]; Type locality: alpi Austriae Helvetiaeque).
- Heer, 1841: 569 (*Omalium*; synonym of *alpinum*).
  - P. Lucas, 1846: 128 (*Anthobium*; notes; Algeria).
  - Märkel and Kiesenwetter, 1848a: 328 (*Anthophagus*; notes; Carpathian Alps).
  - Redtenbacher, 1849: 755 (*Anthobium*; characters; Austria).
  - Redtenbacher, 1857: 256 (*Anthobium*; characters; Austria).
  - Kraatz, 1857d: 1012 (*Anthobium*; characters; Germany).
  - Fauvel, 1865a: 319 [= 1865b: 69] (*Anthobium*; habitat; France).
  - Redtenbacher, 1874: 280 (*Anthobium*; characters; Austria).
  - Mulsant and Rey, 1880: 353 (*Anthobium*; characters; France).
  - Ganglbauer, 1895: 755 (*Anthobium*; synonym of *alpinum*).
  - Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *alpinum*).
  - Scheerpeltz, 1933: 1032 (*Anthobium*; synonym of *alpinum*).
  - Zanetti, 1987: 95 (*Eusphalerum*; synonym of *alpinum*).
- luteipenne* Erichson, 1840: 898 (*Anthobium*; Type locality: Saxonia montana).
- Redtenbacher, 1849: 829 (*Anthobium*; characters).
  - Kiesenwetter, 1851a: 439 (*Anthobium*; notes; Silesia).
  - Fairmaire and Laboulbène, 1856: 652 (*Anthobium*; characters; France).
  - Redtenbacher, 1857: 256 (*Anthobium*; characters; Germany).
  - Kraatz, 1857d: 1013 (*Anthobium*; characters; Germany).
  - Fauvel, 1871a: 74 [= 1872: 48] (*Eusphalerum*; synonym of *alpinum*).
  - Redtenbacher, 1874: 281 (*Anthobium*; characters).
  - Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).
  - Mulsant and Rey, 1880: 350 (*Anthobium*; synonym of *alpinum*).
  - Ganglbauer, 1895: 755 (*Anthobium*; synonym of *alpinum*).
  - Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *alpinum*).
  - Scheerpeltz, 1933: 1032 (*Anthobium*; synonym of *alpinum*).
  - Zanetti, 1987: 95 (*Eusphalerum*; synonym of *alpinum*).
- alpestre* Motschulsky, 1857a: 491 (*Anthobium*; [**preoccupied**]; Type locality: Alpes de la Carniole).
- Fauvel, 1865c: 18 [= 1866: 15] (*Anthobium*; synonym of *montanum*).
  - Fauvel, 1871a: 74 [= 1872: 48] (*Eusphalerum*; synonym of *alpinum*).
  - Ganglbauer, 1895: 755 (*Anthobium*; synonym of *alpinum*).
  - Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *alpinum*).
- subjectum* Mulsant and Rey, 1880: 352 (*Anthobium*; Type locality: montagnes du Var, au nord de Fréjus).
- Ganglbauer, 1895: 755 (*Anthobium*; synonym of *alpinum*).
  - Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *alpinum*).
  - Zanetti, 1987: 95 (*Eusphalerum*; synonym of *alpinum*).
- obenbergeri* Zanetti, 1982: 109 (*Eusphalerum*; subspecies of *alpinum*; Type locality: Slovacia centr., Monti Nízke Tatry).
- Zanetti, 1987: 95 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *alpinum*; characters; Italy).
  - Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothium*; subspecies of *alpinum*; Slovakia).

*alutaceum* Scheerpeltz, 1956, see: *schatzmayri* C. Koch, 1938.

**amamiense** Watanabe, 1993a: 803 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Mt. Yuwan-dake, Ukenson, Amami-ôshima Is., Ryukyus, Japan).

▲ **DISTRIBUTION:** Japan.

**amplipenne** Coiffait, 1976a: 68 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Anatolie septentrionale: Vallée d'Ardesen, Ilica, 1400–1800 m).

— Zanetti, 1993: 215, 243 (*Eusphalerum*; characters; catalog; Turkey).

▲ **DISTRIBUTION:** Turkey.

**anale** Erichson, 1840: 898 (*Anthobium*; Type locality: montes Saxoniae; Austriae; Croatiae; [**Note:** See lectotype designation by Zanetti, 1981a]).

— Redtenbacher, 1849: 755 (*Anthobium*; characters; Austria).

— Rosenhauer, 1856: 87 (*Anthobium*; Yunquera).

— Fairmaire and Laboulbène, 1856: 649 (*Anthobium*; characters; France).

— Redtenbacher, 1857: 256 (*Anthobium*; characters; Austria).

— Kraatz, 1857d: 1011 (*Anthobium*; characters; Germany).

— Fauvel, 1871a: 71 [= 1872: 45] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy; Austria; Spain).

— Redtenbacher, 1874: 280 (*Anthobium*; characters; Austria).

— Mulsant and Rey, 1880: 358 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 756 (*Anthobium*; characters; Pyrenees; Alps; Sudeten; Carpathians; Germany).

— Reitter, 1909: 197 (*Anthobium*; characters; Germany).

— Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog).

— Portevin, 1929: 454 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1032 (*Anthobium*; catalog).

— Coiffait, 1959c: 221 (*Eusphalerum*; subgenus *Abinothum*; characters; Pyrenees).

— Horion, 1963: 32 (*Anthobium*; France; Switzerland; Italy; Carniola; Balkans; Romania; Hungary; Slovakia; Poland; Czech Republic; Germany; Austria).

— Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).

— Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive gland).

— Zanetti, 1981a: 49 (*Eusphalerum*; lectotype designation [**Note:** Locality not cited]; notes).

— Tóth, 1982: 39 (*Eusphalerum*; characters; Hungary).

— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).

— Lohse, 1984: 145 (*Eusphalerum*; characters).

— Zanetti, 1987: 99 (*Eusphalerum*; characters; Italy).

— Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France).

— Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothum*; Czech Republic; Slovakia).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

— Tronquet, 1998a: 114 (*Eusphalerum*; collected from marmot burrow; France).

▲ **DISTRIBUTION:** Europe.

*nivale* Heer, 1841: 569 (*Omalium*; Type locality: Calankeralpen circ. 7000').

— Mulsant and Rey, 1880: 358 (*Anthobium*; synonym of *anale*).

— Ganglbauer, 1895: 756 (*Anthobium*; synonym of *anale*).

— Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *anale*).

*longulum* Kiesenwetter, 1847: 78 (*Anthobium*; Type locality: Riesengebirge).

— Redtenbacher, 1849: 829 (*Anthobium*; characters).

— Redtenbacher, 1857: 256 (*Anthobium*; characters; Germany).

— Kraatz, 1857d: 1012 (*Anthobium*; characters; Germany).

— Fauvel, 1871a: 72 [= 1872: 46] (*Eusphalerum*; characters; France; Switzerland; Germany).

— Redtenbacher, 1874: 281 (*Anthobium*; characters).

— Mulsant and Rey, 1880: 360 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 756 (*Anthobium*; synonym of *anale*).



- Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *anale*).
- Scheerpeltz, 1933: 1033 (*Anthobium*; synonym of *anale*).
- Zanetti, 1987: 99 (*Eusphalerum*; synonym of *anale*).

*difficile* Rosenhauer, 1856: 87 (*Anthobium*; Type locality: Yunquera).

- Ganglbauer, 1895: 756 (*Anthobium*; synonym of *anale*).
- Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *anale*).

*rhododendri* Motschulsky, 1857a: 491 (*Anthobium*; [**preoccupied**]; Type locality: Alpes de la Carniole).

- Fauvel, 1865a: 319 [= 1865b: 69] (*Anthobium*; habitat; France).
- Fauvel, 1871a: 71 [= 1872: 45] (*Eusphalerum*; synonym of *anale*).
- Ganglbauer, 1895: 756 (*Anthobium*; synonym of *anale*).
- Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *anale*).

*longiusculum* Gemminger and Harold, 1868: 670 (*Anthobium*; replacement name for a nomen nudum cited as “*longulum* Miller *i. litt.*”; [**Note: Nomen nudum** (Article 12.2.3)]).

- Fauvel, 1871a: 71 [= 1872: 45] (*Eusphalerum*; synonym of *anale*).
- Ganglbauer, 1895: 756 (*Anthobium*; synonym of *anale*).
- Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *anale*).
- Zanetti, 1987: 99 (*Eusphalerum*; synonym of *anale*).

*sinuatum* Fauvel, 1871a: 70 [= 1872: 44] (*Eusphalerum*; Type locality: Basses-Alpes).

- Mulsant and Rey, 1880: 309 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; French Alps).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Coiffait, 1959c: 235 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alpes).
- Zanetti, 1981a: 49 (*Eusphalerum*; synonym of *anale*).
- Zanetti, 1987: 99 (*Eusphalerum*; synonym of *anale*).

*analogicum* Roubal, 1915, see: *limbatum* Erichson, 1840.

**anatolicum** Coiffait, 1976a: 66 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Turquie d'Asie, Soguksu, Kizilcahaman).

- Zanetti, 1993: 225, 255 (*Eusphalerum*; characters; doubtful species, possible subspecies of *minutum*; catalog; Turkey).

▲ **DISTRIBUTION:** Turkey.

*anatolicum* Coiffait, 1978, see: *korbi* Bernhauer, 1903.

*andromorphe* Coiffait, 1959, see: *torquatum* Marsham, 1802.

*angulatum* Luze, 1911, see: *signatum* Märkel, 1857.

**angusticolle** Fauvel, 1871a: 73 [= 1872: 47] (*Eusphalerum*; Type locality: Alpes-Maritimes).

- Mulsant and Rey, 1880: 357 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 756 (*Anthobium*; characters; maritime Alps).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Coiffait, 1959c: 223 (*Eusphalerum*; subgenus *Abinothum*; characters; Maritime Alps).
- Zanetti, 1987: 114 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy.

*angustatum* Fauvel, 1871, see: *angustum* Kiesenwetter, 1850.

**angustum** Kiesenwetter, 1850: 222 (*Anthobium*; Type locality: Pyrenaei centrales).

- Kiesenwetter, 1851a: 436 (*Anthobium*; characters; France).
- Fairmaire and Laboulbène, 1856: 652 (*Anthobium*; characters; France).
- Mulsant and Rey, 1880: 354 (*Anthobium*; characters; France).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Portevin, 1929: 454 (*Anthobium*; [**Note:** Misspelling: Scheerpeltz, 1933: 1033 cited *angustatum* Portevin as synonym of *angustum*; Portevin misspelled *angustum*, he cited the species as “*angustatum* Kiesw.”]; characters; France).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Coiffait, 1959c: 223 (*Eusphalerum*; subgenus *Abinothum*; characters; Pyrenees).
- ▲ **DISTRIBUTION:** France, Spain.
- angustatum* Fauvel, 1871a: 73 [= 1872: 47] (*Eusphalerum*; emendation of *angustum*).
- Mulsant and Rey, 1880: 354 (*Anthobium*; synonym of *angustum*).
- Scheerpeltz, 1933: 1033 (*Anthobium*; synonym of *angustum*).
- melanurum* C. Koch, 1938a: 319 (*Anthobium*; aberration of *angustum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Saldeu e di Mont Louis).
- Coiffait, 1959c: 223, 227 (*Eusphalerum*; subgenus *Abinothum*; aberration of *angustum*; characters).
- fuscicolle* Coiffait, 1959c: 223 (*Eusphalerum*; subgenus *Abinothum*; aberration of *angustum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Ariège, Pic Saint-Barthélemy).
- cantabricum* C. Koch, 1940: 369 (*Anthobium*; subspecies of *montivagum*; Type locality: Nordspanien: Espinama, kantabr. Kordilleren).
- Coiffait, 1959c: 223 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *angustum*; characters).
- annaerosae** Zanetti, 1986: 92 (*Eusphalerum*; Type locality: Val di Mesdi, Sella, Dolomiti).
- Zanetti, 1987: 113 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- ▲ **DISTRIBUTION:** Italy.
- aoba** Watanabe, 1990: 219 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamanashi Pref.: Fureoka-machi, Otsuki).
- ▲ **DISTRIBUTION:** Japan.
- appendiculatum* Heer, 1839, see: *minutum* Fabricius, 1792.
- apenninum* C. Koch, 1938, see: *octavii* Fauvel, 1871.
- atriceps* Motschulsky, 1860, see: *Hapalaraea*.
- atriventre** Casey, 1894: 431 (*Anthobium*; Type locality: California: Los Angeles).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).
- ▲ **DISTRIBUTION:** USA.
- atrum** Heer, 1839: 178 (*Omalium*; Type locality: Helvetia: Valesia; Martygni).
- Fairmaire and Laboulbène, 1856: 648 (*Anthobium*; characters; France).
- Kraatz, 1857d: 997 (*Omalium*; synonym of *nigrum*).
- Kraatz, 1857d: 1009 (*Anthobium*; synonym of *nigrum*).
- Fauvel, 1871a: 62 [= 1872: 36] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy).
- Fauvel, 1873b: 110 [= 1873c: 3] (*Anthobium*; characters; France).
- Mulsant and Rey, 1880: 300 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 748 (*Anthobium*; subgenus *Eusphalerum*; characters; central Europe).
- Luze, 1906: 558 (*Phyllodrepa*; synonym of *nigra*).
- Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; [**Note:** Also cited on page 47 as a synonym of *Phyllodrepa nigra*]; catalog).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- C. Koch, 1938a: 320 (*Anthobium*; Andorra).
- Freude, 1957: 113 (*Anthobium*; Germany).
- Coiffait, 1959c: 248 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; France).
- Horion, 1963: 50 (*Anthobium*; subgenus *Eusphalerum*; Holland; Belgium; France; Portugal; Spain; Switzerland; Italy; Greece; Romania; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 36 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; central Europe).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Pareusphalerum*; characters of abdominal defensive gland).

- Zanetti, 1982a: 89 (*Eusphalerum*; subgenus *Pareusphalerum*; characters).
- Tóth, 1982: 46 (*Eusphalerum*; characters).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
- Zanetti, 1987: 152 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Pareusphalerum*; Czech Republic).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- Assing, Frisch, Kahlen, et al., 1998: 122 (*Eusphalerum*; subgenus *Pareusphalerum*; characters).

▲ **DISTRIBUTION:** Europe.

*nigrum* Erichson, 1840: 892 (*Anthobium*; Type locality: Helvetia).

- Heer, 1841: 568 (*Omalium*; synonym of *atrum*).
- Redtenbacher, 1857: 256 (*Anthobium*; characters; Germany).
- Kraatz, 1857d: 1009 (*Anthobium*; characters; Germany).
- Fauvel, 1871a: 62 [= 1872: 36] (*Eusphalerum*; synonym of *atrum*).
- Redtenbacher, 1874: 281 (*Anthobium*; characters).
- Mulsant and Rey, 1880: 301 (*Anthobium*; synonym of *atrum*).
- Ganglbauer, 1895: 748 (*Anthobium*; synonym of *atrum*).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; synonym of *atrum*).
- Scheerpeltz, 1933: 1033 (*Anthobium*; synonym of *atrum*).
- Zanetti, 1987: 152 (*Eusphalerum*; synonym of *atrum*).

*splendens* Coiffait, 1959c: 249 (*Eusphalerum*; subgenus *Pareusphalerum*; aberration of *atrum*; cited as *spendens* on page 249 and *splendens* on page 252; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Floarac, Gironde).

*aucupariae* Kiesenwetter, 1866, see: *pseudaucupariae* E. Strand, 1917.

*audisioi* Zanetti, 1980, see: *italicum* C. Koch, 1938.

**auliense** Bernhauer, 1913a: 219 (*Anthobium*; Type locality: Aulie-Ata; Ala Tau, Syr Darja).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Zanetti, 1991: 298 (*Eusphalerum*; characters; Turkestan).

▲ **DISTRIBUTION:** Kyrgyzstan, Turkestan.

**aurifluum** Fauvel, 1878d: 201 [= 1878e: 37] (*Anthobium*; Type locality: Californie, Mari-  
posa).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*balmae* Coiffait, 1959, see: *torquatum* Marsham, 1802.

**banghaasi** Zanetti, 1991: 299 (*Eusphalerum*; Type locality: N. Alai Fergana).

▲ **DISTRIBUTION:** Uzbekistan.

**bargaglii** Luze, 1910: 233 (*Anthobium*; Type locality: Piemont).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Coiffait, 1959c: 247 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1980b: 623 (*Eusphalerum*; Italy).
- Zanetti, 1982: 120, 124 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 147 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

**baudii** Fiori, 1894: 96 (*Anthobium*; [Note: Preoccupied as a secondary homonym of *Anthobium baudii* Kraatz]; Type locality: Serra S. Bruno, Calabria; [Note: See lectotype designation by Zanetti, 1986]).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Luze, 1910: 227 (*Anthobium*; characters of male and female).
- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Scheerpeltz, 1961d: 116 (*Anthobium*; subgenus *Eusphalerum*; Italy).

- Zanetti, 1986: 96 (*Eusphalerum*; lectotype designation).
- Zanetti, 1987: 145 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

*hummleri* Bernhauer, 1908e: 320 (*Anthobium*; Type locality: Calabrien, Aspromonte, Sta. Christina).

- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Luze, 1911a: 334 (*Anthobium*; synonym of *baudii*).
- Scheerpeltz, 1933: 1033 (*Anthobium*; synonym of *baudii*).

**bergi** Kirshenblat, 1959: 649 [= 1960: 584] (*Eusphalerum*; subgenus *Abinotum*; Type locality: Gruzii: ushchel'e Banis-Khevi Borzhomskogo raiona; Bakuriani: Borzhomskogo raiona).

- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Abinotum*; checklist; Georgia).
- Zanetti, 1993: 215, 241 (*Eusphalerum*; characters; catalog; Caucasus).

▲ **DISTRIBUTION:** Georgia.

*bigerricum* Coiffait, 1959, see: *oblitum* Fairmaire and Laboulbène, 1856.

*biglianii* Doderò, 1922, see: *luteum* Marsham, 1802.

*binaghii* Zanetti, 1980, see: *italicum* C. Koch, 1938.

**birmanum** Scheerpeltz, 1965: 148 (*Anthobium*; subgenus *Eusphalerum*; Type locality: N.E. Kambaiti, 7000 ft.).

- Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Myanmar.

**bivittatum** Eppelsheim, 1887a: 45 (*Anthobium*; Type locality: Sicilia: Caronia).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Scheerpeltz, 1961d: 116 (*Anthobium*; subgenus *Anthobium*; Italy).
- Zanetti, 1987: 94 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Sparacio, 1995: 139 (*Eusphalerum*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- Zanetti and Sabella, 1998: 28 (*Eusphalerum*; Sicily).

▲ **DISTRIBUTION:** Italy.

*densepilosum* Scheerpeltz, 1961d: 143 (*Anthobium*; subgenus *Anthobium*; Type locality: Umgebung von Gambarie im Aspromonte).

- Zanetti, 1980: 161 (*Eusphalerum*; synonym of *bivittatum*).
- Zanetti, 1987: 94 (*Eusphalerum*; synonym of *bivittatum*).

**bolivari** C. Koch, 1940: 369 (*Anthobium*; Type locality: Nordspanien: Espinama, Kantabr. Kordilleren).

- Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Spain.

*bonadonai* Coiffait, 1959, see: *rhododendri* Baudi, 1848.

*bonnelli* Hatch, 1944, see: *dichroum*, Fall, 1922.

**bosatsu** Watanabe, 1990: 198 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamanashi Pref.: Mt. Daibosatsu).

▲ **DISTRIBUTION:** Japan.

**bothmeri** Coiffait, 1976a: 65 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Iran: Assalam, 1300 m).

- Zanetti, 1993: 219, 251 (*Eusphalerum*; characters; catalog; Iran, Azerbaidzhan?).

▲ **DISTRIBUTION:** Azerbaijan, Iran.

**brachiale** Fauvel, 1878: 87 [= 1878a: 7] (*Anthobium*; Type locality: Bône; [Note: See lectotype designation by Zanetti, 1991a]. Originally cited from Algeria; Morocco).

- Fauvel, 1886: 13 [= 1886a: 5] (*Anthobium*; Algeria).
- Fauvel, 1902b: 51 (*Anthobium*; Algeria; Tunisia).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Coiffait, 1959c: 246 (*Eusphalerum*; subgenus *Eusphalerum*; characters; North Africa).
- Zanetti, 1991a: 23 (*Eusphalerum*; lectotype designation: Bône; characters; notes; Tunisia; Algeria).

▲ **DISTRIBUTION:** Algeria, Morocco, Tunisia.

**brandmayri** Zanetti, 1981a: 50 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Sella Nevea, Casera Gragnedul, Tarvisio, prov. di Udine, 1800 m).

- Lohse, 1984: 145 (*Eusphalerum*; characters).
- Zanetti, 1987: 100 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy; Austria; Czech Republic; Poland).
- Schülke and Uhlig, 1988: 2 (*Eusphalerum*; notes; Germany).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothium*; Czech Republic).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- Burakowski, Mroczkowski, and Stefańska, 2000: 40 (*Eusphalerum*; subgenus *Abinothum*; catalog; Poland).

▲ **DISTRIBUTION:** Italy, Germany, Austria, Czech Republic, Poland.

*brevicolle* Heer, 1841, see: *minutum* Fabricius, 1792.

*brevipenne* Luze, 1910, see: *Philorinum*.

**calabrum** Zanetti, 1980: 168 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Morano Calabro, prov. di Cosenza).

- Zanetti, 1987: 112 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

**californicum** Fauvel, 1878d: 199 [= 1878e: 35] (*Anthobium*; Type locality: Californie, Mari-  
posa).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Hatch, 1957: 84 (*Eusphalerum*; subgenus *Onibathum*; characters; British Columbia; Idaho; Oregon).
- Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** Canada, USA.

*cantabricum* C. Koch, 1940, see: *angustum* Kiesenwetter, 1850.

**cariniphallum** Zanetti, 1998: 145 (*Eusphalerum*; Type locality: Taiwan: Hualien Hsien: Taroko N. P., Nanhushi Hut, 2220 m).

▲ **DISTRIBUTION:** Taiwan.

*carnicum* Coiffait, 1959, see: *pallens* Heer, 1841.

**caucasicum** Bernhauer, 1908e: 321 (*Anthobium*; Type locality: Batum).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Luze, 1910: 226 (*Anthobium*; characters; notes).
- Tikhomirova, 1973a: 137 (*Eusphalerum* subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 222, 252 (*Eusphalerum*; characters; catalog; Caucasus).

▲ **DISTRIBUTION:** Georgia, Turkey.

*loebli* Zanetti, 1993: 222, 236 (*Eusphalerum*; subspecies of *caucasicum*; Type locality: Turquie Zonguldak 17 km N Safranbolu 1000 m).

**celsum** Luze, 1910: 236 (*Anthobium*; Type locality: Kaukasus, Araxestal).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Armenia).
- Zanetti, 1992: 353 (*Eusphalerum*; characters; notes; Balkan region; Turkey; Armenia; Caucasian region).
- Zanetti, 1993: 215, 241 (*Eusphalerum*; characters; catalog; Caucasus; Armenia; Turkey).

▲ **DISTRIBUTION:** Balkan region, Azerbaijan, Armenia, Turkey.

*celticum* Coiffait, 1959, see: *umbellatarum* Kiesenwetter, 1850.

- cerdanicum** Coiffait, 1959c: 237 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Pyrénées-Orientales: Osseja).  
 ▲ **DISTRIBUTION:** France.
- cerrutii** Bernhauer, 1940b: 622 (*Anthobium*; Type locality: Abruzzen, Parco Naz.).  
 — C. Koch, 1938: 136 (*Anthobium*; [**Note:** Misidentified as *oblitum* according to Zanetti, 1982: 133] Italy).  
 — Coiffait, 1959c: 238 (*Eusphalerum*; subgenus *Eusphalerum*; [**Note:** Italian specimens misidentified as *oblitum* according to Zanetti, 1982: 133]; characters; Italy).  
 — Zanetti, 1982: 131, 133 (*Eusphalerum*; characters; Italy).  
 — Zanetti, 1987: 130 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
 — Zanetti, 1995: 5 (*Eusphalerum*; Italy).  
 ▲ **DISTRIBUTION:** Italy.
- luigionii* Bernhauer, 1940b: 623 (*Anthobium*; Type locality: Filetino, Umgebung Rom's).  
 — Zanetti, 1982: 133 (*Eusphalerum*; synonym of *cerrutii*).  
 — Zanetti, 1987: 130 (*Eusphalerum*; synonym of *cerrutii*).
- chinecum** J. Li, 1992: 59 (*Eusphalerum*; Type locality: China: Liaoning Province: Mt. Qian-shan).  
 — J. Li, 1993: 18 (*Eusphalerum*; China).  
 ▲ **DISTRIBUTION:** China.
- chinense** Bernhauer, 1938b: 49 (*Anthobium*; Type locality: China: Kansou-O.: Ma-ho chan; [**Note:** See lectotype designation by Zanetti, 1993a]).  
 — Zanetti, 1993a: 48 (*Eusphalerum*; lectotype designation; notes on characters).  
 ▲ **DISTRIBUTION:** China.
- chobauti* Coiffait, 1959, see: *montivagum* Heer, 1839.
- cincticolle* Chevrolat, 1860, see: *luteicornis* Erichson, 1840.
- clavipes** Scriba, 1868: 159 (*Anthobium*; Type locality: Apenninen bei Lucca und Valambrosa [**Note:** Vallombrosa]).  
 — Fauvel, 1869: 494 (*Anthobium*; synonym of *tempestivum*).  
 — Mulsant and Rey, 1880: 337 (*Anthobium*; characters; Italy).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).  
 — Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
 — Zanetti, 1980b: 623 (*Eusphalerum*; Italy).  
 — Zanetti, 1987: 144 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
 — Zanetti, 1995: 5 (*Eusphalerum*; Italy).  
 ▲ **DISTRIBUTION:** Italy.
- collare* Crotch, 1870, see: *marshami* Fauvel, 1869.
- contortispinum** Zanetti, 1998: 136 (*Eusphalerum*; Type locality: Taiwan: Chiai Hsien: Yushan N. P., Ta-Ta Ghia, 2750 m).  
 ▲ **DISTRIBUTION:** Taiwan.
- convexum** Fauvel, 1878d: 201 [= 1878e: 37] (*Anthobium*; Type locality: Canada, Québec; Massachusetts, Springfield; Pennsylvanie; Missouri).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).  
 — Blatchley, 1910: 481 (*Anthobium*; characters; Indiana).  
 — Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).  
 — Dearborn and Donahue, 1994: 13 (*Eusphalerum*; Maine).  
 — Downie and Arnett, 1996: 439 (*Eusphalerum*; characters; USA).  
 ▲ **DISTRIBUTION:** Canada, USA.
- corpulentum* Bernhauer, 1913, see: *nitidicolle* Baudi, 1857.
- corsicum** Luze, 1910: 242 (*Anthobium*; Type locality: Korsika).  
 — Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).  
 — Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Corsica).

- Zanetti, 1982: 125 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 136 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Corsica).

▲ **DISTRIBUTION:** Corsica.

**crebrepunctatum** Scheerpeltz, 1976a: 97 (*Anthobium*; subgenus *Eusphalerum*; [**Note:** Cited as *crebepunctatum* at the head of the description but as *crebrepunctatum* on pages 78 and 100]; Type locality: Nepal: Ting-Sang-La, 3800 m).

- Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Nepal.

**cribrellum** Fauvel, 1900d: 218 (*Anthobium*; Type locality: Sila de Calabre).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Zanetti, 1982a: 91 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 136 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

*cribricolle* Baudi, 1870, see: *foveicolle* Fauvel, 1871.

*cribrosum* Heer, 1841, see: *primulae* Stephens, 1834.

**croaticum** Luze, 1910: 238 (*Anthobium*; Type locality: Kroatien).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Tóth, 1982: 44 (*Eusphalerum*; characters).

▲ **DISTRIBUTION:** Croatia.

**daisetsuense** Watanabe, 1990: 215 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Hokkaido: Mt. Daisetsu).

▲ **DISTRIBUTION:** Japan.

**delyi** Zanetti, 1993a: 53 (*Eusphalerum*; Type locality: Korea: Mt. Pektusan, environs Sam-zi-yan hotel).

▲ **DISTRIBUTION:** Korea.

*densepilosum* Scheerpeltz, 1961, see: *bivittatum* Eppelsheim, 1887.

**densicolle** Bernhauer, 1915c: 69 (*Anthobium*; Type locality: Westlicher Kaukasus).

- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 224, 258 (*Eusphalerum*; characters; catalog; Caucasus, Turkey).

▲ **DISTRIBUTION:** Caucasus, Turkey.

**densipenne** Fauvel, 1900d: 218 (*Anthobium*; Type locality: Tokat, Asie min.; [**Note:** See lectotype designation by Zanetti, 1993]. Originally cited from Asie-Mineure: Tokat, Amasia, Erzeroum).

- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Zanetti, 1993: 225, 251 (*Eusphalerum*; characters; lectotype designation: Tokat, Asie min.; catalog; Turkey).

▲ **DISTRIBUTION:** Turkey.

**dewanum** Watanabe, 1990: 212 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamagata Pref.: Tachiyazawa, Higashitagawa).

▲ **DISTRIBUTION:** Japan.

*diabolicum* Roubal, 1914 [**Note:** **Nomen nudum**], see: *zolotarevi* Reitter, 1909.

**dichroum** Fall, 1922: 13 (*Anthobium*; Type locality: California: Humboldt County: Korbel).

- Hatch, 1957: 84 (*Eusphalerum*; subgenus *Onibathum*; characters; Washington; Oregon).
- Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*bonnelli* Hatch, 1944: 103 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Wash.: Sultan).

- Hatch, 1957: 84 (*Eusphalerum*; synonym of *dichroum*).
- Moore and Legner, 1975: 190 (*Eusphalerum*; synonym of *dichroum*).

*difficile* Rosenhauer, 1856, see: *anale* Erichson, 1840.

*dimidiatum* Melsheimer, 1844, see: *pothos* Mannerheim, 1843.

*diolii* Zanetti, 1982, see: *limbatum* Erichson, 1840.

*discinum* Gredler, 1863, see: *luteum* Marsham, 1802.

*dispar* Baudi, 1889, see: *luteum* Marsham, 1802.

**dis simile** Luze, 1910: 231 (*Anthobium*; Type locality: Súdungarn, Herkulesbad, Mehadia; [Note: See lectotype designation by Zanetti, 1992]. Also cited from Kroatien, Kapella; Transylvanien, Kerzcschora; Montenegro, Durmitor; Krain, Gottschee).

— Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).

— Horion, 1963: 36 (*Eusphalerum*; Slovenia; Croatia; Romania; Austria).

— Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).

— Zanetti, 1982: 116, 117 (*Eusphalerum*; characters; Romania).

— Tóth, 1982: 39 (*Eusphalerum*; characters).

— Lucht, 1987: 85 (*Eusphalerum*; checklist; Austria).

— Zanetti, 1992: 348 (*Eusphalerum*; lectotype designation: Herkulesbad; characters; notes; Balkan region).

▲ **DISTRIBUTION:** Czech Republic, Austria, Bosnia Hercegovina, Croatia, Germany, Romania, Slovenia, Yugoslavia.

**diversicolle** Casey, 1894: 428 (*Anthobium*; Type locality: California: Lake Tahoe; Nevada: Reno; southern Utah).

— Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).

— Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

**dubitatum** Zanetti, 1998: 124 (*Eusphalerum*; Type locality: Taiwan: Nantou Hsien: Nenkaoshan, Tenchi Hut, 2895 m).

▲ **DISTRIBUTION:** Taiwan.

**elongatum** Ganglbauer, 1895: 754 (*Anthobium*; Type locality: Westalpen und in den Gebirgen von Südfrankreich).

— Fauvel, 1871a: 75 [= 1872: 49] (*Eusphalerum*; [Note: Misidentification: Bernhauer and Schubert, 1910: 39 cited *palligerum* Fauvel as a synonym of *elongatum*; Fauvel did not describe the species as new, he attributed it to Kiesenwetter]; characters; France; Italy; Germany).

— Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).

— Coiffait, 1959c: 226 (*Eusphalerum*; subgenus *Abinothum*; characters).

— Horion, 1963: 37 (*Anthobium*; France; Switzerland; Austria).

— Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).

— Zanetti, 1987: 101 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Lucht, 1987: 85 (*Eusphalerum*; checklist; Austria).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy, Austria.

*excavatum* Erichson, 1840, see: *robustum* Heer, 1839.

**ezoense** Watanabe, 1990: 217 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Hokkaido: Jôzankei).

▲ **DISTRIBUTION:** Japan.

**farrarae** Hatch, 1944: 101 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Wash.: Fall City).

— Hatch, 1957: 83 (*Eusphalerum*; subgenus *Onibathum*; characters; British Columbia; Washington; Oregon).

— Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** Canada, USA.

**fenyesi** Bernhauer, 1912i: 679 (*Anthobium*; Type locality: Washington: Baring).

— Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).

— Hatch, 1957: 82 (*Eusphalerum*; characters; British Columbia; Washington; Oregon).

— Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** Canada, USA.



- fidele** Luze, 1910: 235 (*Anthobium*; Type locality: Kaukasus, Araxestal).  
 — Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).  
 — Zanetti, 1993: 219, 248 (*Eusphalerum*; characters; catalog; Azerbaijan, cited as Armenia).  
 ▲ **DISTRIBUTION:** Azerbaijan.
- flavipenne* Erichson, 1840, see: *lapponicum* Mannerheim, 1830.
- formosae** Cameron, 1949b: 460 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Formosa: Taiheizan).  
 — Zanetti, 1998: 150, 154 (*Eusphalerum*; characters; Taiwan).  
 ▲ **DISTRIBUTION:** Taiwan.
- fortepunctatum** Coiffait, 1978b: 148 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Dorjula, 3100 m).  
 ▲ **DISTRIBUTION:** Bhutan.
- foveicolle** Fauvel, 1871: 18 (*Anthobium*; Type locality: Mont Rosa [**Note:** May be Monte Rosa]).  
 — Fauvel, 1871a: 73 [= 1872: 47] (*Eusphalerum*; characters; France).  
 — Mulsant and Rey, 1880: 361 (*Anthobium*; characters; France).  
 — Ganglbauer, 1895: 755 (*Anthobium*; characters; western Alps).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).  
 — Portevin, 1929: 454 (*Anthobium*; characters; France).  
 — Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).  
 — Coiffait, 1959c: 220 (*Eusphalerum*; subgenus *Abinothum*; characters; Italy).  
 — Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).  
 — Zanetti, 1987: 97 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
 — Lucht, 1987: 85 (*Eusphalerum*; checklist; Austria).  
 — Zanetti, 1995: 5 (*Eusphalerum*; Italy).  
 — Herman, 2001: 20 (*Eusphalerum*; use as valid maintained).  
 ▲ **DISTRIBUTION:** France, Italy.
- cribricolle* Baudi, 1870: 403 (*Anthobium*; [**Note:** This name is older than *foveicolle*]; Type locality: Alpium Lepontiarum valle Formazza).  
 — Fauvel, 1871a: 73 [= 1872: 47] (*Eusphalerum*; synonym of *foveicolle*).  
 — Mulsant and Rey, 1880: 362 (*Eusphalerum*; synonym of *foveicolle*).  
 — Ganglbauer, 1895: 755 (*Anthobium*; synonym of *foveicolle*).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; synonym of *foveicolle*).  
 — Zanetti, 1987: 97 (*Eusphalerum*; synonym of *foveicolle*).
- foveolatum** Luze, 1910: 235 (*Anthobium*; Type locality: Russia merid.).  
 — Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).  
 — Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; southern Russia).  
 — Zanetti, 1993: 221, 257 (*Eusphalerum*; characters; catalog; Caucasus, Turkey, southern Russia).  
 ▲ **DISTRIBUTION:** Russia, Turkey.
- paramerum* Coiffait, 1976a: 68 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Turquie d'Asie: Torul).  
 — Zanetti, 1993: 257 (*Eusphalerum*; synonym of *foveolatum*).
- fraternum** Casey, 1894: 432 (*Anthobium*; Type locality: California: Hoopa Valley, Humboldt Co.).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).  
 — Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** USA.
- fraternum* Luze, 1910, see: *improvisum* Luze, 1911.
- frosti** Bernhauer, 1928d: 40 (*Anthobium*; Type locality: Massachusetts: Monterey).  
 — Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).  
 — Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** USA.
- fulvicorne* Coiffait, 1959 [**Note:** *Nomen nudum*], see: *italicum* C. Koch, 1938.

- fulvipenne** Solsky, 1874: 210 (*Anthobium*; Type locality: Kokandico).  
 — Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).  
 — Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Central Asia).  
 — Zanetti, 1991: 292 (*Eusphalerum*; characters; Turkestan; Transcaspian region; Kirghizia; Uzbekistan).  
 ▲ **DISTRIBUTION:** Kyrgyzstan, Turkestan, Uzbekistan.
- fuscicolle* Coiffait, 1959 [**Note: Nomen nudum**], see: *angustum* Kiesenwetter, 1850.
- fuscipenne* Heer, 1839, see: *limbatum* Erichson, 1840.
- gilvipenne** Casey, 1894: 428 (*Anthobium*; Type locality: California: Santa Cruz Co.).  
 — Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
 — Moore and Legner, 1975: 190 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** USA.
- goetzelmanni* Luze, 1910, see: *luteicorne* Erichson, 1840.
- gracile* Luze, 1910, see: *rufoscutellatum* Eppelsheim, 1881.
- granulipenne* J. Sahlberg, 1871, see: *lapponicum* Mannerheim, 1830.
- grayae** Hatch, 1944: 102 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Wash.: Seattle).  
 — Hatch, 1957: 83 (*Eusphalerum*; subgenus *Onibathum*; characters; British Columbia; Washington; Oregon).  
 — Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** Canada, USA.
- gusarov** Zanetti, 1993: 224, 225, 254 (*Eusphalerum*; Type locality: Kabardino-Balkaria near vill. Elbrus, the upper Shkhelda river 2500 m).  
 ▲ **DISTRIBUTION:** Russia.
- hapalaraeoides** Zanetti, 1998: 147 (*Eusphalerum*; Type locality: Taiwan: Pingtung Hsien: Peitwushan Trail at 1500 m).  
 ▲ **DISTRIBUTION:** Taiwan.
- heydeni** Bernhauer, 1902d: 704 (*Anthobium*; Type locality: Kischlar, Afghanistan).  
 — Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
 — Herman, 2001: 13 (*Eusphalerum*).  
 ▲ **DISTRIBUTION:** Afghanistan.
- hidakanum** Watanabe, 1990: 216 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Hokkaido: Mt. Poroshiri-dake, Hidaka).  
 ▲ **DISTRIBUTION:** Japan.
- hirtellum** Fauvel, 1901a: 2 (*Anthobium*; Type locality: Japon Central).  
 — Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
 — Watanabe, 1990: 224 (*Eusphalerum*; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- hispanicum** Brisout, 1866: 362 (*Anthobium*; Type locality: Espagne: environs de l'Escorial).  
 — Fauvel, 1869: 494 (*Anthobium*; synonym of *torquatum*).  
 — Mulsant and Rey, 1880: 335 (*Anthobium*; characters; Spain).  
 — Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
 — C. Koch, 1940: 372 (*Anthobium*; Spain).  
 — Scheerpeltz, 1960d: 133 (*Anthobium*; subgenus *Eusphalerum*; Portugal).  
 — Herman, 2001: 13 (*Eusphalerum*).  
 ▲ **DISTRIBUTION:** Portugal, Spain.
- horni** Fauvel, 1878d: 202 [= 1878e: 38] (*Anthobium*; Type locality: Missouri; Géorgie).  
 — Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
 — Blatchley, 1910: 481 (*Anthobium*; characters; Indiana).  
 — Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).  
 — Downie and Arnett, 1996: 439 (*Eusphalerum*; characters; USA).  
 ▲ **DISTRIBUTION:** USA.

*hummleri* Bernhauer, 1908, see: *baudii* Fiori, 1894.

**ideyu** Watanabe, 1990: 189 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Gunma Pref.: Kirizumi).

▲ **DISTRIBUTION:** Japan.

*imhoffii* Heer, 1839, see: *longipenne* Erichson, 1839.

**impressicolle** Kiesenwetter, 1850: 222 (*Anthobium*; Type locality: Pyrenaei).

- Kiesenwetter, 1851a: 437 (*Anthobium*; characters; France).
- Fairmaire and Laboulbène, 1856: 647 (*Anthobium*; characters; France).
- Fauvel, 1871a: 71 [= 1872: 45] (*Eusphalerum*; characters; France).
- Mulsant and Rey, 1880: 310 (*Anthobium*; characters; France).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Portevin, 1929: 454 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- Coiffait, 1959c: 234 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Pyrenees).

▲ **DISTRIBUTION:** France.

**improvisum** Luze, 1911b: 130 (*Anthobium*; replacement name for *fraternum* Luze).

- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- C. Koch, 1940: 373 (*Anthobium*; Spain).
- Coiffait, 1959c: 237 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Spanish and French Pyrenees).
- Scheerpeltz, 1960d: 133 (*Anthobium*; subgenus *Eusphalerum*; Portugal).
- Outerelo, 1980a: 54 (*Eusphalerum*; cited as *improvisum*; Spain).

▲ **DISTRIBUTION:** France, Portugal, Spain, Morocco, Algeria.

*fraternum* Luze, 1910: 231 (*Anthobium*; [**preoccupied**]; Type locality: Spanien, Sierra Nevada; Alger).

- Scheerpeltz, 1933: 1034 (*Anthobium*; synonym of *improvisum*).

*luzei* Roubal, 1915b: 102 (*Anthobium*; replacement name for *fraternum* Luze).

- Scheerpeltz, 1933: 1034 (*Anthobium*; synonym of *improvisum*).

**indicum** Champion, 1920: 243 (*Anthobium*; Type locality: Parachinar, Kurram Valley).

- Cameron, 1930: 136 (*Anthobium*; subgenus *Eusphalerum*; characters; India).
- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- Scheerpeltz, 1976a: 99 (*Anthobium*; characters).
- Coiffait, 1984: 118 (*Eusphalerum*).

▲ **DISTRIBUTION:** Pakistan.

*iranicum* Coiffait, 1976, see: *sorbi* Gyllenhal, 1810.

*ispartensis* Coiffait, 1979, see: *korbi* Bernhauer, 1903.

**italicum** C. Koch, 1938: 139 (*Anthobium*; Type locality: Lazio: Filettino, M.te Pagano. Sicilia).

- Coiffait, 1959c: 229 (*Eusphalerum*; subgenus *Abinothum*; characters; Italy).
- Zanetti, 1980: 160 (*Eusphalerum*; characters; Italy).
- Zanetti, 1980b: 623 (*Eusphalerum*; Italy).
- Zanetti, 1987: 109 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

*fulvicorne* Coiffait, 1959c: 229 (*Eusphalerum*; subgenus *Abinothum*; aberration of *italicum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Toscane, Monte Cetona).

- Zanetti, 1980: 160 (*Eusphalerum*; synonym of *italicum*).

*audisioi* Zanetti, 1980: 165 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *italicum*; Type locality: M. Terminillo, prov. di Rieti).

- Zanetti, 1987: 109 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *italicum*; characters; Italy).
- Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *italicum*; Italy).

*binaghii* Zanetti, 1980: 162 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *italicum*;  
Type locality: M. Sibilla [M. Sibillini, Marche], 2000 m).

— Zanetti, 1987: 109 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *italicum*; characters;  
Italy).

— Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *italicum*; Italy).

**japonicum** Bernhauer, 1909: 52 (*Anthobium*; Type locality: Japan, Okayama).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).

— Watanabe, 1990: 225 (*Eusphalerum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**jurassicum** Jarrige, 1946a: 110 (*Anthobium*; Type locality: France: Jougne, Jura).

— Coiffait, 1959c: 221 (*Eusphalerum*; subgenus *Abinothum*; characters; Jura).

— Lohse, 1964: 36 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; central Europe).

— Lucht, 1987: 85 (*Eusphalerum*).

▲ **DISTRIBUTION:** France.

**kahleni** Zanetti, 1986: 88 (*Eusphalerum*; Type locality: Gomagoi, Stelvio, Bolzano, 1300 m).

— Zanetti, 1987: 122 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy; Switzerland;  
France).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

— Assing, Frisch, Kahlen, et al., 1998: 122 (*Eusphalerum*; characters; Austria).

▲ **DISTRIBUTION:** Italy, Austria, Switzerland, France.

**kaiji** Watanabe, 1990: 197 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan:  
Honshu: Yamanashi Pref.: Masutomi).

▲ **DISTRIBUTION:** Japan.

**kambaitiense** Scheerpeltz, 1965: 147 (*Anthobium*; subgenus *Eusphalerum*; Type locality:  
N.E. Burma, Kambaiti, 7000 ft.).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Myanmar.

**kamduschense** Coiffait, 1982b: 78 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality:  
Afghanistan: Nouristan: Kamdesch, 2000 m).

▲ **DISTRIBUTION:** Afghanistan.

**kamui** Watanabe, 1990: 213 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan:  
Hokkaido: Sôunkyô).

▲ **DISTRIBUTION:** Japan.

**kana** Watanabe, 1993a: 807 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Asato-tôge,  
Naze City, Amami-ôshima Is., Ryukyus, Japan).

▲ **DISTRIBUTION:** Japan.

**kaoru** Watanabe, 1990: 242 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan:  
Honshu: Yamanashi Pref.: Mt. Daibosatsu).

▲ **DISTRIBUTION:** Japan.

**kasumi** Watanabe, 1990: 210 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan:  
Honshu: Gunma Pref.: near Kirizumi).

▲ **DISTRIBUTION:** Japan.

**kirizumiense** Watanabe, 1990: 230 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality:  
Japan: Honshu: Gunma Pref.: Kirizumi).

▲ **DISTRIBUTION:** Japan.

**korbi** Bernhauer, 1903b: 192 (*Anthobium*; Type locality: Antolien: Ak-Chehir).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).

— Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Turkey).

— Zanetti, 1993: 221, 260 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; catalog; Turkey).

▲ **DISTRIBUTION:** Turkey.

*anatolicum* Coiffait, 1978f: 271 (*Eusphalerum*; [**preoccupied**]; Type locality: environs  
d'Isparta).

— Zanetti, 1993: 260 (*Eusphalerum*; synonym of *korbi*).

*ispartensis* Coiffait, 1979c: 319 (*Eusphalerum*; replacement name for *anatolicum* Coiffait).  
— Zanetti, 1993: 260 (*Eusphalerum*; synonym of *korbi*).

- kraatzii** Jacquelin du Val, 1857: pl. 27, fig. 134 (*Anthobium*; Type locality: Not cited).  
— Jacquelin du Val, 1857: 78 (*Anthobium*; [**Note:** Misidentified as *longipenne* Erichson with the citation “Pl. 27, Fig 134 *longipenne* Er.”; that figure is identified on the plate as *Anthobium kraatzii*; Bernhauer and Schubert, 1910: 40 cited *longipenne* Jacquelin du Val as a synonym of *kraatzii*]).  
— Brisout, 1863: 43 (*Anthobium*; characters; France).  
— Fauvel, 1871a: 69 [= 1872: 43] (*Eusphalerum*; characters; France).  
— Mulsant and Rey, 1880: 379 (*Anthobium*; characters; France).  
— Ganglbauer, 1895: 753 (*Anthobium*; characters; Pyrenees; Croatia; Bosnia).  
— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
— Portevin, 1929: 455 (*Anthobium*; characters; France).  
— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).  
— Coiffait, 1959c: 224 (*Eusphalerum*; subgenus *Abinothum*; characters; Pyrenees).  
— Horion, 1963: 38 (*Anthobium*; France; Spain; Bosnia; Croatia; Italy; Austria).  
— Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).  
— Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive gland).  
— Tóth, 1982: 37 (*Eusphalerum*; characters).  
— Lucht, 1987: 85 (*Eusphalerum*; checklist; Austria).  
▲ **DISTRIBUTION:** France, Croatia, Bosnia Hercegovina.

*krasae* Roubal, 1940, see: *pruinorum* Fauvel, 1871.

- kumoma** Watanabe, 1990: 196 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Kamegaiki-Katanokoya on Mt. Norikura, N. Jpn. Alps).  
▲ **DISTRIBUTION:** Japan.

- kyushuense** Watanabe, 1990: 221 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Kyushu: Fukuoka Pref.: Mt. Hōman).  
▲ **DISTRIBUTION:** Japan.

- lacinipenne** Scheerpeltz, 1976: 6 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Nepal: Basislager Yaral bei Pangpoche, 3900 m).  
— Scheerpeltz, 1976a: 78, 100 (*Anthobium*; subgenus *Eusphalerum*; characters; Nepal).  
— Herman, 2001: 13 (*Eusphalerum*).  
▲ **DISTRIBUTION:** Nepal.

*laevipenne* Baudi, 1870, see: *stramineum* Kraatz, 1857.

- lapponicum** Mannerheim, 1830: 52 (*Omalium*; Type locality: Lapponiae: Utsjock).  
— Mannerheim, 1831: 466 (*Omalium*; Lapland).  
— Zetterstedt, 1838: 50 (*Omalium*; characters; habitat; Lapland).  
— Erichson, 1840: 899 (*Anthobium*; characters; Lapland).  
— Thomson, 1861: 203 (*Anthobium*; characters; Scandinavia).  
— J. Sahlberg, 1876: 215 (*Anthobium*; Finland).  
— Fowler, 1888: 426 (*Anthobium*; characters; Britain).  
— Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; Sudeten; Finland; Lapland; Scotland).  
— Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).  
— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).  
— Luze, 1910: 228 (*Anthobium*; notes).  
— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).  
— Van Dyke, 1924: 16 (*Omalium*; Alaska).  
— L. Benick, 1943b: 601 (*Anthobium*; characters).  
— Palm, 1948: 60 (*Anthobium*; characters; Sweden; Norway; Finland).  
— Horion, 1963: 47 (*Anthobium*; subgenus *Eusphalerum*; Finland; Russia; Sweden; Norway; Scotland; Germany).  
— Lohse, 1964: 35 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; mountains of Central Europe; northern Europe; Urals).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Poland; Czechoslovakia).
- Zanetti, 1993a: 55 (*Eusphalerum*; Siberia).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic).

▲ **DISTRIBUTION:** Finland, Germany, Russia, USA.

*flavipenne* Erichson, 1840: 896 (*Anthobium*; Type locality: in Lapponia).

- Kraatz, 1857d: 1010 (*Anthobium*; synonym of *minutum*).
- Thomson, 1861: 203 (*Anthobium*; synonym of *lapponicum*).
- Ganglbauer, 1895: 750 (*Anthobium*; synonym of *lapponicum*).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *lapponicum*).

*granulipenne* J. Sahlberg, 1871a: 424 (*Anthobium*; Type locality: Muonioniska).

- J. Sahlberg, 1876: 216 (*Anthobium*; characters; Finland).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Luze, 1910: 228 (*Anthobium*; synonym of *lapponicum*).
- Scheerpeltz, 1933: 1034 (*Anthobium*; synonym of *lapponicum*).

**lawrencei** Hatch, 1957: 83 (*Eusphalerum*; subgenus *Onibathum*; Type locality: Oregon: Ashland).

- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*levasseuri* Coiffait, 1959, see: *montivagum* Heer, 1839.

**lewisi** Cameron, 1930c: 182 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Kyushu: Mt. Unzen, alt. 2000 feet).

- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- Watanabe, 1990: 204 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**liepolti** Bernhauer, 1943: 71 (*Anthobium*; Type locality: Umgebung von Gottschee, Krain).

- Zanetti, 1982a: 93 (*Eusphalerum*; characters).

▲ **DISTRIBUTION:** Slovenia.

**limbatum** Erichson, 1840: 894 (*Anthobium*; Type locality: Hercynia; Austria).

- Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; characters; France).
- Redtenbacher, 1857: 254 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1008 (*Anthobium*; characters; Germany).
- Fauvel, 1871a: 64 [= 1872: 38] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy).
- Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; Austria).
- Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
- Mulsant and Rey, 1880: 325 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; middle Europe).
- Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Portevin, 1929: 451 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- Freude, 1957: 109 (*Anthobium*; Germany).
- Coiffait, 1959c: 243 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
- Horion, 1963: 45 (*Anthobium*; subgenus *Eusphalerum*; Holland; Belgium; France; Switzerland; Switzerland; Italy; Romania; Hungary; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Scheerpeltz, 1968a: 6 (*Anthobium*; catalog; Austria).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; checklist; USSR).
- Zanetti, 1978b: 85 (*Eusphalerum*; collecting notes; Italy).
- Muona, 1979: 17 (*Eusphalerum*; Baltic States).
- Burakowski, Mroczkowski, and Stefańska, 1979: 19 (*Eusphalerum*; synonym of *adustum*).

- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
  - Zanetti, 1981: 210 (*Eusphalerum*; characters).
  - Zanetti, 1982: 137, 140, 147 (*Eusphalerum*; characters; discussion of subspecies; Belgium; France; Switzerland; Germany; Austria; Czechoslovakia; Hungary; Yugoslavia; Italy).
  - Tóth, 1982: 44 (*Eusphalerum*; characters; Hungary).
  - Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
  - Terlutter, 1984: 13, 37 (*Eusphalerum*; notes; Germany).
  - Zanetti, 1987: 127 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
  - Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Belgium; Netherlands; Luxembourg; France).
  - Lohse and Lucht, 1989: 125 (*Eusphalerum*; characters).
  - Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
  - Silfverberg, 1992: 21 (*Eusphalerum*; Estonia).
  - Boháč, 1993: 40 (*Eusphalerum*; synonym of *adustum*).
  - Zanetti, 1995: 5 (*Eusphalerum*; Italy).
  - Ádám, 1996: 237 (*Eusphalerum*; synonym of *adustum*).
  - ▲ **DISTRIBUTION:** Europe.
- adustum* Heer, 1839: 182 (*Omalium*; [**Note:** This name is older than *limbatum*]; Type locality: Genf).
- Heer, 1841: 570 (*Omalium*; characters).
  - Fairmaire and Laboulbène, 1856: 649 (*Anthobium*; characters; France).
  - Redtenbacher, 1857: 256 (*Anthobium*; characters; Germany).
  - Kraatz, 1857d: 1008 (*Anthobium*; synonym of *limbatum*).
  - Redtenbacher, 1874: 281 (*Anthobium*; characters).
  - Ganglbauer, 1895: 750 (*Anthobium*; synonym of *limbatum*).
  - Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *limbatum*).
  - Scheerpeltz, 1933: 1034 (*Anthobium*; synonym of *limbatum*).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 19 (*Eusphalerum*; cited as valid name; catalog; Poland).
  - Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).
  - Ádám, 1996: 237 (*Eusphalerum*; valid name; Hungary).
- fuscipenne* Heer, 1839: 183 (*Omalium*; [**Note:** This name is older than *limbatum*]; Type locality: Bern; Zürich).
- Kraatz, 1857d: 1008 (*Anthobium*; synonym of *limbatum*).
  - Ganglbauer, 1895: 750 (*Anthobium*; synonym of *limbatum*).
  - Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *limbatum*).
- analogicum* Roubal, 1915: 19 (*Anthobium*; variety of *limbatum*; Type locality: Pribram auf Tremosna).
- Scheerpeltz, 1933: 1034 (*Anthobium*; aberration of *limbatum*).
- romani* Coiffait, 1964e: 129 (*Eusphalerum*; Type locality: France: Col de Crozet, Ain).
- Zanetti, 1987: 127 (*Eusphalerum*; synonym of *limbatum*).
- diolii* Zanetti, 1982: 141 (*Eusphalerum*; subspecies of *limbatum*; Type locality: Oropa: Piemonte, Biellese).
- Zanetti, 1987: 127 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *limbatum*; characters; Italy).
  - Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *limbatum*; Italy).
- paternum* Zanetti, 1982: 142 (*Eusphalerum*; subspecies of *limbatum*; Type locality: Bosco del Cansiglio, Veneto-Friuli, Pian dell'Osteria).
- Zanetti, 1987: 127 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *limbatum*; characters; Italy).
  - Lohse and Lucht, 1989: 125 (*Eusphalerum*; subspecies of *limbatum*; characters).
  - Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *limbatum*; Italy).

*visentinii* Zanetti, 1982: 146 (*Eusphalerum*; subspecies of *limbatum*; Type locality: Stazione Carnia, Friuli, loc. Rio de Stali Togliazzo, Rio Lavàrie d P. di Portolans).

— Zanetti, 1987: 127 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *limbatum*; characters; Italy).

— Lohse and Lucht, 1989: 125 (*Eusphalerum*; subspecies of *limbatum*; characters).

— Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *limbatum*; Italy).

**lindbergi** Bernhauer, 1931e: 7 (*Anthobium*; Type locality: Spanien: Sierra Morena, Santa Helena).

— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).

— Scheerpeltz, 1960d: 133 (*Anthobium*; subgenus *Eusphalerum*; Portugal).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Portugal, Spain.

*loebli* Zanetti, 1993, see: *caucasicum* Bernhauer, 1908.

*lombardum* Coiffait, 1959, see: *montivagum* Heer, 1839.

**longipenne** Erichson, 1839a: 640 (*Anthobium*; [**preoccupied**]; Type locality: Mark Brandenburg).

— Erichson, 1840: 898 (*Anthobium*; characters; Germany; Sweden).

— Heer, 1841: 570 (*Omalium*; synonym of *imhoffi*).

— Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).

— Fairmaire and Laboulbène, 1856: 651 (*Anthobium*; characters; France).

— Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).

— Kraatz, 1857d: 1015 (*Anthobium*; characters; Germany).

— Fauvel, 1871a: 76 [= 1872: 50] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy; Austria; Spain).

— Fauvel, 1873b: 112 [= 1873c: 5] (*Anthobium*; Sardinia; Russia).

— Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).

— Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).

— J. Sahlberg, 1876: 216 (*Anthobium*; characters; Finland).

— Mulsant and Rey, 1880: 367 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 754 (*Anthobium*; characters; Finland; middle Europe; Italy; Spain).

— Reitter, 1909: 197 (*Anthobium*; characters; Germany).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).

— Portevin, 1929: 455 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).

— Palm, 1948: 61 (*Anthobium*; characters).

— Blackwelder, 1952: 32 (*Abinothum*; type species).

— Freude, 1957: 106 (*Anthobium*; Germany).

— Coiffait, 1959c: 230 (*Eusphalerum*; subgenus *Abinothum*; [**Note:** Misidentified as *dissimilis* according to Zanetti, 1982: 116]; characters; Silesia; Croatia; Venetia).

— Horion, 1963: 36 (*Anthobium*; Russia; Poland; Czechoslovakia; Hungary; Romania; Bosnia; Slovenia; Italy; Switzerland; France; Germany; Austria).

— Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).

— Szujeci, 1968a: 710 (*Eusphalerum*; Poland).

— Scheerpeltz, 1968a: 5 (*Anthobium*; catalog; Austria).

— Tikhomirova, 1973a: 137 (*Eusphalerum*; checklist; USSR).

— Klinger and Maschwitz, 1977: 402 (*Eusphalerum*; morphology and chemical secretions of defensive glands).

— Muona, 1979: 17 (*Eusphalerum*; Russia; Baltic States).

— Burakowski, Mroczkowski, and Stefańska, 1979: 18 (*Eusphalerum*; catalog; Poland).

— Tóth, 1980: 96 (*Anthobium*; Hungary).

— Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive gland).

— Zanetti, 1982: 116 (*Eusphalerum*; characters; Italy).

— Tóth, 1982: 38 (*Eusphalerum*; characters; Hungary).

— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).



- Terlutter, 1984: 10, 37 (*Eusphalerum*; notes; Germany).
- Segers, 1986: 18 (*Eusphalerum*; Belgium).
- Zanetti, 1987: 103 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- K. Koch, 1989: 218 (*Eusphalerum*; habitat).
- Silfverberg, 1992: 21 (*Eusphalerum*; Russia; Latvia).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothium*; Czech Republic; Slovakia).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- Ádám, 1995: 41 (*Eusphalerum*; synonym of *imhoffii*).
- Ádám, 1996: 237 (*Eusphalerum*; synonym of *imhoffii*).
- Eisinger, 1997: 169 (*Eusphalerum*; collecting notes; Germany).
- Pašník, 1998: 69 (*Eusphalerum*; habitat; Poland).
- Köhler, 1998: 159 (*Eusphalerum*; habitat notes; Germany).
- Herman, 2001: 36 (*Eusphalerum*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).

▲ **DISTRIBUTION:** Europe.

*imhoffii* Heer, 1839: 184 (*Omalium*; Type locality: Pilatus).

- Fauvel, 1871a: 76 [= 1872: 50] (*Eusphalerum*; synonym of *longipenne*).
- Ganglbauer, 1895: 754 (*Anthobium*; synonym of *longipenne*).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *longipenne*).
- Zanetti, 1987: 103 (*Eusphalerum*; synonym of *longipenne*).
- Ádám, 1995: 41 (*Eusphalerum*; valid species; Hungary).
- Ádám, 1996: 237 (*Eusphalerum*; valid species; Hungary).
- Herman, 2001: 37 (*Eusphalerum*; synonym of *longipenne*).

*longiusculum* Gemminger and Harold, 1868 [**Note: Nomen nudum**], see: *anale* Erichson, 1840.

*longulum* Kiesenwetter, 1847, see: *anale* Erichson, 1840.

**lunae** Hatch, 1957: 84 (*Eusphalerum*; subgenus *Onibathum*; Type locality: Ida.: Craters of the Moon Nat. Mon.).

- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*luigionii* Bernhauer, 1940, see: *cerrutii* Bernhauer, 1940.

**luteicorne** Erichson, 1840: 897 (*Anthobium*; Type locality: Sicilia; [**Note:** See lectotype designation by Zanetti, 1991a]).

- Fauvel, 1878: 88 [= 1878a: 8] (*Anthobium*; Algeria).
- Fauvel, 1886: 13 [= 1886a: 5] (*Anthobium*; Algeria; Tunisia).
- Fauvel, 1902b: 51 (*Anthobium*; Algeria; Tunisia).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Coiffait, 1959c: 235 (*Eusphalerum*; subgenus *Eusphalerum*; characters; North Africa; Sicily; Sardinia).
- Zanetti, 1987: 119 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1991a: 26 (*Eusphalerum*; lectotype designation; characters; notes; Sicily; Tunisia; Algeria).
- Sparacio, 1995: 139 (*Eusphalerum*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Eusphalerum*; Italy).
- Zanetti and Sabella, 1998: 28 (*Eusphalerum*; Sicily).

▲ **DISTRIBUTION:** Spain, Italy, Sicily, Sardinia, Algeria, Tunisia.

*cincticolle* Chevrolat, 1860: 448 (*Anthobium*; Type locality: environs d' Alger).

- Fauvel, 1865c: 18 [= 1866: 25] (*Anthobium*; synonym of *maculicolle*).
- Fauvel, 1878: 88 [= 1878a: 8] (*Anthobium*; synonym of *luteicorne*).
- Fauvel, 1902b: 51 (*Anthobium*; synonym of *luteicorne*).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *luteicorne*).
- Zanetti, 1987: 119 (*Eusphalerum*; synonym of *luteicorne*).
- Zanetti, 1991a: 26 (*Eusphalerum*; subspecies of *luteicorne*; characters; Algeria).

*maculicolle* Fairmaire, 1860b: 164 (*Anthobium*; Type locality: Bône).

— Fauvel, 1878: 88 [= 1878a: 8] (*Anthobium*; synonym of *luteicornes*).

— Fauvel, 1902b: 51 (*Anthobium*; synonym of *luteicornes*).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; variety of *luteicornes*).

— Zanetti, 1987: 119 (*Eusphalerum*; synonym of *luteicornes*).

*tibiale* Luze, 1910: 237 (*Anthobium*; [**preoccupied**]; Type locality: Algier, Oran).

— Scheerpeltz, 1933: 1032 (*Anthobium*; synonym of *africanum*).

— Zanetti, 1991a: 26 (*Eusphalerum*; synonym of *luteicornes cincticolle*).

*goetzelmanni* Luze, 1910: 230 (*Anthobium*; Type locality: Tunis, Gafsa).

— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).

— Zanetti, 1991a: 26 (*Eusphalerum*; synonym of *luteicornes*).

*africanum* Roubal, 1915b: 102 (*Anthobium*; replacement name for *tibiale* Luze).

— Scheerpeltz, 1933: 1032 (*Anthobium*; catalog).

— Zanetti, 1991a: 26 (*Eusphalerum*; synonym of *luteicornes cincticolle*).

*luteipenne* Erichson, 1840, see: *alpinum* Heer, 1839.

**luteoides** Zanetti, 1998: 140 (*Eusphalerum*; Type locality: Taiwan: Pingtung Hsien: Peitawushan Ridge, 2800–2910 m).

▲ **DISTRIBUTION:** Taiwan.

**luteum** Marsham, 1802: 128 (*Silpha*; Type locality: Britain).

— Germar, 1827: 6 (*Omalium*; synonym of *ophthalmicum*).

— Stephens, 1834: 338 (*Anthobium*; characters; England).

— Stephens, 1839: 425 (*Anthobium*; variety of *sorbi*; characters; England).

— Hardy, 1851: 63 (*Anthobium*; variety of *sorbi*).

— Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; synonym of *sorbi*).

— Kraatz, 1857d: 1018 (*Anthobium*; synonym of *sorbi*).

— G. Waterhouse, 1858: 32 (*Anthobium*; synonym of *ophthalmicum*).

— Mulsant and Rey, 1880: 336 (*Anthobium*; synonym of *sorbi*).

— Ganglbauer, 1895: 752 (*Anthobium*; synonym of *ophthalmicum*).

— Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *ophthalmicum*).

— Steel, 1970a: 9 (*Eusphalerum*; biological notes).

— Pope, 1977: 23 (*Eusphalerum*; Britain).

— Hammond, 1980: 137 (*Eusphalerum*; Ireland).

— Zanetti, 1982: 126, 128 (*Eusphalerum*; characters; discussion of races; Italy).

— Zanetti, 1987: 137 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Drugmand, 1992a: 35 (*Eusphalerum*; characters; collection notes; Belgium).

— Welch, 1993: 227 (*Eusphalerum*; ovariole number and ovary structure).

— Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).

— Zanetti, 1995: 5 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Europe, Russia.

*ophthalmicum* Paykull, 1800: 409 (*Staphylinus*; [**preoccupied**]; Type locality: Westrogothia).

— Gyllenhal, 1810: 205 (*Omalium*; characters; Sweden).

— Olivier, 1811: 479 (*Omalium*; characters; Germany).

— Gyllenhal, 1827: 464 (*Omalium*).

— Germar, 1827: 6 (*Omalium*; characters; Germany; England; Sweden).

— Curtis, 1829: 28 (*Anthobium*; catalog; Britain).

— Mannerheim, 1830: 53 (*Omalium*; Sweden).

— Mannerheim, 1831: 467 (*Omalium*; Sweden).

— Stephens, 1834: 339 (*Anthobium*; characters; England).

— Lacordaire, 1835: 490 (*Omalium*; characters; France).

— Erichson, 1839a: 641 (*Anthobium*; synonym of *sorbi*).

— Heer, 1839: 183 (*Omalium*; characters; Switzerland).

— Stephens, 1839: 425 (*Anthobium*; characters; England).

— Erichson, 1840: 894 (*Anthobium*; characters; Sweden; Germany).

- Laporte, 1840: 191 (*Omalium*; characters; France; Germany).
- Redtenbacher, 1849: 753 (*Anthobium*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; characters; France).
- Baudi, 1857: 114 (*Anthobium*; notes).
- Redtenbacher, 1857: 254 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1017 (*Anthobium*; characters; Germany).
- Thomson, 1861: 203 (*Anthobium*; characters; Scandinavia).
- Baudi, 1870: 404 (*Anthobium*; characters).
- Fauvel, 1871a: 68 [= 1872: 42] (*Eusphalerum*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy).
- Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; Austria; Russia).
- Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
- Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).
- J. Sahlberg, 1876: 216 (*Anthobium*; Finland).
- Mulsant and Rey, 1880: 343 (*Anthobium*; characters; France).
- Fowler, 1888: 426 (*Anthobium*; characters; Britain).
- Ganglbauer, 1895: 752 (*Anthobium*; subgenus *Eusphalerum*; characters; north and middle Europe).
- Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Johansen, 1914: 624 (*Anthobium*; characters; Denmark).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Palm, 1948: 58 (*Anthobium*; characters; Sweden; Denmark; Norway; Finland).
- Freude, 1957: 107 (*Anthobium*; Germany).
- Coiffait, 1959c: 246 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
- Horion, 1963: 39 (*Anthobium*; subgenus *Eusphalerum*; Britain; Norway; Sweden; Finland; Russia; Denmark; Holland; Belgium; France; Switzerland; Italy; Bosnia; Romania; Czechoslovakia; Poland; Austria; Germany).
- Lohse, 1964: 32 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
- Pope, 1977: 23 (*Eusphalerum*; synonym of *luteum*).
- Zanetti, 1982: 128 (*Eusphalerum*; synonym of *luteum*).
- Zanetti, 1980b: 623 (*Eusphalerum*; Italy).
- Tóth, 1982: 40 (*Eusphalerum*; characters; Hungary).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
- Zanetti, 1987: 137 (*Eusphalerum*; synonym of *luteum*).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
- Boháč, 1993: 40 (*Eusphalerum*; synonym of *luteum*).
- Zanetti, 1995: 5 (*Eusphalerum*; synonym of *luteum*).
- M. Hansen, 1996: 95 (*Eusphalerum*; synonym of *luteum*).
- pallidum* Gravenhorst, 1806: 217 (*Omalium*; Type locality: Not cited).
  - Gyllenhal, 1810: 205 (*Omalium*; synonym of *ophthalmicum*).
  - Olivier, 1811: 480 (*Omalium*; characters; Europe).
  - Germar, 1827: 6 (*Omalium*; synonym of *ophthalmicum*).
  - Erichson, 1840: 894 (*Anthobium*; synonym of *ophthalmicum*).
  - Redtenbacher, 1849: 753 (*Anthobium*; synonym of *ophthalmicum*).
  - Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; synonym of *ophthalmicum*).
  - Kraatz, 1857d: 1017 (*Anthobium*; synonym of *ophthalmicum*).
  - Mulsant and Rey, 1880: 344 (*Anthobium*; synonym of *ophthalmicum*).
  - Ganglbauer, 1895: 752 (*Anthobium*; synonym of *ophthalmicum*).
  - Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *ophthalmicum*).
  - Pope, 1977: 23 (*Eusphalerum*; synonym of *luteum*).

*discinum* Gredler, 1863: 127 (*Anthobium*; variety of *ophthalmicum*; Type locality: Schloss-Ruine Gfrill am Gampen).

- Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; synonym of *nigriceps*).
- Ganglbauer, 1895: 752 (*Anthobium*; synonym of *ophthalmicum*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *ophthalmicum*).
- Scheerpeltz, 1933: 1036 (*Anthobium*; variety of *ophthalmicum*).
- Zanetti, 1982: 128 (*Eusphalerum*; synonym of *luteum*).
- Tóth, 1982: 40 (*Eusphalerum*; variety of *ophthalmicum*; characters).
- Zanetti, 1987: 137 (*Eusphalerum*; synonym of *luteum*).

*dispar* Baudi, 1889: 74 [= 1890: 122] (*Anthobium*; variety of *ophthalmicum*, cited as *ophthalmicum*; Type locality: not cited, presumably Piemonte).

- Jarrige, 1946a: 110 (*Anthobium*; variety of *ophthalmicum*, cited as *ophthalmicum*; France).
- Coiffait, 1959c: 246 (*Eusphalerum*; subgenus *Eusphalerum*; aberration of *ophthalmicum*, cited as *ophthalmicum*; characters).
- Zanetti, 1982: 128 (*Eusphalerum*; subspecies of *luteum*; characters; Italy).
- Tóth, 1982: 40 (*Eusphalerum*; aberration of *ophthalmicum*; characters).
- Zanetti, 1987: 137 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *luteum*; characters; Italy).
- Zanetti and Sabella, 1998: 28 (*Eusphalerum*; subspecies of *luteum*; Sicily).
- Zanetti, 1995: 5 (*Eusphalerum*; subspecies of *luteum*; Italy).

*biglianii* Doderò, 1922: 46 (*Anthobium*; variety of *ophthalmicum*; Type locality: Certosa di Pesio).

- Scheerpeltz, 1933: 1036 (*Anthobium*; variety of *ophthalmicum*).
- Zanetti, 1982: 128 (*Eusphalerum*; synonym of *luteum dispar*).
- Zanetti, 1987: 137 (*Eusphalerum*; synonym of *luteum dispar*).

*ragusae* Bernhauer, 1923a: 122 (*Anthobium*; Type locality: Sizilien: bei S. Fratello).

- Ragusa, 1921: 86 (*Anthobium*; subgenus *Eusphalerum*; variety of *ophthalmicum*; [**Note:** Cited as a new variety and attributed to Bernhauer but published without characters so Ragusa's name is not available (Article 12.1). Scheerpeltz, 1933: 1036 listed *ragusae* Ragusa as a valid species]; Sicily).
- Scheerpeltz, 1933: 1036 (*Anthobium*; cited as synonym of *ragusae* Ragusa [which is a nomen nudum]; catalog).
- Zanetti, 1982: 128 (*Eusphalerum*; synonym of *luteum dispar*).
- Zanetti, 1987: 137 (*Eusphalerum*; synonym of *luteum dispar*).

*luzei* Roubal, 1915, see: *improvisum* Luze, 1911.

*lybicum* Normand, 1935 [**Note: Nomen nudum**], see: *metasternale* Fauvel, 1898.

**macropterum** Kraatz, 1857d: 1015, note (*Anthobium*; Type locality: Piemonte).

- Fauvel, 1871a: 77 [= 1872: 51] (*Eusphalerum*; characters; France).
- Ganglbauer, 1895: 754 (*Anthobium*; characters; Piemonte).
- Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).
- Portevin, 1929: 455 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).
- Coiffait, 1959c: 229 (*Eusphalerum*; subgenus *Abinothum*; characters; Alps).
- Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Zanetti, 1987: 102 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy.

*maculicollae* Fairmaire, 1860, see: *luteicornae* Erichson, 1840.

**mahunkai** Zanetti, 1993a: 58 (*Eusphalerum*; Type locality: Korea: Prov. Kengi, Bagyon san, Bagyon popo, about 27 km SW from Kaesong).

▲ **DISTRIBUTION:** Korea.

**malaisei** Scheerpeltz, 1965: 145 (*Anthobium*; subgenus *Eusphalerum*; Type locality: N.E. Burma, Kambaiti, 7000 ft.).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Myanmar.

**marginatum** Say, 1832: 50 [= 1834: 463] (*Omalium*; Type locality: Missouri: Engineer Cantonment).

— Erichson, 1840: 890 (*Omalium*; characters; Missouri).

— Fauvel, 1878d: 200 [= 1878e: 36] (*Anthobium*; characters; Missouri).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).

— Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*marocanum* Coiffait, 1978, see: *Philorinum*.

**marshami** Fauvel, 1869: 494 (*Anthobium*; proposed for misidentified species that Kraatz cited as *torquatium* and that Erichson cited as *sorbi* variety b and c; Type locality: im mittleren, südlichen und nördlichen Deutschland).

— Erichson, 1840: 895 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 41 cited *sorbi* varieties b and c as synonyms of *marshami* Fauvel; the varieties are unavailable]; characters; Europe).

— Kraatz, 1857d: 1018 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 41 cited *torquatium* Kraatz as a synonym of *marshami*; Kraatz did not describe the species as new, he attributed it to Marsham]; characters; Germany).

— Fauvel, 1871a: 78 [= 1872: 52] (*Eusphalerum*; characters; France; Germany; Italy).

— Mulsant and Rey, 1880: 332 (*Anthobium*; cited as *torquatium* Kraatz with *marshami* Fauvel as a synonym; characters; France).

— Ganglbauer, 1895: 751 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany; France; Alps; Carpathians).

— Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; catalog).

— Matsumura, 1911: 115 (*Anthobium*; cited as *marschami*; Japan).

— Portevin, 1929: 453 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).

— Freude, 1957: 108 (*Anthobium*; Germany).

— Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Massif Central; Alps).

— Horion, 1963: 42 (*Anthobium*; subgenus *Eusphalerum*; Italy; France; Belgium; Holland; Switzerland; Bosnia; Romania; Slovakia; Czech Republic; Germany; Austria).

— Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Zanetti, 1981: 210 (*Eusphalerum*; characters).

— Tóth, 1982: 42 (*Eusphalerum*; characters; Hungary).

— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).

— Zanetti, 1987: 143 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).

— Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).

— Detner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).

— Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Europe.

*collare* Crotch, 1870: 101 (*Anthobium*; proposed for misidentified species that Kraatz cited as *torquatium*; Type locality: Not cited).

— Fauvel, 1871a: 78 [= 1872: 52] (*Eusphalerum*; synonym of *marshami*).

— Ganglbauer, 1895: 751 (*Anthobium*; synonym of *marshami*).

— Bernhauer and Schubert, 1910: 40 (*Anthobium*; synonym of *marshami*).

*punctulatum* Mulsant and Rey, 1880: 335 (*Anthobium*; Type locality: Espagne).

— Ganglbauer, 1895: 751 (*Anthobium*; synonym of *marshami*).

- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *marshami*).
- Zanetti, 1987: 143 (*Eusphalerum*; synonym of *marshami*).

**masatakai** Watanabe, 1999: 266 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: China: Guangxi Province: Xing'an Xian, Mt. Miao'er Shan, near Tieshan Ping).

▲ **DISTRIBUTION:** China.

*melanurum* C. Koch, 1938 [**Note: Nomen nudum**], see: *angustum* Kiesenwetter, 1850.

*melichari* Bernhauer, 1913, see: *zlotarevi* Reitter, 1909.

*mendax* Coiffait, 1959 [**Note: Nomen nudum**], see: *oblitum* Fairmaire and Laboulbène, 1856.

**merkli** Zanetti, 1993a: 50 (*Eusphalerum*; Type locality: Korea: prov. Kanwon, Kum-gang san, Man-mul san).

▲ **DISTRIBUTION:** Korea.

**metasternale** Fauvel, 1898: 94 (*Anthobium*; Type locality: Tlemcen, Alger; [**Note:** See lectotype designation by Zanetti, 1991a]. Originally cited from Provinces d'Oran, d'Alger et de Constantine; Madère).

- Fauvel, 1897d: 243 (*Anthobium*; Algeria; Madeira).
- Wollaston, 1860: 106 (*Anthobium*; [**Note:** Misidentified as *torquatum* according to Fauvel, 1897d: 243]; Madeira).
- Wollaston, 1865: 524 (*Anthobium*; [**Note:** Misidentified as *torquatum* according to Fauvel, 1897d: 243]; notes; Madeira Islands).
- Fauvel, 1902b: 51 (*Anthobium*; Algeria; Tunisia; Madeira).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Bernhauer, 1931e: 8 (*Anthobium*; Morocco).
- Zanetti, 1991a: 23 (*Eusphalerum*; lectotype designation: Tlemcen, Alger; characters; notes; Tunisia; Algeria; Morocco; Madeira).

▲ **DISTRIBUTION:** Tunisia, Algeria, Morocco, Madeira.

*lybicum* Normand, 1935: 357 (*Anthobium*; aberration of *metasternale*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]); locality cited: Tunisie: Ain-Draham; Bizerte; El Feidja).

**miaoershanum** Watanabe, 1999: 267 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: China: Guangxi Province: Xing'an Xian, Mt. Miao'er Shan, near Tieshan Ping).

▲ **DISTRIBUTION:** China.

**michinoku** Watanabe, 1990: 239 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamagata Pref.: Tachiyazawa, Higashitagawa).

▲ **DISTRIBUTION:** Japan.

**microcephalum** Motschulsky, 1860: 543 (*Anthobium*; Type locality: Alpes du Caucase; [**Note:** See lectotype designation by Zanetti, 1993]).

- Hochhuth, 1862: 108 (*Anthobium*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 216, 249 (*Eusphalerum*; characters; lectotype designation; catalog; Caucasus).

▲ **DISTRIBUTION:** Caucasus.

*pilosellum* Luze, 1910: 229 (*Anthobium*; Type locality: Kaukasus occid., Chag.; [**Note:** See lectotype designation by Zanetti, 1993]).

- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 249 (*Eusphalerum*; lectotype designation; synonym of *microcephalum*).

**minskae** Hatch, 1944: 104 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Wash.: Olympic Hot Springs).

- Hatch, 1957: 83 (*Eusphalerum*; subgenus *Onibathum*; characters; Washington; Oregon).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

- minutum** Fabricius, 1792: 254 (*Silpha*; Type locality: Germania).
- Olivier, 1811: 478 (*Omalium*; synonym of *ranunculi*).
  - Erichson, 1839a: 638 (*Anthobium*; characters; Germany).
  - Stephens, 1839: 425 (*Anthobium*; characters; England).
  - Erichson, 1840: 896 (*Anthobium*; characters; Europe).
  - Redtenbacher, 1849: 755 (*Anthobium*; characters; Austria).
  - Hardy, 1851: 63 (*Anthobium*; notes; England).
  - Rosenhauer, 1856: 86 (*Anthobium*; Yunquera).
  - Fairmaire and Laboulbène, 1856: 648 (*Anthobium*; characters; France).
  - Redtenbacher, 1857: 256 (*Anthobium*; characters; Austria).
  - Kraatz, 1857d: 1010 (*Anthobium*; characters; Germany).
  - Thomson, 1859: 50 (type species of *Anthobium*).
  - Thomson, 1861: 202 (*Anthobium*; characters; Scandinavia).
  - Fauvel, 1865a: 319 [= 1865b: 69] (*Anthobium*; habitat; France).
  - Fauvel, 1871a: 70 [= 1872: 44] (*Eusphalerum*; characters; France).
  - Redtenbacher, 1874: 280 (*Anthobium*; characters; Austria).
  - Fauvel, 1876a: 48 [= 1876: 233] (*Anthobium*; characters in key).
  - Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).
  - J. Sahlberg, 1876: 215 (*Anthobium*; Finland).
  - Mulsant and Rey, 1880: 305 (*Anthobium*; characters; France).
  - Sharp, 1889: 476 (*Anthobium*; Japan).
  - Fowler, 1888: 425 (*Anthobium*; characters; Britain).
  - Ganglbauer, 1895: 749 (*Anthobium*; subgenus *Eusphalerum*; characters; Europe).
  - Fauvel, 1902b: 51 (*Anthobium*; Morocco).
  - Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
  - Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
  - Johansen, 1914: 623 (*Anthobium*; characters; Denmark).
  - Portevin, 1929: 452 (*Anthobium*; characters; France).
  - Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
  - West, 1937: 47 (*Anthobium*; Faroe Islands).
  - L. Benick, 1943b: 601 (*Anthobium*; characters).
  - Palm, 1948: 60 (*Anthobium*; characters; Sweden; Denmark; Norway; Finland).
  - Freude, 1957: 110 (*Anthobium*; Germany).
  - Coiffait, 1959c: 232 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Massif Central).
  - Horion, 1963: 47 (*Anthobium*; subgenus *Eusphalerum*; Siberia; Iberian Peninsula; Italy; Sicily; Bosnia; Macedonia; Bulgaria; Germany; Austria).
  - Lohse, 1964: 35 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
  - Smetana, 1964d: 52 (*Anthobium*; subgenus *Eusphalerum*; Czechoslovakia).
  - Szujewski, 1968a: 710 (*Eusphalerum*; Poland).
  - Steel, 1970a: 9 (*Eusphalerum*; biological notes).
  - Pope, 1977: 23 (*Eusphalerum*; Britain).
  - Araujo, 1978: 230 (*Eusphalerum*; defensive glands).
  - Hammond, 1980: 137 (*Eusphalerum*; Ireland).
  - Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
  - Tóth, 1982: 45 (*Eusphalerum*; characters; Hungary).
  - Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
  - Zanetti, 1984: 76 (*Eusphalerum*; Bulgaria).
  - Dajoz, 1985: 61 (*Eusphalerum*; defensive glands).
  - Zanetti, 1987: 117 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
  - Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
  - Zanetti, 1991a: 29 (*Eusphalerum*; North African records may be erroneous).
  - Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
  - Zanetti, 1993: 225, 254 (*Eusphalerum*; characters; catalog; Caucasus).
  - Welch, 1993: 227 (*Eusphalerum*; ovariole number and ovary structure).
  - Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).

- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- Owen, 1997a: 148 (*Eusphalerum*; collecting sites; Ireland).
- ▲ **DISTRIBUTION:** Europe, Faroe Islands.
- ranunculi* Gravenhorst, 1802: 118 (*Omalium*; Type locality: not cited, but presumably Brunsvigae).
- Latreille, 1804: 373 (*Omalium*; characters; Germany).
- Gravenhorst, 1806: 215 (*Omalium*).
- Gyllenhal, 1810: 204 (*Omalium*; characters).
- Olivier, 1811: 478 (*Omalium*; characters).
- Gyllenhal, 1827: 464 (*Omalium*).
- C. Sahlberg, 1827: 279 (*Omalium*; characters; Finland).
- Zetterstedt, 1828: 50 (*Omalium*; characters; Lapland).
- Curtis, 1829: 28 (*Anthobium*; catalog; Britain).
- Mannerheim, 1830: 52 (*Omalium*; Finland; Sweden).
- Mannerheim, 1831: 466 (*Omalium*; Finland; Sweden).
- Stephens, 1834: 337 (*Anthobium*; characters; England).
- Runde, 1835: 22 (*Omalium*; characters; Germany).
- Lacordaire, 1835: 489 (*Omalium*; characters; France).
- Zetterstedt, 1838: 50 (*Omalium*; characters; habitat; Lapland; Sweden).
- Erichson, 1839a: 638 (*Anthobium*; synonym of *minutum*).
- Erichson, 1840: 896 (*Anthobium*; synonym of *minutum*).
- Redtenbacher, 1849: 755 (*Anthobium*; synonym of *minutum*).
- Kraatz, 1857d: 1010 (*Anthobium*; synonym of *minutum*).
- Thomson, 1861: 202 (*Anthobium*; synonym of *minutum*).
- J. Sahlberg, 1876: 215 (*Anthobium*; synonym of *minutum*).
- Mulsant and Rey, 1880: 306 (*Anthobium*; synonym of *minutum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *minutum*).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- picipenne* Stephens, 1834: 337 (*Anthobium*; Type locality: Norfolk; Yorkshire).
- Stephens, 1839: 425 (*Anthobium*; variety of *minutum*; characters; England).
- Hardy, 1851: 63 (*Anthobium*; synonym of *minutum*).
- C. Waterhouse, 1858: 32 (*Anthobium*; synonym of *minutum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *minutum*).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- paludosum* Heer, 1839: 179 (*Omalium*; Type locality: Genf; Bern).
- Heer, 1841: 568 (*Omalium*; Switzerland).
- Fairmaire and Laboulbène, 1856: 648 (*Anthobium*; synonym of *minutum*).
- Kraatz, 1857d: 1010 (*Anthobium*; synonym of *minutum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *minutum*).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- Zanetti, 1987: 117 (*Eusphalerum*; synonym of *minutum*).
- appendiculatum* Heer, 1839: 181 (*Omalium*; Type locality: monte Jura).
- Fauvel, 1876a: 48 [= 1876: 233] (*Anthobium*; synonym of *minutum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *minutum*).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- Zanetti, 1987: 117 (*Eusphalerum*; synonym of *minutum*).
- brevicolle* Heer, 1841: 568 (*Omalium*; Type locality: Nufenen, 5000').
- Fauvel, 1871a: 70 [= 1872: 44] (*Eusphalerum*; synonym of *minutum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *minutum*).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- Zanetti, 1987: 117 (*Eusphalerum*; synonym of *minutum*).
- puncticolle* Gredler, 1863: 125 (*Anthobium*; Type locality: Umgebung von Bozen: auf der Mendel; bei Senale im Nonsberg; bei Rappesbühel unweit Klobenstein).
- Redtenbacher, 1874: 281 (*Anthobium*; characters).
- Ganglbauer, 1895: 749 (*Anthobium*; variety of *minutum*).



- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *minutum*).
- Scheerpeltz, 1933: 1035 (*Anthobium*; aberration of *minutum*).
- Tóth, 1982: 45 (*Eusphalerum*; aberration of *puncticolle*; characters; Hungary).
- Zanetti, 1987: 117 (*Eusphalerum*; synonym of *minutum*).

*sinuatocolle* Lokay, 1919: 21 (*Anthobium*; variety of *minutum*; Type locality: Serbia).

- Scheerpeltz, 1933: 1035 (*Anthobium*; variety of *minutum*).

**miricolle** Sainte-Claire Deville, 1901: 1 (*Anthobium*; Type locality: Mont Mounier, Alpes Maritimes, 2750 m).

- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Portevin, 1929: 453 (*Anthobium*; characters; France).
- Jarrige, 1946a: 111 (*Anthobium*; France).
- Coiffait, 1959c: 232 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alpes).
- Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Zanetti, 1987: 123 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy.

**mocsarskii** Bernhauer, 1913a: 219 (*Anthobium*; Type locality: Thian-S. Musart; [**Note:** See lectotype designation by Zanetti, 1991]. Originally cited from Thian-Schan; Musart, Provinz Kuliab [Aksou-Tal], Naryn-Kol und Tekestal).

- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Zanetti, 1991: 298 (*Eusphalerum*; lectotype designation: Thian-S. Musart; characters; central Asia).

▲ **DISTRIBUTION:** China, Kazakhstan, Kyrgyzstan.

*montanum* Erichson, 1840, see: *alpinum* Heer, 1839.

**montivagum** Heer, 1839: 184 (*Omalium*; Type locality: in monte Jura).

- Hardy, 1851: 63 (*Anthobium*; synonym of *torquatium*).
- Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; characters; France).
- Kraatz, 1857d: 1017 (*Anthobium*; synonym of *scutellare*).
- Fauvel, 1871a: 67 [= 1872: 41] (*Eusphalerum*; synonym of *torquatium*).
- Mulsant and Rey, 1880: 329 (*Anthobium*; synonym of *scutellare*).
- Mulsant and Rey, 1880: 370 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 41 cited *sparsum* Rey as a synonym of *montivagum*; Mulsant and Rey did not describe the species as new, they attributed it to Fauvel]; characters; France).
- Mulsant and Rey, 1880: 373 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 41 cited *macropterum* Rey as a synonym of *montivagum*; Mulsant and Rey did not describe the species as new, they attributed it to Kraatz]; characters; France).
- Ganglbauer, 1895: 755 (*Anthobium*; characters; Europe).
- Reitter, 1909: 197 (*Anthobium*; characters; Germany).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Coiffait, 1959c: 227 (*Eusphalerum*; subgenus *Abinothum*; characters; Alps; Jura).
- Horion, 1963: 34 (*Anthobium*; Belgium; France; Luxembourg; Switzerland; Italy; Germany; Austria).
- Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Zanetti, 1982: 112 (*Eusphalerum*; characters; Italy).
- Tóth, 1982: 38 (*Eusphalerum*; characters).
- Zanetti, 1987: 106 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Austria; France; Benelux).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Luxembourg, Belgium, France, Germany, Italy, Austria, Switzerland.

*sordidulum* Kraatz, 1857d: 1013 (*Anthobium*; Type locality: Bonn).

- Redtenbacher, 1857: 995 (*Anthobium*; characters; Austria).
- Fauvel, 1871a: 74 [= 1872: 48] (*Eusphalerum*; characters; France; Belgium).

- Redtenbacher, 1874: 280 (*Anthobium*; characters).
- Mulsant and Rey, 1880: 363 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 755 (*Anthobium*; synonym of *montivagum*).
- Xamheu, 1900: 14 (*Anthobium*; larval characters).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; synonym of *montivagum*).
- Portevin, 1929: 455 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1035 (*Anthobium*; synonym of *montivagum*).
- Zanetti, 1987: 106 (*Eusphalerum*; synonym of *montivagum*).
- levasseuri* Coiffait, 1959c: 227 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *montivagum*; Type locality: Basses-Alpes, Cousson).
- Zanetti, 1987: 106 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *montivagum*; characters; Italy).
- chobauti* Coiffait, 1959c: 227 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *montivagum*; Type locality: Sainte-Baume).
- Zanetti, 1987: 106 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *montivagum*; characters; Italy).
- vesubianum* Coiffait, 1959c: 227 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *montivagum*; Type locality: Sainte-Martin-Vésubie).
- Zanetti, 1987: 106 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *montivagum*; characters; Italy).
- Zanetti, 1995: 6 (*Eusphalerum*; subspecies of *montivagum*; Italy).
- lombardum* Coiffait, 1959c: 227 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *montivagum*; Type locality: Alpes de Lombardie: Monte Lesina, 1500 m).
- Zanetti, 1982: 115 (*Eusphalerum*; synonym of *montivagum vesubianum*).
- Zanetti, 1987: 106 (*Eusphalerum*; synonym of *montivagum vesubianum*).
- morator** Zanetti, 1986: 90 (*Eusphalerum*; Type locality: Pereto, L'Aquila).
- Zanetti, 1987: 121 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- ▲ **DISTRIBUTION:** Italy.
- mucronatum* Stephens, 1834, see: *torquatum* Marsham, 1802.
- nepalense** Scheerpeltz, 1976: 4 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Nepal: Basislager Yaral bei Pangpoche, 3900 m).
- Scheerpeltz, 1976a: 78, 100 (*Anthobium*; subgenus *Eusphalerum*; characters; Nepal).
- Herman, 2001: 13 (*Eusphalerum*).
- ▲ **DISTRIBUTION:** Nepal.
- nigerrimum** Casey, 1894: 427 (*Anthobium*; Type locality: Southern California).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).
- ▲ **DISTRIBUTION:** USA.
- nigriceps** Fauvel, 1871a: 67 [= 1872: 41] (*Eusphalerum*; Type locality: Corse).
- Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; characters).
- Mulsant and Rey, 1880: 362 (*Anthobium*; characters; Corsica).
- Sainte-Claire Deville, 1906: 68 (*Anthobium*; Corsica).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Portevin, 1929: 453 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Coiffait, 1959c: 219 (*Eusphalerum*; subgenus *Abinothum*; characters; Corsica).
- Zanetti, 1982: 112 (*Eusphalerum*; characters; Corsica).
- Zanetti, 1987: 105 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Corsica).
- ▲ **DISTRIBUTION:** Corsica.
- nigricolle* Stephens, 1834, see: *primulae* Stephens, 1834.
- nigriventre* Stephens, 1834, see: *torquatum* Marsham, 1802.

*nigriventre* Motschulsky, 1860, see: *subsolanum* Herman, 2001.

*nigrum* Erichson, 1840, see: *atrum* Heer, 1839.

**nitidicolle** Baudi, 1857: 114 (*Anthobium*; Type locality: alpium Pedomontii regiones; [**Note:** See lectotype designation by Zanetti, 1986]).

- Fauvel, 1871a: 72 [= 1872: 46] (*Eusphalerum*; characters; France; Italy; Austria).
- Ganglbauer, 1895: 749 (*Anthobium*; subgenus *Eusphalerum*; characters; Alps).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Portevin, 1929: 453 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Freude, 1957: 111 (*Anthobium*; notes; Germany).
- Coiffait, 1959c: 237 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italian Alps).
- Horion, 1963: 49 (*Anthobium*; subgenus *Eusphalerum*; Switzerland; France; Italy; Slovenia; Germany; Austria).
- Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Zanetti, 1982: 148 (*Eusphalerum*; clinal variation).
- Zanetti, 1986: 96 (*Eusphalerum*; lectotype designation).
- Zanetti, 1987: 151 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Austria).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Switzerland, Germany, Austria, Italy, Slovenia.

*corpulentum* Bernhauer, 1913a: 220 (*Anthobium*; variety of *nitidicolle*; Type locality: Ennstal [Bodenwies], Umgebung Steyrs).

- Scheerpeltz, 1933: 1035 (*Anthobium*; variety of *nitidicolle*).

**nitidifrons** Luze, 1910: 237 (*Anthobium*; Type locality: Turkestan, Vernyi; [**Note:** See lectotype designation by Zanetti, 1991]).

- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Semiretsh'e).
- Zanetti, 1991: 300 (*Eusphalerum*; lectotype designation; characters; Turkestan; Kazakhstan).

▲ **DISTRIBUTION:** Kazakhstan.

*nivale* Heer, 1841, see: *anale* Erichson, 1840.

*nudum* Luze, 1910, see: *transcausicum* Bernhauer, 1902.

**nuristanicum** Scheerpeltz, 1961b: 35 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Ost-Afghanistan: Umgebung von Wama, Nuristan, 1400 m).

- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; Afghanistan).

▲ **DISTRIBUTION:** Afghanistan.

*nuristanicum* Coiffait, 1982, see: *afghanicum* Herman, 2001.

*obenbergeri* Zanetti, 1982, see: *alpinum* Heer, 1839.

*obliquum* Mulsant and Rey, 1861, see: *rhododendri* Baudi, 1848.

**oblitum** Fairmaire and Laboulbène, 1856: 648 (*Anthobium*; Type locality: H.-Pyr.; Belgique).

- Kraatz, 1857d: 1004 (*Eusphalerum*).
- Fauvel, 1871a: 66 [= 1872: 40] (*Eusphalerum*; characters; France; Italy).
- Mulsant and Rey, 1880: 303 (*Anthobium*; characters; France).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- C. Koch, 1938: 136 (*Anthobium*; Italy).
- Coiffait, 1959c: 238 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Pyrenees [**Note:** Specimens from Italy are *cerrutii* according to Zanetti, 1982: 133]).

▲ **DISTRIBUTION:** France.

*bigerricum* Coiffait, 1959c: 238 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *oblitum*; Type locality: Hautes-Pyrénées, région de Saint-Péde-Bigorre à basse altitude).

*mendax* Coiffait, 1959c: 238, 246 (*Eusphalerum*; subgenus *Eusphalerum*; aberration of *oblitum*; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Hautes-Pyrénées, région de Saint-Péde-Bigorre à basse altitude).

*obscurillum* Luze, 1911 [Note: **Nomen nudum**], see: *tempestivum* Erichson, 1840.

**obscuriceps** Zanetti, 1998: 126 (*Eusphalerum*; Type locality: Taiwan: Nantou Hsien: Houhuanshan Kuenyang, 3050 m).

▲ **DISTRIBUTION:** Taiwan.

*obscurum* Brisout, 1866, see: *scribae* Schaufuss, 1862.

**obsoletum** Erichson, 1840: 892 (*Anthobium*; Type locality: Lusitania).

— Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).

— Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).

— C. Koch, 1940: 372 (*Anthobium*; Spain).

— Zanetti, 1991a: 26 (*Eusphalerum*; characters; notes; Morocco; Portugal; Spain).

▲ **DISTRIBUTION:** Portugal, Spain, Morocco.

**obtusicolle** Fauvel, 1876a: 48 [= 1876: 233] (*Anthobium*; Type locality: Gap; Var, St. Maximin; Nice; Carcassonne; Espagne).

— Mulsant and Rey, 1880: 308 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 749 (*Anthobium*; subgenus *Eusphalerum*; characters; French Alps; Spain).

— Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).

— Portevin, 1929: 452 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).

— Coiffait, 1959c: 235 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alps; Massif Central; Pyrenees).

— Lohse, 1964: 35 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Zanetti, 1987: 118 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Lucht, 1987: 86 (*Eusphalerum*; checklist; Austria).

▲ **DISTRIBUTION:** France, Spain, Italy, Austria.

**occidentale** Coiffait, 1959c: 234 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Basses-Pyrénées: les forges d'Abel).

▲ **DISTRIBUTION:** France.

**octavii** Fauvel, 1871: 18 (*Anthobium*; Type locality: Hautes et Basses-Alpes).

— Fauvel, 1871a: 65 [= 1872: 39] (*Eusphalerum*; characters; France).

— Mulsant and Rey, 1880: 319 (*Anthobium*; characters; France).

— Ganglbauer, 1895: 751 (*Anthobium*; subgenus *Eusphalerum*; characters; western Alps).

— Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).

— Portevin, 1929: 451 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).

— Coiffait, 1959c: 241 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alps).

— Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Zanetti, 1980b: 23 (*Eusphalerum*; notes; Italy).

— Zanetti, 1981: 210 (*Eusphalerum*; characters).

— Zanetti, 1987: 139 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Lucht, 1987: 86 (*Eusphalerum*).

— Lohse and Lucht, 1989: 124 (*Eusphalerum*; characters).

— Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy.

*apenninum* C. Koch, 1938a: 320 (*Anthobium*; subgenus *Eusphalerum*; subspecies of *octavii*; Type locality: Appennino toscano ed emiliano).

— Zanetti, 1980b: 624 (*Eusphalerum*; synonym of *octavii*).

— Zanetti, 1987: 139 (*Eusphalerum*; synonym of *octavii*).

**okutamaense** Watanabe, 1990: 195 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Tokyo Pref.: Mizunozawa, Okutama).

▲ **DISTRIBUTION:** Japan.

*ophthalmicum* Paykull, 1800, see: *luteum* Marsham, 1802.

**orientale** Bernhauer, 1912i: 678 (*Anthobium*; Type locality: New Hampshire; Massachusetts).

- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Hatch, 1944: 101 (*Anthobium*; subgenus *Eusphalerum*; notes; Washington).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

**osellai** Zanetti, 1993: 219, 236, 257 (*Eusphalerum*; Type locality: Turchia - vil. Bolu Abant Gölü 1400–1600 m).

▲ **DISTRIBUTION:** Turkey.

**pallens** Heer, 1841: 570 (*Omalium*; Type locality: alp. Manigorio).

- Kraatz, 1857d: 1016 (*Anthobium*; synonym of *puberulum*).
- Fauvel, 1871a: 77 [= 1872: 51] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy; Austria).
- Mulsant and Rey, 1880: 381 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 753 (*Anthobium*; characters; Alps; Sudeten).
- Reitter, 1909: 197 (*Anthobium*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Portevin, 1929: 455 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Freude, 1957: 106 (*Anthobium*; Germany).
- Coiffait, 1959c: 224 (*Eusphalerum*; subgenus *Abinothum*; characters; Alps).
- Horion, 1963: 38 (*Anthobium*; Italy; Germany; Austria; Italy; Switzerland; France; Slovenia; Croatia).
- Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Zanetti, 1980b: 623 (*Eusphalerum*; Italy).
- Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive gland).
- Tóth, 1982: 37 (*Eusphalerum*; characters; Hungary).
- Zanetti, 1987: 93 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Austria; Switzerland).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothum*; Czech Republic ?; Slovakia ?).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Italy, Austria, Hungary, Croatia, Slovenia.

*puberulum* Märkel and Kiesenwetter, 1848a: 328 (*Anthophagus*; Type locality: Alpen oberhalb Bucheben nach Gastein).

- Fairmaire and Laboulbène, 1856: 651 (*Anthobium*; characters; France).
- Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1016 (*Anthobium*; characters; Germany).
- Fauvel, 1865a: 320 [= 1865b: 70] (*Anthobium*; habitat; France).
- Fauvel, 1871a: 77 [= 1872: 51] (*Eusphalerum*; synonym of *pallens*).
- Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
- Mulsant and Rey, 1880: 382 (*Anthobium*; synonym of *pallens*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *pallens*).
- Scheerpeltz, 1933: 1036 (*Anthobium*; synonym of *pallens*).
- Zanetti, 1987: 93 (*Eusphalerum*; synonym of *pallens*).

*carnicum* Coiffait, 1959c: 224 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *pallens*; Type locality: Alpes carniques).

- Zanetti, 1982: 108 (*Eusphalerum*; synonym of *pallens*).
- Zanetti, 1987: 93 (*Eusphalerum*; synonym of *pallens*).

*pallidum* Gravenhorst, 1806, see: *luteum* Marsham, 1802.

**palligerum** Kiesenwetter, 1847: 78 note (*Anthobium*; Type locality: Krainer Alpen).

- Erichson, 1840: 899, note (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 42 cited *longipenne* variety Erichson as a synonym of *palligerum*; there is no available name]; characters).
- Baudi, 1857: 115 (*Anthobium*; Italy).
- Kraatz, 1857d: 1014 (*Anthobium*; characters; Alps).
- Fauvel, 1865a: 320 [= 1865b: 70] (*Anthobium*; habitat; France).
- Baudi, 1870: 404 (*Anthobium*; Italy).
- Redtenbacher, 1874: 281 (*Anthobium*; characters).
- Mulsant and Rey, 1880: 376 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 754 (*Anthobium*; cited as *dissimile*; [**Note:** Misidentified as *palligerum* according to Zanetti, 1982: 117]; characters; Austria; Croatia; Hungary; Bosnia).
- Reitter, 1909: 197 (*Anthobium*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Luze, 1910: 227 (*Anthobium*; notes).
- Portevin, 1929: 455 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Freude, 1957: 106 (*Anthobium*; Germany).
- Coiffait, 1959c: 230 (*Eusphalerum*; subgenus *Abinothum*; [**Note:** Misidentified as *longipenne* according to Zanetti, 1982: 119]; characters; Alps).
- Horion, 1963: 34 (*Anthobium*; Balkans; Romania; France; Italy; Switzerland; Carniola; Croatia; Bosnia Hercegovina; Macedonia; Hungary; Germany; Austria).
- Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Zanetti, 1982: 119 (*Eusphalerum*; characters; Italy).
- Tóth, 1982: 38 (*Eusphalerum*; characters).
- Zanetti, 1987: 104, 463 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Austria; Switzerland).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Europe.

**sparsum** Fauvel, 1876a: 49 [= 1876: 234] (*Anthobium*; Type locality: Valais, Saas; Grande Chartreuse; Mont Viso [Monte Viso]; Apennins de Ligurie).

- Mulsant and Rey, 1880: 373 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 43 cited *macropterum* Rey as a synonym of *sparsum*; Mulsant and Rey did not describe the species as new, they attributed it to Kraatz]; characters; France).
- Ganglbauer, 1895: 753 (*Anthobium*; characters; western Alps; Apennines).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Portevin, 1929: 455 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).
- Coiffait, 1959c: 224 (*Eusphalerum*; subgenus *Abinothum*; characters).
- Horion, 1963: 35 (*Anthobium*; Alps; France; Italy; Switzerland; Austria).
- Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Zanetti, 1982: 119 (*Eusphalerum*; synonym of *palligerum*).
- Tóth, 1982: 37 (*Eusphalerum*; characters).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Austria; Switzerland).
- Zanetti, 1987: 104 (*Eusphalerum*; synonym of *palligerum*).
- Lohse and Lucht, 1989: 123 (*Eusphalerum*; synonym of *palligerum*).

**paludosum** Heer, 1839, see: *minutum* Fabricius, 1792.

**parallellum** Sharp, 1889: 476 (*Anthobium*; Type locality: Miyanoshta).

- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Nakane, 1963a: 82 (*Anthobium*; characters; habitus photograph; Japan).
- Watanabe, 1990: 234 (*Eusphalerum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*paramerum* Coiffait, 1976, see: *foveolatum* Luze, 1910.

**parareitteri** Zanetti, 1998: 130 (*Eusphalerum*; Type locality: Taiwan: Pingtung Hsien: Peitawushan, above Kuaiku Hut, 2680 m).

▲ **DISTRIBUTION:** Taiwan.

**parnassicum** Bernhauer, 1910a: 71 (*Anthobium*; Type locality: Parnass, Griechenland).

— Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).

— Zanetti, 1992: 352 (*Eusphalerum*; aedeagal illustration).

▲ **DISTRIBUTION:** Greece.

**parvulum** Scheerpeltz, 1976a: 96 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Nepal: Ting-Sang-La, 3800 m).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Nepal.

*paternum* Zanetti, 1982, see: *limbatum* Erichson, 1840.

**paucisetulosum** Zanetti, 1998: 142 (*Eusphalerum*; Type locality: Taiwan: Nantou Hsien: Nenkaoshan, Tenchi Hut, 2900 m).

▲ **DISTRIBUTION:** Taiwan.

**pectorale** Luze, 1910: 239 (*Anthobium*; Type locality: Kaukasus, Abago).

— Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).

— Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).

— Zanetti, 1993: 253 (*Eusphalerum*; catalog; Caucasus).

▲ **DISTRIBUTION:** Caucasus.

**petzi** Bernhauer, 1910a: 71 (*Anthobium*; Type locality: oberösterreichische Voralpen, Bodenwies).

— Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).

— Horion, 1963: 52 (*Anthobium*; subgenus *Eusphalerum*; Austria).

— Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Zanetti, 1981: 210 (*Eusphalerum*; characters).

— Zanetti, 1987: 142 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Austria; Slovenia; species may not occur in Italy).

— Lucht, 1987: 86 (*Eusphalerum*; Germany; Poland; Austria).

— Lohse and Lucht, 1989: 124 (*Eusphalerum*; characters).

— Burakowski, Mroczkowski, and Stefańska, 2000: 40 (*Eusphalerum*; subgenus *Eusphalerum*; catalog; Poland).

▲ **DISTRIBUTION:** Austria, Slovenia.

*uncipes* C. Koch, 1938a: 320 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Karnica nella Selva di Tarnova, Venezia Giulia).

— Zanetti, 1981: 212 (*Eusphalerum*; synonym of *petzi*).

— Zanetti, 1987: 142 (*Eusphalerum*; synonym of *petzi*).

— Lohse and Lucht, 1989: 124 (*Eusphalerum*; synonym of *petzi*).

**petzianum** Bernhauer, 1929g: 177 (*Anthobium*; Type locality: Schoberstein, 1278 m, in der Nähe der Stadt Steyr in Oberösterreich in der oberen Bergregion).

— Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).

— Freude, 1957: 113 (*Anthobium*; Germany).

— Horion, 1963: 49 (*Anthobium*; subgenus *Eusphalerum*; Switzerland; France; Italy; Germany; Austria).

— Lohse, 1964: 35 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Zanetti, 1987: 118 (*Eusphalerum*; probably synonym of *minutum*).

— Lucht, 1987: 86 (*Eusphalerum*; checklist; Austria).

▲ **DISTRIBUTION:** Austria.

**pfefferi** Roubal, 1941: 59 (*Anthobium*; Type locality: Graecia: Hypati).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** Greece.

*picipenne* Stephens, 1834, see: *minutum* Fabricius, 1792.

*pilosellum* Luze, 1910, see: *microcephalum* Motschulsky, 1860.

**pollens** Sharp, 1889: 476 (*Anthobium*; Type locality: Kiga; Suyana).

- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Nakane, 1963a: 82 (*Anthobium*; characters; habitus photograph; Japan).
- Watanabe and Shibata, 1972: 60 (*Eusphalerum*; Yaku-shima Island).
- Watanabe, 1990: 187 (*Eusphalerum*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**poroshiriense** Watanabe, 1990: 206 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Hokkaido: Mt. Poroshiri-dake, Hidaka).

▲ **DISTRIBUTION:** Japan.

**pothos** Mannerheim, 1843b: 235 (*Anthobium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 203 [= 1878e: 39] (*Anthobium*; characters; Alaska; Lake Superior; Oregon; New Hampshire; Pennsylvania).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Van Dyke, 1924: 15 (*Anthobium*; Alaska).
- Fall, 1926: 145 (*Anthobium*; Alaska).
- Hatch, 1957: 82 (*Eusphalerum*; characters; British Columbia; Idaho; Washington; Oregon).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).
- Levesque and Levesque, 1996: 290 (*Eusphalerum*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 439 (*Eusphalerum*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

*dimidiatum* Melsheimer, 1844: 43 (*Anthobium*; Type locality: Pennsylvania).

- LeConte, 1850: 221 (*Anthobium*; Lake Superior).
- Fauvel, 1878d: 203 [= 1878e: 39] (*Anthobium*; synonym of *pothos*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *pothos*).
- Moore and Legner, 1975: 191 (*Eusphalerum*; synonym of *pothos*).

**primulae** Stephens, 1834: 356 (*Omalium*; Type locality: London).

- Lacordaire, 1835: 472 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 42 cited *florale* Lacordaire as a synonym of *primulae* Stephens; Lacordaire did not describe the species as new, he attributed it to Fabricius who attributed it to Paykull]; characters; France).
- Stephens, 1839: 430 (*Omalium*; characters; England).
- Hardy, 1851: 62 (*Anthobium*; synonym of *triviale*).
- Fauvel, 1871a: 65 [= 1872: 39] (*Eusphalerum*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Austria).
- Seidlitz, 1875: 236 (*Eusphalerum*; characters; Baltic region).
- Fowler, 1888: 424 (*Eusphalerum*; characters; Britain).
- Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; middle Europe).
- Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Johansen, 1914: 622 (*Anthobium*; subgenus *Eusphalerum*; characters; Denmark).
- Portevin, 1929: 451 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Palm, 1948: 61 (*Anthobium*; characters).
- Coiffait, 1959c: 243 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
- Horion, 1963: 48 (*Anthobium*; subgenus *Eusphalerum*; Britain; Denmark; Holland; Belgium; France; Switzerland; Italy; Bosnia; Macedonia; Romania; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Pope, 1977: 23 (*Eusphalerum*; Britain).
- Hammond, 1980: 137 (*Eusphalerum*; needs confirmation in Ireland).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Eusphalerum*; [**Note:** Klinger cited *primulae* as the type species of *Eusphalerum* but it was not one of the originally included species]; characters of abdominal defensive gland).



- Zanetti, 1981: 210 (*Eusphalerum*; characters).
- Tóth, 1982: 44 (*Eusphalerum*; characters; Hungary).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
- Zanetti, 1987: 150 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
- Lohse and Lucht, 1989: 124 (*Eusphalerum*; characters).
- Zanetti, 1993: 224, 260 (*Eusphalerum*; characters; catalog; Caucasus, Turkey, Europe).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Europe, Turkey, Caucasus.

*nigricolle* Stephens, 1834: 357 (*Omalium*; Type locality: London; Suffolk).

- Stephens, 1839: 428 (*Omalium*; characters; England).
- C. Waterhouse, 1858: 32 (*Eusphalerum*; synonym of *primulae*).
- Ganglbauer, 1895: 750 (*Anthobium*; synonym of *primulae*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *primulae*).

*triviale* Erichson, 1839a: 639 (*Anthobium*; Type locality: Berlin; England).

- Erichson, 1840: 892 (*Anthobium*; characters; Germany; France; England).
- Redtenbacher, 1849: 755 (*Anthobium*; characters; Austria).
- Hardy, 1851: 61 (*Anthobium*; characters; notes; England).
- Fairmaire and Laboulbène, 1856: 648 (*Anthobium*; characters; France).
- Redtenbacher, 1857: 256 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1004 (*Eusphalerum*; characters; Germany).
- C. Waterhouse, 1858: 32 (*Eusphalerum*; synonym of *primulae*).
- Fauvel, 1871a: 65 [= 1872: 39] (*Eusphalerum*; synonym of *primulae*).
- Mulsant and Rey, 1880: 313 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 750 (*Anthobium*; synonym of *primulae*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *primulae*).
- Scheerpeltz, 1933: 1036 (*Anthobium*; synonym of *primulae*).
- Zanetti, 1987: 150 (*Eusphalerum*; synonym of *primulae*).

*cribrosum* Heer, 1841: 568 (*Omalium*; Type locality: Jura).

- Fauvel, 1871a: 66 [= 1872: 40] (*Eusphalerum*; synonym of *primulae*).
- Mulsant and Rey, 1880: 313 (*Anthobium*; synonym of *triviale*).
- Ganglbauer, 1895: 750 (*Anthobium*; synonym of *primulae*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *primulae*).
- Zanetti, 1987: 150 (*Eusphalerum*; synonym of *primulae*).

*rufipenne* Gerhardt, 1910: 555 (*Anthobium*; aberration of *primulae*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Kaltwasser, Kr. Lüben).

- Scheerpeltz, 1933: 1036 (*Anthobium*; aberration of *primulae*).

**procerum** Baudi, 1857: 114 (*Anthobium*; Type locality: Pedemontio; [**Note: See lectotype designation by Zanetti, 1986**]).

- Fauvel, 1871a: 65 [= 1872: 39] (*Eusphalerum*; characters; France; Italy).
- Mulsant and Rey, 1880: 315 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 751 (*Anthobium*; subgenus *Eusphalerum*; characters; Italian and French Alps).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Portevin, 1929: 451 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Coiffait, 1959c: 243 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alps).
- Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Zanetti, 1981: 210 (*Eusphalerum*; characters).
- Zanetti, 1986: 96 (*Eusphalerum*; lectotype designation).
- Zanetti, 1987: 131 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; in checklist).

- Lohse and Lucht, 1989: 124 (*Eusphalerum*; characters).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Italy].

**pruinorum** Fauvel, 1871: 18 (*Anthobium*; Type locality: Corse).

- Fauvel, 1871a: 68 [= 1872: 42] (*Eusphalerum*; characters; Corsica).
- Sainte-Claire Deville, 1906: 68 (*Anthobium*; Corsica).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Sainte-Claire Deville, 1926: 118 (*Anthobium*; Corsica).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Coiffait, 1959c: 219 (*Eusphalerum*; subgenus *Abinothum*; characters; Corsica).
- Zanetti, 1982: 112 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 105 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 6, 59 (*Eusphalerum*; may not occur in Italy).

▲ **DISTRIBUTION:** France Italy.

*krasae* Roubal, 1940: 281 (*Anthobium*; Type locality: Italia: Vallombrosa).

- Zanetti, 1982: 111 (*Eusphalerum*; synonym of *pruinorum*).
- Zanetti, 1987: 105 (*Eusphalerum*; synonym of *pruinorum*).

**pseudocupariae** E. Strand, 1917: 80 (*Anthobium*; replacement name for *aucupariae* Kiesenwetter).

- Freude, 1957: 113 (*Anthobium*; Germany).
- Horion, 1963: 43 (*Anthobium*; subgenus *Eusphalerum*; France; Belgium; Switzerland; Austria; Czech Republic; Slovakia; Russia; Germany).
- Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Smetana, 1964d: 52 (*Anthobium*; subgenus *Eusphalerum*; Czechoslovakia).
- Zanetti, 1981: 210 (*Eusphalerum*; characters).
- Tóth, 1982: 43 (*Eusphalerum*; characters; Hungary).
- Zanetti, 1987: 141 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux).
- Schülke and Uhlig, 1988: 2 (*Eusphalerum*; notes; Germany).
- Haghebaert, Bruge, and Drugmand, 1990: 35 (*Eusphalerum*; Belgium).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).

▲ **DISTRIBUTION:** Europe.

*aucupariae* Kiesenwetter, 1866: 288 (*Anthobium*; [**preoccupied**]; Type locality: Altvater-Gebirge, Karlsbrunn).

- Fauvel, 1871a: 66 [= 1872: 40] (*Eusphalerum*; characters; France; Germany).
- Redtenbacher, 1874: 281 (*Anthobium*; characters).
- Mulsant and Rey, 1880: 346 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 751 (*Anthobium*; subgenus *Eusphalerum*; characters; Carpathian; Sudeten; Pyrenees).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Portevin, 1929: 453 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).
- Horion, 1935: 176 (*Anthobium*; Germany [**Note:** Today Poland]; Austria).
- Freude, 1957: 113 (*Anthobium*; synonym of *pseudocupariae*).
- Coiffait, 1959c: 240 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
- Lohse, 1964: 33 (*Eusphalerum*; synonym of *pseudocupariae*).
- Zanetti, 1987: 141 (*Eusphalerum*; synonym of *pseudocupariae*).
- Boháč, 1993: 40 (*Eusphalerum*; synonym of *pseudocupariae*).

**pseudoreitteri** Zanetti, 1998: 137 (*Eusphalerum*; Type locality: Taiwan: Nantou Hsien: Houhuanshan Kuenyang, 3050 m).

▲ **DISTRIBUTION:** Taiwan.

*puberulum* Kiesenwetter, 1848, see: *pallens* Heer, 1841.

**pulcherrimum** Bernhauer, 1901b: 654 (*Anthobium*; Type locality: Südtirol).

- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Zanetti, 1982: 107 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 115 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

*pumilio* Rosenhauer, 1856, see: *torquatum* Marsham, 1802.

**punctatum** Casey, 1894: 429 (*Anthobium*; Type locality: California: Santa Cruz Co.).

- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*puncticeps* Luze, 1910, see: *torquatum* Marsham, 1802.

*puncticolle* Gredler, 1863, see: *minutum* Fabricius, 1792.

*punctulatum* Mulsant and Rey, 1880, see: *marshami* Fauvel, 1869.

*ragusae* Bernhauer, 1923, see: *luteum* Marsham, 1802.

*ranunculi* Gravenhorst, 1802, see: *minutum* Fabricius, 1792.

**rectanguloides** Smetana, 1967e: 298 (*Anthobium*; subgenus of *Eusphalerum*; Type locality:

Türkei: Erciyas dag, 2700 m).

- Zanetti, 1993: 219, 255 (*Eusphalerum*; characters; catalog; Turkey).

▲ **DISTRIBUTION:** Turkey.

**rectangulum** Baudi, 1870: 404 (*Anthobium*; [**Note:** Baudi cited this name as “*rectangulum* Fauvel, in litt” so the later description of *rectangulum* by Fauvel may be the same species. Fauvel, 1871a: 78 referred to Baudi’s *rectangulum* as a subsequent reference of *rectangulum* Fauvel]; Type locality: Alpi Grajis maritimi).

- Herman, 2001: 13 (*Eusphalerum*; synonymy).

▲ **DISTRIBUTION:** Europe.

*rectangulum* Fauvel, 1871: 17 (*Anthobium*; [**preoccupied**]; Type locality: Vosges; Alpes françaises; Piémont et Apennins).

- Letzner, 1868: 360 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 42 cited *sorbi* Letzner as a synonym of *rectangulum*; Letzner did not describe the species as new]; characters).
- Fauvel, 1871a: 78 [= 1872: 52] (*Eusphalerum*; [**Note:** Fauvel cited Baudi’s 1869 use of *rectangulum* as a subsequent use of *rectangulum* Fauvel]; characters; France; Italy; Germany).
- Mulsant and Rey, 1880: 338 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 752 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany; France; Alps; Apennines).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Portevin, 1929: 454 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Freude, 1957: 107 (*Anthobium*; Germany).
- Coiffait, 1959c: 247 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
- Raianu, 1963: 85 (*Anthobium*; Romania).
- Horion, 1963: 40 (*Anthobium*; subgenus *Eusphalerum*; Holland; Belgium; France; Switzerland; Italy; Corsica; Sardinia; Sicily; Romania; Czechoslovakia; Germany; Austria).
- Lohse, 1964: 32 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Smetana, 1964d: 52 (*Anthobium*; subgenus *Eusphalerum*; Czechoslovakia).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Eusphalerum*; characters of abdominal defensive gland).
- Tóth, 1982: 41 (*Eusphalerum*; characters; Hungary).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).

- Lucht, 1987: 86 (*Eusphalerum*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Belgium; Netherlands; Luxembourg).
- Zanetti, 1987: 146 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- Herman, 2001: 20 (*Eusphalerum*; synonymic homonym of *rectangulum*).

*rectangulum* Fauvel, 1871, see: *rectangulum* Baudi, 1870.

**reitteri** Bernhauer, 1935a: 39 (*Anthobium*; Type locality: Ostsibirien: Sotka Gora).

- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; northern Siberia; Far East).
- Zanetti, 1993a: 49 (*Eusphalerum*; notes on characters and type locality; Siberia).

▲ **DISTRIBUTION:** Russia.

**retowskii** Bernhauer, 1914e: 33 (*Anthobium*; Type locality: Suchum, Caucasus, Gumista).

- Bernhauer, 1923d: 178 (*Anthobium*; characters; Caucasus).
- Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 217, 225, 247 (*Eusphalerum*; characters; catalog; Caucasus).

▲ **DISTRIBUTION:** Caucasus.

*rhododendri* Motschulsky, 1857, see: *anale* Erichson, 1840.

**rhododendri** Baudi, 1848: 148 (*Anthobium*; Type locality: Alpi Pedemontio; [**Note:** See lectotype designation by Zanetti, 1986]).

- Kraatz, 1857d: 1018 (*Anthobium*; synonym of *sorbi*).
- Fauvel, 1871a: 79 [= 1872: 53] (*Eusphalerum*; characters; France; Switzerland; Italy).
- Mulsant and Rey, 1880: 339 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 752 (*Anthobium*; subgenus *Eusphalerum*; characters; western Alps).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Portevin, 1929: 454 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).
- Freude, 1957: 112 (*Anthobium*; Germany).
- Coiffait, 1959c: 247 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Jura; Alps).
- Horion, 1963: 40 (*Anthobium*; subgenus *Eusphalerum*; France; Italy; Switzerland; Austria; Bosnia; Germany).
- Lohse, 1964: 32, 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Zanetti, 1980b: 623 (*Eusphalerum*; Italy).
- Tóth, 1982: 42 (*Eusphalerum*; characters).
- Zanetti, 1986: 96 (*Eusphalerum*; lectotype designation).
- Zanetti, 1987: 146 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Austria; Switzerland).
- Haghebaert, Bruge, and Drugmand, 1990: 35 (*Eusphalerum*; Belgium).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Belgium, France, Germany, Switzerland, Italy.

*obliquum* Mulsant and Rey, 1861: 184 [= 1862: 168] (*Anthobium*; Type locality: Suisse).

- Fauvel, 1865c: 18 [= 1866: 15] (*Anthobium*; synonym of *rhododendri*).
- Fauvel, 1871a: 79 [= 1872: 53] (*Eusphalerum*; synonym of *rhododendri*).
- Mulsant and Rey, 1880: 340 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 752 (*Anthobium*; synonym of *rhododendri*).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; synonym of *rhododendri*).
- Zanetti, 1987: 146 (*Eusphalerum*; synonym of *rhododendri*).

*bonadonai* Coiffait, 1959c: 247 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Alpes Maritimes: Haute Tinée: Le Pré).

- Zanetti, 1986: 94 (*Eusphalerum*; synonym of *rhododendri*).
- Zanetti, 1987: 146 (*Eusphalerum*; synonym of *rhododendri*).

**rizzottivlachi** Zanetti, 1992: 350 (*Eusphalerum*; Type locality: Tukalska Bjelina, Erzegovina meridionale).

▲ **DISTRIBUTION:** Bosnia Hercegovina.

**robustum** Heer, 1839: 179 (*Omalium*; Type locality: Basel).

- Fairmaire and Laboulbène, 1856: 646 (*Omalium*; characters; France).
- Kraatz, 1857d: 1010 (*Anthobium*; synonym of *excavatum*).
- Fauvel, 1871a: 69 [= 1872: 43] (*Eusphalerum*; characters; France; Germany; Switzerland).
- Mulsant and Rey, 1880: 294 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 749 (*Anthobium*; subgenus *Eusphalerum*; characters; Alps; Pyrenees).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 42 (*Anthobium*; catalog).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).
- Freude, 1957: 112 (*Anthobium*; Germany).
- Coiffait, 1959c: 231 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alps; Pyrenees; Massif Central).
- Horion, 1963: 49 (*Anthobium*; subgenus *Eusphalerum*; France; Switzerland; Italy; Bosnia; Germany; Austria).
- Lohse, 1964: 34 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
- Zanetti, 1987: 120 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Austria; Switzerland; France).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- Assing, Frisch, Kahlen, et al., 1998: 122 (*Eusphalerum*; character; Alps; Black Forest).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Austria, Italy, Bosnia Herzegovina.

**alpestre** Heer, 1839: 178 (*Omalium*; Type locality: Berglialp; Mühlebachalp).

- Fauvel, 1871a: 69 [= 1872: 43] (*Eusphalerum*; synonym of *robustum*).
- Mulsant and Rey, 1880: 295 (*Anthobium*; synonym of *robustum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *robustum*).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *robustum*).

**excavatum** Erichson, 1840: 893 (*Anthobium*; Type locality: Helvetia).

- Heer, 1841: 568 (*Omalium*; synonym of *robustum*).
- Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).
- Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1009 (*Anthobium*; characters; Germany).
- Fauvel, 1871a: 69 [= 1872: 43] (*Eusphalerum*; synonym of *robustum*).
- Redtenbacher, 1874: 280 (*Anthobium*; characters; Austria).
- Mulsant and Rey, 1880: 295 (*Anthobium*; synonym of *robustum*).
- Ganglbauer, 1895: 749 (*Anthobium*; synonym of *robustum*).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *robustum*).
- Scheerpeltz, 1933: 1037 (*Anthobium*; synonym of *robustum*).
- Zanetti, 1987: 120 (*Eusphalerum*; synonym of *robustum*).

**romani** Coiffait, 1964, see: *limbatum* Erichson, 1840.

**ruffoi** Scheerpeltz, 1956: 3 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Gebiet des Mte. Pollino, teils Piani Pollino).

- Zanetti, 1982: 134 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 131 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

**rufipenne** Gerhardt, 1910 [**Note: Nomen nudum**], see: *primulae* Stephens, 1834.

**rufiventre** Cameron, 1930, see: *solitare* Sharp, 1874.

- rufoscutellatum** Eppelsheim, 1881: 508 (*Anthobium*; Type locality: Suramgebirge).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).  
 — Zanetti, 1993: 221, 250 (*Eusphalerum*; characters; catalog; Caucasus).  
 ▲ **DISTRIBUTION:** Georgia.
- gracile* Luze, 1910: 241 (*Anthobium*; Type locality: Kaukasus, Suram).  
 — Scheerpeltz, 1933: 1034 (*Anthobium*; catalog).  
 — Zanetti, 1993: 250 (*Eusphalerum*; synonym of *rufoscutellatum*).
- rufotestaceum** Motschulsky, 1860: 543 (*Anthobium*; Type locality: Alpes du Caucase; [**Note:** See lectotype designation by Zanetti, 1993]).  
 — Hochhuth, 1862: 111 (*Anthobium*; characters; Caucasus).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — Luze, 1910: 228 (*Anthobium*; notes).  
 — Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).  
 — Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Turkey; Caucasus).  
 — Zanetti, 1993: 217, 242 (*Eusphalerum*; characters; lectotype designation; catalog; Caucasus).  
 ▲ **DISTRIBUTION:** Turkey, Caucasus.
- rufulum* Luze, 1910 [**Note: Nomen nudum**], see: *viertli* Ganglbauer, 1895.
- rugulosum** Mäklin, 1853: 199 (*Anthobium*; Type locality: insula Sitkha).  
 — Fauvel, 1878d: 199 [= 1878e: 35] (*Anthobium*; characters; Sitka Island).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** USA.
- ryvkini** Zanetti, 1993: 221, 225, 230, 253 (*Eusphalerum*; Type locality: near Teberda, Hatipara Mt., 1800 m).  
 ▲ **DISTRIBUTION:** Russia.
- sagiri** Watanabe, 1990: 203 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Gunma Pref.: near Kirizumi).  
 ▲ **DISTRIBUTION:** Japan.
- sahlbergi** Luze, 1910: 244 (*Anthobium*; Type locality: Libanon, Monte Baruk).  
 — Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).  
 — Zanetti, 1993: 224, 261 (*Eusphalerum*; cited as *shalbergi*; characters; catalog; Lebanon).  
 ▲ **DISTRIBUTION:** Lebanon.
- saigokuense** Watanabe, 1990: 191 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Hiroshima Pref.: Haigamine).  
 ▲ **DISTRIBUTION:** Japan.
- sanae** Watanabe, 1990: 211 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Shizuoka Pref.: near Abe-tôge).  
 ▲ **DISTRIBUTION:** Japan.
- sareptanum** Eppelsheim, 1878a: 423 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Sarepta; [**Note:** See lectotype designation by Zanetti, 1993]).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — Scheerpeltz, 1933: 1037 (*Anthobium*; aberration of *rufotestaceum*).  
 — Zanetti, 1993: 216, 222, 245 (*Eusphalerum*; lectotype designation; valid species; characters; catalog; Caucasus, Armenia, Turkey).  
 ▲ **DISTRIBUTION:** Armenia, Russia, Turkey.
- starcki* Reitter, 1890: 190 (*Anthobium*; Type locality: Cirkassien: Chag).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *sareptanum*).  
 — Scheerpeltz, 1933: 1037 (*Anthobium*; synonym of *rufotestaceum*).  
 — Zanetti, 1993: 245 (*Eusphalerum*; synonym of *sareptanum*).

- umbricolor* Roubal, 1915a: 62 (*Anthobium*; Type locality: Caucasus occidentalis: Krasnaja Poljana; [Note: See lectotype designation by Zanetti, 1993]).  
 — Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).  
 — Zanetti, 1993: 245 (*Eusphalerum*; lectotype designation; synonym of *sareptanum*).
- satanas* Luze, 1911 [Note: **Nomen nudum**], see: *tempestivum* Erichson, 1840.
- satsuki** Watanabe, 1990: 201 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamanashi Pref.: Aokigahara, foot of Mt. Fuji).  
 ▲ **DISTRIBUTION:** Japan.
- schatzmayri** C. Koch, 1938: 138 (*Anthobium*; Type locality: Monte Pollino, Appennino calabrese; [Note: See lectotype designation by Zanetti, 1980]).  
 — Zanetti, 1980: 167 (*Eusphalerum*; lectotype designation: M. Pollino, 1800 m; characters; Italy).  
 — Zanetti, 1987: 113 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
 — Zanetti, 1995: 6 (*Eusphalerum*; Italy).  
 ▲ **DISTRIBUTION:** Italy.
- alutaceum* Scheerpeltz, 1956: 1 (*Anthobium*; subgenus *Anthobium*; Type locality: Massiv des Mte. Pollino, Colle Gaudolino).  
 — Zanetti, 1980: 167 (*Eusphalerum*; synonym of *schatzmayri*).  
 — Zanetti, 1987: 113 (*Eusphalerum*; synonym of *schatzmayri*).
- schoenmanni** Zanetti, 1993a: 55 (*Eusphalerum*; Type locality: Seitengraben des Parwja Rietschka Tales, nördl. Wladiwostok).  
 ▲ **DISTRIBUTION:** Russia.
- scribae** Schaufuss, 1862: 147 (*Anthobium*; Type locality: Südsanien).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — C. Koch, 1940: 373 (*Anthobium*; Spain).  
 — Coiffait, 1959c: 234 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Spain).  
 ▲ **DISTRIBUTION:** Spain.
- obscurum* Brisout, 1866: 361 (*Anthobium*; Type locality: Espagne: environs de Madrid).  
 — Fauvel, 1869: 494 (*Anthobium*; synonym of *scribae*).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *scribae*).
- scutellare* Erichson, 1840, see: *torquatium* Marsham, 1802.
- segmentarium** Mäklin, 1852: 322 (*Omalium*; Type locality: insula Sitkha).  
 — Fauvel, 1878d: 200 [= 1878e: 36] (*Anthobium*; characters; Alasaka).  
 — Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
 — Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** USA.
- semicoleopratum** Panzer, 1795: 103 (*Dermestes*; Type locality: Not cited, presumably Germany).  
 — Panzer, 1799c: 6 (*Dermestes*; characters; illustrations).  
 — Gravenhorst, 1806: 219 (*Omalium*; synonym of *testaceum*).  
 — Olivier, 1811: 480 (*Omalium*; characters; France).  
 — Lacordaire, 1835: 489 (*Omalium*; synonym of *testaceum*).  
 — Stephens, 1839: 425 (*Anthobium*; synonym of *torquatium*).  
 — Erichson, 1840: 893 (*Anthobium*; characters; Germany).  
 — Redtenbacher, 1849: 754 (*Anthobium*; synonym of *abdominale*).  
 — Kraatz, 1857d: 1007 (*Anthobium*; synonym of *abdominale*).  
 — Mulsant and Rey, 1880: 322 (*Anthobium*; synonym of *abdominale*).  
 — Ganglbauer, 1895: 750 (*Anthobium*; synonym of *abdominale*).  
 — Bernhauer and Schubert, 1910: 38 (*Anthobium*; synonym of *abdominale*).  
 — Burakowski, Mroczkowski, and Stefańska, 1979: 24 (*Eusphalerum*; cited as valid name; catalog; Poland).  
 — Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).  
 — Ádám, 1996: 237 (*Eusphalerum*; valid name; Hungary).  
 ▲ **DISTRIBUTION:** Europe.

- abdominale* Gravenhorst, 1806: 219 (*Omalium*; Type locality: Not cited).
- Olivier, 1811: 480 (*Omalium*; characters; Europe).
  - Runde, 1835: 22 (*Omalium*; characters; Germany).
  - Erichson, 1839a: 639 (*Anthobium*; characters; Germany).
  - Heer, 1839: 182 (*Omalium*; characters; Switzerland).
  - Erichson, 1840: 893 (*Anthobium*; characters; Germany).
  - Heer, 1841: 569 (*Omalium*; characters).
  - Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).
  - Fairmaire and Laboulbène, 1856: 647 (*Anthobium*; characters; France).
  - Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).
  - Kraatz, 1857d: 1007 (*Anthobium*; characters; Germany).
  - Fauvel, 1871a: 63 [= 1872: 37] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy).
  - Fauvel, 1873b: 110 [= 1873c: 3] (*Anthobium*; Sardinia).
  - Fauvel, 1874: 320 [= 1874b: 26] (*Anthobium*; Russia; Carpathians).
  - Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
  - Seidlitz, 1875: 237 (*Anthobium*; characters; Baltic region).
  - Mulsant and Rey, 1880: 321 (*Anthobium*; characters; France).
  - Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; middle Europe).
  - Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
  - Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog).
  - Portevin, 1929: 451 (*Anthobium*; characters; France).
  - Scheerpeltz, 1933: 1032 (*Anthobium*; catalog).
  - Freude, 1957: 109 (*Anthobium*; notes; Germany).
  - Coiffait, 1959c: 241 (*Eusphalerum*; subgenus *Eusphalerum*; characters; France).
  - Horion, 1963: 46 (*Anthobium*; subgenus *Eusphalerum*; Holland; Belgium; France; Switzerland; Italy; Sardinia; Bosnia; Romania; Czechoslovakia; Germany; Austria).
  - Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
  - Scheerpeltz, 1968a: 6 (*Anthobium*; catalog; Austria).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 24 (*Eusphalerum*; synonym of *semicoleopratum*).
  - Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
  - Zanetti, 1981: 210 (*Eusphalerum*; characters).
  - Tóth, 1982: 43 (*Eusphalerum*; characters; Hungary).
  - Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
  - Zanetti, 1987: 126 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
  - Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
  - Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
  - Boháč, 1993: 40 (*Eusphalerum*; synonym of *semicoleopratum*).
  - Zanetti, 1995: 5 (*Eusphalerum*; Italy).
  - Wenzel, 1997: 345 (*Eusphalerum*; collecting notes; Germany).
  - Ádám, 1996: 237 (*Eusphalerum*; synonym of *semicoleopratum*).
- senjoense** Watanabe, 1990: 236 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Mt. Senjō-ga-take, S. Jpn. Alps).
- ▲ **DISTRIBUTION:** Japan.
- settei** Zanetti, 1982a: 86 (*Eusphalerum*; subgenus *Pareusphalerum*; Type locality: Piccole Dolomiti, pendici M. Plische, tra il comune di Ala [TN] e il comune di Recoaro Terme, 1900–2000 m).
- Zanetti, 1987: 155 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; Italy).
  - Zanetti, 1995: 6 (*Eusphalerum*; Italy).
  - Assing, Frisch, Kahlen, et al., 1998: 122 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; Austria).
- ▲ **DISTRIBUTION:** Italy, Austria.



- shibatai** Watanabe, 1990: 207 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Kanagawa Pref.: Mt. Kamiyama Hakone).  
▲ **DISTRIBUTION:** Japan.
- shikokuense** Watanabe, 1990: 185 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Shikoku: Tokushima Pref.: Mt. Kôtsu-zan).  
▲ **DISTRIBUTION:** Japan.
- shizuokanum** Watanabe, 1990: 227 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Shizuoka Pref.: near Abe-Tôge).  
▲ **DISTRIBUTION:** Japan.
- sibiricum** Luze, 1910: 232 (*Anthobium*; Type locality: Sibirien: Tomsk; Amurgebiet).  
— Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).  
— Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Siberia; Far East).  
— Smetana 1975c: 154 (*Eusphalerum*; Mongolia).  
— Zanetti, 1993a: 49 (*Eusphalerum*; notes on characters).  
— Ryabukhin, 1999: 14 (*Eusphalerum*; catalog; habitat; distribution; northeastern Russia).  
▲ **DISTRIBUTION:** Mongolia, Russia.
- sicanum** Zanetti, 1980: 170 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Femminamorta, M. Nebrodi, Sicilia).  
— Zanetti, 1987: 111 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
— Sparacio, 1995: 139 (*Eusphalerum*; characters; notes; Sicily).  
— Zanetti, 1995: 6 (*Eusphalerum*; Italy).  
— Zanetti and Sabella, 1998: 28 (*Eusphalerum*; notes; Sicily).  
▲ **DISTRIBUTION:** Italy.
- signatum** Märkel, 1857: 172 (*Anthobium*; Type locality: im Ottowalder Grunde).  
— Redtenbacher, 1857: 995 (*Anthobium*; characters; Austria).  
— Kraatz, 1857d: 1006 (*Anthobium*; characters; Germany).  
— Baudi, 1870: 403 (*Anthobium*; characters).  
— Fauvel, 1871a: 64 [= 1872: 38] (*Eusphalerum*; characters; France; Austria; Germany; Switzerland; Italy).  
— Redtenbacher, 1874: 280 (*Anthobium*; characters).  
— Mulsant and Rey, 1880: 324 (*Anthobium*; characters; France).  
— Ganglbauer, 1895: 750 (*Anthobium*; subgenus *Eusphalerum*; characters; middle Europe).  
— Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).  
— Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).  
— Portevin, 1929: 451 (*Anthobium*; characters; France).  
— Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).  
— Freude, 1957: 109 (*Anthobium*; Germany).  
— Coiffait, 1959c: 246 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Alps).  
— Horion, 1963: 46 (*Anthobium*; subgenus *Eusphalerum*; Holland; Belgium; France; Switzerland; Italy; Romania; Czech Republic; Germany; Austria).  
— Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).  
— Smetana, 1964d: 52 (*Anthobium*; subgenus *Eusphalerum*; Czechoslovakia).  
— Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).  
— Zanetti, 1982: 136 (*Eusphalerum*; characters; Italy).  
— Tóth, 1982: 43 (*Eusphalerum*; characters; Hungary).  
— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).  
— Zanetti, 1987: 124 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).  
— Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).  
— Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).  
— Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).  
— Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Italy, Austria, Hungary, Czechoslovakia.

*angulatum* Luze, 1911a: 333 (*Anthobium*; Type locality: Porretta, Apenn. tosc., Italien).

— Scheerpeltz, 1933: 1033 (*Anthobium*; catalog).

— Coiffait, 1959c: 243 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).

— Zanetti, 1980b: 624 (*Eusphalerum*; subspecies of *signatum*).

— Zanetti, 1982: 136 (*Eusphalerum*; subspecies of *signatum*; characters; Italy).

— Zanetti, 1987: 124 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *signatum*; characters; Italy).

— Zanetti, 1995: 6 (*Eusphalerum*; subspecies of *signatum*; Italy).

**sikkimi** Fauvel, 1904b: 88 (*Anthobium*; Type locality: Sikkim: Darjeeling).

— Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).

— Cameron, 1930: 135 (*Anthobium*; subgenus *Eusphalerum*; characters; Sikkim).

— Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).

— Scheerpeltz, 1976a: 99 (*Anthobium*; characters).

— Herman, 2001: 13 (*Eusphalerum*).

▲ **DISTRIBUTION:** India.

*silesiacum* Letzner, 1868, see: *sorbi* Gyllenhal, 1810.

**simillimum** Zanetti, 1993a: 56 (*Eusphalerum*; Type locality: Far East, N. Maritime Prov., Bolshaya Svetlovodnaya River, 40 km from mouth).

▲ **DISTRIBUTION:** Russia.

**simpliciphallum** Zanetti, 1998: 118 (*Eusphalerum*; Type locality: Taiwan: Kaohsiung Hsien, Kuanshan trail at Kaunshanchi riv., 2400 m).

▲ **DISTRIBUTION:** Taiwan.

*sinuatocolle* Lokay, 1919, see: *minutum* Fabricius, 1792.

*sinuatum* Fauvel, 1871, see: *anale* Erichson, 1840.

**smetanai** Zanetti, 1998: 132 (*Eusphalerum*; Type locality: Taiwan: Kaohsiung Hsien: Kuanshan, Kuhanoshing Hut, 3020 m).

▲ **DISTRIBUTION:** Taiwan.

**solitare** Sharp, 1874: 98 (*Anthobium*; Type locality: Nagasaki).

— Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).

— Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).

— Cameron, 1949b: 460 (*Anthobium*; Formosa).

— Watanabe, 1990: 199 (*Eusphalerum*; characters; Japan).

▲ **DISTRIBUTION:** Japan, Taiwan.

*rufiventre* Cameron, 1930c: 182 (*Anthobium*; variety of *solitare*; Type locality: Kobe: Harada).

— Scheerpeltz, 1933: 1037 (*Anthobium*; variety of *solitare*).

— Watanabe, 1990: 200 (*Eusphalerum*; synonym of *solitare*).

**sorbi** Gyllenhal, 1810: 206 (*Omalium*; Type locality: Westrogothia).

— Gravenhorst, 1806: 216 (*Omalium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 43 cited *ophthalmicum* Gravenhorst as a synonym of *sorbi* but Gravenhorst did not describe the species as new, he attributed it to Paykull]; characters).

— Gyllenhal, 1827: 464 (*Omalium*).

— Curtis, 1829: 28 (*Anthobium*; catalog; Britain).

— Mannerheim, 1830: 53 (*Omalium*; Sweden).

— Mannerheim, 1831: 467 (*Omalium*; Sweden).

— Stephens, 1834: 338 (*Anthobium*; characters; England).

— Runde, 1835: 22 (*Omalium*; characters; Germany).

— Erichson, 1839a: 640 (*Anthobium*; characters; Germany).

— Heer, 1839: 183 (*Omalium*; characters; Switzerland).

— Stephens, 1839: 425 (*Anthobium*; characters; England).

- Erichson, 1840: 895 (*Anthobium*; characters; Europe).
- Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).
- Hardy, 1851: 63 (*Anthobium*; notes; England).
- Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; characters; France).
- Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).
- Kraatz, 1857d: 1018 (*Anthobium*; characters; Germany).
- Thomson, 1861: 203 (*Anthobium*; characters; Scandinavia).
- Fauvel, 1871a: 79 [= 1872: 53] (*Eusphalerum*; characters; France; Britain; Switzerland; Italy; Germany; Scandinavia; Greenland).
- Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
- Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).
- Fauvel, 1878d: 203 [= 1878e: 39] (*Anthobium*; characters; Greenland).
- Mulsant and Rey, 1880: 335 (*Anthobium*; characters; France).
- Fowler, 1888: 426 (*Anthobium*; characters; Britain).
- Ganglbauer, 1895: 752 (*Anthobium*; subgenus *Eusphalerum*; characters; north and middle Europe; Greenland).
- Poppius, 1905: 12 (*Anthobium*; Shetland Islands).
- Montandon, 1908: 77 (*Anthobium*; Romania).
- Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Johansen, 1914: 625 (*Anthobium*; characters; Denmark).
- Eichelbaum, 1914: 95 (*Anthobium*; abdominal segmentation; apical segments).
- Henriksen and Lundbeck, 1918: 500 (*Anthobium*; Greenland).
- Portevin, 1929: 454 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).
- Henriksen, 1939: 44 (*Anthobium*; Greenland).
- Palm, 1948: 58 (*Anthobium*; characters; Sweden; Denmark; Norway; Finland).
- Freude, 1957: 108 (*Anthobium*; Germany).
- Coiffait, 1959c: 247 (*Eusphalerum*; subgenus *Eusphalerum*; characters).
- Horion, 1963: 41 (*Anthobium*; subgenus *Eusphalerum*; Britain; Norway; Greenland; Faroes; Sweden; Finland; Russia; Denmark; Poland; Czechoslovakia; Hungary; Romania; Bosnia-Herzegovina; Macedonia; Italy; France; Switzerland; Belgium; Holland; Germany; Austria).
- Lohse, 1964: 32 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Scheerpeltz, 1968a: 7 (*Eusphalerum*; catalog; Austria).
- Steel, 1970a: 9 (*Eusphalerum*; biological notes).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; checklist; USSR).
- Moore and Legner, 1975: 191 (*Eusphalerum*; synonym [?] of *orientale*).
- Pope, 1977: 23 (*Eusphalerum*; Britain).
- Muona, 1979: 17 (*Eusphalerum*; Finland; Russia; Sweden; Norway; Denmark).
- Burakowski, Mroczkowski, and Stefańska, 1979: 25 (*Eusphalerum*; catalog; Poland).
- Klinger, 1980: 456 (*Eusphalerum*; subgenus *Onibathum*; characters of abdominal defensive gland).
- Tóth, 1980: 96 (*Anthobium*; subgenus *Eusphalerum*; Hungary).
- Zanetti, 1982: 120, 122 (*Eusphalerum*; characters; Italy).
- Tóth, 1982: 40 (*Eusphalerum*; characters; Hungary).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
- Zanetti, 1984: 76 (*Eusphalerum*; Bulgaria).
- Terlutter, 1984: 14, 38 (*Eusphalerum*; notes; Germany).
- H. Franz, 1984: 59 (*Anthobium*; Macedonia).
- Zanetti, 1987: 149 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Belgium; Netherlands; Luxembourg; Denmark; Sweden).
- Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
- Silfverberg, 1992: 21 (*Eusphalerum*; Finland; Russia; Sweden; Norway; Denmark; Estonia).
- Zanetti, 1993: 219, 256 (*Eusphalerum*; characters; catalog; Caucasus, Turkey, Iran, Europe).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic; Slovakia).

- Assing, 1994a: 11 (*Eusphalerum*; wing length; xerothermous sites; Germany).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- M. Hansen, 1996: 95 (*Eusphalerum*; checklist; Denmark).
- Ádám, 1996: 237 (*Eusphalerum*; synonym of *testaceum*).
- Köhler, 1998: 159 (*Eusphalerum*; collecting notes; Germany).
- Herman, 2001: 20 (*Eusphalerum*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).

▲ **DISTRIBUTION:** Greenland, Europe, Turkey, Iran, Caucasus.

*testaceum* Gravenhorst, 1806: 218 (*Omalium*; [**Note:** This name is older than *sorbi*]; Type locality: Not cited).

- Olivier, 1811: 480 (*Omalium*; characters; France).
- Lacordaire, 1835: 489 (*Omalium*; characters; France).
- Heer, 1839: 183 (*Omalium*; synonym of *sorbi*).
- Kraatz, 1857d: 1018 (*Anthobium*; synonym of *sorbi*).
- Mulsant and Rey, 1880: 336 (*Anthobium*; synonym of *sorbi*).
- Ganglbauer, 1895: 752 (*Anthobium*; synonym of *sorbi*).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *sorbi*).
- Ádám, 1996: 237 (*Eusphalerum*; valid name; Hungary).
- Herman, 2001: 20 (*Eusphalerum*; synonym of *sorbi*).

*silesiacum* Letzner, 1868: 359 (*Anthobium*; Type locality: Grafschaft Glatz: Klessengrund, Königshainer Spitzberg; Eulen- und Waldenburger-Geb.: Grosse Hecke, Hornschloss, Bögenberge).

- Fauvel, 1871a: 79 [= 1872: 53] (*Eusphalerum*; synonym of *sorbi*).
- Redtenbacher, 1874: 281 (*Anthobium*; characters).
- Ganglbauer, 1895: 752 (*Anthobium*; synonym of *sorbi*).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *sorbi*).
- Scheerpeltz, 1933: 1037 (*Anthobium*; synonym of *sorbi*).

*iranicum* Coiffait, 1976a: 65 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Iran: Gole Lovae, 750 m à 1400 m).

- Zanetti, 1993: 256 (*Eusphalerum*; synonym of *sorbi*).

*sorbi* Grimmer, 1841, see: *tenenbaumi* Bernhauer, 1932.

**sorbicola** Y. Kangas, 1941: 63 (*Anthobium*; Type locality: Salla).

- L. Benick, 1943b: 602 (*Anthobium*; characters).
- Palm, 1948: 61 (*Anthobium*; characters; Sweden; Norway; Finland).
- Horion, 1963: 47 (*Anthobium*; subgenus *Eusphalerum*; Finland; Sweden; Norway; Britain; Germany).
- Lohse, 1964: 35 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).
- Smetana 1975c: 154 (*Eusphalerum*; Mongolia).
- Pope, 1977: 23 (*Eusphalerum*; Britain).
- Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany).
- Hodge and Jones, 1995: 30 (*Eusphalerum*; characters; Britain).

▲ **DISTRIBUTION:** Finland, Norway, Sweden, Germany, Mongolia.

*sordidulum* Kraatz, 1857, see: *montivagum* Heer, 1839.

*sparsum* Fauvel, 1876, see: *palligerum* Kiesenwetter, 1847.

*splendens* Coiffait, 1959 [**Note:** **Nomen nudum**], see: *atrum* Heer, 1839.

*starcki* Reitter, 1890, see: *sarpetanum* Eppelsheim, 1878.

**steinmanni** Zanetti, 1993a: 52 (*Eusphalerum*; Type locality: Korea: Prov Kanwon, Kum-gang san, Man-mul san).

▲ **DISTRIBUTION:** Korea.

**stramineum** Kraatz, 1857d: 1015 (*Anthobium*; Type locality: Thüringen; Bonn).

- Redtenbacher, 1857: 995 (*Anthobium*; characters; Austria).
- Fauvel, 1871a: 77 [= 1872: 51] (*Eusphalerum*; characters; France; Germany; Switzerland; Italy).

- Redtenbacher, 1874: 280 (*Anthobium*; characters).
- Mulsant and Rey, 1880: 384 (*Anthobium*; characters; France).
- Ganglbauer, 1895: 753 (*Anthobium*; characters; Alps).
- Reitter, 1909: 197 (*Anthobium*; characters; Germany).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Scheerpeltz, 1933: 1037 (*Anthobium*; catalog).
- Freude, 1957: 106 (*Anthobium*; Germany).
- Coiffait, 1959c: 224 (*Eusphalerum*; subgenus *Abinothum*; characters; Alpes).
- Horion, 1963: 37 (*Anthobium*; Germany; Austria; Italy; Switzerland; France; Czechoslovakia).
- Lohse, 1964: 30 (*Eusphalerum*; subgenus *Abinothum*; characters; central Europe).
- Smetana, 1964d: 52 (*Anthobium*; subgenus *Anthobium*; Czechoslovakia).
- Klinger, 1980: 455 (*Eusphalerum*; subgenus *Abinothum*; characters of abdominal defensive gland).
- Tóth, 1982: 37 (*Eusphalerum*; characters).
- Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).
- Zanetti, 1987: 108 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Lucht, 1987: 85 (*Eusphalerum*; checklist; Germany; Czechoslovakia; Austria; Switzerland).
- Detner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
- Boháč, 1993: 40 (*Eusphalerum*; subgenus *Abinothium*; Czech Republic).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** France, Germany, Switzerland, Italy, Czechoslovakia.

*laevipenne* Baudi, 1870: 404 (*Anthobium*; Type locality: Alpi maritimi).

- Fauvel, 1871a: 77 [= 1872: 51] (*Eusphalerum*; synonym of *stramineum*).
- Mulsant and Rey, 1880: 384 (*Anthobium*; synonym of *stramineum*).
- Bernhauer and Schubert, 1910: 43 (*Anthobium*; synonym of *stramineum*).
- Zanetti, 1987: 108 (*Eusphalerum*; synonym of *stramineum*).

**stussineri** Bernhauer, 1909: 52 (*Anthobium*; Type locality: Südtalien, Central-Calabrien, am Monte Nero).

- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Zanetti, 1982: 131 (*Eusphalerum*; subspecies of *luteum*; characters; Italy).
- Zanetti, 1987: 140 (*Eusphalerum*; subgenus *Eusphalerum*; valid species; characters; Italy).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy.

**subangulatum** Casey, 1894: 430 (*Anthobium*; Type locality: California: Lake Tahoe).

- Bernhauer and Schubert, 1910: 43 (*Anthobium*; catalog).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).
- Downie and Arnett, 1996: 439 (*Eusphalerum*; characters; USA).

▲ **DISTRIBUTION:** USA.

**subangusticolle** Coiffait, 1959: 221 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Basses-Alpes: Col de la Cayolle).

▲ **DISTRIBUTION:** France.

*subjectum* Mulsant and Rey, 1880, see: *alpinum* Heer, 1839.

**subjurassicum** Coiffait, 1959c: 221 (*Eusphalerum*; subgenus *Abinothum*; Type locality: Basses-Alpes: Saint-Paul-sur-Ubaye).

▲ **DISTRIBUTION:** France.

**subsolanum** Herman, 2001: 37 (*Eusphalerum*; replacement name for *nigriventre* Motschulsky).

▲ **DISTRIBUTION:** Russia.

*nigriventre* Motschulsky, 1860: 544 (*Anthobium*; [preoccupied]; Type locality: Sibérie orientale à Ajan et Ochotsk; [Note: See lectotype designation by Zanetti, 1993a]).

- J. Sahlberg, 1880: 109 (*Anthobium*; characters; Siberia).
- Poppius, 1909: 3 (*Anthobium*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 41 (*Anthobium*; catalog).

- Bernhauer, 1926g: 2 (*Anthobium*; Kamchatka region).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Arkhangelsk; Central Asia; Urals; Eastern Siberia; Far East).
- Zanetti, 1993a: 48 (*Eusphalerum*; lectotype designation [**Note:** Locality not cited]; notes on characters).
- Ryabukhin, 1999: 14 (*Eusphalerum*; catalog; habitat; distribution; northeastern Russia).
- Herman, 2001: 37 (*Eusphalerum*; synonym of *subsolanum*).
- swauki** Hatch, 1957: 83 (*Eusphalerum*; subgenus *Onibathum*; Type locality: Washington: Kittitas Co.: Swauk Creek. Also cited from British Columbia, Oregon, and Idaho).
- Hatch, 1944: 101 (*Anthobium*; subgenus *Eusphalerum*; [**Note:** Misidentified as *californicum* according to Hatch, 1957: 84]; Oregon; Washington).
- Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).
- ▲ **DISTRIBUTION:** Canada, USA.
- szeli** Zanetti, 1993a: 54 (*Eusphalerum*; Type locality: Korea: Ryanggang Prov., 31 km on Paekdu-san road, NW of Samjiyon 2000 m).
- ▲ **DISTRIBUTION:** Korea.
- tachiyazanum** Watanabe, 1990: 231 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Yamagata Pref.: Tachiyazawa, Higashitagawa).
- ▲ **DISTRIBUTION:** Japan.
- taiwanense** Zanetti, 1998: 122 (*Eusphalerum*; Type locality: Taiwan: Taichung Hsien, Anmashan, 2150 m).
- ▲ **DISTRIBUTION:** Taiwan.
- takane** Watanabe, 1990: 193 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Mt. Sanpuku-tôge, S. Jpn. Alps).
- ▲ **DISTRIBUTION:** Japan.
- tempestivum** Erichson, 1840: 895 (*Anthobium*; Type locality: Sardinia).
- Mulsant and Rey, 1880: 334 (*Anthobium*; characters; Corsica; Sardinia).
- Sainte-Claire Deville, 1906: 67 (*Anthobium*; Corsica).
- Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).
- Luze, 1910: 229 (*Anthobium*; characters).
- Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).
- Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Italy).
- Zanetti, 1982: 125 (*Eusphalerum*; characters; Italy).
- Zanetti, 1987: 135 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Sardinia; mainland reports from Italy may be *clavipes*; reports from Corsica may be *corsicum*).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).
- ▲ **DISTRIBUTION:** Sardinia.
- obscurellum** Luze, 1911a: 334 (*Anthobium*; aberration of *tempestivum*; [**Note:** **Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).
- Scheerpeltz, 1933: 1038 (*Anthobium*; variety of *tempestivum*).
- Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; aberration of *tempestivum*; characters).
- Zanetti, 1987: 135 (*Eusphalerum*; aberration of *tempestivum*; characters; Italy).
- satanas** Luze, 1911a: 334 (*Anthobium*; aberration of *tempestivum*; [**Note:** **Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).
- Scheerpeltz, 1933: 1038 (*Anthobium*; variety of *tempestivum*).
- Coiffait, 1959c: 244 (*Eusphalerum*; subgenus *Eusphalerum*; aberration of *tempestivum*; characters).
- Zanetti, 1987: 135 (*Eusphalerum*; aberration of *tempestivum*; characters; Italy).
- tenenbaumi** Bernhauer, 1932c: 232 (*Anthobium*; variety of *florale*; Type locality: Umgebung von Pieniny Pustelnia, Sw. Kingi, Polen).
- Panzer, 1796b: 20 (*Staphylinus*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 39 cited *florale* Panzer as a valid species; Panzer did not describe the species as new, he attributed it to Paykull]; characters; illustrations).

- Heer, 1839: 180 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 39 cited *triviale* Heer as a synonym of *florale* Panzer; Heer did not describe the species as new, he attributed it to Erichson]; characters; Switzerland).
  - Erichson, 1840: 891 (*Anthobium*; [**Note:** Misidentification: Erichson (and Bernhauer and Schubert, 1910: 39) cited *florale* Panzer as a valid species; Panzer did not describe the species as new, he attributed it to Paykull]; characters; Germany; France).
  - Redtenbacher, 1849: 755 (*Anthobium*; [**Note:** Misidentification: Redtenbacher (and Bernhauer and Schubert, 1910: 39) cited *florale* Panzer as a valid species; Panzer attributed the species to Paykull]; characters; Austria).
  - Kraatz, 1857d: 1009 (*Anthobium*; [**Note:** Misidentification: Kraatz (and Bernhauer and Schubert, 1910: 39) cited *florale* Paykull as a valid species; Panzer attributed it to Paykull]; characters; Germany).
  - Redtenbacher, 1857: 255 (*Anthobium*; [**Note:** Redtenbacher cited *florale* Panzer as a valid species; Panzer did not describe the species as new, he attributed it to Paykull]; characters; Austria).
  - Fauvel, 1871a: 63 [= 1872: 37] (*Eusphalerum*; [**Note:** Fauvel cited *florale* Panzer as a valid species; Panzer did not describe the species as new, he attributed it to Paykull]; characters; France; Germany; Switzerland; Italy).
  - Redtenbacher, 1874: 280 (*Anthobium*; cited as *florale* Panzer; characters; Austria).
  - Mulsant and Rey, 1880: 297 (*Anthobium*; cited as *florale* Panzer who attributed it to Paykull; characters; France).
  - Ganglbauer, 1895: 748 (*Anthobium*; subgenus *Eusphalerum*; cited as *florale* Panzer; characters; middle Europe).
  - Fauvel, 1902b: 50 (*Anthobium*; cited as *florale* Panzer; Algeria).
  - Reitter, 1909: 195 (*Anthobium*; subgenus *Eusphalerum*; cited as *florale*; characters; Germany).
  - Bernhauer and Schubert, 1910: 39 (*Anthobium*; cited as *florale*; catalog).
  - Scheerpeltz, 1933: 1033 (*Anthobium*; cited as *tennenbaumi*; cited as variety of *florale* [which is a misidentification]; catalog).
  - Freude, 1957: 112 (*Anthobium*; cited as *florale*; Germany).
  - Coiffait, 1959c: 249 (*Eusphalerum*; subgenus *Pareusphalerum*; cited as *florale*; characters).
  - Horion, 1963: 52 (*Anthobium*; subgenus *Eusphalerum*; cited *florale* Panzer; Denmark; Belgium; France; Switzerland; Italy; Croatia; Bosnia; Macedonia; Romania; Hungary; Czechoslovakia; Poland; Germany; Austria).
  - Lohse, 1964: 36 (*Eusphalerum*; subgenus *Pareusphalerum*; cited as *florale* Panzer; characters; central Europe).
  - Smetana, 1964d: 52 (*Anthobium*; subgenus *Eusphalerum*; cited as *florale*; Czechoslovakia).
  - Klinger, 1980: 456 (*Eusphalerum*; subgenus *Pareusphalerum*; cited as *florale*; characters of abdominal defensive gland).
  - Zanetti, 1982a: 89, 90 (*Eusphalerum*; subgenus *Pareusphalerum*; cited as *florale* Panzer; characters).
  - Tóth, 1982: 45 (*Eusphalerum*; cited as *florale* Panzer; characters; Hungary).
  - Klinger, 1983: 38 (*Eusphalerum*; cited as *florale* Panzer; natural history notes; Germany).
  - Zanetti, 1987: 154 (*Eusphalerum*; subgenus *Pareusphalerum*; cited as *florale* Erichson who cited Panzer as the author; characters; Italy).
  - Lucht, 1987: 86 (*Eusphalerum*; cited as *florale* Panzer; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
  - Silfverberg, 1991: 21 (*Eusphalerum*; valid name for *florale* auct.).
  - Detner and Reissenweber, 1991 (*Eusphalerum*; cited as *florale*; defensive secretions: chemistry and systematics).
  - Zanetti, 1991a: 29 (*Eusphalerum*; cited as *florale* Erichson; North African records may be erroneous).
  - Ádám, 1996: 237 (*Pareusphalerum*; valid name; Hungary).
  - Assing, Frisch, Kahlen, et al., 1998: 122 (*Eusphalerum*; cited as *florale* Panzer; characters).
  - Ryabukhin, 1999: 14 (*Eusphalerum*; cited as *florale* Panzer; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Europe, Algeria (?).

*sorbi* Grimmer, 1841: 33 (*Omalium*; [**Note: Nomen dubium; preoccupied**]; Type locality: Steiermark).

— Weise, 1876: 178 (*Anthobium*; synonym of *florale* Panzer).

— Bernhauer and Schubert, 1910: 39 (*Anthobium*; synonym of *florale*).

*testaceum* Gravenhorst, 1806, see: *sorbi* Gyllenhal, 1810.

**tibiale** Casey, 1894: 429 (*Anthobium*; Type locality: Arizona).

— Fall and Cockerell, 1907: 168 (*Anthobium*; New Mexico).

— Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).

— Moore and Legner, 1975: 191 (*Eusphalerum*; checklist).

▲ **DISTRIBUTION:** USA.

*tibiale* Luze, 1910, see: *luteicornis* Erichson, 1840.

**torquatum** Marsham, 1802: 127 (*Silpha*; Type locality: Britain).

— Curtis, 1829: 28 (*Anthobium*; catalog; Britain).

— Stephens, 1834: 339 (*Anthobium*; characters; England).

— Lacordaire, 1835: 489 (*Lesteva*; [**Note: Misidentification: Bernhauer and Schubert, 1910: 44 cited *testaceum* Lacordaire as a synonym of *torquatum* Marsham; Lacordaire did not describe the species as new, he attributed it to Gravenhorst**]; characters; France).

— Westwood, 1838a: 18 (*Eusphalerum*; type species).

— Stephens, 1839: 425 (*Anthobium*; characters; England).

— Erichson, 1840: 895 (*Anthobium*; synonym of *sorbi*).

— Hardy, 1851: 63 (*Anthobium*; notes; England).

— Redtenbacher, 1857: 995 (*Anthobium*; characters; Austria).

— Fauvel, 1871a: 67 [= 1872: 41] (*Eusphalerum*; characters; France; Britain; Germany; Switzerland; Italy; Algeria; Madeira).

— Redtenbacher, 1874: 281 (*Anthobium*; characters).

— Seidlitz, 1875: 238 (*Anthobium*; characters; Baltic region).

— Fauvel, 1878: 87 [= 1878a: 7] (*Anthobium*; Algeria; Morocco).

— Fauvel, 1886: 13 [= 1886a: 5] (*Anthobium*; Algeria; Morocco).

— Fowler, 1888: 426 (*Anthobium*; characters; Britain).

— Ganglbauer, 1895: 751 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany; western middle Europe; western Mediterranean region).

— Reitter, 1909: 196 (*Anthobium*; subgenus *Eusphalerum*; characters; Germany).

— Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).

— Johansen, 1914: 624 (*Anthobium*; characters; Denmark).

— Portevin, 1929: 453 (*Anthobium*; characters; France).

— Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).

— C. Koch, 1940: 372 (*Anthobium*; Spain).

— Palm, 1948: 59 (*Anthobium*; characters; Sweden; Denmark).

— Freude, 1957: 108 (*Anthobium*; Germany).

— Coiffait, 1959c: 238 (*Eusphalerum*; subgenus *Eusphalerum*; characters).

— Horion, 1963: 44 (*Anthobium*; subgenus *Eusphalerum*; Britain; Denmark; Sweden; Finland; Holland; Belgium; France; Spain; Portugal; Switzerland; Italy; Romania; Czech Republic; Germany; Austria).

— Lohse, 1964: 33 (*Eusphalerum*; subgenus *Eusphalerum*; characters; central Europe).

— Steel, 1970a: 9 (*Eusphalerum*; biological notes).

— Moore and Legner, 1975: 191 (*Eusphalerum*; checklist; Newfoundland).

— Pope, 1977: 23 (*Eusphalerum*; Britain).

— Tóth, 1982: 42 (*Eusphalerum*; characters).

— Klinger, 1983: 38 (*Eusphalerum*; natural history notes; Germany).

— Zanetti, 1987: 133 (*Eusphalerum*; subgenus *Eusphalerum*; characters; notes on subspecies; species may not occur in Italy).

— Lucht, 1987: 86 (*Eusphalerum*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).

— Watanabe, 1990: 237 (*Eusphalerum*; characters; Japan).

— Dettner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).



- Silfverberg, 1992: 21 (*Eusphalerum*; Russia; Sweden; Norway; Denmark).
  - Welch, 1993: 227 (*Eusphalerum*; ovariole number and ovary structure).
  - Boháč, 1993: 40 (*Eusphalerum*; subgenus *Eusphalerum*; Czech Republic).
  - Zanetti, 1995: 6, 59 (*Eusphalerum*; may not occur in Italy).
  - ▲ **DISTRIBUTION:** Norway, Sweden, Britain, Denmark, Belgium, Netherlands, France, Germany, Switzerland, Spain, Portugal, Madeira, Algeria, Morocco, Japan, Canada.
- mucronatum* Stephens, 1834: 339 (*Anthobium*; Type locality: London; Devonshire; near Bristol; Suffolk; Norfolk; Yorkshire).
- Stephens, 1839: 425 (*Anthobium*; characters; England).
  - Hardy, 1851: 63 (*Anthobium*; synonym of *torquatum*).
  - C. Waterhouse, 1858: 32 (*Anthobium*; synonym of *torquatum*).
  - Fauvel, 1871a: 67 [= 1872: 41] (*Eusphalerum*; synonym of *torquatum*).
  - Ganglbauer, 1895: 751 (*Anthobium*; synonym of *torquatum*).
  - Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).
- nigriventre* Stephens, 1834: 343 (*Anthobium*; Type locality: London).
- Stephens, 1839: 426 (*Lathrimaeum*; characters; England).
  - Hardy, 1851: 63 (*Anthobium*; synonym of *torquatum*).
- scutellare* Erichson, 1840: 895 (*Anthobium*; Type locality: Austria; France).
- Heer, 1841: 570 (*Omalium*; synonym of *montivagum*).
  - Redtenbacher, 1849: 754 (*Anthobium*; characters; Austria).
  - Kiesenwetter, 1851a: 436 (*Anthobium*; France).
  - Hardy, 1851: 63 (*Anthobium*; synonym of *torquatum*).
  - Rosenhauer, 1856: 86 (*Anthobium*; Granada, Rio Darro).
  - Fairmaire and Laboulbène, 1856: 650 (*Anthobium*; synonym of *montivagum*).
  - Redtenbacher, 1857: 255 (*Anthobium*; characters; Austria).
  - Kraatz, 1857d: 1016 (*Anthobium*; characters; Germany).
  - Fauvel, 1871a: 67 [= 1872: 41] (*Eusphalerum*; synonym of *torquatum*).
  - Redtenbacher, 1874: 279 (*Anthobium*; characters; Austria).
  - Fauvel, 1878: [= 1878a:] (*Anthobium*; synonym of *torquatum*).
  - Mulsant and Rey, 1880: 329 (*Anthobium*; characters; France).
  - Ganglbauer, 1895: 751 (*Anthobium*; synonym of *torquatum*).
  - Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).
  - Scheerpeltz, 1933: 1038 (*Anthobium*; synonym of *torquatum*).
- adustum* Kiesenwetter, 1851a: 438 (*Anthobium*; [**preoccupied**]; Type locality: Mont Louis dans le Pyrénées Orientales).
- Fauvel, 1871a: 68 [= 1872: 42] (*Eusphalerum*; characters; France).
  - Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; synonym of *torquatum*).
  - Mulsant and Rey, 1880: 329 (*Anthobium*; synonym of *scutellare*).
  - Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).
  - Portevin, 1929: 453 (*Anthobium*; characters; France).
  - Scheerpeltz, 1933: 1038 (*Anthobium*; variety of *torquatum*).
  - Coiffait, 1959c: 240 (*Eusphalerum*; subgenus *Eusphalerum*; characters; Pyrenees).
  - Shibata, 1974: 32 (*Eusphalerum*; variety of *torquatum*; Japan).
  - Outerelo, 1980a: 54 (*Eusphalerum*; Spain).
  - Zanetti, 1987: 133 (*Eusphalerum*; subgenus *Eusphalerum*; variety of *torquatum*; characters).
  - Watanabe, 1990: 237 (*Eusphalerum*; synonym of *torquatum*).
- adultum* Kiesenwetter, 1851: 156 (*Anthobium*; Type locality: Orte le Vernet in dem Flusstale des Tet).
- Rosenhauer, 1856: 87 (*Anthobium*; P. S. Maria).
  - Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).
- pumilio* Rosenhauer, 1856: 87 (*Anthobium*; Type locality: Malaga; Algeciras; Ronda).
- Fauvel, 1873b: 111 [= 1873c: 4] (*Anthobium*; synonym of *torquatum*).
  - Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).

- ustulatum* Fairmaire and Laboulbène, 1856: 649 (*Anthobium*; Type locality: Pyrenees Oriental, environs de Mt. Louis).  
 — Kraatz, 1857d: 1016 (*Anthobium*; synonym of *adustum*).  
 — Mulsant and Rey, 1880: 329 (*Anthobium*; synonym of *scutellare*).  
 — Bernhauer and Schubert, 1910: 44 (*Anthobium*; synonym of *torquatum*).
- puncticeps* Luze, 1910: 243 (*Anthobium*; Type locality: Asturien, Albas).  
 — Scheerpeltz, 1933: 1036 (*Anthobium*; catalog).  
 — Jarrige, 1946a: 110 (*Anthobium*; France).  
 — Coiffait, 1959c: 240 (*Eusphalerum*; subgenus *Eusphalerum*; variety of *torquatum*; characters; Pyrenees).  
 — Scheerpeltz, 1960d: 133 (*Anthobium*; subgenus *Eusphalerum*; cited as valid species; Portugal).  
 — Zanetti, 1987: 133 (*Eusphalerum*; subgenus *Eusphalerum*; variety of *torquatum*; characters).
- balmae* Coiffait, 1959c: 240 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *torquatum*; Type locality: Provence: La Ste. Baume).  
 — Zanetti, 1987: 134 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *torquatum*; characters; France).
- andromorphe* Coiffait, 1959c: 238 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *torquatum*; Type locality: Basses Pyrénées: les Forges d'Abel).  
 — Zanetti, 1987: 133 (*Eusphalerum*; subgenus *Eusphalerum*; subspecies of *torquatum*; characters).
- towadaense** Watanabe, 1990: 233 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Aomori Pref.: Towada).  
 ▲ **DISTRIBUTION:** Japan.
- transcausicum** Bernhauer, 1902d: 705 (*Anthobium*; Type locality: Talysch-Gebirge).  
 — Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).  
 — Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Talysh).  
 — Zanetti, 1993: 217, 247 (*Eusphalerum*; characters; catalog; Caucasus, Armenia, Turkey).  
 ▲ **DISTRIBUTION:** Armenia, Caucasus, Turkey.
- nudum* Luze, 1910: 241 (*Anthobium*; Type locality: Kaukasus).  
 — Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).  
 — Zanetti, 1993: 247 (*Eusphalerum*; synonym of *transcausicum*).
- triviale* Erichson, 1839, see: *primulae* Stephens, 1834.
- tsukushiense** Watanabe, 1990: 223 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Kyushu: Fukuoka Pref.: Magaribuchi).  
 ▲ **DISTRIBUTION:** Japan.
- uhligi** Zanetti, 1991: 292 (*Eusphalerum*; Type locality: Kazakhstan: Alma-Ata, Transili-Alatau Prochodnaja-Ufer, Alma-Arasen, 2000 m. Also cited from Kirghizia).  
 ▲ **DISTRIBUTION:** Kazakhstan, Kyrgyzstan.
- umbellatarum** Kiesenwetter, 1850: 222 (*Anthobium*; Type locality: Pyrenaei orientales).  
 — Kiesenwetter, 1851a: 439 (*Anthobium*; characters; France).  
 — Fairmaire and Laboulbène, 1856: 651 (*Anthobium*; characters; France).  
 — Fauvel, 1871a: 75 [= 1872: 49] (*Eusphalerum*; characters; France).  
 — Mulsant and Rey, 1880: 366 (*Anthobium*; characters; France).  
 — Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).  
 — Portevin, 1929: 456 (*Anthobium*; characters; France).  
 — Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).  
 — Coiffait, 1959c: 226 (*Eusphalerum*; subgenus *Abinothum*; characters; Pyrenees).  
 — Lucht, 1987: 85 (*Eusphalerum*; checklist).  
 ▲ **DISTRIBUTION:** Belgium, France.
- celticum* Coiffait, 1959c: 226 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *umbellatarum*; Type locality: Creuse, Sainte-Feyre).  
 — Lohse, 1964: 31 (*Eusphalerum*; subgenus *Abinothum*; subspecies of *umbellatarum*; characters; central Europe).

- Lucht, 1987: 85 (*Eusphalerum*; subspecies of *umbellatarum*; checklist; Germany; France).
- Haghebaert, Bruge, and Drugmand, 1990: 35 (*Eusphalerum*; subspecies of *umbellatarum*; Belgium).

*umbricolor* Roubal, 1915, see: *sareptanum* Eppelsheim, 1878.

*uncipes* C. Koch, 1938, see: *petzi* Bernhauer, 1910.

*ustulatum* Fairmaire and Laboulbène, 1856, see: *torquatum* Marsham, 1802.

*vesubianum* Coiffait, 1959, see: *montivagum* Heer, 1839.

**viertli** Ganglbauer, 1895: 748 (*Anthobium*; subgenus *Eusphalerum*; Type locality: Fünfkirchen in Ungarn).

- Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).
- Luze, 1910: 227 (*Anthobium*; notes).
- Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).
- Coiffait, 1959c: 248 (*Eusphalerum*; subgenus *Pareusphalerum*; characters; central Europe; (?) France).
- Zanetti, 1982a: 90 (*Eusphalerum*; subgenus *Pareusphalerum*; characters).
- Tóth, 1982: 46 (*Eusphalerum*; characters; Hungary).
- Zanetti, 1995: 6 (*Eusphalerum*; Italy).

▲ **DISTRIBUTION:** Italy, Hungary.

*rufulum* Luze, 1910: 227 (*Anthobium*; aberration of *viertli*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).

- Scheerpeltz, 1933: 1038 (*Anthobium*; aberration of *viertli*).
- Tóth, 1982: 46 (*Eusphalerum*; aberration of *viertli*; characters).

*visentinii* Zanetti, 1982, see: *limbatum* Erichson, 1840.

**wittmeri** Coiffait, 1976a: 64 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Iran: Assalam, 1300 m).

- Zanetti, 1993: 217, 249 (*Eusphalerum*; characters; catalog; Iran).

▲ **DISTRIBUTION:** Iran.

**yakushmanum** Watanabe, 1990: 190 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Kagoshima Pref.: Kosugidani on Yakushima Is.).

▲ **DISTRIBUTION:** Japan.

**yamanami** Watanabe, 1990: 209 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Gunma Pref.: Mt. Jōshū-Hotaka).

▲ **DISTRIBUTION:** Japan.

**yasukawai** Watanabe, 1990: 228 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Tokyo Pref.: Mt. Mitake, Okutama).

▲ **DISTRIBUTION:** Japan.

**yukiguni** Watanabe, 1990: 205 (*Eusphalerum*; subgenus *Eusphalerum*; Type locality: Japan: Honshu: Niigata Pref.: Komanoyu).

▲ **DISTRIBUTION:** Japan.

**zerchei** Zanetti, 1992: 351 (*Eusphalerum*; Type locality: Jugoslawien, Mezadonien, Baba planina, Hutte Kopanki Umgb., 1500–1800 m).

▲ **DISTRIBUTION:** Macedonia.

**zlotarevi** Reitter, 1909a: 55 (*Anthobium*; Type locality: Zentralkaukasus; Kluchorpass).

- Bernhauer and Schubert, 1910: 44 (*Anthobium*; catalog).
- Scheerpeltz, 1933: 1038 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 222, 259 (*Eusphalerum*; characters; catalog; Caucasus).

▲ **DISTRIBUTION:** Russia.

*melichari* Bernhauer, 1913a: 220 (*Anthobium*; Type locality: nördlichen Kaukasus).

- Scheerpeltz, 1933: 1035 (*Anthobium*; catalog).
- Tikhomirova, 1973a: 137 (*Eusphalerum*; subgenus *Eusphalerum*; checklist; Caucasus).
- Zanetti, 1993: 259 (*Eusphalerum*; synonym of *zlotarevi*).

*diabolicum* Roubal, 1914a: 164 (*Anthobium*; aberration of *zolutarevi*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Nordkaukasus, Kluchorpass).

- Scheerpeltz, 1933: 1038 (*Anthobium*; aberration of *zolutarevi*).
- Zanetti, 1993: 259 (*Eusphalerum*; aberration of *zolutarevi*).

### Tribe Hadrognathini

Hadrognathini Portevin, 1929: 431 (genera included: *Hadrognathus*, *Oncognathus*). **TYPE GENUS:** *Hadrognathus* (see Newton and Thayer, 1992: 58).

- Zerche, 1991a: 366 (characters; revision; key to species; phylogeny).
- Newton and Thayer, 1992: 58 (tribe of Omaliinae).
- Newton and Thayer, 1995: 247–286, 293 (phylogenetic relationships; characters; discussion; includes *Hadrognathus* and *Brachygnathellus*; may be part of Omaliini).

Eugnathates Mulsant and Rey, 1880: 386 (genera included: *Eugnathus*). **TYPE GENUS:** *Eugnathus* (see Newton and Thayer, 1992: 58).

- Newton and Thayer, 1992: 58 (synonym of Hadrognathini).

### Brachygnathellus

[1 species; Palaearctic Region]

*Brachygnathellus* Zerche, 1991a: 368 (species included: *loebli*). **TYPE SPECIES:** *Brachygnathellus loebli* Zerche, fixed by original designation and monotypy.

**loebli** Zerche, 1991a: 371 (*Brachygnathellus*; Type locality: Turquie Artvin: 5 km E Hopa, 100 m).

- ▲ **DISTRIBUTION:** Turkey.

### Hadrognathus

[2 species; Palaearctic Region]

*Hadrognathus* Schaum, 1852: 31 (replacement name for *Eugnathus*). **TYPE SPECIES:**

*Eugnathus longipalpis* Mulsant and Rey, fixed by objective synonymy with for which the type had been fixed.

- Kraatz, 1857: 43 (characters).
- Jacquelin du Val, 1857: 77 (characters).
- Redtenbacher, 1857: 253 (characters).
- Schaum, 1859: 32 (catalog; European species).
- Jacquelin du Val, 1868: 81 (catalog; European species).
- Gemminger and Harold, 1868: 665 (catalog).
- Fauvel, 1871a: 80 [= 1872: 54] (characters).
- Redtenbacher, 1874: 273 (characters).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog).
- Ganglbauer, 1895: 703 (characters).
- Heyden, Reitter, and Weise, 1906: 136 (list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 81 (world catalog; 1 species).
- Winkler, 1925: 336 (catalog for Palaearctic region).
- Porta, 1926: 33 (characters; species of Italy).
- Scheerpeltz, 1933: 1070 (world catalog supplement).
- Tikhomirova, 1973a: 141 (checklist of species of USSR).
- Zanetti, 1987: 422 (characters; habitus; species of Italy).
- Zerche, 1991a: 373 (characters; revision of and key to species; character analysis; phylogenetic relationships).
- Zanetti, 1995: 10 (list of species of Italy).

*Eugnathus* Mulsant and Rey, 1851: 141 [= 1852: 1] (species included: *longipalpis*; **pre-occupied** by Schönherr, 1833, and Agassiz, 1836). **TYPE SPECIES:** *Eugnathus longipalpis* Mulsant and Rey, fixed by monotypy.

- Lacordaire, 1854: 144 (preoccupied; replaced by *Oncognathus*).
- Jacquelin du Val, 1857: 77 (synonym of *Hadrognathus*).
- Schaum, 1859: 32 (synonym of *Hadrognathus*).

- Gemminger and Harold, 1868: 665 (synonym of *Hadrognathus*).
- Fauvel, 1871a: 80 [= 1872: 54] (synonym of *Hadrognathus*).
- Mulsant and Rey, 1880: 386 (characters).
- Ganglbauer, 1895: 703 (synonym of *Hadrognathus*).
- Bernhauer and Schubert, 1910: 82 (synonym of *Hadrognathus*).
- Blackwelder, 1952: 155 (type species: *longipalpis*).
- Zanetti, 1987: 422 (synonym of *Hadrognathus*).
- Zerche, 1991a: 373 (synonym of *Hadrognathus*).

*Oncognathus* Lacordaire, 1854: 144 (replacement name for *Eugnathus* Mulsant and Rey).

**TYPE SPECIES:** *Eugnathus longipalpis* Mulsant and Rey, fixed by objective synonymy with *Eugnathus*.

- Fairmaire and Laboulbène, 1856: 646 (characters).
- Jacquelin du Val, 1857: 77 (synonym of *Hadrognathus*).
- Schaum, 1859: 32 (synonym of *Hadrognathus*).
- Gemminger and Harold, 1868: 665 (synonym of *Hadrognathus*).
- Fauvel, 1871a: 80 [= 1872: 54] (synonym of *Hadrognathus*).
- Heyden, Reitter, and Weise, 1891: 121 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 703 (synonym of *Hadrognathus*).
- Bernhauer and Schubert, 1910: 82 (synonym of *Hadrognathus*).
- Blackwelder, 1952: 275 (type species: *longipalpis*).
- Zerche, 1991a: 373 (synonym of *Hadrognathus*).

**cantabricus** Scheerpeltz, 1933a: 9 (*Hadrognathus*; Type locality: Caboalles, Nordspanien; [Note: See lectotype designation by Zerche, 1991a]).

- Zerche, 1991a: 380 (*Hadrognathus*; lectotype designation; characters; Spain; Portugal).

▲ **DISTRIBUTION:** Portugal, Spain.

**longipalpis** Mulsant and Rey, 1851: 143 [= 1852: 3] (*Eugnathus*; Type locality: montagnes du Lyonnais, sur celles du Pilat, au mont-Dore).

- Fairmaire and Laboulbène, 1856: 646 (*Oncognathus*; characters; France).
- Redtenbacher, 1857: 254 (*Hadrognathus*; characters; France).
- Hochhuth, 1872: 172 (*Hadrognathus*; notes; Ukraine [Note: Misidentified according to Zerche (pers. comm.)]).
- Fauvel, 1871a: 81 [= 1872: 55] (*Hadrognathus*; characters; France).
- Fauvel, 1873b: 112 [= 1873c: 5] (*Hadrognathus*; Spain; Russia [Note: Misidentified according to Zerche (pers. comm.)]).
- Redtenbacher, 1874: 273 (*Hadrognathus*; characters; France).
- Mulsant and Rey, 1880: 389 (*Eugnathus*; characters; France).
- Ganglbauer, 1895: 704 (*Hadrognathus*; characters; France; Pyrenees).
- Jakobson, 1908: 462 (*Hadrognathus*; Kiev doubtful).
- Bernhauer and Schubert, 1910: 81 (*Hadrognathus*; catalog).
- Portevin, 1929: 431 (*Hadrognathus*; characters; France).
- Scheerpeltz, 1933: 1070 (*Hadrognathus*; catalog).
- Scheerpeltz, 1933a: 11, 13 (*Hadrognathus*; illustration; France; Spain).
- Español, 1945: 90 (*Hadrognathus*; Spain).
- Tikhomirova, 1973a: 141 (*Hadrognathus*; checklist; Kiev doubtful; Mediterranean region).
- Zanetti, 1987: 424 (*Hadrognathus*; characters; Italy).
- Zerche, 1991a: 375 (*Hadrognathus*; characters; Spain; France; Switzerland; Italy).
- Hodge and Jones, 1995: 31 (*Hadrognathus*; characters; Britain).
- Zanetti, 1995: 10 (*Hadrognathus*; Italy).

▲ **DISTRIBUTION:** Britain, Spain, France, Switzerland, Italy.

### Tribe Omaliini

Omaliini W. S. MacLeay, 1825.

- Eichelbaum, 1909: 96 (list of genera with some references; generic synonyms; number of genera; number of species in each genus; general distribution of genera).
- Bernhauer and Schubert, 1910: 37 (world catalog; *Tanyrhinus*, *Trigonodemus*, *Anthobium*, *Acruia*, *Pycnoglypta*, *Acrolocha*, *Phyllodrepa*, *Omalissus*, *Eunonia*, *Haida*, *Omalium*,

- Phloeonomus*, *Xylodromus*, *Carcinocephalus*, *Philorinum*, *Micralymma*, *Cylletron*, *Porrhodites*, *Orochares*, *Mannerheimia*, *Phyllodrepoidea*, *Deliphrum*, *Lathrimaeum*, *Camioleum*, *Olophrum*, *Arpedium*, *Acidota*, *Amphichroum*, *Lesteva*, *Paralesteva*, *Tevales*, *Unamis*, *Artochia*, *Vellica*, *Tilea*, *Brathinus*, *Orobanus*, *Microedus*, *Pelecomalium*, *Geodromicus*, *Hygrogeus*, *Anthophagus*, *Hadroganthus*, *Tetradelus*, *Eupsorus*, *Ischnoderus*, *Eudectus*, *Ephelinus*, *Coryphium*, *Coryphoides*, *Boreaphilus*, *Niphetodes*, *Physognatus*).
- Blatchley, 1910: 474 (characters; key to Indiana genera).
  - Johansen, 1914: 582 (characters; key to Danish genera).
  - Porta, 1926: 10 (characters; species of Italy).
  - Portevin, 1929: 444 (key to French genera).
  - Cameron, 1930: 133 (characters; key to British Indian genera).
  - Joy, 1932: 99 (key to British genera).
  - Scheerpeltz, 1940: 14 (key to Palaearctic genera).
  - Hatch, 1957: 49 (characters; key to genera of Pacific Northwest).
  - Arnett, 1963: 241, 260 (key to North American genera; characters; list of North American genera).
  - Pototskaia, 1967: 18, 19 (larval characters; key to some genera).
  - Moore and Legner, 1979: 203 (characters; tabular key to genera of North America north of Mexico).
  - Muona, 1979: 17 (list of Scandinavian species).
  - Thayer, 1985a: 182 (characters).
  - Newton, 1985: 198, 200 (notes on austral distribution and genera).
  - Outerelo and Gamarra, 1985: 82 (key to genera of Iberian Peninsula).
  - Watanabe, 1990: 64, 377 (characters; key to genera and species of Japan; relationships of genera).
  - Thayer, 1992: 545 (characters).
  - Newton and Thayer, 1992: 58 (tribe of Omaliinae).
  - Newton and Thayer, 1995: 247–286, 292 (phylogenetic relationships; discussions; characters; list of synonyms; may not be monophyletic).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (list of New Zealand genera; number of New Zealand species).
  - M. Hansen, 1996: 93 (list of Danish species).
  - Newton, Thayer, Ashe, and Chandler, 2000: 282, 335 (key to Nearctic genera; characters; notes).

#### Omalina:

- Heer, 1839a: 6 (cited as tribe of Omalida).

#### Omalini:

- Thomson, 1858: 37 (characters; key to genera).

#### Micralymmini Mulsant and Rey, 1880.

- Newton and Thayer, 1992: 58 (tribe of Omaliinae).
- Newton and Thayer, 1995: 293 (synonym of Omaliini).

#### Micralymmates Mulsant and Rey, 1880: 3 (genera included: *Micralymma*). **TYPE GENUS:** *Micralymma* (see Newton and Thayer, 1992: 58).

#### Tetradelini Fauvel, 1904.

- Newton and Thayer, 1992: 59 (tribe of Omaliinae).
- Newton and Thayer, 1995: 293 (synonym of Omaliini).

#### Tetradeli Fauvel, 1904b: 90 (genera included: *Tetradelus*). **TYPE GENUS:** *Tetradelus* (see Newton and Thayer, 1992: 59).

#### Tetradelina Fauvel, 1904.

- Jakobson, 1908: 453 (characters).

#### Arpediomimini Cameron, 1917b: 277 (replacement name for Arpediopsini). **TYPE GENUS:** *Arpediomimus* (see Newton and Thayer, 1992: 58).

- Scheerpeltz, 1933: 1031 (world catalog supplement).
- Newton and Thayer, 1992: 57 (tribe of Omaliinae).
- Newton and Thayer, 1995: 293 (synonym of Omaliini).

## Arpediomiminae Cameron, 1917.

- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).

Arpediopsini Cameron, 1917: 123 (new taxon with one genus *Arpediopsis*).

- Scheerpeltz, 1933: 1031 (synonym of Arpediomimini).
- Newton and Thayer, 1992: 58 (synonym of Arpediomimini).

**Acrolocha**

[15 species; Nearctic and Palaearctic Regions]

*Acrolocha* Thomson, 1858: 38 (species included: *striata*). **TYPE SPECIES:** *Omalium striatum* Gravenhorst, fixed by original designation as determined by action of the Commission in Opinion 1722 and generic name conserved (ICZN, 1993a).

- Thomson, 1859: 50 (characters; type species: *striata*).
- Thomson, 1861: 201 (characters).
- Fauvel, 1871a: 85 [= 1872: 59] (subgroup of *Omalium*, cited as *Homalium*).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).
- Mulsant and Rey, 1880: 259 (characters; key to French species).
- Heyden, 1880: 83 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).
- Fowler, 1888: 423 (notes; group of *Omalium*).
- Seidlitz, 1891: 342 (key to some European species).
- Seidlitz, 1891a: 364 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 120 (subgenus of *Omalium*; list of species of Europe and Caucasus).
- Ganglbauer, 1895: 743 (characters; key to middle European species).
- Heyden, Reitter, and Weise, 1906: 130 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 27 (characters; key to species of Seine Basin, France).
- Reitter, 1909: 194 (characters; key to German species).
- Bernhauer and Schubert, 1910: 45 (world catalog; 3 species).
- Petri, 1912: 52 (list of species of Siebenbürgen).
- Johansen, 1914: 618 (characters; key to Danish species).
- Winkler, 1925: 328 (catalog for Palaearctic region).
- Porta, 1926: 20 (characters; key to species of Italy).
- Portevin, 1929: 449 (characters; key to French species).
- Roubal, 1930: 305 (catalog; Slovakia).
- Joy, 1932: 100 (key to British species).
- Scheerpeltz, 1933: 1039 (world catalog supplement).
- Normand, 1935: 357 (list of species of Tunisia).
- Scheerpeltz, 1937a: 121 (key to species).
- Kloet and Hincks, 1945: 160 (list of British species).
- Palm, 1948: 64 (characters; key to species of Sweden).
- Tottenham, 1949: 354, 406 (type species: *striatum* Gravenhorst; list of British species).
- Blackwelder, 1952: 36 (type species: *striata*).
- Tottenham, 1954: 19 (characters; British species).
- Hatch, 1957: 52, 76 (characters; key to species of Pacific Northwest).
- Steel, 1957 (characters; revision of and key to species; habitat of species; type species: *striata*).
- Székessy, 1963: 13 (characters).
- Lohse, 1964: 36 (characters; key to central European species).
- Scheerpeltz, 1968a: 8 (catalog of Austrian species).
- Steel, 1970a: 9 (larval characters; biological notes).
- Tikhomirova, 1973a: 137 (checklist of species of USSR).
- Moore and Legner, 1975: 187 (catalog; genus cited as *Elonium* with *Acrolocha* listed as a synonym; North America north of Mexico).
- Tóth, 1976: 87 (key to species of Palaearctic region).
- Pope, 1977: 23 (list of British species).

- Topp, 1978: 309 (larval characters).
- Zanetti, 1979: 547, 548 (characters; notes; key to species of Italy).
- Burakowski, Mroczkowski, and Stefańska, 1979: 29 (catalog; Poland).
- Moore and Legner, 1979: 205 (cited as *Elonium*; characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Uhlig, Vogel, and Sieber, 1980: 241 (some species collected in Germany).
- Uhlig and Vogler, 1981: 84 (cited as *Elonium*; list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 48 (characters; habitus; key to species of Hungary).
- Segers, 1986: 19 (checklist of species; Belgium).
- Zanetti, 1987: 160 (characters; habitus; key to species of Italy).
- Lohse and Lucht, 1989: 125 (notes).
- Watanabe, 1990: 65 (characters; species of Japan).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Thayer, 1992a: 25 (requested placing name on Official List of Generic Names in Zoology with *Omalium striatum* Gravenhorst as type species).
- ICZN, 1993a (name conserved and type species designation fixed).
- Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- Zanetti, 1995: 6 (list of species of Italy).
- M. Hansen, 1996: 93 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 436 (characters; cited as *Elonium*; key to species of Northeastern North America).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 69 (list of species collected in 1997; Denmark).
- Assing, Frisch, Kahlen, et al., 1998: 120, 122 (valid name, not *Elonium*).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (3 Nearctic species; notes; characters in key).

*Elonium* Leach, 1819: 175 (species included: *striatum*). **TYPE SPECIES:** *Omalium striatum* Gravenhorst, fixed by original designation and monotypy.

- Westwood, 1827: 64, 65 (characters; type species).
- Curtis, 1829: 29 (catalog; Britain).
- Stephens, 1829a: 25 (catalog; Britain).
- Stephens, 1829: 296 (catalog; Britain).
- Gistel, 1856: 389 (list of species).
- Fauvel, 1871a: 152 [= 1872: 126] (synonym of *Acrognathus*).
- Fauvel, 1875a: VIII [= 1875b: 210] (synonym of *Acrognathus*).
- Bernhauer and Schubert, 1911: 89 (synonym of *Coprophilus*).
- Tottenham, 1949: 359, 408 (type species: *striatulus* Fabricius; list of British species).
- Blackwelder, 1952: 146 (type species: *striatum*).
- Herman, 1970: 427 (notes; moved to Omaliinae).
- Campbell and Davies, 1991: 88 (checklist of species; Canada).
- Thayer, 1992a: 24, 25 (requested suppression of name for purposes of Priority but not for Homonymy and inclusion in list of Rejected and Invalid Generic Names in Zoology).
- ICZN, 1993a (*Elonium* is rejected for purposes of Priority but not Homonymy and is placed on the Official Index of Rejected and Invalid Generic Names in Zoology by action of the Commission in Opinion 1722).

**amabilis** Heer, 1841: 567 (*Omalium*; Type locality: Jorat, Chalet à Gobet).

- Kraatz, 1857d: 999 (*Omalium*; characters; Austria).
- Fauvel, 1871a: 85 [= 1872: 59] (*Omalium*, cited as *Homalium*; subgroup *Acrolocha*; characters; France; Switzerland; Austria; Turkey).
- Redtenbacher, 1874: 276 (*Omalium*; characters).
- Mulsant and Rey, 1880: 268 (*Acrolochas*; characters; France).
- Ganglbauer, 1895: 744 (*Acrolocha*; characters; middle Europe; Asia Minor).



- Reitter, 1909: 194 (*Acrolocha*; characters; Germany).
- Bernhauer and Schubert, 1910: 45 (*Acrolocha*; catalog).
- Portevin, 1929: 450 (*Acrolocha*; characters; France).
- Scheerpeltz, 1933: 1039 (*Acrolocha*; catalog).
- Scheerpeltz, 1937a: 122 (*Acrolocha*; characters in key; central and southern Europe; Mediterranean region; Asia Minor; Caucasus).
- Steel, 1957: 163 (*Acrolocha*; characters; South Europe, Asia Minor, Caucasus).
- Horion, 1963: 58 (*Acrolocha*; Turkey; Bosnia; Hungary; Czech Republic; Switzerland; Austria; Germany).
- Lohse, 1964: 37 (*Acrolocha*; characters; central Europe).
- Tóth, 1976: 87 (*Acrolocha*; characters).
- Tóth, 1976a: 117 (*Acrolocha*; Hungary).
- Zanetti, 1979: 548, 551 (*Acrolocha*; characters; notes; Italy).
- Tóth, 1982: 49 (*Acrolocha*; characters).
- Zanetti, 1984: 76 (*Acrolocha*; Bulgaria).
- Zanetti, 1987: 165 (*Acrolocha*; characters; Italy).
- Lucht, 1987: 86 (*Acrolocha*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Benelux).
- Boháč, 1993: 40 (*Acrolocha*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Acrolocha*; Italy).
- ▲ **DISTRIBUTION:** Germany, France, Switzerland, Austria, Italy, Hungary, Turkey, Caucasus.

*hampei* Redtenbacher, 1857: 250 (*Omalium*; Type locality: Not cited, presumably Austria).

- Kraatz, 1857d: 999 (*Omalium*; synonym of *amabile*).
- Redtenbacher, 1874: 274 (*Omalium*; characters; Austria).
- Mulsant and Rey, 1880: 268 (*Acrolocha*; synonym of *amabilis*).
- Ganglbauer, 1895: 744 (*Acrolocha*; synonym of *amabilis*).
- Bernhauer and Schubert, 1910: 45 (*Acrolocha*; synonym of *amabilis*).
- Scheerpeltz, 1933: 1039 (*Acrolocha*; synonym of *amabilis*).
- Steel, 1957: 163 (*Acrolocha*; synonym of *amabilis*).

**angustior** Hatch, 1957: 77 (*Acrolocha*; Type locality: B. C. [British Columbia]: Terrace).

▲ **DISTRIBUTION:** Canada.

**asperata** Hatch, 1957: 78 (*Acrolocha*; Type locality: Washington: Ocean Park. Also cited from Oregon).

▲ **DISTRIBUTION:** USA.

*barri* Hatch, 1957, see: *hamata* Fauvel, 1878.

**caucasica** Tóth, 1976: 85 (*Acrolocha*; Type locality: Kaukasus).

▲ **DISTRIBUTION:** Caucasus.

**crenulata** Hatch, 1957: 78 (*Acrolocha*; Type locality: Oregon: Peavine Ridge near McMinnville. Also cited from Washington and British Columbia).

▲ **DISTRIBUTION:** USA.

**daccordii** Zanetti, 1979: 549 (*Acrolocha*; Type locality: Brindisi di Montagna).

- Zanetti, 1987: 166 (*Acrolocha*; characters; Italy).
- Zanetti, 1995: 6 (*Acrolocha*; Italy).

▲ **DISTRIBUTION:** Italy.

**diffusa** Fauvel, 1878d: 207 [= 1878e: 43] (*Omalium*, cited as *Homalium*; Type locality: Lac Supérieur, Bachewauung Bay).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Notman, 1919a: 96 (*Acrolocha*; Ontario).
- Steel, 1957: 163 (*Acrolocha*; characters; Michigan and Canada).
- Moore and Legner, 1975: 187 (*Elonium*; catalog; North America north of Mexico).
- Downie and Arnett, 1996: 437 (*Elonium*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

**exsculpta** Mäklin, 1852: 321 (*Omalium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 218 [= 1878e: 54] (*Omalium*, cited as *Homalium*; characters; Alaska).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Hatch, 1957: 79 (*Acrolocha*; cited as *exsculptatum*; characters; British Columbia; Washington; Oregon).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Carcinocephalus* ?).

▲ **DISTRIBUTION:** Canada, USA.

*rugosa* Hatch, 1957: 79 (*Acrolocha*; Type locality: Oregon: McMinnville. Also cited from Washington and British Columbia).

- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Carcinocephalus* ?; synonym of *exsculptum*).

▲ **DISTRIBUTION:** USA.

**fracta** Fauvel, 1878d: 212 [= 1878e: 48] (*Omalium*, cited as *Homalium*; Type locality: California; Pennsylvanie; Missouri; Caroline du Sud).

- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Blatchley, 1910: 480 (*Omalium*, cited as *Homalium*; characters; Indiana).
- Moore and Legner, 1975: 187 (*Elonium*; catalog; North America north of Mexico).
- Downie and Arnett, 1996: 436 (*Elonium*; characters; USA).

▲ **DISTRIBUTION:** USA.

*hampei* Redtenbacher, 1857, see: *amabilis* Heer, 1841.

**helferi** Steel, 1957: 161 (*Acrolocha*; Type locality: California: Lake Co.: Scott Valley).

▲ **DISTRIBUTION:** USA.

**leechi** Hatch, 1957: 79 (*Acrolocha*; Type locality: B. C. [British Columbia]: Salmon Arm).

▲ **DISTRIBUTION:** Canada.

**minuta** Olivier, 1795:(42): 38 (*Staphylinus*; Type locality: Paris).

- Gyllenhal, 1810: 231 (*Omalium*; synonym of *striata* Gravenhorst).
- Olivier, 1811: 479 (*Omalium*; synonym of *striatum*).
- Erichson, 1839a: 632 (*Omalium*; synonym of *striatum*).
- Heer, 1839: 177 (*Omalium*; synonym of *striatum*).
- Erichson, 1840: 882 (*Omalium*; synonym of *striatum*).
- Laporte, 1840: 192 (*Anthobium*; synonym of *striatum*).
- Kraatz, 1857d: 1000 (*Omalium*; synonym of *striatum*).
- Ganglbauer, 1895: 743 (*Acrolocha*; synonym of *striata*).
- Bernhauer and Schubert, 1910: 45 (*Acrolocha*; synonym of *striata*).
- Steel, 1957: 159 (*Acrolocha*; valid species; characters).
- Pope, 1977: 23 (*Acrolocha*; Britain).
- Zanetti, 1987: 162 (*Acrolocha*; characters; Italy).
- Boháč, 1993: 40 (*Acrolocha*; Czech Republic; Slovakia).
- Hodge and Jones, 1995: 30 (*Acrolocha*; characters; Britain).
- Zanetti, 1995: 6 (*Acrolocha*; Italy).
- Assing, Frisch, Kahlen, et al., 1998: 122 (note).

▲ **DISTRIBUTION:** Europe, Russia, Canada, USA.

*striata* Gravenhorst, 1802: 119 (*Omalium*; Type locality: Not cited, but presumably Brunsvigae).

- Latreille, 1804: 374 (*Omalium*; characters; Germany).
- Gravenhorst, 1806: 216 (*Omalium*; notes).
- Gyllenhal, 1810: 231 (*Omalium*; characters; Sweden).
- Olivier, 1811: 479 (*Omalium*; characters).
- Gyllenhal, 1813: 702 (*Omalium*; characters for variety; Sweden).
- Mannerheim, 1830: 55 (*Anthobium*; Sweden).
- Mannerheim, 1831: 469 (*Anthobium*; Sweden).
- Erichson, 1839a: 632 (*Omalium*; characters; Germany).
- Heer, 1839: 177 (*Omalium*; characters; Switzerland).
- Erichson, 1840: 882 (*Omalium*; characters; Europe).
- Laporte, 1840: 192 (*Anthobium*; characters; France).

- Redtenbacher, 1849: 750 (*Omalium*; characters; Austria).
- Thomson, 1857a: 226 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 641 (*Omalium*; characters; France).
- Redtenbacher, 1857: 250 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 1000 (*Omalium*; characters; Germany).
- Thomson, 1858: 38 (*Acrolocha*; type species).
- Thomson, 1859: 50 (type species of *Acrolocha*).
- Thomson, 1861: 202 (*Acrolocha*; characters; Scandinavia).
- Fauvel, 1871a: 86 [= 1872: 60] (*Omalium*, cited as *Homalium*; subgroup *Acrolocha*; characters; France; Britain; Germany; Switzerland; Austria; Corsica).
- Fauvel, 1873b: 113 [= 1873c: 6] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia).
- Redtenbacher, 1874: 274 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 236 (*Acrolocha*; characters; Baltic region).
- Mulsant and Rey, 1880: 262 (*Acrolocha*; characters; France).
- Ganglbauer, 1895: 743 (*Acrolocha*; characters; Europe).
- Montandon, 1908: 77 (*Acrolocha*; Romania).
- Reitter, 1909: 194 (*Acrolocha*; characters; Germany).
- Bernhauer and Schubert, 1910: 45 (*Acrolocha*; catalog).
- Johansen, 1914: 619 (*Acrolocha*; characters; Denmark).
- Eichelbaum, 1914: 95 (*Acrolocha*; abdominal segmentation; apical segments).
- Portevin, 1929: 450 (*Acrolocha*; characters; France).
- Scheerpeltz, 1933: 1039 (*Acrolocha*; catalog).
- Scheerpeltz, 1937a: 121 (*Acrolocha*; characters in key; Europe; Siberia).
- Palm, 1948: 65 (*Acrolocha*; characters; Sweden; Denmark).
- Hatch, 1957: 78 (*Acrolocha*; characters; British Columbia; Idaho; Washington; Oregon).
- Steel, 1957: 159 (*Acrolocha*; synonym of *minuta*).
- Horion, 1963: 55 (*Acrolocha*; Denmark; Sweden; Russia; Britain; Holland; Belgium; France; Iberian Peninsula; Switzerland; Corsica; Italy; Romania; Hungary; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 36 (*Acrolocha*; characters; central Europe).
- Tóth, 1976: 87 (*Acrolocha*; cited as valid species; characters).
- Tóth, 1976a: 116 (*Acrolocha*; cited as valid species; Hungary).
- Pope, 1977: 23 (*Acrolocha*; synonym of *minuta*).
- Zanetti, 1979: 548 (*Acrolocha*; cited as valid species; notes; Italy).
- Tóth, 1982: 49 (*Acrolocha*; cited as valid species; characters; Hungary).
- Zanetti, 1987: 162 (*Acrolocha*; synonym of *minuta*).
- Lucht, 1987: 86 (*Acrolocha*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Acrolocha*; synonym of *minuta*).
- Zanetti, 1995: 6 (*Acrolocha*; synonym of *minuta*).
- Thayer, 1992a: 25 (requested to place name on Official List of Specific Names in Zoology).
- ICZN, 1993a: 164 (name placed on Official List of Specific Names in Zoology).
- Assing, Frisch, Kahlen, et al., 1998: 122 (*Acrolocha*; synonym of *minuta*).

**miyamorii** Watanabe, 1990: 68 (*Acrolocha*; Type locality: Japan: Hokkaido: near Lake Kuttara-ko, Iburi).

▲ **DISTRIBUTION:** Japan.

**pliginskii** Bernhauer, 1912k: 259 (*Acrolocha*; Type locality: Krim, Sebastopol).

- Scheerpeltz, 1937a: 123 (*Acrolocha*; characters in key; north Europe; Russia; Caucasus).
- Palm, 1948: 66 (*Acrolocha*; characters; Sweden; Denmark; Finland).
- Steel, 1957: 164 (*Acrolocha*; characters; Crimea; Finland; Sweden; Denmark; Caucasus).
- Horion, 1963: 57 (*Acrolocha*; Ukraine; Georgia; Urals; Sweden; Finland; Russia; Denmark; Germany).
- Lohse, 1964: 37 (*Acrolocha*; characters; central Europe).
- Tóth, 1976: 88 (*Acrolocha*; characters).

- Tóth, 1976a: 115, 117 (*Acrolocha*; notes; Hungary).
- Zanetti, 1979: 548 (*Acrolocha*; notes; Italy).
- Tóth, 1982: 50 (*Acrolocha*; characters; Hungary).
- Zanetti, 1987: 167 (*Acrolocha*; characters; Italy).
- Ádám, 1987: 137 (*Elonium*; collecting notes; Hungary).
- Lucht, 1987: 86 (*Acrolocha*; checklist; Germany; Denmark; Sweden).
- Zanetti, 1995: 6 (*Acrolocha*; Italy).

▲ **DISTRIBUTION:** Finland, Sweden, Denmark, Hungary, Italy, Ukraine, Caucasus.

*rugosa* Hatch, 1957, see: *exsculptum* Mäklin, 1852.

*striata* Gravenhorst, 1802, see: *minuta* Olivier, 1795.

**sulcula** Stephens, 1834: 336 (*Anthobium*; Type locality: Somersetshire; Norfolk).

- Curtis, 1829: 29 (*Omalium*; cited as *striatum*; [**Note:** Misidentification: *A. striata* of British authors prior to 1954 refer to *A. sulcula* according to Pope, 1977]; catalog; Britain).
- Stephens, 1834: 349 (*Omalium*; characters; cited as *striatum*; [**Note:** Misidentification: *A. striata* of British authors prior to 1954 refer to *A. sulcula* according to Pope, 1977]; England).
- Lacordaire, 1835: 475 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 45 cited *striata* Lacordaire as a synonym of *sulculus* Stephens; Lacordaire did not describe the species as new, he attributed it to Gravenhorst]; characters; France).
- Stephens, 1839: 425 (*Anthobium*; characters; England).
- Stephens, 1839: 428 (*Omalium*; characters; cited as *striatum*; [**Note:** Misidentification: *A. striata* of British authors prior to 1954 refer to *A. sulcula* according to Pope, 1977]; England).
- G. Waterhouse, 1858: 32 (*Omalium*; synonym of *striatum*).
- Fauvel, 1873b: 113 [= 1873c: 6] (*Omalium*, cited as *Homalium*; characters; France; Britain; Corsica).
- J. Sahlberg, 1876: 428 (*Acrolocha*; characters; Finland).
- Mulsant and Rey, 1880: 265 (*Acrolocha*; characters; France).
- Fowler, 1888: 423 (*Omalium*, cited as *Homalium*; subgenus *Acrolocha*; characters; cited as *striatum*; [**Note:** Misidentification: *A. striata* of British authors prior to 1954 refer to *A. sulcula* according to Pope, 1977]; Britain).
- Ganglbauer, 1895: 744 (*Acrolocha*; characters; west Europe; Corsica; Caucasus).
- Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Tunisia).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 194 (*Acrolocha*; characters; Germany).
- Bernhauer and Schubert, 1910: 45 (*Acrolocha*; catalog).
- Johansen, 1914: 619 (*Acrolocha*; cited as *sulcatula*; [**Note:** Misspelling: Scheerpeltz, 1933: 1039 cited *sulcatula* Johansen as a synonym of *sulculus*]; characters; Denmark).
- Portevin, 1929: 450 (*Acrolocha*; characters; France).
- Scheerpeltz, 1933: 1039 (*Acrolocha*; catalog).
- Horion, 1935: 176 (*Acrolocha*; note on spelling; Netherlands; Germany).
- Scheerpeltz, 1937a: 122 (*Acrolocha*; characters in key; Europe; Mediterranean region; Caucasus).
- Palm, 1948: 65 (*Acrolocha*; characters; Sweden; Finland).
- Steel, 1957: 164 (*Acrolocha*; characters; Europe and Caucasus).
- V. Hansen, 1962: 242 (*Acrolocha*; Denmark).
- Horion, 1963: 56 (*Acrolocha*; Britain; Norway; Sweden; Finland; Russia; Denmark; Holland; Belgium; France; Spain; Corsica; Sardinia; Germany; Austria).
- Lohse, 1964: 37 (*Acrolocha*; characters; central Europe).
- Tóth, 1976: 87 (*Acrolocha*; characters).
- Tóth, 1976a: 116, 117 (*Acrolocha*; notes; Hungary).
- Pope, 1977: 23 (*Acrolocha*; Britain).
- Hammond, 1980: 138 (*Acrolocha*; Ireland).
- Zanetti, 1979: 549 (*Acrolocha*; notes; Italy).
- Tóth, 1982: 50 (*Acrolocha*; characters; Hungary).
- Zanetti, 1987: 167 (*Acrolocha*; characters; Italy).
- Lucht, 1987: 86 (*Acrolocha*; checklist; Germany; Poland; Austria; France; Benelux; Denmark; Sweden).

- Wittwer, 1993: 247 (*Elonium*; Switzerland).
- Boháč, 1993: 40 (*Acrolocha*; Czech Republic).
- Cuccodoro, 1995: 262 (*Acrolocha*; water loading behavior).
- Sparacio, 1995: 140 (*Acrolocha*; characters; notes; Sicily).
- Zanetti, 1995: 6 (*Acrolocha*; Italy).

▲ **DISTRIBUTION:** Europe, Caucasus.

### **Acrulia**

[5 species; Nearctic and Palaearctic Regions]

*Acrulia* Thomson, 1858: 38 (species included: *inflata*). **TYPE SPECIES:** *Omalium inflatum* Gyllenhal, fixed by monotypy.

- Thomson, 1859: 50 (characters; type species).
- Thomson, 1861: 199 (characters).
- Fauvel, 1871a: 82 [= 1872: 56] (characters).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog).
- Mulsant and Rey, 1880: 285 (characters).
- Heyden, 1880: 83 (list of species of Siberian region).
- Fowler, 1888: 424 (notes).
- Heyden, Reitter, and Weise, 1891: 121 (list of species of Europe and Caucasus).
- Ganglbauer, 1895: 745 (characters).
- Heyden, Reitter, and Weise, 1906: 129 (list of species of Europe and Caucasus).
- Reitter, 1909: 194 (characters).
- Bernhauer and Schubert, 1910: 44 (world catalog; 3 species).
- Petri, 1912: 52 (list of species of Siebenbürgen).
- Johansen, 1914: 621 (characters).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 328 (catalog for Palaearctic region).
- Porta, 1926: 18 (characters; species of Italy).
- Roubal, 1930: 304 (catalog; Slovakia).
- Joy, 1932: 95 (key to British species).
- Scheerpeltz, 1933: 1038 (world catalog supplement).
- Scheerpeltz, 1937b: 186 (list of Bulgarian species).
- Kloet and Hincks, 1945: 160 (list of British species).
- Palm, 1948: 62 (characters; species of Sweden).
- Tottenham, 1949: 354, 405 (type species: *inflata* Gyllenhal; list of British species).
- Tottenham, 1954: 19 (characters; British species).
- Hatch, 1957: 52, 81 (characters; species of Pacific Northwest).
- Horion, 1963: 53 (list of central European species).
- Székessy, 1963: 13 (characters).
- Lohse, 1964: 36 (characters; key to central European species).
- Scheerpeltz, 1968a: 7 (catalog of Austrian species).
- Steel, 1970a: 10 (larval characters; biological notes).
- Tikhomirova, 1973a: 137 (checklist of species of USSR).
- Moore and Legner, 1975: 179 (catalog; North America north of Mexico).
- Pototskaia, 1976: 165 (larval characters).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 27 (catalog; Poland).
- Moore and Legner, 1979: 204 (characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Tóth, 1982: 46 (characters; habitus; key to species of Hungary).
- Zanetti, 1987: 155 (characters; habitus; species of Italy).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).

- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 6 (list of species of Italy).
- M. Hansen, 1996: 93 (list of Danish species).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 69 (list of species collected in 1997; Denmark).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (1 Nearctic species; notes; characters in key).

**angusticollis** Reitter, 1909: 194 (*Acrulia*; Type locality: Kroatien: Velebitgebirge).

- Bernhauer and Schubert, 1910: 44 (*Acrulia*; catalog).
- Székessy, 1939b: 375 (*Acrulia*; characters in key).
- Tóth, 1982: 47 (*Acrulia*; characters).

▲ **DISTRIBUTION:** Croatia.

**armeniaca** Székessy, 1939b: 374 (*Acrulia*; Type locality: Lenkoran).

- Tikhomirova, 1973a: 140 (*Acidota*; checklist; Transcaucasia).

▲ **DISTRIBUTION:** Azerbaijan.

*corticalis* Heer, 1834 [**Note: Nomen nudum**], see: *inflata* Gyllenhal, 1813.

*egregia* Redtenbacher, 1874, see: *inflata* Gyllenhal, 1813.

**inflata** Gyllenhal, 1813: 700 (*Omalium*; Type locality: Smolandia; Westrogothia: Mysseberg).

- Gyllenhal, 1827: 466 (*Omalium*).
- Zetterstedt, 1828: 53 (*Omalium*; characters; Lapland).
- C. Sahlberg, 1830: 285 (*Omalium*; characters; Finland).
- Mannerheim, 1830: 51 (*Omalium*; Sweden).
- Mannerheim, 1831: 465 (*Omalium*; Sweden).
- Stephens, 1834: 343 (*Anthobium*; characters; England).
- Zetterstedt, 1838: 52 (*Omalium*; characters; habitat; Lapland; Sweden).
- Heer, 1839: 185 (*Phloeonomus*; characters; Switzerland).
- Stephens, 1839: 426 (*Lathrimaeum*; characters; England).
- Erichson, 1840: 883 (*Omalium*; characters; Sweden; Finland; Germany).
- Redtenbacher, 1849: 829 (*Omalium*; characters; Austria).
- Hardy, 1851: 58 (*Phloeonomus*; notes; England).
- Thomson, 1857a: 227 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 645 (*Omalium*; characters; France).
- Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 1002 (*Omalium*; characters; Germany).
- Thomson, 1858: 38 (*Acrulia*; type species).
- Thomson, 1859: 50 (type species of *Acrulia*).
- Thomson, 1861: 200 (*Acrulia*; characters; Scandinavia).
- Fauvel, 1865a: 319 [= 1865b: 69] (*Omalium*; habitat; France).
- Fauvel, 1871a: 82 [= 1872: 56] (*Acrulia*; characters; France; Lapland; Scandinavia; Britain; Germany; Switzerland; Italy; Austria).
- Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 239 (*Acrulia*; cited as *Arculia*; characters; Baltic region).
- J. Sahlberg, 1876: 215 (*Acrulia*; Finland).
- Mulsant and Rey, 1880: 287 (*Acrulia*; characters; France).
- Fowler, 1888: 424 (*Acrulia*; characters; Britain).
- Seidlitz, 1891: 344 (*Acrulia*; characters; Europe).
- Seidlitz, 1891a: 366 (*Acrulia*; characters; Europe).
- Ganglbauer, 1895: 745 (*Acrulia*; characters; north and middle Europe).
- Reitter, 1909: 194 (*Acrulia*; characters; Germany).
- Bernhauer and Schubert, 1910: 44 (*Acrulia*; catalog).
- Johansen, 1914: 621 (*Acrulia*; characters; Denmark).
- Portevin, 1929: 450 (*Acrulia*; characters; France).
- Scheerpeltz, 1933: 1038 (*Acrulia*; catalog).
- Székessy, 1939b: 375 (*Acrulia*; characters in key).
- Palm, 1948: 63 (*Acrulia*; characters; Sweden; Denmark; Norway; Finland).

- Horion, 1963: 53 (*Acrulia*; Britain; Norway; Sweden; Finland; Russia; Denmark; Holland; Belgium; France; Switzerland; Italy; Croatia; Bosnia-Herzegovina; Bulgaria; Romania; Czechoslovakia; Poland; Russia; Germany; Austria).
- Lohse, 1964: 36 (*Acrulia*; characters; central Europe).
- Steel, 1970a: 10 (*Acrulia*; larval characters; biological notes).
- Legner and Moore, 1977: 175 (*Acrulia*; found under bark).
- Pope, 1977: 23 (*Acrulia*; Britain).
- Hammond, 1980: 137 (*Acrulia*; Ireland).
- Tóth, 1982: 47 (*Acrulia*; characters; Hungary).
- Segers, 1986: 19 (*Acrulia*; checklist of species; Belgium).
- Zanetti, 1987: 156 (*Acrulia*; characters; Italy).
- Lucht, 1987: 86 (*Acrulia*; checklist; Germany; Poland; Czechoslovakia; Austria; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Acrulia*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Acrulia*; Italy).
- Fowles, Alexander, and Key, 1999: 129 (*Acrulia*; saproxylic species; status as endangered or threatened species; Britain).
- Cibulskis, 1999: 34 (*Acrulia*; list; Latvia).
- ▲ **DISTRIBUTION:** Europe.

*corticalis* Heer, 1834: 76 (*Omaliium*; subgenus *Anthobium*; [Note: **Nomen nudum**, cited without characters]; elevational listing).

- Fauvel, 1871a: 82 [= 1872: 56] (*Acrulia*; synonym of *inflata*).
- Ganglbauer, 1895: 745 (*Acrulia*; synonym of *inflata*).
- Bernhauer and Schubert, 1910: 44 (*Acrulia*; synonym of *inflata*).

*longicollis* Gredler, 1874: 52 (*Proteinus*; Type locality: Südtirol).

- Ganglbauer, 1895: 745 (*Acrulia*; synonym of *inflata*).
- Bernhauer and Schubert, 1910: 44 (*Acrulia*; synonym of *inflata*).

*egregia* Redtenbacher, 1874: 550 (*Proteinus*; Type locality: Rax-Alpe).

- Ganglbauer, 1895: 745 (*Acrulia*; synonym of *inflata*).
- Bernhauer and Schubert, 1910: 44 (*Acrulia*; synonym of *inflata*).

*longicollis* Gredler, 1874, see: *inflata* Gyllenhal, 1813.

**punctata** Coiffait, 1978f: 272 (*Acrulia*; Type locality: Aude, environs de Carcassonne).

- Zanetti, 1986: 95 (*Acrulia*; probably synonym of *Dialycera distincticornis*).

▲ **DISTRIBUTION:** France.

**tumidula** Mäklin, 1853: 199 (*Omaliium*; Type locality: insula Sitkha; insula Afognak).

- Fauvel, 1878d: 205 [= 1878e: 41] (*Acrulia*; characters; Alaska).
- Bernhauer and Schubert, 1910: 44 (*Acrulia*; catalog).
- Hatch, 1957: 81 (*Acrulia*; characters; British Columbia; Washington).
- Legner and Moore, 1977: 175 (*Acrulia*; found under bark).

▲ **DISTRIBUTION:** Canada, USA.

### **Allodrepa**

[2 species; Antarctic Region]

*Allodrepa* Steel, 1964: 359 (species included: *decipiens*, *subcylindrica*). **TYPE SPECIES:** *Allodrepa decipiens* Steel, fixed by original designation.

- Steel, 1970a: 23 (larval characters; biological notes).
- Klimaszewski, Newton, and Thayer, 1996: 146 (endemic to New Zealand).

**decipiens** Steel, 1964: 360 (*Allodrepa*; also larval characters; Type locality: Campbell Island; Shoal Point).

- Steel, 1970a: 23 (*Allodrepa*; larval characters; biological notes).
- Marris, 2000: 174 (*Allodrepa*; collecting notes; Bollons Island [Antipodes]; also known from Campbell Island).

▲ **DISTRIBUTION:** Campbell Island, Antipodes Islands.

- subcylindrica** Kiesenwetter, 1877: 164 (*Omalium*; Type locality: Auckland Islands).  
 — Fauvel, 1877: 190 (*Omalium*, cited as *Homalium*; characters; Auckland Islands).  
 — Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).  
 — Gourlay, 1950: 184 (*Omalium*; may not be in *Omalium*; republication of original description; collecting notes).  
 — Steel, 1964: 363 (*Allodrepa*; characters; Auckland, French, and Ewing Islands).  
 ▲ **DISTRIBUTION:** Auckland Islands.

#### **Antarctotachinus**

[1 species; Antarctic Region]

- Antarctotachinus* Enderlein, 1909: 379 (species included: *crozetensis*). **TYPE SPECIES:** *Antarctotachinus crozetensis* Enderlein, fixed by monotypy.  
 — Bernhauer and Schubert, 1916: 487 (world catalog; 1 species).  
 — Scheerpeltz, 1934: 1514 (world catalog supplement).  
 — Jeannel, 1940: 116, 120 (characters; type species: *crozetensis* Enderlein).  
 — Blackwelder, 1952: 55 (type species: *crozetensis*).  
**crozetensis** Enderlein, 1909: 380 (*Antarctotachinus*; also larval description on page 381; Type locality: Crozet-Inseln: Possession Island: Weihnachts-Bucht).  
 — Bernhauer and Schubert, 1916: 487 (*Antarctotachinus*; catalog).  
 — Scheerpeltz, 1934: 1514 (*Antarctotachinus*; catalog).  
 — Jeannel, 1940: 123 (*Antarctotachinus*; adult, larval, and pupal characters).  
 — Paulian, 1941: 149 (*Antarctotachinus*; larval characters; Crozet Islands).  
 ▲ **DISTRIBUTION:** Crozet Islands.

#### **Anthobiomimus**

[2 species; Australian Region]

- Anthobiomimus* Steel, 1953b: 171 (species included: *unicolor*, *differens*). **TYPE SPECIES:** *Anthobiomimus unicolor* Steel, fixed by original designation.  
**differens** Steel, 1953b: 174 (*Anthobiomimus*; Type locality: Western Australia: Fremantle).  
 ▲ **DISTRIBUTION:** Australia.  
**unicolor** Steel, 1953b: 173 (*Anthobiomimus*; Type locality: Western Australia: Fremantle).  
 ▲ **DISTRIBUTION:** Australia.

#### **Austrolophrum**

[2 species; Australian Region]

- Austrolophrum* Steel, 1938a: 28 (species included: *cribriceps*). **TYPE SPECIES:** *Amphichroum cribriceps* Fauvel, by original designation and monotypy.  
 — Steel, 1949b: 232 (characters; illustrations; notes; key to species).  
 — Blackwelder, 1952: 70 (type species: *cribriceps*).  
 — Steel, 1970a: 23 (larval characters; biological notes).  
*adelaidae* Blackburn, 1892, see: *cribriceps* Fauvel, 1878.  
**australe** Fauvel, 1877: 191 (*Amphichroum*; Type locality: Nouvelle Galles du Sud, Sydney).  
 — Fauvel, 1878g: 486 (*Amphichroum*; characters).  
 — Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).  
 — Steel, 1949b: 238 (*Austrolophrum*; characters; Australia).  
 ▲ **DISTRIBUTION:** Australia.  
**cribriceps** Fauvel, 1878g: 486 (*Amphichroum*; Type locality: Australie du Sud, Nouvelle-Galles, Angas).  
 — Blackburn, 1892: 23 (*Amphichroum*; notes; Australia).  
 — Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).  
 — Steel, 1938a: 28 (*Austrolophrum*).  
 — Steel, 1949b: 235 (*Austrolophrum*; characters; illustrations; Australia).  
 — Steel, 1970a: 23 (*Austrolophrum*; biological notes).  
 ▲ **DISTRIBUTION:** Australia.



*guichardi* Steel, 1949b: 237 (*Austrolophrum*; variety of *cribriceps*; Type locality: Mt. Martha, Victoria).

*adelaidae* Blackburn, 1892: 23 (*Amphichroum*; cited as *Amphicroum*; Type locality: S. Australia; near Adelaide).

— Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).

— Steel, 1949b: 235 (*Austrolophrum*; synonym of *cribriceps*).

*guichardi* Steel, 1949, see: *cribriceps* Fauvel, 1878.

### **Brouniellum**

[7 species; Australian Region]

*Brouniellum* Bernhauer, 1939f: 198 (species included: *sagoloide*, *australe*, *majus*, *hirtellum*, *parcum*). **TYPE SPECIES:** *Brouniellum hirtellum* Bernhauer, fixed by original designation.

— Cameron, 1947d: 701 (characters).

— Blackwelder, 1952: 86 (type species: *hirtellum*).

— Klimaszewski, Newton, and Thayer, 1996: 146 (endemic to New Zealand).

**australe** Broun, 1894: 426 (*Omalium*; Type locality: West Plains, Invercargill).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Bernhauer, 1939f: 200 (*Brouniellum*).

▲ **DISTRIBUTION:** New Zealand.

**hilarum** Broun, 1914: 90 (*Omalium*; Type locality: Erua, near Waimarino).

— Scheerpeltz, 1933: 1045 (*Omalium*; catalog).

— Kuschel, 1990: 25, 43 (*Brouniellum*; endemic; winged; habitat; New Zealand).

▲ **DISTRIBUTION:** New Zealand.

**hirtellum** Bernhauer, 1939f: 200 (*Brouniellum*; Type locality: Neu-Seeland: North Island: Pudding Hill, near Methven; Auckland).

▲ **DISTRIBUTION:** New Zealand.

**majus** Bernhauer, 1939f: 201 (*Brouniellum*; Type locality: New Zealand).

▲ **DISTRIBUTION:** New Zealand.

**parcum** Bernhauer, 1939f: 201 (*Brouniellum*; Type locality: Neu-Seeland: North Island: Pudding Hill, near Methven; Howick).

▲ **DISTRIBUTION:** New Zealand.

**sagoloide** Sharp, 1886a: 381 (*Omalium*; Type locality: New Zealand: Picton).

— Broun, 1893: 1035 (*Omalium*; characters; New Zealand).

— Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).

— Bernhauer, 1939f: 200 (*Brouniellum*).

▲ **DISTRIBUTION:** New Zealand.

**zealandicum** Cameron, 1947d: 702 (*Brouniellum*; Type locality: New Zealand: Canterbury: Mistake Creek. Also cited from Stewart Island).

▲ **DISTRIBUTION:** New Zealand.

### **Carcinocephalus**

[4 species; Palaearctic Region]

*Carcinocephalus* Bernhauer, 1903c: 592 (replacement name for *Astacops* Bernhauer). **TYPE SPECIES:** *Omalium merkli* Eppelsheim, fixed by R. Lucas, 1920: 164, by subsequent designation.

— Heyden, Reitter, and Weise, 1906: 132 (list of species of Europe and Caucasus).

— Bernhauer and Schubert, 1910: 61 (world catalog; 2 species).

— Winkler, 1925: 332 (catalog for Palaearctic region).

— Scheerpeltz, 1934b: 81 (characters; notes; key to species).

— Székessy, 1963: 15 (characters).

— Tikhomirova, 1973a: 139 (cited as *Carinocephalus*; checklist of species of USSR).

- Tóth, 1982: 68 (*Carcinocephalus*; characters; Hungary).
- Zanetti, 1987: 240 (characters; habitus; species of Italy).
- Zanetti, 1995: 7 (list of species of Italy).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (3 ? Nearctic species; placement of species uncertain; notes; characters in key).

*Astacops* Bernhauer, 1902c: 61 (species included: *merkli*, *mehadiensis*; **preoccupied** by Boisduval, 1835). **TYPE SPECIES:** *Omalium merkli* Eppelsheim, fixed by objective synonymy with *Carcinocephalus* for which R. Lucas had fixed the type species.

- Blackwelder, 1952: 64 (type species).
- Zanetti, 1987: 240 (synonym of *Carcinocephalus*).

*Scribaia* Luze, 1906: 505 (subgenus of *Omalium*; species included: *blandum*). **TYPE SPECIES:** *Omalium (Scribaia) blandum* Luze, fixed by monotypy.

- Bernhauer and Schubert, 1910: 57 (subgenus of *Omalium*).
- Scheerpeltz, 1934b: 81, 89 (subgenus of *Carcinocephalus*; characters; notes).
- Blackwelder, 1952: 349 (type species: *blanda*).
- Zanetti, 1987: 242 (subgenus of *Carcinocephalus*; characters; habitus; species of Italy).

**blandus** Luze, 1906: 546 (*Omalium*; subgenus *Scribaia*; Type locality: Italien, etruskischer Apennin, Porretta; Veltlin).

- Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Scribaia*; catalog).
- Scheerpeltz, 1934b: 81, 89 (*Carcinocephalus*; subgenus *Scribaia*; characters; notes; Italy).
- Zanetti, 1987: 242 (*Carcinocephalus*; subgenus *Scribaia*; characters; Italy).
- Zanetti, 1995: 7 (*Carcinocephalus*; Italy).

▲ **DISTRIBUTION:** Italy.

**bosnicus** Scheerpeltz, 1934b: 86 (*Carcinocephalus*; subgenus *Carcinocephalus*; Type locality: Ilidze, Bosnien, im Tale der Bosna westlich von Sarajevo).

▲ **DISTRIBUTION:** Bosnia Hercegovina.

**mehadiensis** Bernhauer, 1902c: 62 (*Astacops*; Type locality: Graz bei Mehadia in Südungarn).

- Bernhauer and Schubert, 1910: 61 (*Carcinocephalus*; catalog).
- Scheerpeltz, 1934b: 90 (*Carcinocephalus*; subgenus *Carcinocephalus*; characters).
- Tikhomirova, 1973a: 139 (*Carcinocephalus*, cited as *Carinocephalus*; checklist; southern Carpathians).
- Tóth, 1982: 69 (*Carcinocephalus*; characters).

▲ **DISTRIBUTION:** Romania.

**merkli** Eppelsheim, 1883: 305 (*Omalium*, cited as *Homalium*; Type locality: Kodscha-Balkan).

- Bernhauer and Schubert, 1910: 61 (*Carcinocephalus*; catalog).
- Petri, 1912: 171 (*Carcinocephalus*; Romania).
- Scheerpeltz, 1934b: 91 (*Carcinocephalus*; subgenus *Scribaia*; characters; Balkan region).
- Tikhomirova, 1973a: 139 (*Carcinocephalus*, cited as *Carinocephalus*; checklist; northern Balkans).
- Tóth, 1982: 69 (*Carcinocephalus*; characters).

▲ **DISTRIBUTION:** Romania, Balkan region.

### **Crymus**

[2 species; Neotropical, Antarctic, and Australian Regions]

*Crymus* Fauvel, 1904b: 92 (species included: *antarcticus*). **TYPE SPECIES:** *Crymus antarcticus* Fauvel, fixed by monotypy.

- Bernhauer and Schubert, 1911: 91 (world catalog; 1 species).
- Scheerpeltz, 1933: 1078 (world catalog supplement).
- Herman, 1970: 397 (notes).
- Steel, 1970: 240 (synonyms).
- Steel, 1970a: 24 (larval characters; notes).
- Newton, 1985: 198 (notes on austral distribution).

*Arpediomimus* Cameron, 1917b: 277 (replacement name for *Arpediopsis* Cameron). **TYPE SPECIES:** *Arpediopsis falklandicus* Cameron, fixed by objective synonymy with *Arpediopsis*.

- Scheerpeltz, 1933: 1031 (world catalog supplement).
- Jeannel, 1940: 116, 117 (characters; type species: *falklandicus* Cameron).
- Gourlay, 1950: 182 (notes).
- Blackwelder, 1952: 62 (type species: *falklandicus*).
- Steel, 1964: 348 (characters; key to species).
- Steel, 1970: 240 (synonym of *Crymus*).
- Moore and Legner, 1976: 536 (includes seashore species; notes).

*Arpediopsis* Cameron, 1917: 124 (species included: *falklandicus*; **Preoccupied** by Ganglbauer, 1895). **TYPE SPECIES:** *Arpediopsis falklandica* Cameron, fixed by monotypy.

- Scheerpeltz, 1933: 1031 (synonym of *Arpediomimus*).
- Gourlay, 1950: 182 (synonym of *Arpediomimus*).
- Blackwelder, 1952: 62 (type species: *falklandica*).
- Steel, 1964: 348 (synonym of *Arpediomimus*).
- Steel, 1970: 240 (synonym of *Crymus*).

**antarcticus** Fauvel, 1904b: 93 (*Crymus*; Type locality: Nouvelle-Georgie du Sud).

- Bernhauer and Schubert, 1911: 91 (*Crymus*; catalog).
- Holdhaus, 1932: 166 (*Crymus*; notes; South Georgia Island).
- Scheerpeltz, 1933: 1078 (*Crymus*; catalog).
- Steel, 1970: 240 (*Crymus*; characters; South Georgia).
- Steel, 1970a: 24 (*Crymus*; larval characters).

▲ **DISTRIBUTION:** South Georgia, Falkland Islands.

*falklandicus* Cameron, 1917: 124 (*Arpediopsis*; Type locality: Sandy Beaches in vicinity of Port Stanley, Falkland Islands).

- Scheerpeltz, 1933: 1031 (*Arpediomimus*; catalog).
- Steel, 1964: 349 (*Arpediomimus*; characters; Falkland Islands; South Georgia).
- Steel, 1970: 240 (*Crymus*; synonym of *antarcticus*).

*falklandicus* Cameron, 1917, see: *antarcticus* Fauvel, 1904.

**kronii** Kiesenwetter, 1877: 161 (*Omalium*; Type locality: Auckland Inseln).

- Fauvel, 1877: 188 (*Omalium*, cited as *Homalium*; cited as *kroni*; characters; Auckland Islands).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; cited as *kroni*; catalog).
- Scheerpeltz, 1933: 1045 (*Omalium*; cited as *kroni*; catalog).
- Gourlay, 1950: 182 (*Arpediomimus*; cited as *kronii*; collecting notes and range extension).
- Steel, 1964: 350 (*Arpediomimus*; cited as *kroni*; adult and larval characters; Campbell Island; Auckland Island; South Island).
- Klimaszewski, Newton, and Thayer, 1996: 146 (*Crymus*; New Zealand).
- Marris, 2000: 175 (*Crymus*; habitat; Bollons Island [Antipodes]; also known from Auckland Islands; Campbell Island; New Zealand).

▲ **DISTRIBUTION:** New Zealand, Auckland Island, Campbell Island; Antipodes Islands.

*longiceps* Broun, 1914: 89 (*Omalium*; Type locality: Hakapoua, Southland).

- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- Gourlay, 1950: 182 (*Arpediomimus*; synonym of *kronii*, cited as *kroni*).
- Steel, 1964: 350 (*Arpediomimus*; synonym of *kronii*, cited as *kroni*).

*longiceps* Broun, 1914, see: *kronii* Kiesenwetter, 1877.

### Dialycera

[5 species; Palaearctic Region]

*Dialycera* Ganglbauer, 1895: 739, 743 (subgenus of *Phyllodrepa*; species included: *distincticornis*). **TYPE SPECIES:** *Omalium distincticornis* Baudi, fixed by monotypy.

- Luze, 1906: 576 (characters; key to species).
- Heyden, Reitter, and Weise, 1906: 131 (list of species of Europe and Caucasus).

- Bernhauer and Schubert, 1910: 49 (subgenus of *Phyllodrepa*; catalog).
- Blackwelder, 1952: 122 (subgenus of *Hapalaraea*; type species: *distincticornis*).
- Zanetti, 1987: 202 (cited as valid genus; characters; habitus; key to species of Italy).
- Zanetti, 1995: 7 (list of species of Italy).

**armena** Khnzorian, 1959: 66 (*Phyllodrepa*; subgenus *Dialycera*; Type locality: ArmSSR: Areni, Ekhegnadzorskii r-n).

- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dialycera*; checklist; Armenia).
- Herman, 2001: 13 (*Dialycera*).

▲ **DISTRIBUTION:** Armenia.

**bimaculata** Luze, 1906: 578 (*Dialycera*; Type locality: Kleinasien: Bulghar-Dagh).

- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; subgenus *Hypopycna*; catalog).
- J. Sahlberg, 1913: 58 (*Dialycera*; Caramania).
- Khnzorian, 1959: 68 (*Phyllodrepa*; subgenus *Dialycera*; characters).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dialycera*; checklist; Asia Minor).

▲ **DISTRIBUTION:** Turkey.

**distincticornis** Baudi, 1870: 402 (*Omalium*; Type locality: Pedemontio; [Note: See lectotype designation by Zanetti, 1986]).

- Fauvel, 1871a: 87 [= 1872: 61] (*Omalium*, cited as *Homalium*; characters; France; Italy).
- Mulsant and Rey, 1880: 279 (*Hypopycna*; characters; France).
- Ganglbauer, 1895: 743 (*Phyllodrepa*; subgenus *Hypopycna*; characters; Europe).
- Luze, 1906: 577 (*Dialycera*; characters; Italy; France).
- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; subgenus *Hypopycna*; catalog).
- Español, 1945: 90 (*Phyllodrepa*; subgenus *Dialycera*; Spain).
- Khnzorian, 1959: 68 (*Phyllodrepa*; subgenus *Dialycera*; characters).
- Zerche, 1991a: 382, 385 (*Dialycera*; aedeagus illustrated; characters discussed).
- Tóth, 1982: 51 (*Hapalaraea*; characters).
- Zanetti, 1986: 97 (*Dialycera*; lectotype designation).
- Zanetti, 1987: 202 (*Dialycera*; characters; Italy).
- Sparacio, 1995: 140 (*Dialycera*; notes).
- Zanetti, 1995: 7 (*Dialycera*; Italy).

▲ **DISTRIBUTION:** Italy, France, Spain.

*subrugata* Rey, 1889: cxix (*Hypopycna*; Type locality: Hyères).

- Ganglbauer, 1895: 743 (*Phyllodrepa*; synonym of *distincticornis*).
- Luze, 1906: 577 (*Dialycera*; synonym of *distincticornis*).
- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; synonym of *distincticornis*).

*sekeræ* Reitter, 1905b: 242 (*Phyllodrepa*; subgenus *Dialycera*; Type locality: Italien, bei Bazzano, unweit Bologna).

- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; subgenus *Hypopycna*; catalog).
- Zanetti, 1986: 95 (*Dialycera*; synonym of *distincticornis*).
- Zanetti, 1987: 202 (*Dialycera*; synonym of *distincticornis*).

**minuta** Luze, 1906: 582 (*Dialycera*; Type locality: Galiläa: Kana).

- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; subgenus *Dialycera*; catalog).
- J. Sahlberg, 1913: 58 (*Dialycera*; Palestine).
- Khnzorian, 1959: 68 (*Phyllodrepa*; subgenus *Dialycera*; characters).

▲ **DISTRIBUTION:** Israel.

*sekeræ* Reitter, 1905, see: *distincticornis* Baudi, 1870.

**striatipennis** Aubé, 1850: 321 (*Omalium*; Type locality: environs de Batoum, Iméritie).

- Luze, 1906: 579 (*Dialycera*; characters; Caucasus).
- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; subgenus *Dialycera*; catalog).
- Khnzorian, 1959: 68 (*Phyllodrepa*; subgenus *Dialycera*; characters).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dialycera*; checklist; Caucasus).
- Herman, 2001: 13 (*Dialycera*).

▲ **DISTRIBUTION:** Georgia.

*subrugata* Rey, 1889, see: *distincticornis* Baudi, 1870.

**Hapalaraea**

[7 species; Nearctic and Palaearctic Regions]

*Hapalaraea* Thomson, 1858: 38 (species included: *pygmaea*). **TYPE SPECIES:** *Staphylinus pygmaeus* Paykull, fixed by monotypy.

- Thomson, 1859: 50 (characters; type species: *pygmaea*).
- Thomson, 1861: 200 (characters).
- Fauvel, 1871a: 83, 86 [= 1872: 57, 61] (subgroup of *Omalium*, cited as *Homalium*).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).
- Mulsant and Rey, 1880: 280 (characters).
- Fowler, 1888: 423 (notes).
- Heyden, Reitter, and Weise, 1891: 121 (list of species of Europe and Caucasus).
- Heyden, Reitter, and Weise, 1906: 130 (subgenus of *Phyllodrepa*; list of species of Europe and Caucasus).
- Bernhauer and Schubert, 1910: 49 (subgenus of *Phyllodrepa*; catalog).
- Roubal, 1930: 307 (catalog; Slovakia).
- Scheerpeltz, 1933: 1042 (world catalog supplement; subgenus of *Phyllodrepa*).
- Palm, 1948: 74 (subgenus of *Dropephylla*; species of Sweden).
- Tottenham, 1949: 354, 406 (type species: *pygmaea* Gyllenhal; list of British species; notes).
- Blackwelder, 1952: 180 (type species: *pygmaea*).
- Tottenham, 1954: 19 (characters; key to British subgenera and species).
- Hatch, 1957: 52, 76 (characters; key to species of Pacific Northwest).
- Székessy, 1963: 14 (characters).
- Lohse, 1964: 37, 40 (subgenus of *Phyllodrepa*; characters).
- Pototskaia, 1967: 20 (larval characters).
- Steel, 1970a: 10 (larval characters; biological notes).
- Tikhomirova, 1973a: 138 (subgenus of *Phyllodrepa*; checklist of species of USSR).
- Moore and Legner, 1975: 193 (catalog; North America north of Mexico).
- Pototskaia, 1976: 164, 165 (larval characters).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 308 (subgenus of *Phyllodrepa*; larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 30 (catalog; Poland).
- Moore and Legner, 1979: 206 (characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Tóth, 1982: 50 (characters; habitus; key to species of Hungary).
- Zanetti, 1983a: 461 (characters; valid genus).
- Zanetti, 1987: 195 (characters; habitus; key to species of Italy).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Lohse and Lucht, 1989: 126 (cited as genus).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 7 (list of species of Italy).
- M. Hansen, 1996: 94 (list of Danish species).
- Downie and Arnett, 1996: 436 (characters).
- Lundgren, 1998: 38 (list of species from Florida; records for other States listed for each species).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (2 Nearctic species; notes; characters in key).

*atriceps* Motschulsky, 1860, see: *pygmaea* Paykull, 1800.

*barri* Hatch, 1957, see: *hamata* Fauvel, 1878.

**hamata** Fauvel, 1878d: 209 [= 1878e: 45] (*Omalium*, cited as *Homalium*; Type locality: Michigan, Detroit).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Blatchley, 1910: 480 (*Omalium*, cited as *Homalium*; characters; Indiana).
- Steel, 1959: 82 (*Hapalaraea*).

- Downie and Arnett, 1996: 438 (*Omalium*; characters; USA).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Hapalaraea*).

▲ **DISTRIBUTION:** USA.

*barri* Hatch, 1957: 77 (*Acrolocha*; Type locality: Ida.: Juliaetta).

- Steel, 1959: 82 (*Acrolocha*; appears to be same as *Hapalaraea hamata*).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Hapalaraea*; synonym of *hamata*).

**humerosa** Fauvel, 1878d: 209 [= 1878e: 45] (*Omalium*, cited as *Homalium*; Type locality: Michigan, Detroit; Pennsylvanie; Missouri).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Notman, 1920b: 693 (*Omalium*; Florida).
- Downie and Arnett, 1996: 438 (*Omalium*; characters; USA).
- Lundgren, 1998: 38 (*Hapalaraea*; Florida; Michigan; North Carolina).

▲ **DISTRIBUTION:** USA.

**humilis** Mäklin, 1853: 197 (*Omalium*; Type locality: interior pars peninsulae Kenai prope fl. Tschunuktnu).

- Fauvel, 1878d: 211 [= 1878e: 47] (*Omalium*, cited as *Homalium*; characters; Alaska).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Hatch, 1957: 81 (*Omalium*; characters; British Columbia).
- Moore and Legner, 1975: 193 (*Hapalaraea*).

▲ **DISTRIBUTION:** Canada, USA.

**lestevoides** Sawada, 1966: 257 (*Hapalaraea*; subgenus *Phyllodrepa*; Type locality: Mt. Noshag, 3800 m).

▲ **DISTRIBUTION:** Afghanistan.

**megarthroides** Fauvel, 1878d: 208 [= 1878e: 44] (*Omalium*, cited as *Homalium*; Type locality: Californie).

- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Hapalaraea*; catalog).
- Hatch, 1957: 77 (*Acrolocha*; characters; British Columbia; Idaho; Washington; Oregon).
- Steel, 1959b: 82 (*Hapalaraea*).

▲ **DISTRIBUTION:** Canada, USA.

**pygmaea** Paykull, 1800: 410 (*Staphylinus*; [**preoccupied**]; [**Note:** Bernhauer and Schubert (1910: 49) cited *pygmaea* Gyllenhal (1810: 223) as a species of *Phyllodrepa* (*Hapalaraea*). Gyllenhal did not describe the species he attributed it to Paykull but he also cited *pygmaeus* Gravenhorst, 1806 as a subsequent reference of *pygmaeus* Paykull; the Gravenhorst species cited by Gyllenhal is now in *Xylodromus* where it is listed as a synonym of *testaceus* Erichson; *pygmaeus* Gravenhorst is an available name and Gravenhorst made no mention of the Paykull species]; Type locality: Westrogothia).

- Gyllenhal, 1810: 223 (*Omalium*; [**Note:** Bernhauer and Schubert (1910: 49) cited *pygmaea* Gyllenhal as a valid species; Gyllenhal did not described the species as new, he attributed it to Paykull; further he treated *pygmaea* Gravenhorst, 1806: 206 as a subsequent reference of *pygmaea* Paykull; *pygmaea* Gravenhorst is currently in *Xylodromus*]; characters).
- Stephens, 1834: 356 (*Omalium*; [**Note:** Stephens, 1834: 356 cited Paykull as the author of this name; Stephens, 1829: 298 cited *pygmaeus* with references by Gravenhorst, 1806: 206 and Paykull, 1800: 410 as the same species]; characters; England).
- Lacordaire, 1835: 488 (*Omalium*; [**Note:** Lacordaire cited *pygmaeus* of Paykull, 1800, Gravenhorst, 1806 and Gyllenhal, 1810 as referring to the same species]; characters; France).
- Stephens, 1839: 430 (*Omalium*; characters; England).
- Erichson, 1840: 883 (*Omalium*; [**Note:** Erichson cited Paykull, 1800 and Gyllenhal, 1810 as referring to the same species; see *pygmaeus* Gravenhorst]; characters; Germany; Sweden).
- Heer, 1841: 570 (*Phloeonomus*; characters; Switzerland).
- Redtenbacher, 1849: 829 (*Omalium*; characters; Austria).
- Thomson, 1857a: 226 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 645 (*Omalium*; characters; France).
- Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).

- Kraatz, 1857d: 1001 (*Omalium*; characters; Germany).
- Thomson, 1858: 38 (*Hapalaraea*; type species).
- Thomson, 1859: 50 (type species of *Hapalaraea*).
- Thomson, 1861: 201 (*Hapalaraea*; characters; Scandinavia).
- Fauvel, 1871a: 87 [= 1872: 61] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany; Austria; Corsica).
- Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 238 (*Hapalaraea*; characters; Baltic region).
- Mulsant and Rey, 1880: 282 (*Hapalaraea*; characters; France).
- Fowler, 1888: 423 (*Hapalaraea*; characters; Britain).
- Seidlitz, 1891: 344 (*Hapalaraea*; characters; Europe).
- Seidlitz, 1891a: 366 (*Hapalaraea*; characters; Europe).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; subgenus *Hapalaraea*; characters; north and middle Europe; Corsica).
- Sainte-Claire Deville, 1906: 68 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 193 (*Phyllodrepa*; subgenus *Hapalaraea*; characters; Germany).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Hapalaraea*; Gyllenhal cited as author; catalog).
- Johansen, 1914: 617 (*Phyllodrepa*; subgenus *Hapalaraea*; characters; Denmark).
- Portevin, 1929: 449 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Hapalaraea*; catalog).
- Palm, 1948: 74 (*Phyllodrepa*; subgenus *Hapalaraea*; characters; Sweden; Denmark; Norway; Finland).
- Tottenham, 1949: 406 (*Hapalaraea*; checklist; Britain).
- Horion, 1963: 71 (*Phyllodrepa*; subgenus *Hapalaraea*; Britain; Denmark; Norway; Sweden; Finland; Holland; Belgium; France; Corsica; Italy; Slovenia; Croatia; Hercegovina; Romania; Hungary; Slovakia; Czech Republic; Poland; Germany; Austria).
- Lohse, 1964: 40 (*Phyllodrepa*; subgenus *Hapalaraea*; characters; central Europe).
- Smetana, 1964c: 163 (*Phyllodrepa*; subgenus *Hapalaraea*; Czechoslovakia).
- Focarile, 1964: 60 (*Phyllodrepa*; Italy).
- Coiffait, 1968c: 505 (*Hapalaraea*; Corsica).
- Steel, 1970a: 10 (*Hapalaraea*; larval characters; biological notes).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Hapalaraea*; checklist; USSR).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).
- Pope, 1977: 23 (*Hapalaraea*; Britain).
- Muona, 1979: 18 (*Hapalaraea*; Finland; Russia; Sweden; Norway; Denmark).
- Burakowski, Mroczkowski, and Stefańska, 1979: 37 (*Hapalaraea*; catalog; Poland).
- Hammond, 1980: 137 (*Hapalaraea*; unconfirmed in Ireland).
- Tóth, 1980: 97 (*Phyllodrepa*; subgenus *Hapalaraea*; Hungary).
- Tóth, 1982: 57 (*Hapalaraea*; characters; Hungary).
- Zanetti, 1983a: 464 (*Hapalaraea*; characters).
- Terlutter, 1984: 19, 39 (*Phyllodrepa*; notes; Germany).
- Segers, 1986: 20 (*Hapalaraea*; checklist of species; Belgium).
- Zanetti, 1987: 196 (*Hapalaraea*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Belgium; Netherlands; Luxembourg; Denmark).
- Lohse and Lucht, 1989: 285 (*Hapalaraea*; also cited in *Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; France; Belgium; Netherlands; Luxembourg; Denmark; Sweden).
- Gusarov, 1989: 5 (*Hapalaraea*; habitat notes; Ukraine).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Hapalaraea*; Slovakia; Czech Republic).
- Silfverberg, 1992: 21 (*Hapalaraea*; Finland; Russia; Sweden; Norway; Denmark).
- Wittwer, 1993: 248 (*Hapalaraea*; Switzerland).
- Boháč, 1993: 40 (*Hapalaraea*; Czech Republic).
- Zanetti, 1995: 7 (*Hapalaraea*; Italy).
- M. Hansen, 1996: 94 (*Hapalaraea*; checklist; Denmark).

- Anderson, Nash, and O'Connor, 1997: 15 (*Hapalaraea*; Ireland).
- Owen, 1999b: 61 (*Hapalaraea*; captured underground at roots of old trees; Britain).
- Fowles, Alexander, and Key, 1999: 129 (*Hapalaraea*; saproxylic species; status as endangered or threatened species; Britain).
- Lott, 1999: 72 (*Hapalaraea*; saproxylic species; habitat; endangered status; Britain).
- Ryabukhin, 1999: 16 (type species of *Hapalaraea*).
- Owen, 2000: 251 (*Hapalaraea*; pitfall trap collections from underground at roots of trees; Britain).
- Herman, 2001: 37 (*Hapalaraea*; although a junior primary homonym of *Staphylinus pygmaeus* Paykull, required replacement should be ignored; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Europe.

- ulmi* Motschulsky, 1857a: 493 (*Phloeonomus*; Type locality: Fontainebleau).  
 — Fauvel, 1871a: 87 [= 1872: 61] (*Omalium*, cited as *Homalium*; synonym of *pygmaeus*).  
 — Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; synonym of *pygmaea*).

*atriceps* Motschulsky, 1860: 543 (*Anthobium*; Type locality: Mont. Tschatyr-Dag en Crimée).

- Hochhuth, 1862: 109 (*Anthobium*; characters; Crimea).
- Bernhauer and Schubert, 1910: 39 (*Anthobium*; catalog).
- Zanetti, 1993: 261 (*Hapalaraea*; synonym of *pygmaea*).

**settei** Zanetti, 1983a: 462 (*Hapalaraea*; Type locality: Haute Asco, Corsica, 1550 m).  
 — Zanetti, 1987: 198 (*Hapalaraea*; characters; Corsica).

▲ **DISTRIBUTION:** Corsica.

*ulmi* Motschulsky, 1857, see: *pygmaea* Paykull, 1800.

### Hypopycna

[1 species; Palaearctic Region]

*Hypopycna* Mulsant and Rey, 1880: 274 (species included: *rufula*; *distincticornis*). **TYPE SPECIES:** *Omalium rufulum* Erichson, fixed by subsequent designation by R. Lucas, 1920: 346.

- Luze, 1906: 574 (characters).
- Heyden, Reitter, and Weise, 1906: 130 (subgenus of *Phyllodrepa*; list of species of Europe and Caucasus).
- Scheerpeltz, 1933: 1043 (world catalog supplement; subgenus of *Phyllodrepa*).
- Tottenham, 1949: 355, 406 (subgenus of *Hapalaraea*; type species: *rufula* Erichson; list of British species).
- Blackwelder, 1952: 196 (type species: *rufula*).
- Lohse, 1964: 37, 41 (subgenus of *Phyllodrepa*; characters).
- Steel, 1970a: 9 (valid genus; larval characters; biological notes).
- Bordoni, 1973j: 656 (subgenus of *Phyllodrepa*; list of species from islands near Sicily).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 308 (cited as subgenus of *Phyllodrepa*; larval characters).
- Zanetti, 1987: 199 (valid genus; characters; habitus; key to species of Italy).
- Lohse and Lucht, 1989: 126 (cited as genus; notes).
- Zanetti, 1995: 7 (list of species of Italy).

*marina* Ragusa, 1871, see: *rufula* Erichson, 1840.

- rufula** Erichson, 1840: 883 (*Omalium*; Type locality: Austria).  
 — Fairmaire and Laboulbène, 1856: 645 (*Omalium*; characters; France).  
 — Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).  
 — Fauvel, 1871a: 86 [= 1872: 60] (*Omalium*, cited as *Homalium*; characters; France; Germany; Austria; Italy).  
 — Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).  
 — Mulsant and Rey, 1880: 276 (*Hypopycna*; characters; France).



- Mulsant and Rey, 1880: 279 (*Hypopycna*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 49 cited *distincticornis* Rey as a synonym of *rufula* (cited as *ufula*); Mulsant and Rey did not describe the species as new, they attributed it to Baudi]; characters; France).
- Fauvel, 1886: 96 [= 1886a: 88] (*Omalium*, cited as *Homalium*; Tunisia).
- Seidlitz, 1891: 344 (*Hypopycna*; characters; Europe).
- Seidlitz, 1891a: 366 (*Hypopycna*; characters; Europe).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; subgenus *Hypopycna*; characters; middle Europe; Mediterranean region).
- Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Algeria; Tunisia).
- Luze, 1906: 574 (*Hypopycna*; characters; central Europe; Mediterranean region).
- Sainte-Claire Deville, 1906: 68 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 194 (*Phyllodrepa*; subgenus *Hypopycna*; characters; Germany).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Hapalaraea*; cited as *ufula*; catalog).
- Portevin, 1929: 448 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1043 (*Phyllodrepa*; subgenus *Hypopycna*; catalog).
- Blair, 1944: 20 (*Phyllodrepa*; subgenus *Hypopycna*; characters; Britain).
- Horion, 1963: 73 (*Phyllodrepa*; subgenus *Hypopycna*; Tunisia; France; Corsica; Sardinia; Sicily; Italy; Dalmatia; Austria).
- Lohse, 1964: 41 (*Phyllodrepa*; subgenus *Hypopycna*; characters; central Europe).
- Steel, 1970a: 9 (*Hypopycna*; larval characters; biological notes).
- Pope, 1977: 23 (*Hypopycna*; Britain).
- Tóth, 1982: 52 (*Hapalaraea*; characters).
- Zanetti, 1987: 200 (*Hypopycna*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Austria).
- Owen, 1993a: 187 (*Phyllodrepa*; subgenus *Hypopycna*; collecting notes; England).
- Hodge and Jones, 1995: 30 (*Hypopycna*; characters; Britain).
- Sparacio, 1995: 140 (*Hypopycna*; characters; notes; Sicily).
- Zanetti, 1995: 7 (*Hypopycna*; Italy).
- Owen, 1997: 302 (*Hypopycna*; collecting notes; Britain).
- Zanetti and Sabella, 1998: 29 (*Hypopycna*; Sicily).
- ▲ **DISTRIBUTION:** Britain, France, Italy, Austria, Croatia, Algeria, Tunisia.

*marina* Ragusa, 1871: 196 (*Omalium*; Type locality: Palermo).

- Fauvel, 1873b: 114 [= 1873c: 7] (*Omalium*, cited as *Homalium*; synonym of *rufulum*).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; synonym of *rufula*).
- Luze, 1906: 574 (*Hypopycna*; synonym of *rufula*).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; synonym of *rufula*).

*subrugata* Rey, 1889, see: *Dialycera*.

### Ischnoderus

[15 species; Neotropical and Australian Regions]

*Ischnoderus* Fauvel, 1867a: 46 [= 1868: 51] (species included: *insignis*). **TYPE SPECIES:**  
*Omalium insigne* Fairmaire and Germain, fixed by monotypy.

- Gemminger and Harold, 1868: 671 (catalog).
- Bernhauer and Schubert, 1910: 82 (world catalog; 7 species).
- Scheerpeltz, 1933: 1070 (world catalog supplement).
- Blackwelder, 1944: 102 (checklist of species from Mexico, Central and South America, and the West Indies).
- Blackwelder, 1952: 200 (type species: *insignis*).
- Coiffait and Saiz, 1968: 454 (characters; Chilean species).

*Walkerellus* Bernhauer, 1939f: 203 (subgenus of *Ischnoderus*; species included: *paradoxus*).

- TYPE SPECIES:** *Ischnoderus (Walkerellus) paradoxus* Bernhauer, fixed by monotypy.
- Blackwelder, 1952: 403 (type species: *paradoxus*).

**arecobius** Broun, 1910: 20 (*Ischnoderus*; Type locality: Waitakerei Range).

- Scheerpeltz, 1933: 1070 (*Ischnoderus*; catalog).
- ▲ **DISTRIBUTION:** New Zealand.

- australicus** Cameron, 1943a: 338 (*Ischnoderus*; Type locality: W. Australia: Mundaring).  
▲ **DISTRIBUTION:** Australia.
- bruchii** Bernhauer, 1912d: 30 (*Ischnoderus*; Type locality: Argentinien: Gob. Neuquen).  
— Scheerpeltz, 1933: 1070 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** Argentina.
- cognatus** Broun, 1910: 20 (*Ischnoderus*; Type locality: West Plains, Invercargill).  
— Scheerpeltz, 1933: 1070 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- curtipennis** Broun, 1915: 280 (*Ischnoderus*; Type locality: Pudding Hill, near Methven).  
— Scheerpeltz, 1933: 1070 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- fultoni** Broun, 1893: 1041 (*Ischnoderus*; Type locality: Taieri).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- genalis** Broun, 1880: 118 (*Omalium*; Type locality: Whangarei Harbour).  
— Broun, 1886: 943 (*Ischnoderus*).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
— Kuschel, 1990: 25 (*Ischnoderus*; endemic; winged; habitat; New Zealand).  
— Emberson, 1998: 32 (*Ischnoderus*; collecting notes; Chatham Islands).  
▲ **DISTRIBUTION:** New Zealand, Chatham Islands.
- insignis** Fairmaire and Germain, 1861: 454 (*Omalium*; Type locality: Santiago).  
— Fauvel, 1867a: 48 [= 1868: 53] (*Ischnoderus*; characters; Chile).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
— Coiffait and Saiz, 1968: 454 (*Ischnoderus*; characters; Chile).  
▲ **DISTRIBUTION:** Chile.
- morosus** Broun, 1893: 1041 (*Ischnoderus*; Type locality: Howick).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- nitescens** Bernhauer, 1939f: 202 (*Ischnoderus*; Type locality: Neu-Seeland: Greymouth).  
▲ **DISTRIBUTION:** New Zealand.
- opaciceps** Cameron, 1947d: 703 (*Ischnoderus*; Type locality: New Zealand: N. Auckland: Kava, Whangarei).  
▲ **DISTRIBUTION:** New Zealand.
- paradoxus** Bernhauer, 1939f: 203 (*Ischnoderus*; subgenus *Walkerellus*; Type locality: Tasmania: Hobart).  
▲ **DISTRIBUTION:** Australia.
- pictulus** Broun, 1893: 1040 (*Ischnoderus*; Type locality: near Howick).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- politulus** Broun, 1880: 119 (*Omalium*; Type locality: Parua).  
— Broun, 1886: 943 (*Ischnoderus*).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
▲ **DISTRIBUTION:** New Zealand.
- tectus** Broun, 1880: 117 (*Omalium*; Type locality: Parua).  
— Broun, 1886: 943 (*Ischnoderus*).  
— Bernhauer and Schubert, 1910: 82 (*Ischnoderus*; catalog).  
— Kuschel, 1990: 25 (*Ischnoderus*; endemic; winged; habitat; New Zealand).  
▲ **DISTRIBUTION:** New Zealand.

**Leaskia**

[2 species; Australian Region]

*Leaskia* Steel, 1938a: 28 (species included: *acidotiformis*). **TYPE SPECIES:** *Leaskia acidotiformis* Steel, fixed by original designation.

— Steel, 1949b: 239 (characters; illustrations; notes; key to species).

— Blackwelder, 1952: 212 (type species: *acidotiformis*).

**acidotiformis** Steel, 1938a: 30 (*Leaskia*; Type locality: Australia: Victoria: Wannon Valley).

— Steel, 1949b: 242 (*Leaskia*; characters; illustrations; Australia).

▲ **DISTRIBUTION:** Australia.

**spinipes** Fauvel, 1878g: 487 (*Amphichroum*; Type locality: Australie occidentale).

— Bernhauer and Schubert, 1910: 70 (*Amphichroum*; catalog).

— Steel, 1949b: 244 (*Leaskia*; characters; illustrations; Australia).

▲ **DISTRIBUTION:** Australia.

**Macralymma**

[1 species; Australian Region]

*Macralymma* Cameron, 1945b: 179 (species included: *punctiventris*). **TYPE SPECIES:** *Macralymma punctiventris* Cameron, fixed by monotypy.

— Blackwelder, 1952: 229 (type species: *punctiventris*).

— Moore and Legner, 1976: 536 (includes seashore species; notes).

**punctiventre** Cameron, 1945b: 179 (*Macralymma*; Type locality: New Zealand: Taieri Beach).

— Emberson, 1998: 32 (*Macralymma*; collecting notes; Chatham Islands).

— Klimaszewski, Newton, and Thayer, 1996: 146 (*Macralymma*; endemic to New Zealand and Chatham Island).

▲ **DISTRIBUTION:** New Zealand, Chatham Islands.

**Metaxylostiba**

[3 species; Oriental Region]

*Metaxylostiba* Steel, 1960a: 171 (species included: *castaneipennis*). **TYPE SPECIES:** *Phloeonomus castaneipennis* Cameron, fixed by original designation and monotypy.

— Smetana, 1992c: 33, 34 (key to species; notes).

**castaneipennis** Cameron, 1928g: 433 (*Phloeonomus*; Type locality: Borneo: Mt. Murud, 5000–6000 feet).

— Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

— Steel, 1960a: 171 (*Metaxylostiba*; characters; Sarawak).

— Hammond, 1984: 196 (*Metaxylostiba*; Borneo).

— Smetana, 1992c: 34 (*Metaxylostiba*; characters in key; notes; Borneo).

▲ **DISTRIBUTION:** Borneo.

**hanskii** Smetana, 1992c: 38 (*Metaxylostiba*; Type locality: Sarawak: 4th Division Gn. Mulu N.P.).

▲ **DISTRIBUTION:** Malaysia.

**monticola** Smetana, 1992c: 35 (*Metaxylostiba*; Type locality: Sabah: Borneo Sabah, Mt. Kinabalu N. P., below Laban Rata, 3150 m).

▲ **DISTRIBUTION:** Borneo.

**Micralymma**

[4 species; Nearctic and Palaeartic Regions]

*Micralymma* Westwood, 1838b: 129 (species included: *johnstonis*). **TYPE SPECIES:** *Micralymma johnstonis* Westwood, fixed by monotypy.

— Westwood, 1838a (August): 18 (characters; type species).

— Stephens, 1839: 422 (characters).

— Erichson, 1840: 819 (characters).

— Schiødte, 1845: 374 (characters).

— Schiødte, 1846 (characters; discussion).

- Schaum, 1852: 29 (list of species; Europe).
- Lacordaire, 1854: 134 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 625 (characters).
- Jacquelin du Val, 1857: 66 (characters).
- Redtenbacher, 1857: 241 (characters).
- Thomson, 1858: 37 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 49 (characters; type species: *brevipenne*).
- Schaum, 1859: 31 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 187 (characters).
- LeConte, 1863: 26 (list of North American species).
- Jacquelin du Val, 1868: 79 (catalog; European species).
- Fauvel, 1871a: 107 [= 1872: 81] (characters).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 271 (characters).
- Fauvel, 1875a:VI [= 1875b: 208] (catalog).
- Fauvel, 1878d: 222 [= 1878e: 58] (key to North American species).
- Mulsant and Rey, 1880: 4 (characters).
- Fowler, 1888: 407 (notes).
- Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).
- Heyden, 1893: 49 (list of species of Siberian region).
- Ganglbauer, 1895: 728 (characters).
- Heyden, Reitter, and Weise, 1906: 132 (list of species of Europe and Caucasus).
- Reitter, 1909: 188 (characters; key to German species).
- Bernhauer and Schubert, 1910: 61 (world catalog; 5 species).
- Johansen, 1914: 602 (characters).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 332 (catalog for Palaearctic region).
- Joy, 1932: 94 (key to British species).
- Scheerpeltz, 1933: 1052 (world catalog supplement).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 90 (characters; Swedish species).
- Tottenham, 1949: 356, 407 (type species: *marina* Ström = *johnstonis* Westwood; list of British species; notes).
- Blackwelder, 1952: 242 (type species: *johnstonis*).
- Tottenham, 1954: 28 (characters; British species).
- Steel, 1958: 138 (characters; key to species).
- Steel, 1962: 238 (key to species; notes).
- Horion, 1963: 97 (list of central European species).
- Lohse, 1964: 49 (characters; key to central European species).
- Pototskaia, 1967: 19 (larval characters).
- Kasule, 1968: 132, 134 (larval characters).
- Steel, 1970a: 17 (larval characters; biological notes).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Moore and Legner, 1975: 197 (catalog; North America north of Mexico).
- Moore and Legner, 1976: 536 (includes seashore species; notes).
- Pope, 1977: 24 (list of British species).
- Topp, 1978: 309 (larval characters).
- Moore and Legner, 1979: 207 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Zanetti, 1983: 429 (characters).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Downie and Arnett, 1996: 436 (characters; species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (2 Nearctic species; notes; characters in key).

*Microcalymma* Agassiz, 1847: 232 (emendation of *Micralymma*). **TYPE SPECIES:** *Micralymma johnstonis* Westwood, fixed by objective synonymy with *Micralymma*.

— Blackwelder, 1952: 243 (type species).

*Microcalymma* Gemminger and Harold, 1868: 663 (emendation of *Micralymma*). **TYPE SPECIES:** *Micralymma johnstonis* Westwood, fixed by objective synonymy with *Micralymma*.

— Duvivier, 1883: 197 (catalog).

— Bernhauer and Schubert, 1910: 61 (synonym of *Micralymma*).

— Blackwelder, 1952: 243 (type species).

*Micromalium* Melichar, 1913: 45 (species included: *caucasicum*). **TYPE SPECIES:** *Micromalium caucasicum* Melichar, fixed by monotypy.

— Winkler, 1925: 332 (catalog for Palaearctic region).

— Scheerpeltz, 1933: 1053 (world catalog supplement).

— Blackwelder, 1952: 246 (type species: *caucasicum*).

— Steel, 1962: 238 (synonym of *Micralymma*).

**brevilingue** Schiødte, 1845: 377 (*Micralymma*; Type locality: insula Groenlandiae: Kikertarsoeitsiak).

— Schiødte, 1846: 163 (*Micralymma*; characters; Greenland).

— Fauvel, 1878d: 222 [= 1878e: 58] (*Micralymma*; characters; Greenland).

— Bernhauer and Schubert, 1910: 62 (*Micralymma*; catalog).

— Henriksen and Lundbeck, 1918: 496 (*Micralymma*; Greenland).

— Lindroth, 1957: 256, 260, 263, 292 (*Micralymma*; notes; Siberia; tidal zone high Arctic circumpolar).

— Henriksen, 1939: 43 (*Micralymma*; Greenland).

— Steel, 1958: 140 (*Micralymma*; characters; Greenland to 70°N; Baffin Island).

— Steel, 1962: 238 (*Micralymma*; characters).

— M. Hansen and Martin, 2000: 216 (*Micralymma*; notes).

▲ **DISTRIBUTION:** Greenland, Canada, USA, Russia, Islands of Arctic region.

*dicksoni* Mäklin, 1878: 24 [= 1878a: 300] (*Microcalymma*; Type locality: Jefremow Kamen, 72°40' N. lat.; Krestowskoj 72°15' N. lat.).

— Mäklin, 1881: 42 (*Micralymma*; characters; Jefremov Kamen, lat. bor. 72°40'; Krestowskoj, lat. bor. 72°15').

— J. Sahlberg, 1897: 367 (*Phyllodrepa*; notes; Siberia).

— Poppius, 1909: 5 (*Micralymma*; Lena Valley, Siberia).

— Bernhauer and Schubert, 1910: 62 (*Micralymma*; catalog).

— Van Dyck, 1921: 164 (*Micralymma*; Pribilof Islands, Alaska).

— Scheerpeltz, 1933: 1053 (*Micralymma*; catalog).

— Lindroth, 1957: 260, 261, 262, 292 (*Micralymma*; characters; notes; *dicksoni* and *brevilingue* are one species).

— Steel, 1958: 142 (*Micralymma*; subspecies of *brevilingue*; characters; Arctic coast of Siberia from Jenisei Bay to New Siberian Islands; Commodore Islands; Chukotski Peninsula; Pribiloff Islands; N.W. Territory; Richards Islands).

— Ryabukhin, 1999: 20 (*Micralymma*; cited as valid species; catalog; habitat; distribution; northeastern Russia).

*brevipenne* Gyllenhal, 1810, see: *marinum* Ström, 1783.

**caucasicum** Melichar, 1913: 46 (*Micromalium*; Type locality: Teberda im nordwestlichen Kaukasus).

— Scheerpeltz, 1933: 1053 (*Micromalium*; catalog).

— Steel, 1962: 238 (*Micralymma*; characters; Caucasus).

— Tikhomirova, 1973a: 139 (*Micralymma*; checklist; northwestern Caucasus).

▲ **DISTRIBUTION:** Russia.

*dicksoni* Mäklin, 1878, see: *brevilingue* Schiødte, 1845.

*johnstonis* Westwood, 1838, see: *marinum* Ström, 1783.

**laticolle** Motschulsky, 1860: 549 (*Micralymma*; Type locality: boréales de la Sibérie orientale près de la mer glaciale dans le Gouv. de Jeniseisk).

- Bernhauer and Schubert, 1910: 62 (*Micralymma*; catalog).
- Steel, 1958: 138 (not in *Micralymma*; probably an *Arpedium*).

▲ **DISTRIBUTION:** Russia.

**marinum** Ström, 1783: 65 (*Staphylinus*; Type locality: Norwegen).

- Fauvel, 1871a: 108 [= 1872: 82] (*Micralymma*; characters; France; Scandinavia; Denmark; Britain).
- Seidlitz, 1875: 237 (*Micralymma*; characters; Baltic region).
- Seidlitz, 1891: 343 (*Micralymma*; characters; Europe).
- Seidlitz, 1891a: 366 (*Micralymma*; characters; Europe).
- Ganglbauer, 1895: 729 (*Micralymma*; characters; France; Britain; Denmark; Scandinavia).
- Poppius, 1905: 11 (*Micralymma*; Shetland Islands).
- Sainte-Claire Deville, 1907: 40 (*Micralymma*; characters; France).
- Reitter, 1909: 188 (*Micralymma*; characters; Germany).
- Bernhauer and Schubert, 1910: 62 (*Micralymma*; catalog).
- Johansen, 1914: 602 (*Micralymma*; characters; Denmark).
- Henriksen and Lundbeck, 1918: 496 (*Micralymma*; Greenland).
- Portevin, 1929: 443 (*Micralymma*; characters; France).
- Scheerpeltz, 1933: 1053 (*Micralymma*; catalog).
- West, 1937: 45 (*Micralymma*; Faroe Islands).
- Henriksen, 1939: 43 (*Micralymma*; Greenland).
- Paulian, 1941: 147 (*Micralymma*; cited as *Micralymna*; larval characters).
- Palm, 1948: 90 (*Micralymma*; characters; Sweden; Norway; Finland).
- Lindroth, 1957: 231, 244, 245, 260, 263 (*Micralymma*; notes on distribution and dispersal).
- Steel, 1958: 140 (*Micralymma*; characters; correction of citation of original description; France; Britain; Shetlands; Faroes; western and northern Scandinavia; Bear Island; Iceland; Greenland; Maine; Newfoundland).
- Larsson and Gígja, 1959: 66 (*Micralymma*; biological notes; Iceland).
- Steel, 1962: 238 (*Micralymma*; characters).
- Horion, 1963: 97 (*Micralymma*; Amphi-Atlantic; France; Belgium; Holland; Britain; Norway; Russia; Shetlands; Faroes; Greenland; Newfoundland; Germany).
- Lohse, 1964: 49 (*Micralymma*; characters; central Europe).
- Pototskaia, 1967: 19 (*Micralymma*; larval characters).
- Steel, 1970a: 17 (*Micralymma*; larval characters; biological notes).
- Pope, 1977: 24 (*Micralymma*; Britain).
- Hammond, 1980: 139 (*Micralymma*; Ireland).
- Frank, 1982: 9 (*Micralymma*; list of parasites).
- Elliott, King, and Fordy, 1983 (*Micralymma*; habitat; natural history).
- Thayer, 1985b (*Micralymma*; natural history notes; Newfoundland; Quebec; Maine; Massachusetts; New Hampshire).
- Elliott and King, 1986 (*Micralymma*; adaptations for intertidal living).
- Segers, 1986: 21 (*Micralymma*; checklist of species; Belgium).
- Lucht, 1987: 88 (*Micralymma*; checklist; Germany; Benelux; Sweden).
- Hicks, 1990: 304 (*Micralymma*; habitat preferences; Newfoundland).
- Downie and Arnett, 1996: 436 (*Micralymma*; characters; Canada; USA).

▲ **DISTRIBUTION:** Russia, Europe, Iceland, Greenland, Canada, USA.

**brevipenne** Gyllenhal, 1810: 234 (*Omalium*; Type locality: Sweden).

- Zetterstedt, 1828: 56 (*Omalium*; characters; Lapland).
- Zetterstedt, 1838: 54 (*Omalium*; characters; habitat; Lapland).
- Erichson, 1840: 820 (*Micralymma*; characters; Sweden; England).
- Schiødte, 1845: 376 (*Micralymma*; characters; Sweden; Norway; Scotland).
- Schiødte, 1846: 162 (*Micralymma*; characters; Norway; Sweden; Scotland).
- Küster, 1854: 22 (*Micralymma*; characters; Europe).
- Hardy, 1851: 53 (*Micralymma*; notes; England).

- Fairmaire and Laboulbène, 1856: 625 (*Micralymma*; characters; France).
- Laboulbène, 1858 (*Micralymma*; anatomy of adults and immatures).
- Staudinger, 1857: 286 (*Micralymma*; notes; Iceland).
- Thomson, 1859: 49 (type species of *Micralymma*).
- Thomson, 1861: 188 (*Micralymma*; characters; Scandinavia).
- Fauvel, 1871a: 108 [= 1872: 82] (*Micralymma*; synonym of *marinum*).
- Redtenbacher, 1874: 271 (*Micralymma*; characters).
- Mulsant and Rey, 1880: 6 (*Micralymma*; characters; France).
- Fowler, 1888: 407 (*Micralymma*; characters; Britain).
- Ganglbauer, 1895: 729 (*Micralymma*; synonym of *marinum*).
- Bernhauer and Schubert, 1910: 62 (*Micralymma*; synonym of *marinum*).
- Scheerpeltz, 1933: 1053 (*Micralymma*; synonym of *marinum*).
- Steel, 1958: 140 (*Micralymma*; synonym of *marinum*).
- Pope, 1977: 24 (*Micralymma*; synonym of *marina*).

*johnstonis* Westwood, 1838b: 130 (*Micralymma*; includes larval and pupal characters;

Type locality: Berwick-upon-Tweed).

- Westwood, 1838: 165 (*Micralymma*; habitat).
- Westwood, 1838a (August): 19 (*Micralymma*; characters; type species).
- Stephens, 1839: 427 (*Micralymma*; characters; England).
- Erichson, 1840: 820 (*Micralymma*; synonym of *brevipenne*).
- Schiødte, 1846: 162 (*Micralymma*; synonym of *brevipenne*).
- Küster, 1854: 22 (*Micralymma*; characters; Europe).
- Hardy, 1851: 53 (*Micralymma*; synonym of *brevipenne*).
- Fairmaire and Laboulbène, 1856: 625 (*Micralymma*; synonym of *brevipenne*).
- Mulsant and Rey, 1880: 6 (*Micralymma*; synonym of *brevipenne*).
- Ganglbauer, 1895: 729 (*Micralymma*; synonym of *marinum*).
- Bernhauer and Schubert, 1910: 62 (*Micralymma*; synonym of *marinum*).
- Steel, 1958: 140 (*Micralymma*; synonym of *marinum*).

*stimpsonii* LeConte, 1863a: 57 (*Micralymma*; Type locality: coast of Maine).

- Fauvel, 1878d: 222 [= 1878e: 58] (*Micralymma*; characters; Maine).
- Bernhauer and Schubert, 1910: 62 (*Micralymma*; catalog).
- Scheerpeltz, 1933: 1053 (*Micralymma*; catalog).
- Steel, 1958: 140 (*Micralymma*; synonym of *marinum*).
- Thayer, 1985b: 49 (*Micralymma*; synonym of *marinum*).

*stimpsonii* LeConte, 1863, see: *marinum* Ström, 1783.

### Nesomalium

[4 species; Antarctic Region]

*Nesomalium* Steel, 1964: 353 (species included: *campbellense*, *pacificum*, *imitator*, *insulare*).

**TYPE SPECIES:** *Nesomalium campbellensis* Steel, fixed by original designation.

- Steel, 1970a: 25 (larval characters).
- Moore and Legner, 1976: 536 (includes seashore species; notes).
- Klimaszewski, Newton, and Thayer, 1996: 146 (endemic to New Zealand and nearby islands).

**campbellense** Steel, 1964: 354 (*Nesomalium*; also larval characters; Type locality: Campbell Island: Moubray Hill, 200 m).

▲ **DISTRIBUTION:** Campbell Island.

**imitator** Steel, 1964: 358 (*Nesomalium*; Type locality: Campbell Island: Lookout Bay).

▲ **DISTRIBUTION:** Campbell Island.

**insulare** Kiesenwetter, 1877: 163 (*Omalium*; Type locality: Auckland Islands).

- Fauvel, 1877: 189 (*Omalium*, cited as *Homalium*; characters; Auckland Islands).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Gourlay, 1950: 183 (*Omalium*; republication of original description).
- Steel, 1964: 357 (*Nesomalium*; characters; Auckland Islands).

▲ **DISTRIBUTION:** Auckland Islands.

**pacificum** Kiesenwetter, 1877: 163 (*Omalium*; Type locality: Auckland Islands).

- Fauvel, 1877: 190 (*Omalium*, cited as *Homalium*; characters; Auckland Islands).
- Fauvel, 1878g: 484 (*Omalium*, cited as *Homalium*; characters).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Gourlay, 1950: 183 (*Omalium*; subgenus *Omaliomimus*?; republication of original description).
- Steel, 1964: 357 (*Nesomalium*; characters; Auckland Islands; Enderby, Ocean, Ewing, and Rose Island).

▲ **DISTRIBUTION:** Auckland Islands.

*zealandicum* Cameron, 1948c: 723 (*Omalium*; Type locality: New Zealand: Auckland [Island]: Musgrave Pen; Carnley Harbour).

- Gourlay, 1950: 184 (*Omalium*; correction of Type locality; synonym of *albipenne*).
- Steel, 1964: 348,357 (*Nesomalium*; Gourlay's citation as synonym of *Omalium albipenne* is erroneous; synonym of *pacificum*).

*zealandicum* Cameron, 1948, see: *pacificum* Kiesenwetter, 1877.

### Nipponophloeostiba

[1 species; Palaearctic Region]

*Nipponophloeostiba* Watanabe, 1962a: 77 (species included: *verrucifera*). **TYPE SPECIES:** *Nipponophloeostiba verrucifera* Watanabe, fixed by original designation and monotypy.

- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Shibata, 1976: 106 (checklist of species of Japan).
- Watanabe, 1990: 106 (characters).

**verrucifera** Watanabe, 1962a: 78 (*Nipponophloeostiba*; Type locality: Miyake Is.: near Tairoke).

- Watanabe and Shibata, 1972: 60 (*Nipponophloeostiba*; Yaku-shima Island).
- Watanabe, 1990: 109 (*Nipponophloeostiba*; characters; Japan).
- Kishimoto, 1995: 76 (*Nipponophloeostiba*; Ryukyu Islands).

▲ **DISTRIBUTION:** Japan.

### Noumalia

[1 species; Oceanic Region]

*Noumalia* Steel, 1960: 5 (species included: *adusta*). **TYPE SPECIES:** *Noumalia adusta* Steel, fixed by original designation and monotypy.

**adusta** Steel, 1960: 6 (*Noumalia*; Type locality: New Caledonia: Mt. Ignambi).

▲ **DISTRIBUTION:** New Caledonia.

### Omaliomimus

[10 species; Australian and Antarctic Regions]

*Omaliomimus* Jeannel, 1940: 115, 117 (species included: *litoreus*, *setipes*, *conicus*, *variipenne*). **TYPE SPECIES:** *Omalium litoreum* Broun, by original designation.

- Blackwelder, 1952: 273 (type species: *litoreus*).
- Steel, 1964: 344 (characters; key to species of Campbell Island).
- Steel, 1970a: 24 (larval characters).
- Moore and Legner, 1976: 536 (includes seashore species; notes).
- Thayer, 1996: 158 (notes).
- Klimaszewski, Newton, and Thayer, 1996: 146 (endemic to New Zealand and nearby islands).

**actobius** Broun, 1893: 1035 (*Omalium*; Type locality: Sandspit, Port Chalmers).

- Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).
- Newton and Thayer, 1995: 293 (*Omaliomimus*).
- Thayer, 1996: 159 (*Omaliomimus*).

▲ **DISTRIBUTION:** New Zealand.

**albipennis** Kiesenwetter, 1877: 162 (*Omalium*; Type locality: Auckland Island).

- Fauvel, 1877: 188 (*Omalium*, cited as *Homalium*; characters; Auckland Island).
- Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).



- Gourlay, 1950: 184 (*Omalium*; republication of original description).
- Steel, 1964: 347 (*Omaliomimus*; characters; Campbell Island).
- Watson, 1967: 34 (*Omaliomimus*; notes; mention of existence of larva; habitat; Macquarie Island).
- P. Greenslade, 1990: 48 (*Omalio minus*; wingless species; Macquarie Island).
- Klimaszewski and Watt, 1997: 169 (*Omaliomimus*; characters; collecting notes; New Zealand).
- ▲ **DISTRIBUTION:** Auckland Island, Macquarie Island, Campbell Island, New Zealand.

*variipennis* Lea, 1920: 30 (*Omalium*, cited as *Homalium*; Type locality: Macquarie Island).

- Tillyard, 1920: 19 (*Omalium*, cited as *Homalium*; [**Note:** Cited as new species but attributed to Lea in appendix of same article]; illustrations of adult; larval characters and adults; Macquarie Island).
- Scheerpeltz, 1933: 1048 (*Omalium*; catalog).
- Jeannel, 1940: 117 (*Omaliomimus*).
- Steel, 1964: 347 (*Omaliomimus*; synonym of *albipenne*).
- Watson, 1967: 34 (*Omaliomimus*; synonym of *albipenne*).
- P. Greenslade, 1990: 48 (*Omalio minus*; synonym of *albipenne*).

*flavipennis* Cameron, 1948c: 723 (*Omaliomimus*; Type locality: New Zealand: Auckland: Port Ross).

- Gourlay, 1950: 183 (*Omalium*; provisional synonym of *pacificum*).
- Steel, 1964: 347 (*Omaliomimus*; synonym of *albipenne*; Gourlay's citation as synonym of *pacificum* is erroneous).
- Watson, 1967: 34 (*Omaliomimus*; synonym of *albipenne*).
- P. Greenslade, 1990: 48 (*Omalio minus*; synonym of *albipenne*).

**carinigerus** Broun, 1893: 1036 (*Omalium*; Type locality: Port Chalmers).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Thayer, 1996: 159 (*Omaliomimus*).
- ▲ **DISTRIBUTION:** New Zealand.

**chalmeri** Broun, 1893: 1037 (*Omalium*; Type locality: Dunedin).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Thayer, 1996: 159 (*Omaliomimus*).
- ▲ **DISTRIBUTION:** New Zealand.

**conicus** Fauvel, 1878g: 484 (*Omalium*, cited as *Homalium*; Type locality: Nouvelle-Zélande).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Jeannel, 1940: 117 (*Omaliomimus*).
- ▲ **DISTRIBUTION:** New Zealand.

*flavipennis* Cameron, 1948, see: *albipenne* Kiesenwetter, 1877.

**laetipennis** Broun, 1910: 19 (*Omalium*; Type locality: Riverton Beach).

- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
- Thayer, 1996: 159 (*Omaliomimus*).
- ▲ **DISTRIBUTION:** New Zealand.

**litoreus** Broun, 1886: 942 (*Omalium*, cited as *Homalium*; Type locality: Mokohinau).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; cited as *litoreum*; catalog).
- Jeannel, 1940: 115, 117 (*Omaliomimus*).
- Kuschel, 1990: 25 (*Omaliomimus*; endemic; winged; habitat; New Zealand).
- ▲ **DISTRIBUTION:** New Zealand.

**robustus** Broun, 1911: 96 (*Omalium*; [**preoccupied**]; Type locality: Pitt Island).

- Scheerpeltz, 1933: 1047 (*Omalium*; catalog).
- Emberson, 1998: 33 (*Omaliomimus*; collecting notes; Chatham Islands).
- Herman, 2001: 37 (*Omaliomimus*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).
- ▲ **DISTRIBUTION:** Chatham Islands (N.Z).

**setipes** Broun, 1909: 230 (*Omalium*; Type locality: Invercargill).

— Scheerpeltz, 1933: 1047 (*Omalium*; catalog).

— Jeannel, 1940: 117 (*Omaliomimus*).

▲ **DISTRIBUTION:** New Zealand.

*variipenne* Lea, 1920, see: *albipenne* Kiesenwetter, 1877.

**venator** Broun, 1909a: 98 (*Omalium*; Type locality: Campbell Island).

— Scheerpeltz, 1933: 1048 (*Omalium*; catalog).

— Steel, 1964: 345 (*Omaliomimus*; characters; Campbell Island; Auckland Island; Macquarie Island).

— Watson, 1967: 35 (*Omaliomimus*; notes; habitat; Macquarie Island).

— P. Greenslade, 1990: 48 (*Omalio minus*; wingless species; Macquarie Island).

— Marris, 2000: 175 (*Omaliomimus*; habitat; Bollons Island [Antipodes]; also known from Auckland Islands; Campbell Island; Macquarie Island; Snares Islands; New Zealand).

▲ **DISTRIBUTION:** Campbell Island, Auckland Island, Macquarie Island, Snares Islands, Antipodes Islands, New Zealand.

### Omalioipsis

[8 species; Ethiopian, Madagascan, Nearctic, and Neotropical Regions]

*Omalioipsis* Jeannel, 1940: 116, 118 (species included: *africana*, *costipennis*, *arenaria*, *rufa*, *madecassus*, *hova*). **TYPE SPECIES:** *Omalium africanum* Fauvel, by original designation.

— Blackwelder, 1952: 273 (type species: *africanus*).

— Fagel, 1956: 2 (synonym of *Omalium*).

— Coiffait and Saiz, 1968: 451 (valid genus; characters).

— Newton, 1985: 199 (notes on austral distribution).

— Newton, Thayer, Ashe, and Chandler, 2000: 337 (1 undescribed Nearctic species; notes; characters in key).

**africana** Fauvel, 1907: 12 (*Omalium*, cited as *Homalium*; Type locality: Kilimandjaro: Kilema).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Bernhauer, 1940: 130 (*Omalium*; Uganda; Kenya).

— Jeannel, 1940: 116, 118 (*Omalioipsis*).

— Fagel, 1956: 11 (*Omalium*; characters; German East Africa).

▲ **DISTRIBUTION:** Tanzania, Uganda, Kenya.

**arenaria** Bernhauer, 1904: 16 (*Omalium*; Type locality: Kap der guten Hoffnung).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Jeannel, 1940: 118 (*Omalioipsis*).

▲ **DISTRIBUTION:** South Africa.

**costipennis** Fauvel, 1904e: 301 (*Omalium*, cited as *Homalium*; Type locality: Tananarive).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Jeannel, 1940: 118 (*Omalioipsis*).

▲ **DISTRIBUTION:** Madagascar.

*flavescens* Motschulsky, 1857, see: *rufum* Sachse, 1852.

**hova** Fauvel, 1904e: 300 (*Omalium*, cited as *Homalium*; Type locality: Tananarive).

— Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).

— Jeannel, 1940: 118 (*Omalioipsis*; cited as *hova*).

▲ **DISTRIBUTION:** Madagascar.

**madegassa** Bernhauer, 1902: 173 (*Omalium*; Type locality: Port Daufin, Madagascar).

— Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).

— Jarrige, 1957: 112 (*Omalioipsis*; Réunion).

▲ **DISTRIBUTION:** Madagascar, Réunion.

- picipennis** Fauvel, 1867a: 44 [= 1868: 49] (*Omalium*; Type locality: Chili).  
 — Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).  
 — Coiffait and Saiz, 1968: 452 (*Omaliosis*; characters; Chile).  
 ▲ **DISTRIBUTION:** Chile.
- rufa** Sachse, 1852: 148 (*Omalium*; [**preoccupied**]; Type locality: Vorgeb. d. g. Hoffnung).  
 — Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).  
 — Jeannel, 1940: 118 (*Omaliosis*).  
 — Herman, 2001: 37 (*Omaliosis*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).  
 ▲ **DISTRIBUTION:** South Africa.
- flavescens* Motschulsky, 1857a: 492 (*Phloeonomus*; Type locality: Cap de bonne Esperance).  
 — Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *rufum*).
- russata** Fairmaire and Germain, 1861: 453 (*Omalium*; Type locality: Chiloe).  
 — Fauvel, 1867a: 45 [= 1868: 50] (*Omalium*; characters; Chile).  
 — Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).  
 — Scheerpeltz, 1933: 1047 (*Omalium*; catalog).  
 — Coiffait and Saiz, 1968: 451 (*Omaliosis*; characters; Chile).  
 — Saiz, 1969: 4 (*Omaliosis*; characters; collecting notes; Chile).  
 ▲ **DISTRIBUTION:** Chile.

### Omalium

[141 species; (11 doubtful); Neotropical, Nearctic, Palaearctic, Ethiopian, Madagascan, Oriental, and Australian Regions]

- Omalium* Gravenhorst, 1802: 111 (species included: *planum*, *depressum*, *brunneum*, *crenatum*, *brachypterum*, *rufum*, *rugosum*, *rivulare*, *viburni*, *florale*, *ranunculi*, *striatum*). **TYPE SPECIES:** *Staphylinus rivularis* Paykull, fixed by subsequent designation by Latreille, 1810: 427.
- Latreille, 1804: 286 (characters).  
 — Gravenhorst, 1806: 204 (characters).  
 — Latreille, 1806: 297 (characters).  
 — Latreille, 1810: 182, 427 (characters; type species).  
 — Gyllenhal, 1810: 198 (characters).  
 — Olivier, 1811: 472 (characters).  
 — Leach, 1815: 91 (characters).  
 — Samouelle, 1819: 174 (characters).  
 — Billberg, 1820: 14 (cited as *Homalium*; characters; list of some species).  
 — Dejean, 1821: 26 (list of species in collection).  
 — Latreille, 1825: 245 (cited as *Omalie*; characters).  
 — Berthold, 1827: 332 (characters).  
 — C. Sahlberg, 1827: 277 (characters).  
 — Zetterstedt, 1828: 48 (characters).  
 — Curtis, 1829: 29 (catalog; Britain).  
 — Stephens, 1829a: 25 (catalog; Britain).  
 — Stephens, 1829: 297 (catalog; Britain).  
 — Latreille, 1829: 439 (characters).  
 — Mannerheim, 1830: 10, 51 (characters).  
 — Mannerheim, 1830: 10, 53 (key; characters; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 50 cited *Anthobium* Mannerheim as a synonym of *Omalium*; Mannerheim did not describe the genus as new, he attributed it to Leach]).  
 — Mannerheim, 1831: 424, 465 (characters).  
 — Mannerheim, 1831: 424, 467 (characters; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 50 cited *Anthobium* Mannerheim as a synonym of *Omalium*; Mannerheim did not describe the genus as new, he attributed it to Leach]).  
 — Griffith and Pidgeon, 1832: 297 (characters).

- Dejean, 1833: 69 (list of species).
- Stephens, 1834: 345 (characters; England).
- Gistel, 1834: 9 (list of species).
- Lacordaire, 1835: 484 (characters).
- Westwood, 1838a: 18 (characters; type species).
- Zetterstedt, 1838: 49 (characters).
- Erichson, 1839a: 628 (characters).
- Heer, 1839: 175 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 874 (characters).
- Laporte, 1840: 191 (characters).
- Redtenbacher, 1849: 750 (characters).
- Schaum, 1852: 30 (list of species; Europe).
- Lacordaire, 1854: 143 (characters; notes; list of species).
- Wollaston, 1854: 612 (characters; notes).
- Fairmaire and Laboulbène, 1856: 638 (characters).
- Giebel, 1856: 74 (fossil species).
- Gistel, 1856: 389 (cited as *Homalium*; list of species).
- Jacquelin du Val, 1857: 76 (characters).
- Redtenbacher, 1857: 249 (characters).
- Kraatz, 1857d: 974 (characters).
- Thomson, 1858: 38 (characters).
- G. Waterhouse, 1858: 31 (catalog of British species).
- Thomson, 1859: 51 (characters; type species: *rivulare*).
- Schaum, 1859: 32 (catalog; European species).
- LeConte, 1861a: 70 (characters).
- Thomson, 1861: 211 (characters).
- Gredler, 1863: 124 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Fauvel, 1865c: 5 [= 1866: 13] (characters; list of species).
- Wencker and Silbermann, 1866: 36 (list of species; collecting notes; France).
- Fauvel, 1867a: 43 [= 1868: 48] (characters; key to Chilean species).
- Jacquelin du Val, 1868: 81 (catalog; European species).
- Sharp, 1871d: 14 (cited as *Homalium*; list of British species).
- Fauvel, 1871a: 83 [= 1872: 57] (characters; key to species).
- Redtenbacher, 1874: 273 (characters; key to Austrian species).
- Fauvel, 1875a: [= 1875b:] (catalog; cited as *Homalium*).
- Sharp, 1876: 402 (notes).
- Provancher, 1877: 261 (characters).
- Fauvel, 1878d: 205 [= 1878e: 41] (cited as *Homalium*; key to North American species).
- Broun, 1880: 115 (characters).
- Mulsant and Rey, 1880: 189 (characters; key to French species).
- Heyden, 1880: 82 (cited as *Homalium*; list of species of Siberian region).
- Duvivier, 1883: 198 (catalog; cited as *Homalium*).
- Gozis, 1886: 16 (type species).
- Sharp, 1887: 744 (notes; Mexican and Central American species).
- Fowler, 1888: 409 (notes; cited as *Homalium*; key to British species).
- Seidlitz, 1891: 339 (key to some European species).
- Seidlitz, 1891a: 362 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 120 (list of species of Europe and Caucasus).
- Heyden, 1893: 49 (list of species of Siberian region).
- Ganglbauer, 1895: 733 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Fauvel, 1897c: 230 (key to species).
- Fauvel, 1897d: 244 (catalog of species of Barbary; Azores; Madeira; Canaries).
- Luze, 1906: 501 (characters; key to species).

- Heyden, Reitter, and Weise, 1906: 131 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 32 (cited as *Homalium*; key to and annotated list of species of Seine Basin, France).
- Broun, 1909a: 97 (characters).
- Reitter, 1909: 190 (characters; key to German species).
- Bernhauer and Schubert, 1910: 50 (world catalog; 120 species).
- Blatchley, 1910: 479 (characters; key to Indiana species).
- Petri, 1912: 53 (list of species of Siebenbürgen).
- Johansen, 1914: 608 (characters; key to Danish species).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 330 (catalog for Palaearctic region).
- Cameron, 1925: 10, 104 (catalog of Indian species).
- Porta, 1926: 18 (characters; key to species of Italy).
- Portevin, 1929: 445 (characters; key to French species).
- Cameron, 1930: 138 (characters; key to British Indian species).
- Roubal, 1930: 307 (catalog; Slovakia).
- Scheerpeltz, 1933: 1043 (world catalog supplement).
- Normand, 1935: 357 (list of species of Tunisia).
- Scheerpeltz, 1937b: 187 (list of Bulgarian species).
- Jeannel, 1940: 115 (characters in key; type species: *rivulare* Paykull).
- Blackwelder, 1943: 53 (characters; type species: *rivulare*; key to species of West Indies).
- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).
- Jeannel and Jarrige, 1949: 311 (cave species; type species: *rivulare*).
- Kloet and Hincks, 1945: 161 (list of British species).
- Scheerpeltz and Höfler, 1948: 152 (key to species in fungus in Europe).
- Palm, 1948: 75 (characters; key to species of Sweden).
- Tottenham, 1949: 355, 406 (type species: *rivularis* Paykull; list of British species; notes).
- Blackwelder, 1952: 273 (type species).
- Tottenham, 1954: 23 (characters; key to British species).
- Hatch, 1957: 52, 80 (characters; key to species of Pacific Northwest).
- Kocher, 1958: 93 (checklist of species; Morocco).
- Smetana, 1959a: 196 (list of species collected in Albania).
- Ferreira, 1962a: 9 (list of Portuguese species).
- Székessy, 1963: 14 (characters).
- Lohse, 1964: 41 (characters; key to central European species).
- Pototskaia, 1967: 20 (larval characters).
- Kasule, 1968: 133, 136 (larval characters).
- Scheerpeltz, 1968a: 9 (catalog of Austrian species).
- Bolov, 1969a: 328 (collecting notes for some species; Russia).
- Steel, 1970a: 13 (larval characters; biological notes).
- Bordoni, 1973j: 656 (list of species from islands near Sicily).
- Tikhomirova, 1973a: 138 (checklist of species of USSR).
- Moore and Legner, 1975: 201 (catalog; North America north of Mexico).
- Shibata, 1976: 101 (checklist of species of Japan).
- Moore and Legner, 1976: 536 (includes seashore species; notes).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 38 (catalog; Poland).
- Moore and Legner, 1979: 208 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, 1979: 242 (some species collected in Germany).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
- Waterston, Owen, Welch, Bacchus and Hammond, 1981: 273 (list of species of Outer Hebrides).

- Uhlig and Vogler, 1981: 85 (list of some species collected in Germany; habitat and collecting notes).
- Spahr, 1981: 95 (references to specimens from amber and copal).
- Tóth, 1982: 57 (characters; habitus; key to species of Hungary).
- Zanetti, 1985: 27 (key to some Italian species).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Frank, 1986a: 365 (checklist of species of Florida).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Segers, 1986: 20 (checklist of species; Belgium).
- Ádám, 1987: 137 (list of four species with collecting notes; Hungary).
- Zanetti, 1987: 205 (characters; habitus; species group classification; key to species of Italy).
- Watanabe, 1990: 88 (characters; key to species of Japan).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
- Frank, 1991: 344 (larval characters).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- Hernández, Outerelo, and Gamarra, 1994: 187 (checklist of species; Canary Islands).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- Zanetti, 1995: 7 (list of species of Italy).
- M. Hansen, 1996: 94 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 437 (characters; key to species of Northeastern North America).
- Klimaszewski, Newton, and Thayer, 1996: 146 (species in New Zealand and nearby islands probably belong in another genus).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 69 (list of species collected in 1997; Denmark).
- Lundgren, 1998: 38 (list of species from Florida; records for other States listed for each species).
- Newton, Thayer, Ashe, and Chandler, 2000: 337 (14 Nearctic species; notes; characters in key).

*Homalium* Ljungh, 1804a: 74 (emendation of *Omalium*). **TYPE SPECIES:** *Staphylinus rivularis* Paykull, fixed by objective synonymy with *Omalium*.

- Blackwelder, 1952: 188 (type species).

*Homalium* Agassiz, 1847: 258 (emendation of *Omalium*). **TYPE SPECIES:** *Staphylinus rivularis* Paykull, fixed by objective synonymy with *Omalium*.

- Blackwelder, 1952: 188 (type species).

*Homalium* Gemminger and Harold, 1868: 665 (emendation of *Omalium*). **TYPE SPECIES:** *Staphylinus rivulare* Paykull, fixed by objective synonymy with *Omalium*.

- Blackwelder, 1952: 189 (type species).

*Ochthexenus* Motschulsky, 1860: 546 (species included: *clavicornis*, *rivularis*). **TYPE SPECIES:** *Staphylinus rivularis* Paykull, fixed by subsequent designation by Gozis, 1886: 16.

- Gemminger and Harold, 1868: 665 (catalog).
- Fauvel, 1869: 493 (synonym of *Omalium*).
- Heyden, 1880: 82 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).
- Gozis, 1886: 16 (type species).
- Bernhauer and Schubert, 1910: 50 (synonym of *Omalium*).
- Cameron, 1930: 138 (synonym of *Omalium*).
- Blackwelder, 1943: 53 (synonym of *Omalium*; type species: *clavicornis*).
- Blackwelder, 1952: 266 (type species: *rivularis*).

*abdominale* Gravenhorst, 1806, see: *Eusphalerum*.

*abyssinicum* Tottenham, 1953, see: *Xylostiba*.

*actobium* Broun, 1893, see: *Omalium*.

**adelaidae** Blackburn, 1888d: 191 (*Omalium*, cited as *Homalium*; Type locality: banks of the Torrens).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Australia.

*adustum* Heer, 1839, see: *Eusphalerum*.

*aeneum* P. W. J. Müller, 1821, see: *Syntomium*.

*affine* Gerhardt, 1877, see: *Xylodromus*.

*affine* Mäklin, 1878, see: *Mannerheimia*.

**afghanicum** Scheerpeltz, 1963: 5, 21 (*Omalium*; Type locality: Afghanistan: Goti, zwischen Pol-Khomri und Doab).

▲ **DISTRIBUTION:** Afghanistan.

*africanum* Fauvel, 1907, see: *Omalioptis*.

**agrestis** Broun, 1880: 117 (*Omalium*; Type locality: Whangarei Harbour).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** New Zealand.

*akbesianum* Pic, 1898, see: *Phyllodrepa*.

*alpipenne* Kiesenwetter, 1877, see: *Omalium*.

**algarum** Casey, 1885a: 316 (*Omalium*, cited as *Homalium*; Type locality: California: San Francisco; Santa Cruz).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Hatch, 1957: 81 (*Omalium*; characters; British Columbia; Oregon).

— Orth, Moore, and Fisher, 1978: 188 (*Omalium*; characters; collecting notes; California).

▲ **DISTRIBUTION:** Canada, USA.

*algidum* Fauvel, 1907, see: *Xylostiba*.

**allardii** Fairmaire and Brisout, 1859: 44 (*Omalium*; Type locality: près de Paris).

— Thomson, 1868: 324 (*Omalium*; characters; Scandinavia).

— Fauvel, 1869a: 152 (*Omalium*; cited as *allardi*; synonym of *ocellatum*).

— Baudi, 1870: 402 (*Omalium*; Italy).

— Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; cited as *allardi*; characters; France; Scandinavia; Britain; Italy; Cyprus; Algeria).

— Fauvel, 1873b: 116 [= 1873c: 9] (*Omalium*, cited as *Homalium*; cited as *allardi*; Spain; Sardinia; Syria).

— Fauvel, 1876a: 51 [= 1876: 236] (*Omalium*, cited as *Homalium*; cited as *allardi*; Sicily; Malta).

— Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).

— Fauvel, 1878: 89 [= 1878a: 9] (*Omalium*, cited as *Homalium*; cited as *allardi*; Algeria).

— Mulsant and Rey, 1880: 205 (*Omalium*; cited as *allardi*; characters; France).

— Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; cited as *allardi*; Morocco; Algeria).

— Fowler, 1888: 414 (*Omalium*, cited as *Homalium*; characters; Britain).

— Ganglbauer, 1895: 735 (*Omalium*; cited as *allardi*; characters; Scandinavia; western Europe; Mediterranean region).

— Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; cited as *allardi*; Morocco; Algeria; Tunisia).

— Luze, 1906: 520 (*Omalium*; cited as *allardi*; characters; Mediterranean region; Italy; Cyprus; Bosnia).

— Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; cited as *allardi*; subgenus *Omalium*; catalog).

— Portevin, 1929: 446 (*Omalium*; cited as *allardi*; characters; France).

— Gridelli, 1930: 61 (*Omalium*; cited as *allardi*; Libya).

— Scheerpeltz, 1933: 1043 (*Omalium*; cited as *allardi*; catalog).

— Horion, 1935: 173 (*Omalium*; cited as *allardi*; characters; Western Europe; Netherlands; Germany).

- Palm, 1948: 80 (*Omalium*; characters; Sweden; Norway).
  - Jeannel and Jarrige, 1949: 312 (*Omalium*; cited as *allardi*; cave species; Majorca; Algeria).
  - Horion, 1963: 79 (*Omalium*; cited as *allardi*; Britain; Norway; Sweden; Holland; Belgium; France; Portugal; Spain; Corsica; Sardinia; Sicily; Italy; Dalmatia; Hercegovina; Greece; Crete; Germany).
  - Lohse, 1964: 42 (*Omalium*; cited as *allardi*; characters; central Europe).
  - Pope, 1977: 23 (*Omalium*; cited as *allardi*; Britain).
  - Hammond, 1980: 138 (*Omalium*; cited as *allardi*; Ireland).
  - Tóth, 1982: 61 (*Omalium*; cited as *allardi*; characters).
  - Zanetti, 1987: 221 (*Omalium*; cited as *allardi*; characters; Italy).
  - Lucht, 1987: 87 (*Omalium*; checklist; Germany; France; Benelux; Denmark).
  - Allen, 1988a: 117 (*Omalium*; collecting notes; Scotland).
  - Kuschel, 1990: 25 (*Omalium*; cited as *allardi*; introduced, Palaearctic species; winged; habitat; New Zealand).
  - Sparacio, 1995: 141 (*Omalium*; characters; notes; Sicily).
  - Zanetti, 1995: 7 (*Omalium*; cited as *allardi*; Italy).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (*Omalium*; cited as *allardi*; introduced to New Zealand).
  - Zanetti and Sabella, 1998: 29 (*Omalium*; Sicily).
  - Assing, Frisch, Kahlen, et al., 1998: 122 (*Omalium*; note).
  - Kashcheev, 1999: 142 (*Omalium*; characters).
  - ▲ **DISTRIBUTION:** Europe, Morocco, Algeria, Tunisia, Libya, Israel, Syria, Turkey, New Zealand.
- genistarum* Coquerel, 1860: 164 (*Anthobium*; Type locality: Mer-el-Kébir).
- Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *allardii*).
  - Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; synonym of *allardii*).
  - Mulsant and Rey, 1880: 206 (*Omalium*; synonym of *allardii*).
  - Ganglbauer, 1895: 735 (*Omalium*; synonym of *allardii*).
  - Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; synonym of *allardii*).
  - Luze, 1906: 520 (*Omalium*; synonym of *allardii*).
  - Bernhauer and Schubert, 1910: 51 (*Omalium*; synonym of *allardii*).
- salzmanni* Saulcy, 1864: 658 (*Omalium*; Type locality: Jérusalem).
- Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; synonym of *allardii*).
  - Mulsant and Rey, 1880: 206 (*Omalium*; synonym of *allardii*).
  - Ganglbauer, 1895: 735 (*Omalium*; synonym of *allardii*).
  - Luze, 1906: 520 (*Omalium*; synonym of *allardii*).
  - Bernhauer and Schubert, 1910: 51 (*Omalium*; synonym of *allardii*).
- antennarium* Reitter, 1911: 234 (*Phloeonomus*; subgenus *Xylostiba*; Type locality: Kleinasien: Alhem-Dagh).
- Scheerpeltz, 1933: 1048 (*Phloeonomus*; subgenus *Xylostiba*; catalog).
  - Steel, 1960a: 141 (*Omalium*; synonym of *allardii*, cited as *allardi*).
- almorensis* Champion, 1920, see: *Phyllodrepa*.
- alpestre* Heer, 1839, see: *Eusphalerum*.
- alpinum* Zetterstedt, 1838, see: *Pycnoglypta*.
- alpinum* Heer, 1839, see: *Eusphalerum*.
- alticola** Cameron, 1941: 57 (*Omalium*; Type locality: Kashmir: Gulmarg: Khelanmarg, alt. 8000–10,000 feet).
- ▲ **DISTRIBUTION:** India.
- altivagans** Bernhauer, 1915b: 49 (*Omalium*; Type locality: Westlicher Himalaya: Kashmir, Sintan).
- Cameron, 1930: 140 (*Omalium*; characters; Kashmir).
  - Scheerpeltz, 1933: 1043 (*Omalium*; catalog).
  - ▲ **DISTRIBUTION:** India.



**alutaceum** Fauvel, 1878d: 215 [= 1878e: 51] (*Omalium*, cited as *Homalium*; Type locality: Californie, San Diego).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** USA.

*amabilis* Heer, 1841, see: *Acrolocha*.

**amicale** Gistel, 1857: 86 (*Omalium*; [Note: **Nomen dubium**]; Type locality: Fulda Hassiae).

▲ **DISTRIBUTION:** Germany.

*anceps* Sharp, 1887, see: *Phloeonomus*.

*angustata* Mäklin, 1878, see: *Phyllodrepa*.

*antennarium* Reitter, 1911, see: *allardii* Fairmaire and Brisout, 1859.

*antipodum* Broun, 1893, see: *Stenomalium*.

**antiquorum**† Wickham, 1913a: 11 (*Omalium*, cited as *Homalium*; Miocene Fossil; Type locality: Wilson Ranch near Florissant, Colorado).

▲ **DISTRIBUTION:** USA.

**apicorne** Solsky, 1874: 207 (*Omalium*; Type locality: Maracandam; Taschkent).

— Eppelsheim, 1892: 346 (*Omalium*; Turkestan).

— Luze, 1906: 537 (*Omalium*; characters; Turkestan; Caucasus).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Scheerpeltz, 1933: 1043 (*Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Talysh; Central Asia).

▲ **DISTRIBUTION:** Uzbekistan, “Turkestan”, Caucasus.

*appendiculatum* Heer, 1839, see: *Eusphalerum*.

*arenarium* Bernhauer, 1904, see: *Omalioopsis*.

*asperum* Eppelsheim, 1889, see: *Phyllodrepa*.

**asturicum** Fauvel, 1900d: 221 (*Omalium*, cited as *Homalium*; Type locality: Asturias).

— Luze, 1906: 536 (*Omalium*; characters; Spain).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Spain.

*atomarium* Fauvel, 1865, see: *Phloeonomus*.

*atrocephalum* Gyllenhal, 1827, see: *Anthobium*.

*atrum* Heer, 1839, see: *Eusphalerum*.

*atrum* Casey, 1894, see: *Phyllodrepa*.

*atrum* Gerhardt, 1901, see: *Xylodromus*.

*australe* Broun, 1894, see: *Brouniellum*.

*azoricum* Fauvel, 1900, see: *Phloeonomus*.

*baicalicum* Motschulsky, 1860, see: *Pycnoglypta*.

**balassogloi** Eppelsheim, 1888: 66 (*Omalium*, cited as *Homalium*; Type locality:

See Issyk-Kul).

— Luze, 1906: 525 (*Omalium*; characters; Turkestan).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Kazakhstan).

▲ **DISTRIBUTION:** Kyrgyzstan, Kazakhstan.

**beesoni** Cameron, 1924b: 166 (*Omalium*; Type locality: Chakrata District, 6500 to 8000 feet).

— Cameron, 1930: 139 (*Omalium*; characters; India).

— Scheerpeltz, 1933: 1043 (*Omalium*; catalog).

— Coiffait, 1977: 244 (*Omalium*; Nepal).

▲ **DISTRIBUTION:** India, Nepal.

*blandum* Luze, 1906, see: *Carcinocephalus*.

**blattoides** Guérin-Méneville, 1829: pl. 10, fig. 7 (*Omalium*; [Note: Guérin-Méneville attributed the species to Gravenhorst who did not use the name in *Omalium*; **Nomen dubium**]; Type locality: Not cited).

— Guérin-Méneville, 1844a: 33 (*Omalium*; France).

▲ **DISTRIBUTION:** France.

*brachypterum* C. Koch, 1940, see: *excavatum* Stephens, 1834.

*brachypterum* Gravenhorst, 1802, see: *Eucnecosum*.

*brevicolle* Heer, 1841, see: *Eusphalerum*.

*brevicolle* Thomson, 1884, see: *strigicolle* Wankowicz, 1869.

*brevicorne* Erichson, 1840, see: *Phyllodrepa*.

*brevipenne* Gyllenhal, 1810, see: *Micralymma*.

*brevipenne* Motschulsky, 1860, see: *Mannerheimia*.

**brookesi** Cameron, 1947d: 701 (*Omalium*; Type locality: New Zealand: Canterbury: Mistake Creek).

▲ **DISTRIBUTION:** New Zealand.

*brunnipenne* Stephens, 1834, see: *Xylodromus*.

*brunnipes* Stephens, 1834, see: *Xylodromus*.

**bucharicum** Bernhauer, 1915j: 263 (*Omalium*; Type locality: Repetek, Buchara).

— Bernhauer, 1923d: 180 (*Omalium*; characters; Buchara).

— Scheerpeltz, 1933: 1044 (*Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Central Asia).

▲ **DISTRIBUTION:** Turkmenistan.

**bulgaricum** Zerche, 1988c: 34 (*Omalium*; Type locality: SW-Bulgarien: Pirin-Gebirge, Wichren, 2400 m).

▲ **DISTRIBUTION:** Bulgaria.

**burgeoni** Bernhauer, 1934g: 229 (*Omalium*; subspecies of *algidum*; Type locality: W. Ruwenzori, 4200 m. Also cited from Uganda).

— Bernhauer, 1940: 131 (*Omalium*; subspecies of *algidum*; Uganda; Kenya).

— Tottenham, 1953b: 483 (*Omalium*; valid species; Ruwenzori).

▲ **DISTRIBUTION:** Congo, Kenya, Uganda.

*cacti* Schwarz, 1899, see: *Phyllodrepa*.

**caesum** Gravenhorst, 1806: 209 (*Omalium*; variety of *rivulare*; Type locality: Not cited).

— Gyllenhal, 1810: 217 (*Omalium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 52 cited *oxyacanthae* Gyllenhal as a synonym of *caesum*; Gyllenhal did not describe the species as new, he attributed it to Gravenhorst]; characters).

— Gyllenhal, 1827: 466 (*Omalium*; [Note: Presumably misidentified as *oxyacanthae*]).

— Curtis, 1829: 29 (*Omalium*; catalog; Britain).

— Mannerheim, 1830: 53 (*Anthobium*; Finland; Sweden).

— Mannerheim, 1831: 467 (*Anthobium*; Finland; Sweden).

— Stephens, 1834: 354 (*Omalium*; characters; England).

— C. Sahlberg, 1830: 283 (*Omalium*; characters; Finland).

— Erichson, 1839a: 630 (*Omalium*; characters; Germany).

— Heer, 1839: 176 (*Omalium*; characters; Switzerland).

— Stephens, 1839: 429 (*Omalium*; characters; England).

— Erichson, 1840: 878 (*Omalium*; characters; Germany).

— Kolenati, 1846: 27 (*Omalium*; Caucasus).

— Hochhuth, 1849: 204 (*Omalium*; characters; Imeretia; Tiflis).

— Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).

— Thomson, 1857a: 225 (*Omalium*; characters).

— Fairmaire and Laboulbène, 1856: 640 (*Omalium*; characters; France).

— Redtenbacher, 1857: 251 (*Omalium*; characters; Austria).

- Kraatz, 1857d: 981 (*Omalium*; characters; Germany).
- Kraatz, 1858b: 128 (*Omalium*; Greece).
- Thomson, 1861: 214 (*Omalium*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Omalium*; Russia).
- Fauvel, 1865a: 318 [= 1865b: 68] (*Omalium*; habitat; France).
- Fauvel, 1871a: 99 [= 1872: 73] (*Omalium*, cited as *Homalium*; characters; France; Algeria; Caucasus).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 221 (*Omalium*; Finland).
- Fauvel, 1878: 89 [= 1878a: 9] (*Omalium*, cited as *Homalium*; Algeria).
- Mulsant and Rey, 1880: 214 (*Omalium*; characters; France).
- Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; notes; Algeria).
- Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 736 (*Omalium*; characters; Europe; Mediterranean region; California).
- Fauvel, 1897c: 230 (*Omalium*, cited as *Homalium*; characters).
- Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; Algeria; Tunisia).
- Luze, 1906: 539 (*Omalium*; characters; Europe; Mediterranean region; California).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Montandon, 1908: 77 (*Omalium*; Romania).
- Reitter, 1909: 192 (*Omalium*; [**Note:** Misidentification: Scheerpeltz, 1933: 1044 cited *apicicorne* Reitter as a synonym of *caesum*; Reitter did not describe the species as new, he attributed it to Solsky and cited it as a variety of *caesum*]; characters; Germany).
- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Johansen, 1914: 612 (*Omalium*; characters; Denmark).
- Portevin, 1929: 447 (*Omalium*; characters; France).
- Bernhauer, 1931e: 9 (*Omalium*; Spain).
- Scheerpeltz, 1933: 1044 (*Omalium*; catalog).
- West, 1937: 46 (*Omalium*; Faroe Islands).
- Español, 1945: 90 (*Omalium*; Spain).
- Scheerpeltz and Höfler, 1948: 152 (*Omalium*; fungus inhabitant).
- Palm, 1948: 81 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
- Scheerpeltz, 1956c: 1093 (*Omalium*; Cyprus).
- Lohse, 1960a: 32 (*Omalium*; characters; notes).
- Scheerpeltz, 1961d: 117 (*Omalium*; Italy).
- Palm, 1962: 185 (*Omalium*; characters; notes).
- Scheerpeltz, 1963a: 415 (*Omalium*; Greece).
- Horion, 1963: 86 (*Omalium*; Scotland; Lapland; Russia; Mediterranean region; Spain; Cyprus; Germany; Austria).
- Lohse, 1964: 44 (*Omalium*; characters; central Europe).
- Smetana, 1964d: 53 (*Omalium*; Czechoslovakia).
- Smetana, 1966: 325 (*Omalium*; characters).
- Pototskaia, 1967: 20 (*Omalium*; larval characters).
- Szujewski, 1968a: 711 (*Omalium*; Poland).
- Steel, 1970a: 13 (*Omalium*; biological notes).
- Coiffait, 1970e: 64 (*Omalium*; cited as *coesum*; Cyprus).
- Coiffait, 1973a: 269 (*Omalium*; Morocco).
- Osella and Zanetti, 1975: 86 (*Omalium*; collected from nest of *Talpa europaea*; notes; Italy).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Outerelo, 1980a: 54 (*Omalium*; Spain).
- Tóth, 1982: 64 (*Omalium*; characters; Hungary).
- Frank, 1982: 9 (*Omalium*; list of parasites).
- Bordoni, 1984: 335 (*Omalium*; Lebanon).
- Zanetti, 1984: 76 (*Omalium*; Bulgaria).
- Zanetti, 1985: 30 (*Omalium*; characters).

- Zanetti, 1987: 236 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
- Dettner and Reissenweber, 1991 (*Omalium*; defensive secretions: chemistry and systematics).
- Janák and Vysoky, 1992: 134 (*Omalium*; collected with *Formica polyctena*; Bohemia).
- Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Outerelo, Gamarra, and Salgado, 1998: 123 (*Omalium*; collected from cave; Spain; Portugal).
- Cibulskis, 1999: 34 (*Omalium*; list; Latvia).
- Owen, 2000: 251 (*Omalium*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Omalium*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Faroe Islands, Europe, Morocco, Algeria, Tunisia, USA.
- impressum* Heer, 1839: 176 (*Omalium*; [**preoccupied**]; Type locality: Avers Rhaetorum).
  - Redtenbacher, 1857: 253, 994 (*Omalium*; characters; Germany).
  - Fauvel, 1871a: 99 [= 1872: 73] (*Omalium*, cited as *Homalium*; synonym of *caesum*).
  - Redtenbacher, 1874: 277 (*Omalium*; characters).
  - Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; synonym of *caesum*).
  - Ganglbauer, 1895: 736 (*Omalium*; synonym of *caesum*).
  - Luze, 1906: 539 (*Omalium*; synonym of *caesum*).
  - Bernhauer and Schubert, 1910: 52 (*Omalium*; synonym of *caesum*).
  - Scheerpeltz, 1933: 1044 (*Omalium*; synonym of *caesum*).
- corticinum* Motschulsky, 1857a: 492 (*Omalium*; Type locality: Gourguel Alpe en Tyrol).
  - Fauvel, 1876a: 50 [= 1876: 235] (*Omalium*, cited as *Homalium*; synonym of *caesum*).
  - Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; synonym of *caesum*).
  - Ganglbauer, 1895: 736 (*Omalium*; synonym of *caesum*).
  - Luze, 1906: 539 (*Omalium*; synonym of *caesum*).
  - Bernhauer and Schubert, 1910: 52 (*Omalium*; synonym of *caesum*).
- flavicorne* Roubal, 1930: 309 (*Omalium*; form of *caesum*; Type locality: Silica; Tat.: Poprad. pl.).
  - Scheerpeltz, 1933: 1044 (*Omalium*; aberration of *caesum*).
  - Tóth, 1982: 64 (*Omalium*; aberration of *caesum*; characters; Hungary).
- callosum* Mäklin, 1852, see: *Haida*.
- cantabricum** Coiffait, 1966d: 707 (*Omalium*; Type locality: Cueva Povro Cabaniová, Covadonga, Province d'Oviedo, Espagne).
  - ▲ **DISTRIBUTION:** Spain.
- capito* Casey, 1894, see: *Xylodromus*.
- carinigerum* Broun, 1893, see: *Omaliomimus*.
- cariosum** Cameron, 1924b: 167 (*Omalium*; Type locality: Dehra Dun; Mussorie, 6500 feet).
  - Cameron, 1930: 140 (*Omalium*; characters; India).
  - Scheerpeltz, 1933: 1044 (*Omalium*; catalog).
  - ▲ **DISTRIBUTION:** India.
- castaneum* Gravenhorst, 1806, see: *Acidota*.
- caucasicum* Kolenati, 1846, see: *Phyllodrepa*.
- cephalotes* Eppelsheim, 1884, see: *Xylodromus*.
- cerrutii** Zanetti, 1985: 25 (*Omalium*; Type locality: Camerata Nuova, Lazio, prov. di Roma, Camposecco).
  - Zanetti, 1987: 226 (*Omalium*; characters; Italy).
  - Zanetti, 1995: 7 (*Omalium*; Italy).
  - ▲ **DISTRIBUTION:** Italy.
- chalmeri* Broun, 1893, see: *Omaliomimus*.

**chinese** J. Li, 1993: 52 (*Omalium*; Type locality: Mount Laoye, Shangzhi, Heilongjiang).

▲ **DISTRIBUTION:** China.

*chlorizans* Fauvel, 1904, see: *Phloeonomus*.

**cinnamomeum** Kraatz, 1857d: 1000 (*Omalium*; Type locality: Dalmatien).

— Kraatz, 1858b: 128 (*Omalium*; characters; Dalmatia; Greece).

— Ganglbauer, 1895: 738 (*Omalium*; characters; Dalmatia; Greece).

— Luze, 1906: 535 (*Omalium*; characters; Dalmatia; Herzegovinia; Greece; Asia Minor; Italy; Corfu).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Scheerpeltz, 1933: 1044 (*Omalium*; catalog).

— Scheerpeltz, 1956c: 1092 (*Omalium*; Cyprus).

— Scheerpeltz, 1958a: 3 (*Omalium*; Turkey).

— Scheerpeltz, 1961d: 117 (*Omalium*; Italy).

— Scheerpeltz, 1963a: 414 (*Omalium*; Greece).

— Coiffait, 1970e: 64 (*Omalium*; cited as *cinnamomaeum*; Cyprus).

— Tóth, 1982: 63 (*Omalium*; characters; Hungary).

— Zanetti, 1987: 230 (*Omalium*; characters; Italy).

— H. Franz, 1987: 69 (*Omalium*; Cyprus).

— Zanetti, 1995: 7 (*Omalium*; Italy).

— Zanetti and Sabella, 1998: 30 (*Omalium*; Sicily).

— Assing and Wunderle, 2001: 36 (*Omalium*; Cyprus).

▲ **DISTRIBUTION:** Hungary, Italy, Greece, Bosnia Hercegovina, Turkey.

*clavatum* Fauvel, 1869, see: *septentrionis* Thomson, 1857.

*clavatum* Luze, 1906, see: *subsolanum* Herman, 2001.

*clavicorne* Wollaston, 1857, see: *Phloeonomus*.

*clavicorne* Motschulsky, 1860, see: *septentrionis* Thomson, 1857.

**cognatum** Broun, 1893: 1038 (*Omalium*; Type locality: Tuakau, Lower Waikato).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Watson, 1967: 36 (*Stenomaliium*; synonym of *sulcithorax*).

— Thayer, 1996: 159 (“*Stenomaliium*”; not in *Stenomaliium* and will be transferred).

▲ **DISTRIBUTION:** New Zealand.

*conformatum* Hardy, 1851, see: *excavatum* Stephens, 1834.

*conformis* Kraatz, 1857, see: *Phloeostiba*.

*confusum* Mäklin, 1878, see: *Mannerheimia*.

**congoense** Cameron, 1950g: 7 (*Omalium*; Type locality: Belgian Congo: Kanyabayongok, Kabasha, alt. 1760 m).

— Fagel, 1956: 12 (*Omalium*; characters; Belgian Congo; Urundi).

▲ **DISTRIBUTION:** Congo, Burundi.

*conicum* Fauvel, 1878, see: *Omaliomimus*.

*consimile* Gyllenhal, 1810, see: *Olophrum*.

*cordicolle* Fauvel, 1900, see: *laticolle* Kraatz, 1857.

*corticale* Heer, 1834 [**Note: Nomen nudum**], see: *Acrulia*.

*corticinum* Motschulsky, 1857, see: *caesum* Gravenhorst, 1806.

*costipenne* Fauvel, 1904, see: *Omalioipsis*.

*cottieri* Bernhauer, 1939, see: *Stenomaliium*.

*crassicorne* A. Matthews, 1863, see: *Phyllodrepa*.

**crassicorne** Lea, 1906: 212 (*Omalium*, cited as *Homaliium*; [**preoccupied**]; Type locality: Richmond River, N.S.W.).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Herman, 2001: 38 (*Omalium*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Australia.

*crenatum* Gravenhorst, 1802, see: *Phyllodrepoidea*.

*crenulatus* Broun, 1880, see: *Anotylus*.

**cribriceps** Fauvel, 1900d: 221 (*Omalium*, cited as *Homalium*; Type locality: Syrie: Perse septentrionale).

— Luze, 1906: 530 (*Omalium*; characters; Syria; Mesopotamia; Persia).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Syria, Iraq, Iran.

*cribripenne* Fauvel, 1878, see: *Phyllodrepa*.

*cribrosum* Heer, 1841, see: *Eusphalerum*.

**cribrum** Fauvel, 1878d: 216 [= 1878e: 52] (*Omalium*, cited as *Homalium*; Type locality: Kansas, Topeka; Georgie; Texas, Bosque Co.).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Lundgren, 1998: 38 (*Omalium*; Florida; Oklahoma; Ohio, Delaware).

▲ **DISTRIBUTION:** USA.

**cubanum** Blackwelder, 1943: 55 (*Omalium*; Type locality: Cuba: Pico Turquino, summit at 6000 feet).

▲ **DISTRIBUTION:** Cuba.

*cursor* O. Müller, 1776, see: *rivulare* Paykull, 1789.

**cursor** Gravenhorst, 1806: 208 (*Omalium*; [**preoccupied**]; Type locality: Borussia).

— Olivier, 1811: 476 (*Omalium*; characters; Prussia).

— Erichson, 1840: 890 (*Omalium*; characters; Prussia).

— Luze, 1906: 486 (not in *Omalium*).

— Herman, 2001: 38 (*Omalium*; **nomen dubium**; although a junior primary homonym, it is suggested that the required replacement be ignored).

▲ **DISTRIBUTION:** Germany.

*curtellum* Sharp, 1889, see: *Mannerheimia*.

*curticolle* Eppelsheim, 1889, see: *Phyllodrepa*.

**curtipenne** Mäklin, 1878: 30 [= 1878a: 306] (*Omalium*, cited as *Homalium*; Type locality: Dudino, lat. obr. 69°15').

— J. Sahlberg, 1880: 110 (*Omalium*, cited as *Homalium*; characters; Siberia).

— Mäklin, 1881: 44 (*Omalium*, cited as *Homalium*; characters; Dundino, lat. bor. 69°15').

— Luze, 1906: 514 (*Omalium*; characters; Arctic Siberia).

— Poppius, 1909: 4 (*Omalium*; Lena Valley, Siberia).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Caucasus).

— Kashcheev, 1999: 142 (*Omalium*; characters).

— Ryabukhin, 1999: 17 (*Omalium*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia.

*daimio* Sharp, 1889, see: *Xylodromus*.

**darlingtoni** Blackwelder, 1943: 55 (*Omalium*; Type locality: Jamaica: main range of the Blue Mountains, between 5000 and 7388 feet).

▲ **DISTRIBUTION:** Jamaica.

*debile* Broun, 1893, see: *Stenomalium*.

**decoratum** Bernhauer, 1922: 1 (*Omalium*; Type locality: Bolivien: Yuracaris).

— Scheerpeltz, 1933: 1044 (*Omalium*; catalog).

▲ **DISTRIBUTION:** Bolivia.

*denticollis* Beck, 1817, see: *Megarthus*.

*denticolle* Sharp, 1889, see: *Pycnoglypta*.

*dentipes* Heer, 1839, see: *Amphichroum*.

*deplanatum* Gyllenhal, 1810, see: *Xylodromus*.

*depressus* Gravenhorst, 1802, see: *Xylodromus*.

**deubeli** Bernhauer, 1915j: 263 (*Omalium*; Type locality: am Bucsecs und im Rodnaergebirge in Siebenbürgen).

— Bernhauer, 1923d: 180 (*Omalium*; characters; Siebenbürgen).

— Roubal, 1930: 308 (*Omalium*; characters; Slovakia).

— Scheerpeltz, 1933: 1044 (*Omalium*; catalog).

— Lohse, 1964: 44 (*Omalium*; characters; central Europe).

— Tóth, 1982: 62 (*Omalium*; characters).

— Lucht, 1987: 87 (*Omalium*; checklist; Czechoslovakia).

— Boháč, 1993: 41 (*Omalium*; Slovakia).

▲ **DISTRIBUTION:** Romania, Slovakia.

**diffine** Sharp, 1889: 474 (*Omalium*; Type locality: Hitoyoshi).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Watanabe, 1961: 349 (*Omalium*; Izu Islands).

— Watanabe and Shibata, 1972: 60 (*Omalium*; Yaku-shima Island).

— Watanabe, 1990: 99 (*Omalium*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*diffusum* Fauvel, 1878, see: *Acrolocha*.

*distincticorne* Baudi, 1870, see: *Dialycera*.

**distigma** Bernhauer, 1922: 2 (*Omalium*; Type locality: Bolivien: Yuracarís).

— Scheerpeltz, 1933: 1044 (*Omalium*; catalog).

▲ **DISTRIBUTION:** Bolivia.

*divergens* Mäklin, 1878, see: *Mannerheimia*.

**doderoi** Zanetti, 1980a: 135 (*Omalium*; Type locality: Sardegna: Monti, prov. di Sassari).

— Zanetti, 1987: 220 (*Omalium*; characters; Italy).

— Zanetti, 1995: 7 (*Omalium*; Italy).

▲ **DISTRIBUTION:** Italy.

**edwardsi** Bernhauer, 1937b: 580 (*Omalium*; Type locality: Uganda: Kigezi Dist., Canaba Cap, 7500 ft.).

— Bernhauer, 1940: 132 (*Omalium*; Uganda).

▲ **DISTRIBUTION:** Uganda.

*elegans* Kraatz, 1857, see: *Phyllodrepa*.

**escayraci** Saulcy, 1864: 659 (*Omalium*; Type locality: Jérusalem).

— Luze, 1906: 521 (*Omalium*; characters; Cyprus; Syria).

— Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Israel, Cyprus.

**espanoli** Jarrige, 1952: 86 (*Omalium*, cited as *Homalium*; Type locality: la Cova Andrichol, Majorque).

— Pons and Palmer, 1996: 163 (*Omalium*; Balearic endemic; notes; habitat; Mallorca).

▲ **DISTRIBUTION:** Balearic Islands.

**excavatum** Stephens, 1834: 355 (*Omalium*; Type locality: Suffolk; vicinity of London).

— Gyllenhal, 1810: 215 (*Omalium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 53 cited *caesum* Gyllenhal as a synonym of *excavatum*; Gyllenhal did not describe the species as new, he attributed it to Gravenhorst]).

— Gyllenhal, 1827: 466 (*Omalium*; [Note: Presumably a misidentification of *caesum*]).

— Stephens, 1839: 430 (*Omalium*; characters; England).

— G. Waterhouse, 1858: 31 (*Omalium*; synonym of *fossulatum*).

— Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; characters; France).

— J. Sahlberg, 1876: 221 (*Omalium*; Finland).

— Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Morocco).

- Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; characters; Britain).
  - Ganglbauer, 1895: 736 (*Omalium*; characters; Europe).
  - Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; Morocco; Algeria).
  - Poppius, 1905: 12 (*Omalium*; Orkney Islands).
  - Luze, 1906: 544 (*Omalium*; characters; Europe).
  - Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
  - Reitter, 1909: 192 (*Omalium*; characters; Germany).
  - Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
  - Johansen, 1914: 612 (*Omalium*; characters; Denmark).
  - Henriksen and Lundbeck, 1918: 499 (*Omalium*; Greenland).
  - Portevin, 1929: 447 (*Omalium*; characters; France).
  - Bernhauer, 1931e: 9 (*Omalium*; Spain).
  - Scheerpeltz, 1933: 1044 (*Omalium*; catalog).
  - West, 1937: 47 (*Omalium*; Faroe Islands).
  - Henriksen, 1939: 43 (*Omalium*; Greenland).
  - C. Koch, 1941: 54 (*Omalium*; Morocco).
  - Scheerpeltz and Höfler, 1948: 152 (*Omalium*; fungus inhabitant).
  - Palm, 1948: 82 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
  - Jeannel and Jarrige, 1949: 312 (*Omalium*; cave species; France; Spain).
  - Larsson and Gígja, 1959: 63 (*Omalium*; biological notes; Iceland).
  - Scheerpeltz, 1960d: 133 (*Omalium*; Portugal).
  - Scheerpeltz, 1961d: 117 (*Omalium*; Italy).
  - Horion, 1963: 88 (*Omalium*; Scotland; Lapland; Kola Peninsula; Iberian Peninsula; Corsica; Sardinia; Italy; Bosnia Hercegovina; Germany; Austria).
  - Lohse, 1964: 45 (*Omalium*; characters; central Europe).
  - Scheerpeltz, 1965b: 392 (*Omalium*; Sicily).
  - Coiffait, 1968c: 505 (*Omalium*; Corsica).
  - Szujewski, 1968a: 711 (*Omalium*; Poland).
  - Steel, 1970a: 13 (*Omalium*; biological notes).
  - Ashworth, 1972: 214 (*Omalium*; late-glacial subfossil; Britain).
  - Pope, 1977: 23 (*Omalium*; Britain).
  - Hammond, 1980: 138 (*Omalium*; Ireland).
  - Tóth, 1982: 62 (*Omalium*; characters; Hungary).
  - Frank, 1982: 9 (*Omalium*; list of parasites).
  - Zanetti, 1987: 239 (*Omalium*; characters; Italy).
  - Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
  - Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
  - Hernández, Outerelo, and Gamarra, 1994: 192 (*Omalium*; Canary Island).
  - Sadler and Dugmore, 1995: 144 (*Omalium*; habitat notes; Iceland).
  - Zanetti, 1995: 7 (*Omalium*; Italy).
  - Cibulskis, 1998: 67 (*Omalium*; Latvia).
  - Tronquet, 1998a: 114 (*Omalium*; collected from marmot burrow; France).
  - Zanetti and Sabella, 1998: 30 (*Omalium*; Sicily).
  - Outerelo, Gamarra, and Salgado, 1998: 123 (*Omalium*; collected from cave; Spain; Portugal).
  - Cibulskis, 1999: 34 (*Omalium*; list; Latvia).
  - Assing and Wunderle, 1999: 435 (*Omalium*; collecting notes; Canary Islands).
  - Assing, 2000b: 115 (*Omalium*; collecting notes; Canary Islands).
  - Marchal and Chardonnet, 2000: 71 (*Omalium*; Corsica).
  - ▲ **DISTRIBUTION:** Greenland, Iceland, Faroe Islands, Orkney Islands, Europe, Russia, Morocco, Algeria, Canary Islands.
- fossulatum* Erichson, 1839a: 630 (*Omalium*; [**Note:** Erichson cited *caesum* Gyllenhal as a synonym of *fossulatum* but Gyllenhal's use was a misidentification]; Type locality: Mark Brandenburg).
- Heer, 1839: 176 (*Omalium*; characters; Switzerland).
  - Erichson, 1840: 877 (*Omalium*; characters; Germany).
  - Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).



- Kiesenwetter, 1851a: 435 (*Omalium*; France).
- Hardy, 1851: 59 (*Omalium*; notes; England).
- Thomson, 1857a: 225 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 640 (*Omalium*; characters; France).
- Staudinger, 1857: 287 (*Omalium*; notes; Iceland).
- Redtenbacher, 1857: 251 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 979 (*Omalium*; characters; Germany).
- Thomson, 1861: 213 (*Omalium*; characters; Scandinavia).
- Hochhuth, 1862: 103 (*Omalium*; Russia).
- Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *excavatum*).
- Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; synonym of *excavatum*).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 221 (*Omalium*; synonym of *excavatum*).
- Mulsant and Rey, 1880: 218 (*Omalium*; characters; France).
- Ganglbauer, 1895: 736 (*Omalium*; synonym of *excavatum*).
- Luze, 1906: 544 (*Omalium*; synonym of *excavatum*).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; synonym of *excavatum*).
- Scheerpeltz, 1933: 1045 (*Omalium*; synonym of *excavatum*).
- Zanetti, 1987: 239 (*Omalium*; synonym of *excavatum*).

*conformatum* Hardy, 1851: 59 (*Omalium*; Type locality: Ravensworth woods; South Shields; Berwickshire; near London).

- Fauvel, 1871a: 101 [= 1872: 75] (*Omalium*, cited as *Homalium*; synonym of *excavatum*).
- Ganglbauer, 1895: 737 (*Omalium*; synonym of *excavatum*).
- Luze, 1906: 544 (*Omalium*; synonym of *excavatum*).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; synonym of *excavatum*).

*brachypterum* C. Koch, 1940: 373 (*Omalium*; subspecies of *excavatum*; [preoccupied]; Type locality: Lazio, Filetino).

- Zanetti, 1987: 239 (*Omalium*; synonym of *excavatum*).

*excellens* Bernhauer, 1903, see: *falsum* Eppelsheim, 1889.

**exiguum** Gyllenhal, 1810: 218 (*Omalium*; Type locality: Suecica).

- Gyllenhal, 1827: 466 (*Omalium*).
- Zetterstedt, 1828: 51 (*Omalium*; characters; Lapland).
- Mannerheim, 1830: 53 (*Anthobium*; Finland).
- Mannerheim, 1831: 467 (*Anthobium*; Finland).
- Stephens, 1834: 350 (*Omalium*; characters; England).
- Zetterstedt, 1838: 51 (*Omalium*; characters; habitat; Lapland; Sweden).
- Stephens, 1839: 428 (*Omalium*; characters; England).
- Erichson, 1840: 876 (*Omalium*; characters; Germany).
- Redtenbacher, 1849: 829 (*Omalium*; characters; Austria).
- Hardy, 1851: 59 (*Omalium*; notes; England).
- Thomson, 1857a: 225 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 640 (*Omalium*; characters; France).
- Redtenbacher, 1857: 251 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 984 (*Omalium*; characters; Germany).
- Thomson, 1861: 213 (*Omalium*; characters; Scandinavia).
- Fauvel, 1871a: 98 [= 1872: 72] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 222 (*Omalium*; Finland).
- Mulsant and Rey, 1880: 212 (*Omalium*; characters; France).
- Fowler, 1888: 414 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 736 (*Omalium*; characters; north and middle Europe).
- Luze, 1906: 528 (*Omalium*; characters; northern and central Europe; Spain).

- Reitter, 1909: 191 (*Omalium*; characters; Germany).
  - Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
  - Johansen, 1914: 611 (*Omalium*; characters; Denmark).
  - Portevin, 1929: 446 (*Omalium*; characters; France).
  - Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
  - Palm, 1948: 80 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
  - Horion, 1963: 83 (*Omalium*; Britain; Norway; Sweden; Finland; Denmark; Holland; Belgium; Switzerland; France; Spain; Sardinia; Italy; Slovakia; Czech Republic; Germany; Austria).
  - Lohse, 1964: 44 (*Omalium*; characters; central Europe).
  - Smetana, 1964d: 53 (*Omalium*; Czechoslovakia).
  - Pope, 1977: 23 (*Omalium*; Britain).
  - Hammond, 1980: 138 (*Omalium*; Ireland).
  - Tóth, 1982: 62 (*Omalium*; characters).
  - Zanetti, 1985: 29 (*Omalium*; characters).
  - Zanetti, 1987: 225 (*Omalium*; characters; Italy).
  - Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux; Denmark).
  - Zanetti, 1995: 7 (*Omalium*; Italy).
  - Schülke and Uhlig, 1988: 2 (*Omalium*; notes; Germany).
  - Wittwer, 1993: 248 (*Omalium*; Switzerland).
  - Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- ▲ **DISTRIBUTION:** Europe.

*exsculptum* Mäklin, 1852, see: *Acrolocha*.

*fahraei* Zetterstedt, 1838, see: *Phyllodrepa*.

- falsum** Eppelsheim, 1889d: 21 (*Omalium*, cited as *Homalium*; Type locality: Circassien; Ach-Bulach; Caspimeer-Gebiet bei Liryk).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
  - Tikhomirova, 1973a: 138 (*Omalium*; checklist; Caucasus; Central Asia).
- ▲ **DISTRIBUTION:** Russia, Caspian region.

- excellens* Bernhauer, 1903b: 190 (*Omalium*; Type locality: Caspi-Meergebiet, Rasano).
- Bernhauer, 1903c: 592 (*Omalium*; synonym of *falsum*).
  - Luze, 1906: 491 (*Omalium*; synonym of *falsum*).
  - Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; synonym of *falsum*).

- faustum** Sharp, 1887: 746 (*Omalium*; Type locality: Panama, Bugaba).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- ▲ **DISTRIBUTION:** Panama.

*fenestrale* Zetterstedt, 1828, see: *Porrhodites*.

- ferrugineum** Kraatz, 1857d: 980 (*Omalium*; Type locality: Brocken).
- Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
  - Fauvel, 1871a: 100 [= 1872: 74] (*Omalium*, cited as *Homalium*; characters; Germany; Carpathians; Tatra region; Sudeten).
  - Redtenbacher, 1874: 277 (*Omalium*; characters).
  - Ganglbauer, 1895: 737 (*Omalium*; characters; Europe).
  - Fauvel, 1897c: 230 (*Omalium*, cited as *Homalium*; characters).
  - Luze, 1906: 533 (*Omalium*; characters; Germany; Sudeten; Carpathians).
  - Reitter, 1909: 192 (*Omalium*; characters; Germany).
  - Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
  - Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
  - Lohse, 1960a: 33 (*Omalium*; characters).
  - Smetana, 1960b: 258 (*Omalium*; Czechoslovakia).
  - Horion, 1963: 85 (*Omalium*; Bosnia; Romania; Hungary; Slovakia; Poland; Austria; Germany).
  - Lohse, 1964: 45 (*Omalium*; characters; central Europe).
  - Tóth, 1982: 63 (*Omalium*; characters; Hungary).
  - Zanetti, 1987: 231 (*Omalium*; characters; Italy).

- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria).
- Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Omalium*; Italy).

▲ **DISTRIBUTION:** Europe.

*filiformis* Walker, 1858, see: *Nacaeus*.

*finetarium* Mannerheim, 1830, see: *Anthobium*.

*flavicorne* Roubal, 1930, see: *caesum* Gravenhorst, 1806.

**flavidum** Hamilton, 1895: 347 (*Omalium*, cited as *Homalium*; Type locality: Pennsylvania: near St. Vincent; [Note: See lectotype designation by Thayer, 1992]).

- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Thayer, 1992 (“*Omalium*”; generic placement incorrect; sexual wing dimorphism; discussion of wing dimorphism; redescription; lectotype designation; Ontario; Quebec; Maine; Maryland; Massachusetts; New Hampshire; New York; Pennsylvania).
- Downie and Arnett, 1996: 437 (*Omalium*; characters; USA).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Carcinocephlus* ?).

▲ **DISTRIBUTION:** Canada; USA.

**flavipalpi** Broun, 1909: 228 (*Omalium*; Type locality: Broken River).

- Scheerpeltz, 1933: 1045 (*Omalium*; cited as *flavipalpis*; catalog).
- Watson, 1967: 36 (*Stenomalium*; synonym of *sulcithorax*).
- Thayer, 1996: 159 (“*Stenomalium*”; not in *Stenomalium*; probably a synonym of *cognatum*).

▲ **DISTRIBUTION:** New Zealand.

*flavipenne* Mäklin, 1853, see: *Phloeonomus*.

**foraminosum** Mäklin, 1852: 321 (*Omalium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 217 [= 1878e: 53] (*Omalium*, cited as *Homalium*; characters; Alaska; Lake Superior; Michigan).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Notman, 1919a: 96 (*Omalium*, cited as *Homalium*; Ontario).
- Fall, 1926: 145 (*Omalium*; Yukon Territory).
- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
- Hatch, 1957: 80 (*Omalium*; characters; British Columbia; Washington).

▲ **DISTRIBUTION:** Canada, USA.

*foraminosum* Scriba, 1866, see: *rivulare* Paykull, 1789.

**fortepunctatum** Fagel, 1956: 13 (*Omalium*; Type locality: Congo Belge: Kivu, Mt. Muhi, ruisseau Isale, 3025 m).

▲ **DISTRIBUTION:** Congo.

*fossulatum* Erichson, 1839, see: *excavatum* Stephens, 1834.

*foveolatum* Stephens, 1834, see: *Phloeonomus*.

*fractum* Fauvel, 1878, see: *Acrolocha*.

*fucicola* Kraatz, 1857, see: *laeviusculum* Gyllenhal, 1826.

*fuistingi* Reitter, 1895, see: *validum* Kraatz, 1857.

**funebre** Fauvel, 1871a: 99 [= 1872: 73] (*Omalium*, cited as *Homalium*; Type locality: Hautes Pyrénées).

- Mulsant and Rey, 1880: 213 (*Omalium*; characters; France).
- Luze, 1906: 527 (*Omalium*; characters; Pyrenees; Austria; Transylvania).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Portevin, 1929: 446 (*Omalium*; characters; France).
- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
- Horion, 1935: 174 (*Omalium*; characters; Pyrenees; Balkans; Austria).
- Horion, 1963: 82 (*Omalium*; France; Sardinia; Italy; Switzerland; Romania; Slovakia; Germany; Austria).
- Lohse, 1964: 44 (*Omalium*; characters; central Europe).

- Tóth, 1982: 61 (*Omalium*; characters).
- Zanetti, 1984: 76 (*Omalium*; Bulgaria).
- Zanetti, 1985: 27 (*Omalium*; characters).
- Zanetti, 1987: 224 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Czechoslovakia; Austria).
- Boháč, 1993: 41 (*Omalium*; Slovakia).
- Zanetti, 1995: 7 (*Omalium*; Italy).

▲ **DISTRIBUTION:** Italy, France, Germany, Switzerland, Austria, Slovakia, Romania, Bulgaria.

*fuscipenne* Heer, 1839, see: *Eusphalerum*.

*fusciventre* Broun, 1894, see: *Stenomalium*.

*fuscum* Gravenhorst, 1806, see: *Olophrum*.

**fuscum** Stephens, 1834: 355 (*Omalium*; [**preoccupied**]; Type locality: London).

- Stephens, 1839: 430 (*Omalium*; characters; England).
- Herman, 2001: 38 (*Omalium*; **nomen dubium**); although a junior primary homonym, it is suggested that the required replacement be ignored and prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Britain.

**gartneri** Coiffait, 1982: 153 (*Omalium*; Type locality: Inde: Karakorum, Naltar Tal, Umg. Jagot).

▲ **DISTRIBUTION:** India.

*gayndahense* W. J. MacLeay, 1873, see: *Paraphloeostiba*.

**gedyei** Bernhauer, 1940: 132 (*Omalium*; Type locality: Kenya: West Aberdare Mts., 10–11,000 ft.).

▲ **DISTRIBUTION:** Kenya.

*genalis* Broun, 1880, see: *Ischnoderus*.

*genistarum* Coquerel, 1860, see: *allardii* Fairmaire and Brisout, 1859.

*gracilicorne* Fairmaire and Laboulbène, 1856, see: *Phyllodrepa*.

**gridellii** Bernhauer, 1937b: 579 (*Omalium*; Type locality: Uganda: Bussu Busoga).

▲ **DISTRIBUTION:** Uganda.

*granulatum* Wollaston, 1854, see: *Phloeonomus*.

*gyllenhalii* C. Sahlberg, 1830, see: *Eucnecosum*.

*hamatum* Fauvel, 1878, see: *Hapalaraea*.

*hampei* Redtenbacher, 1857, see: *Acrolocha*.

**hebes** Broun, 1880: 116 (*Omalium*; Type locality: Whangarei Harbour).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** New Zealand.

*helmsi* Cameron, 1945, see: *Stenomalium*.

**henroti** Coiffait, 1976b: 96 (*Omalium*; Type locality: Chypre: Platania).

- Assing and Wunderle, 2001: 36 (*Omalium*; Cyprus).

▲ **DISTRIBUTION:** Cyprus.

*hiemale* Fuss, 1868, see: *Phyllodrepa*.

**hilare** Gistel, 1857: 30 (*Omalium*; [**Note: Nomen dubium**]; Type locality: Styria).

▲ **DISTRIBUTION:** Austria.

*hilarum* Broun, 1914, see: *Brouniellum*.

**holtzi** Bernhauer, 1943: 72 (*Omalium*; Type locality: Morea: Kalavryta).

▲ **DISTRIBUTION:** Greece.

*hova* Fauvel, 1904, see: *Omallopsis*.

**humerale** Cameron, 1924b: 167 (*Omalium*; Type locality: Chakrata District; Korawa Khud, 9100 feet).

- Cameron, 1930: 139 (*Omalium*; characters; India).
- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).

▲ **DISTRIBUTION:** India.

*humerosum* Fauvel, 1878, see: *Hapalaraea*.

*humile* Mäklin, 1853, see: *Hapalaraea*.

**hypsioticum** Gistel, 1857: 30 (*Omalium*; [**Note: Nomen dubium**]; Type locality: Styria).

▲ **DISTRIBUTION:** Austria.

*imhoffi* Heer, 1839, see: *Eusphalerum*.

**imitator** Luze, 1906: 534 (*Omalium*; Type locality: Nordungarn, Pressburg; Südungarn, Mehadia).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Roubal, 1930: 309 (*Omalium*; characters; Slovakia).
- Palm, 1948: 82 (*Omalium*; characters; Sweden).
- Lohse, 1964: 45 (*Omalium*; characters; central Europe).
- Muona, 1979: 18 (*Omalium*; Finland).
- Tóth, 1982: 64 (*Omalium*; characters; Hungary).
- Lucht, 1987: 87 (*Omalium*; checklist; Czechoslovakia).
- Silfverberg, 1992: 21 (*Omalium*; Finland).
- Boháč, 1993: 41 (*Omalium*; Slovakia).

▲ **DISTRIBUTION:** Slovakia, Hungary, Finland.

*impar* Mulsant and Rey, 1861, see: *riparium* Thomson, 1857.

*impressum* Zetterstedt, 1828, see: *Eucnecosum*.

*impressum* Heer, 1839, see: *caesum* Gravenhorst, 1806.

*incisum* Gravenhorst, 1806, see: *rivulare* Paykull, 1789.

**incultum** Sharp, 1887: 746 (*Omalium*; Type locality: Guatemala, Quiche Mountains 7000 to 9000 feet).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Guatemala.

*inflatum* Gyllenhal, 1813, see: *Acrulia*.

*insigne* Fairmaire and Germain, 1861, see: *Ischnoderus*.

*insulare* Kiesenwetter, 1877, see: *Nesomalium*.

*iopterum* Stephens, 1832, see: *Phyllodrepa*.

**italicum** Bernhauer, 1902d: 704 (*Omalium*; Type locality: Nord- und Mittelitalien von Genua bis Rom).

- Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; [**Note: Misidentification: Bernhauer and Schubert, 1910: 54 cited *nigriceps* Fowler as a synonym of *italicum*; Fowler did not describe the species as new, he attributed it to Kiesenwetter**]; characters; Britain).
- Luze, 1906: 487, 491, 541 (*Omalium*; synonym of *tricolor*).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
- Horion, 1935: 175 (*Omalium*; characters; Italy; France; Netherlands; Germany).
- Lohse, 1960a: 33 (*Omalium*; characters).
- Scheerpeltz, 1961d: 117 (*Omalium*; Italy).
- Horion, 1963: 87 (*Omalium*; Britain; France; Italy; Egypt; Holland; Germany).
- Lohse, 1964: 45 (*Omalium*; characters; central Europe).
- Steel, 1970a: 13 (*Omalium*; biological notes).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Zanetti, 1987: 234 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; Germany; Benelux).

- Drugmand and Haghebaert, 1987: 326 (*Omalium*; Belgium).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Owen, 2000: 251 (*Omalium*; pitfall trap collections from underground at roots of trees; Britain).

▲ **DISTRIBUTION:** Ireland, Britain, Belgium, Germany, France, Italy.

*tricolor* Mulsant and Rey, 1880: 218 (*Omalium*; [**preoccupied**]; Type locality: Hyères).

- Ganglbauer, 1895: 736 (*Omalium*; synonym of *caesum*).
- Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; variety of *caesum*).
- Luze, 1906: 541 (*Omalium*; characters; France; Italy; Elba Island).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; synonym of *italicum*).
- Scheerpeltz, 1933: 1045 (*Omalium*; synonym of *italicum*).
- Pope, 1977: 23 (*Omalium*; synonym of *italicum*).
- Zanetti, 1987: 234 (*Omalium*; synonym of *italicum*).

*vanderwieli* Everts, 1920: 228 (*Omalium*; aberration of *italicum*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Valkenburg).

- Scheerpeltz, 1933: 1045 (*Omalium*; aberration of *italicum*).

*jamesi* Jarrige, 1946a: 111 (*Omalium*, cited as *Homalium*; Type locality: France: Lauzanier, Basses-Alpes).

▲ **DISTRIBUTION:** France.

*jamaicensis* Blackwelder, 1943: 54 (*Omalium*; Type locality: Jamaica: Yallahs Valley, Blue Mountains).

▲ **DISTRIBUTION:** Jamaica.

*japonicum* Sharp, 1874: 98 (*Omalium*; Type locality: Nagasaki).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Nakane, 1963a: 82 (*Omalium*; characters; habitus photograph; Japan).
- Watanabe, 1990: 95 (*Omalium*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*kabakovi* Kashcheev, 1999: 141 (*Omalium*; Type locality: Dzhungarskii Alatai, verkhov'ia r. Tentek, 3400 m).

▲ **DISTRIBUTION:** Kazakhstan.

*kronii* Kiesenwetter, 1877, see: *Crymus*.

*kruegeri* Gridelli, 1930: 61 (*Omalium*; cited as *krügeri*; Type locality: Tobruh).

- Scheerpeltz, 1933: 1045 (*Omalium*; cited as *krügeri*; catalog).

▲ **DISTRIBUTION:** Libya.

*laborium* Blackwelder, 1943: 56 (*Omalium*; Type locality: Haiti: east slope of Morne La Selle, about 6000 feet. Also cited from the Dominican Republic).

▲ **DISTRIBUTION:** Haiti, Dominican Republic.

*lacki* Bernhauer, 1940b: 625 (*Omalium*; Type locality: Bären-Insel im nördlichen Eismeer, Fugleodden).

- Tikhomirova, 1973a: 138 (*Omalium*; checklist; Spitzbergen).

▲ **DISTRIBUTION:** Russia.

*lacrymale* Fleutiaux and Sallé, 1889, see: *Phloeonomus*.

*lacustre* Casey, 1894, see: *Xylodromus*.

*laesicolle* Mäklin, 1852, see: *Phloeonomus*.

*laeticulum* Sharp, 1887, see: *Phloeonomus*.

*laetipenne* Broun, 1910, see: *Omaliomimus*.

*laeve* Gravenhorst, 1806, see: *Deliphrum*.

*laevicolle* Heer, 1839, see: *Proteinus*.

*laeviusculum* Gyllenhal, 1827: 464 (*Omalium*; Type locality: Finmarkia ad Nord-Cap).

- C. Sahlberg, 1830: 282 (*Omalium*; characters; Finland).
- Zetterstedt, 1838: 51 (*Omalium*; characters; habitat; Lapland; Sweden).

- Erichson, 1840: 887 (*Omalium*; characters; Sweden).
- Hardy, 1851: 59 (*Omalium*; notes; England).
- Thomson, 1857a: 224 (*Omalium*; characters; Scandinavia).
- Thomson, 1861: 213 (*Omalium*; characters; Scandinavia).
- Fauvel, 1871a: 102 [= 1872: 76] (*Omalium*, cited as *Homalium*; characters; Scandinavia; Britain; Germany).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 220 (*Omalium*; Finland).
- Mulsant and Rey, 1880: 193 (*Omalium*; characters; France).
- Fowler, 1888: 413 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 734 (*Omalium*; characters; Germany; France; Scandinavia; Britain; Iceland).
- Poppius, 1905: 11 (*Omalium*; Orkney Islands; Shetland Islands).
- Luze, 1906: 512 (*Omalium*; characters; Germany; France; Scandinavia; Great Britain; Iceland).
- Reitter, 1909: 190 (*Omalium*; characters; Germany).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Johansen, 1914: 610 (*Omalium*; characters; Denmark).
- Scheerpeltz, 1933: 1045 (*Omalium*; catalog).
- West, 1937: 45 (*Omalium*; Faroe Islands).
- Palm, 1948: 78 (*Omalium*; characters; Sweden; Norway; Finland).
- Larsson and Gígja, 1959: 58 (*Omalium*; biological notes; Iceland).
- Horion, 1963: 74 (*Omalium*; Britain; Norway; Finland; Russia; Sweden; Denmark; Holland; Belgium; France; Germany).
- Lohse, 1964: 41 (*Omalium*; characters; central Europe).
- Steel, 1970a: 13 (*Omalium*; biological notes).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Benelux; Denmark).
- Welch, 1993: 227 (*Omalium*; ovariole number and ovary structure).
- Sadler and Dugmore, 1995: 144 (*Omalium*; habitat notes; Iceland).
- ▲ **DISTRIBUTION:** Iceland, Faroe Islands, Shetland Islands, Orkney Islands, Ireland, Britain, Norway, Sweden, Denmark, Holland, France, Germany, Russia.

*fucicola* Kraatz, 1857c: 286 (*Omalium*; Type locality: Island).

- Kraatz, 1857d: 978 (*Omalium*; characters; Germany).
- Thomson, 1861: 212 (*Omalium*; synonym of *riparium*).
- Fauvel, 1867c: 115 [= 1868b: 214] (*Omalium*; synonym of *laeviusculum*).
- Fauvel, 1871a: 102 [= 1872: 76] (*Omalium*, cited as *Homalium*; synonym of *riparium*).
- Mulsant and Rey, 1880: 194 (*Omalium*; synonym of *laeviusculum*).
- Ganglbauer, 1895: 734 (*Omalium*; synonym of *laeviusculum*).
- Luze, 1906: 512 (*Omalium*; synonym of *laeviusculum*).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; synonym of *laeviusculum*).

*lagopinum* J. Sahlberg, 1871, see: *strigicolle* Wankowicz, 1869.

*languidum* Mäklin, 1878, see: *septentrionis* Thomson, 1857.

*lapponicum* Mannerheim, 1830, see: *Eusphalerum*.

**laticolle** Kraatz, 1857d: 983 (*Omalium*; Type locality: Thüringen).

- Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
- Thomson, 1884: 1032 (*Omalium*; characters; Sweden).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Fauvel, 1878d: 217 [= 1878e: 53] (*Omalium*, cited as *Homalium*; synonym of *foraminosum*).
- Mulsant and Rey, 1880: 213 (*Omalium*; characters; Switzerland; Germany).
- Ganglbauer, 1895: 736 (*Omalium*; characters; Thuringia).
- Luze, 1906: 525 (*Omalium*; characters; Germany; Russia).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- Horion, 1935: 174 (*Omalium*; character; Germany).

- Palm, 1948: 81 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
- Steel, 1953c: 198 (*Omalium*; identified in Britain as *foraminosum* and *brevicolle*; characters).
- Horion, 1963: 82 (*Omalium*; Norway; Sweden; Finland; Denmark; Russia; Germany; Austria; France).
- Lohse, 1964: 43 (*Omalium*; characters; central Europe).
- Pope, 1977: 23 (*Omalium*; Britain).
- Zanetti, 1985: 29 (*Omalium*; characters).
- Zanetti, 1987: 223 (*Omalium*; characters; may not occur in Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Austria; Denmark).
- Boháč, 1993: 41 (*Omalium*; Czech Republic).
- Kashcheev, 1999: 142 (*Omalium*; characters).

▲ **DISTRIBUTION:** Russia, Finland, Sweden, Norway, Denmark, Britain, France, Germany, Austria.

*cordicolle* Fauvel, 1900d: 220 (*Omalium*, cited as *Homalium*; Type locality: Russie: Jaroslaw).

- Luze, 1906: 486, 491, 525 (*Omalium*; synonym of *laticolle*).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; synonym of *laticolle*).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (*Omalium*; cited as valid species; [**Note:** Since this change was cited without documentation in a list I note the alteration but make no transfer]; list of Danish species).

**latum** Stephens, 1834: 357 (*Omalium*; [**Note: Nomen dubium**]; Type locality: London).

- Stephens, 1839: 430 (*Omalium*; characters; England).

▲ **DISTRIBUTION:** Britain.

*lineare* Zetterstedt, 1828, see: *Phyllodrepa*.

**littorale** Kraatz, 1857d: 980 (*Omalium*; Type locality: Swinemünde).

- Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
- Thomson, 1868: 325 (*Omalium*; cited as *litorale*; characters; Scandinavia).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Thomson, 1884: 1032 (*Omalium*; characters; Sweden).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- Ganglbauer, 1895: 736 (*Omalium*; characters; Europe).
- Bernhauer and Schubert, 1910: 52 (*Omalium*; cited as *litorale*; synonym of *caseum*).
- Scheerpeltz, 1933: 1044 (*Omalium*; variety of *caesum*).
- Palm, 1948: 81 (*Omalium*; cited as *litorale*; variety of *caesum*; characters; Sweden; Denmark; Finland).
- Lohse, 1960a: 32 (*Omalium*; valid species; characters; notes).
- Palm, 1962: 185, 186 (*Omalium*; cited as *litorale*; characters; notes).
- V. Hansen, 1962: 242 (*Omalium*; valid species; Denmark).
- Horion, 1963: 87 (*Omalium*; cited as *litorale*; Sweden; Finland; Denmark; Germany).
- Lohse, 1964: 44 (*Omalium*; characters; central Europe).
- Tóth, 1982: 64 (*Omalium*; characters; Hungary).
- Zanetti, 1985: 29 (*Omalium*; characters; Italy).
- Zanetti, 1987: 235 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Denmark).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Ødegaard and Ligaard, 2000: 9 (*Omalium*; notes; habitat; Sweden; Norway).

▲ **DISTRIBUTION:** Europe.

*litoreum* Broun, 1886, see: *Omaliomimus*.

**lobeliae** Tottenham, 1953b: 483 (*Omalium*; Type locality: Kilimanjaro: 12,700 ft., above Peter's Hut).

▲ **DISTRIBUTION:** Tanzania.

**lokayi** Fleischer, 1897: 152 (*Omalium*; Type locality: Transsylvanische Alpen).

- Fauvel, 1897c: 230 (*Omalium*, cited as *Homalium*; characters).
- Luze, 1906: 532 (*Omalium*; characters; Siebenbürgen).



- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- Tóth, 1982: 63 (*Omalium*; characters).
- Zerche, 1988c: 36 (*Omalium*; characters; Carpathians).
- ▲ **DISTRIBUTION:** Romania, Carpathians.

*longiceps* Broun, 1914, see: *Crymus*.

- longicorne** Luze, 1906: 543 (*Omalium*; Type locality: Nördliche Mongolei, Shanghai).  
 — Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).  
 ▲ **DISTRIBUTION:** Mongolia.

*longulum* Mäklin, 1852, see: *Hapalaraea*.

*lucidum* Erichson, 1839, see: *Phyllodrepa*.

*luridum* Gyllenhal, 1813, see: *Pycnoglypta*.

*macropterum* Gravenhorst, 1806, see: *Proteinus*.

*maculicornis* Heer, 1839, see: *Phyllodrepa*.

*madegassa* Bernhauer, 1902, see: *Omalioopsis*.

- malaisei** Scheerpeltz, 1965: 148 (*Omalium*; Type locality: N.E. Burma, Kambaiti, 7000 ft.).  
 ▲ **DISTRIBUTION:** Myanmar.

- malayanum** Cameron, 1950d: 3 (*Omalium*; Type locality: Pahang: Cameron Highlands, Ginting Kial, 5000 feet).  
 ▲ **DISTRIBUTION:** Malaysia.

*mandibularis* Gyllenhal, 1827, see: *Manda*.

*marginatum* Say, 1832, see: *Eusphalerum*.

*marginatum* Kirby, 1837, see: *Olophrum*.

- marginatum** Cameron, 1941: 58 (*Omalium*; [**preoccupied**]; Type locality: Kashmir: Gulmarg, alt. 8000–10,000 feet).  
 — Herman, 2001: 38 (*Omalium*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).  
 ▲ **DISTRIBUTION:** India.

*marinum* Ragusa, 1871, see: *Hypopycna*.

- maxi** Herman, 2001: 38 (*Omalium*; replacement name for *obscurum* Bernhauer).  
 ▲ **DISTRIBUTION:** Kenya, Uganda.

*obscurum* Bernhauer, 1940: 130 (*Omalium*; [**preoccupied**]; Type locality: Kenya: West Aberdare Mts., 10–11,000 ft.; Mt. Kenya, 13,800 ft; Mt. Elgon, 14,000 ft.; Uganda: Mt. Elgon, Mudangi, 11,000 ft).

- Herman, 2001: 38 (*Omalium*; synonym of *maxi*).

*megacephalum* Zetterstedt, 1828, see: *Olisthaerus*.

*megarhroides* Fauvel, 1878, see: *Hapalaraea*.

*maerkelii* Sachse, 1852, see: *Phloeonomus*.

*merkli* Eppelsheim, 1883, see: *Carcinocephalus*

- mesomelas** Holme, 1842: 128 (*Omalium*; [**Note: Nomen dubium**]; Type locality: near Meysey Hampton, Gloucestershire).  
 — Rye, 1870a: 89 (*Omalium*, cited as *Homalium*; species is unidentifiable and must be ignored).  
 — Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).  
 ▲ **DISTRIBUTION:** Britain.

- mesopotamicum** Bernhauer, 1943: 71 (*Omalium*; Type locality: Mesopotamien).  
 ▲ **DISTRIBUTION:** Iraq.

*micrarthrum* Broun, 1893, see: *Stenomalium*.

*minimum* Erichson, 1839, see: *Phloeonomus*.

- minus** Mulsant and Rey, 1880: 218 (*Omalium*; variety of *rugatum*; Type locality: Hyères).  
 — Ganglbauer, 1895: 736 (*Omalium*; synonym of *caesum*).  
 — Luze, 1906: 539 (*Omalium*; synonym of *caesum*).  
 — Bernhauer and Schubert, 1910: 52 (*Omalium*; synonym of *caesum*).  
 — Steel, 1953e: 280 (*Omalium*; synonym of *rugatum*).  
 — Smetana, 1966: 324, 325 (*Omalium*; cited as valid species; characters; notes; Czechoslovakia).  
 ▲ **DISTRIBUTION:** France, Czechoslovakia.
- monilicorne* Gyllenhal, 1810, see: *Xylostiba*.
- monilifer* Broun, 1893, see: *Stenomalium*.
- monticola** Cameron, 1941: 58 (*Omalium*; Type locality: Kashmir: Gulmarg).  
 ▲ **DISTRIBUTION:** India.
- monticulum** Grimmer, 1841: 33 (*Omalium*; [**Note: Nomen dubium**]; Type locality: Steiermark).  
 ▲ **DISTRIBUTION:** Austria.
- montivagans** Cameron, 1942b: 323 (*Omalium*; Type locality: Chyulu Hills, altitude 5600 feet).  
 ▲ **DISTRIBUTION:** Kenya.
- montivagum* Heer, 1839, see: *Eusphalerum*.
- montivagum** Eppelsheim, 1878: 128 (*Omalium*, cited as *Homalium*; [**preoccupied**]; Type locality: Hochgebirge östlich vom Kasbek).  
 — Luze, 1906: 529 (*Omalium*; characters; Caucasus).  
 — Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).  
 — Herman, 2001: 38 (*Omalium*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).  
 ▲ **DISTRIBUTION:** Georgia.
- morrisi** Blackburn, 1902: 28 (*Omalium*, cited as *Homalium*; Type locality: S. Australia, near Adelaide).  
 — Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).  
 ▲ **DISTRIBUTION:** Australia.
- muensteri** Bernhauer, 1901: 540 (*Omalium*; Type locality: Kongsberg in der Umgebung von Christiania in Norwegen).  
 — Luze, 1906: 542 (*Omalium*; characters; Norway).  
 — Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).  
 — Palm, 1948: 82 (*Omalium*; characters; Norway; Finland).  
 ▲ **DISTRIBUTION:** Norway, Caucasus, Caspian region.
- nanum* Sharp, 1876, see: *Phloeonomus*.
- nemobium* Broun, 1910, see: *Stenomalium*.
- neomexicanum** Bernhauer, 1915j: 263 (*Omalium*; Type locality: Neu-Mexiko: Porvenir).  
 — Bernhauer, 1923d: 180 (*Omalium*; characters; New Mexico).  
 — Scheerpeltz, 1933: 1046 (*Omalium*; catalog).  
 ▲ **DISTRIBUTION:** USA.
- nigriceps** Kiesenwetter, 1850: 222 (*Omalium*; Type locality: Pyrenaei, Italia).  
 — Kiesenwetter, 1851a: 435 (*Omalium*; characters; France).  
 — Fairmaire and Laboulbène, 1856: 639 (*Omalium*; characters; France).  
 — Kraatz, 1857d: 981 (*Omalium*; characters).  
 — Fauvel, 1865a: 318 [= 1865b: 68] (*Omalium*; habitat; France).  
 — Fauvel, 1871a: 100 [= 1872: 74] (*Omalium*, cited as *Homalium*; characters; France; Britain).  
 — Fauvel, 1873b: 116 [= 1873c: 9] (*Omalium*, cited as *Homalium*; Spain).  
 — Mulsant and Rey, 1880: 225 (*Omalium*; characters; France).  
 — Ganglbauer, 1895: 737 (*Omalium*; characters; western middle Europe).  
 — Fauvel, 1897c: 230 (*Omalium*, cited as *Homalium*; characters).  
 — Luze, 1906: 532 (*Omalium*; characters; Switzerland; France; Pyrenees).

- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Portevin, 1929: 447 (*Omalium*; characters; France).
- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- Horion, 1935: 175 (*Omalium*; characters; Switzerland; France; Pyrenees; Britain; Germany).
- C. Koch, 1940: 373 (*Omalium*; Spain).
- Horion, 1954: 6 (*Omalium*; characters; Germany).
- Lohse, 1960a: 33 (*Omalium*; characters).
- Horion, 1963: 84 (*Omalium*; Spain; France; Italy; Germany).
- Lohse, 1964: 45 (*Omalium*; characters; central Europe).
- Zanetti, 1987: 232 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Austria; France).
- Zanetti, 1995: 7 (*Omalium*; Italy).

▲ **DISTRIBUTION:** Italy, Switzerland, Germany, France, Spain.

*rufulum* Lavagne, 1917: 139 (*Omalium*; variety of *nigriceps*; [**preoccupied**]; Type locality: Massif de l'Aigoual, col de las Serres).

- Scheerpeltz, 1933: 1046 (*Omalium*; variety of *nigriceps*).

*nigricolle* Stephens, 1834, see: *Eusphalerum*.

*nigriventre* Rosenhauer, 1856, see: *Philorinum*.

*nigrum* Gravenhorst, 1806, see: *Phyllodrepa*.

**nigrum** Coiffait, 1982: 151 (*Omalium*; [**preoccupied**]; Type locality: Nepal: südl. Dhaulagiri, Dhorpatan, 3000–3200 m).

- Herman, 2001: 38 (*Omalium*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Nepal.

**niponense** Sharp, 1889: 474 (*Omalium*; Type locality: Kashiwagi).

- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Nakane, 1963a: 82 (*Omalium*; characters; habitus photograph; Japan).
- Watanabe, 1990: 92 (*Omalium*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*nitidicolle* Poppius, 1904, see: *rivulare* Paykull, 1789.

*nivale* Heer, 1841, see: *Eusphalerum*.

*obesum* Fauvel, 1904, see: *Paraphloeostiba*.

*obscuricorne* Poppius, 1904, see: *rivulare* Paykull, 1789.

*obscurum* Kraatz, 1859, see: *Phloeonomus*.

*obscurum* Bernhauer, 1940, see: *maxi* Herman, 2001.

**ocellatum** Wollaston, 1854: 613 (*Omalium*; Type locality: Madeira: the Northern Dezerta, or Ilheo Chao).

- Wollaston, 1857: 204 (*Omalium*; habitat; Madeira Islands).
- Wollaston, 1865: 522 (*Omalium*, cited as *Homalium*; characters; Madeira Islands; Canary Islands).
- Wollaston, 1871: 311 (*Homlaium*; notes; valid species).
- Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; Madeira; Canary Islands).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Coiffait, 1954: 162 (*Omalium*; Canary Islands).
- Hernández, Outerelo, and Gamarra, 1994: 187 (*Omalium*; checklist; Canary Islands).

▲ **DISTRIBUTION:** Madeira, Canary Islands.

*ovatum* Gravenhorst, 1806, see: *Proteinus*.

**oxyacanthae** Gravenhorst, 1806: 210 (*Omalium*; variety of *rivulare*; Type locality: Not cited).

- Curtis, 1829: 29 (*Omalium*; catalog; Britain).
- Stephens, 1834: 355 (*Omalium*; characters; England).

- Runde, 1835: 23 (*Anthobium*; characters; Germany).
- Lacordaire, 1835: 470 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 55 cited *caesum* Lacordaire as a synonym of *oxyacanthae* Gravenhorst; Lacordaire did not describe the species as new, he attributed it to Gyllenhal]; characters; France).
- Lacordaire, 1835: 471 (*Anthobium*; characters; France).
- Erichson, 1839a: 630 (*Omalium*; synonym of *caesum*).
- Heer, 1839: 176 (*Omalium*; synonym of *fossulatum*).
- Stephens, 1839: 430 (*Omalium*; characters; England).
- Laporte, 1840: 191 (*Anthobium*; characters; France).
- Erichson, 1840: 877 (*Omalium*; characters; Germany; France).
- Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).
- Hardy, 1851: 59 (*Omalium*; notes; England).
- Fairmaire and Laboulbène, 1856: 640 (*Omalium*; characters; France).
- Redtenbacher, 1857: 251 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 982 (*Omalium*; characters; Germany).
- Fauvel, 1871a: 99 [= 1872: 73] (*Omalium*, cited as *Homalium*; characters; France; Britain; Germany; Switzerland; Corsica; Italy; Sicily; Austria).
- Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; Russia; Algeria).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- Fauvel, 1878: 89 [= 1878a: 9] (*Omalium*, cited as *Homalium*; Algeria).
- Mulsant and Rey, 1880: 209 (*Omalium*; characters; France).
- Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Algeria).
- Fowler, 1888: 414 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 735 (*Omalium*; characters; middle Europe; Italy; Corsica; Sicily).
- Luze, 1906: 521 (*Omalium*; characters; central Europe; Italy; Giglio Island; Corsica; Sicily; Sardinia; New Jersey).
- Montandon, 1908: 77 (*Omalium*; Romania).
- Reitter, 1909: 191 (*Omalium*; characters; Germany).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Johansen, 1914: 611 (*Omalium*; characters; Denmark).
- Portevin, 1929: 446 (*Omalium*; characters; France).
- Bernhauer, 1931e: 8 (*Omalium*; Spain).
- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- Palm, 1948: 80 (*Omalium*; characters; Sweden; Denmark).
- Horion, 1963: 80 (*Omalium*; Algeria; Manchuria; Britain; Sweden; Denmark; Holland; Belgium; France; Switzerland; Spain; Corsica; Sardinia; Sicily; Italy; Croatia; Dalmatia; Albania; Romania; Hungary; Slovakia; Czech Republic; Poland; Germany; Austria).
- Lohse, 1964: 44 (*Omalium*; characters; central Europe).
- Steel, 1970a: 13 (*Omalium*; biological notes).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Tóth, 1982: 60 (*Omalium*; characters; Hungary).
- Zanetti, 1985: 27 (*Omalium*; characters).
- Zanetti, 1987: 227 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Ryabukhin, 1999: 16 (*Omalium*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Russia, Europe, Algeria, USA.
- piceum* Stephens, 1834: 354 (*Omalium*; [**preoccupied**]; Type locality: near London; Devonshire; Suffolk; Raehills).
- Stephens, 1839: 429 (*Omalium*; characters; England).
- Hardy, 1851: 59 (*Omalium*; synonym of *oxyacanthae*).

*subdepressum* Mulsant and Rey, 1880: 211 (*Omalium*; Type locality: Provence).

— Luze, 1906: 491, 522 (*Omalium*; synonym of *oxyacanthae*).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; synonym of *oxyacanthae*).

*pacificum* Kiesenwetter, 1877, see: *Nesomalium*.

*pacificum* Casey, 1894, see: *Phyllodrepa*.

*pallens* Heer, 1841, see: *Eusphalerum*.

*pallidum* Gravenhorst, 1806, see: *Eusphalerum*.

*paludosum* Heer, 1839, see: *Eusphalerum*.

**parallelicolle** Coiffait, 1982: 154 (*Omalium*; Type locality: Nepal: Weg von Jiri nach Shiv-alaya, 1800–2500 m).

▲ **DISTRIBUTION:** Nepal.

**parallelum** Lea, 1906: 212 (*Omalium*, cited as *Homalium*; Type locality: Frankford, Huon River, Bruni Island, Tasm.).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Australia.

*parkeri* Bernhauer, 1939, see: *Stenomalium*.

*pedicularius* Erichson, 1840, see: *Phloeonomus*.

**peloponnesiacum** Scheerpeltz, 1962c: 255 (*Omalium*; Type locality: Gebiet des Ziria-[Kyllänë-] Massives im nordöstlichen Peloponnes in etwa 1600 m).

— Scheerpeltz, 1963a: 414 (*Omalium*; Greece).

▲ **DISTRIBUTION:** Greece.

**perplexum** Broun, 1894: 428 (*Omalium*; Type locality: Invercargill).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Watson, 1967: 35 (*Stenomalium*; synonym of *sulcithorax*).

— Thayer, 1996: 159 (“*Stenomalium*”; probably a synonym of *cognatum*).

▲ **DISTRIBUTION:** New Zealand.

**personatum** Jarrige, 1970: 59 (*Omalium*; Type locality: Madagascar: Mt. Tsaratanana, 1500 m).

▲ **DISTRIBUTION:** Madagascar.

*pilosulum* Stephens, 1834, see: *Philorinum*.

*philorinoides* Fauvel, 1878, see: *Phyllodrepa*.

*philpotti* Broun, 1894, see: *Stenomalium*.

*piceum* Gyllenhal, 1810, see: *Olophrum*.

*piceum* Stephens, 1834, see: *rivulare* Paykull, 1789.

*piceum* Stephens, 1834, see: *oxyacanthae* Gravenhorst, 1806.

*picinum* Stephens, 1834, see: *Xylodromus*.

*picipenne* Fauvel, 1867, see: *Omalioipsis*.

*pineti* Thomson, 1857, see: *Phloeostiba*.

**plagiatum** Mannerheim, 1843b: 235 (*Omalium*; Type locality: insula Sitkha).

— Provancher, 1877: 261 (*Omalium*; characters; Quebec).

— Fauvel, 1878d: 213 [= 1878e: 49] (*Omalium*, cited as *Homalium*; characters; Alaska; California).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Canada, USA.

**planimarginatum** Broun, 1909: 229 (*Omalium*; Type locality: Broken River).

— Scheerpeltz, 1933: 1046 (*Omalium*; catalog).

— Watson, 1967: 36 (*Stenomalium*; synonym of *sulcithorax*).

— Thayer, 1996: 159 (“*Stenomalium*”; probably a synonym of *cognatum*).

▲ **DISTRIBUTION:** New Zealand.

*planipenne* Mäklin, 1853, see: *Phloeostiba*.

**poggii** Zanetti, 1985: 23 (*Omalium*; Type locality: Sardegna: prov. di Sassari, Ozieri).

— Zanetti, 1987: 228 (*Omalium*; characters; Italy).

— Zanetti, 1995: 7 (*Omalium*; Italy).

— Zanetti and Sabella, 1998: 29 (*Omalium*; notes; Sicily; France).

▲ **DISTRIBUTION:** Italy, France.

*politulus* Broun, 1880, see: *Ischnoderus*.

*porosum* Scriba, 1867, see: *rivulare* Paykull, 1789.

*primulae* Stephens, 1834, see: *Eusphalerum*.

**protogaecae**† Heer, 1847: 34 (*Omalium*; Miocene fossil; Type locality: Radoboj, Croatia).

— Scudder, 1891: 533 (*Omalium*, cited as *Homalium*; catalog; Mayencian Horizon; Croatia).

— Giebel, 1856: 74 (*Omalium*; characters; fossil species).

— Handlirsch, 1907: 730 (*Omalium*, cited as *Homalium*; catalog; Miocene; Croatia).

▲ **DISTRIBUTION:** Yugoslavia.

*prolixum* Broun, 1893, see: *Stenomalium*.

*pubescens* Zetterstedt, 1828, see: *Porrhodites*.

*pullus* Broun, 1880, see: *Oxytelus*.

**pumilio** Sharp, 1887: 746 (*Omalium*; Type locality: Guatemala, Capetillo).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Guatemala.

*punctiventris* Fauvel, 1878, see: *Phyllodrepa*.

**punicantipennis** Grimmer, 1841: 34 (*Omalium*; [Note: **Nomen dubium**]; Type locality: Steiermark).

▲ **DISTRIBUTION:** Austria.

*pusillum* Gravenhorst, 1806, see: *Phloeonomus*.

**pustuliceps** Bernhauer, 1940: 131 (*Omalium*; Type locality: Uganda: Mt. Elgon, Bulambuli, 9500 ft.; Mt. Elgon, Mudangi, 11,000 ft.; Kenya: Mt. Kenya, 8000 ft; Mt. Elgon, 11,000 ft).

▲ **DISTRIBUTION:** Kenya, Uganda.

*pygmaeum* Gravenhorst, 1806, see: *Xylodromus*.

**quadripenne** Casey, 1894: 425 (*Omalium*; Type locality: Virginia: Fredericksburg).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Lundgren, 1998: 38 (*Omalium*; Florida; Wisconsin, Michigan; Illinois; Ontario; New Hampshire; South Carolina; Tennessee).

▲ **DISTRIBUTION:** USA.

*quadratum* Zetterstedt, 1838, see: *Acidota*.

*quadrum* Gravenhorst, 1806, see: *Arpedium*.

*quadrum* Zetterstedt, 1828, see: *Acidota*.

*ranunculi* Gravenhorst, 1802, see: *Eusphalerum*.

**repandum** Erichson, 1840: 878 (*Omalium*; Type locality: America septentrionalis).

— Fauvel, 1878d: 216 [= 1878e: 52] (*Omalium*, cited as *Homalium*; characters; Missouri; South Carolina; Texas).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Blatchley, 1910: 480 (*Omalium*, cited as *Homalium*; characters; Indiana).

— Downie and Arnett, 1996: 437 (*Omalium*; characters; USA).

— Lundgren, 1998: 38 (*Omalium*; Florida; Texas; Minnesota; Massachusetts, Georgia).

▲ **DISTRIBUTION:** USA.

**riparium** Thomson, 1857a: 224 (*Omalium*; Type locality: Lomma i Skane).

— Thomson, 1861: 212 (*Omalium*; characters; Scandinavia).

— Rye, 1864a: 58 (*Omalium*; characters; Britain).

- Fauvel, 1871a: 102 [= 1872: 76] (*Omalium*, cited as *Homalium*; characters; France; Lapland; Scandinavia; Britain).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Fauvel, 1876a: 51 [= 1876: 236] (*Omalium*, cited as *Homalium*; Tunisia).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- Fauvel, 1878: 90 [= 1878a: 10] (*Omalium*, cited as *Homalium*; Tunisia).
- Mulsant and Rey, 1880: 196 (*Omalium*; characters; France).
- Fauvel, 1886: 15 [= 1886a: 7] (*Omalium*, cited as *Homalium*; Tunisia; Algeria).
- Fowler, 1888: 413 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 734 (*Omalium*; characters; Germany; France; Scandinavia; Britain).
- Fauvel, 1902b: 55 (*Omalium*, cited as *Homalium*; Algeria; Tunisia).
- Poppus, 1905: 11 (*Omalium*; Orkney Islands; Shetland Islands).
- Luze, 1906: 513 (*Omalium*; characters; Germany; France; Scandinavia; Great Britain).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 191 (*Omalium*; characters; Germany).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Poppus, 1913: 9 (*Omalium*; Iceland).
- Johansen, 1914: 610 (*Omalium*; characters; Denmark).
- Portevin, 1929: 446 (*Omalium*; characters; France).
- Scheerpeltz, 1933: 1046 (*Omalium*; catalog).
- West, 1937: 46 (*Omalium*; Faroe Islands).
- Palm, 1948: 78 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
- Larsson and Gíggja, 1959: 59 (*Omalium*; biological notes; Iceland).
- Horion, 1963: 74 (*Omalium*; Finland; Sweden; Denmark; Britain; Faroes; France; Iberian Peninsula; Morocco; Istria; Dalmatia; Germany).
- Lohse, 1964: 42 (*Omalium*; characters; central Europe).
- Coiffait, 1968c: 505 (*Omalium*; Corsica).
- Steel, 1970a: 14 (*Omalium*; biological notes).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Elliott, King, and Fordy, 1983 (*Omalium*; habitat; natural history).
- Zanetti, 1987: 217 (*Omalium*; characters; Italy).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Benelux; Denmark).
- Haghebaert, 1989a: 277 (*Omalium*; notes; Camargue).
- Sadler and Dugmore, 1995: 144 (*Omalium*; habitat notes; Iceland).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Owen, 1997a: 148 (*Omalium*; collecting sites; Ireland).
- Lemdahl and Gustavsson, 1997: 181 (*Omalium*; collected in lateglacial and middle Holocene deposits; Sweden).
- Assing, Frisch, Kahlen, et al., 1998: 122 (*Omalium*; note).
- Kashcheev, 1999a: 57 (*Omalium*; Kazakhstan).
- Burakowski, Mroczkowski, and Stefańska, 2000: 41 (*Omalium*; catalog; Poland).
- Assing and Wunderle, 2001: 36 (*Omalium*; Cyprus).
- ▲ **DISTRIBUTION:** Iceland, Faroe Islands, Shetland Islands, Orkney Islands, Europe, Tunisia, Algeria.
- impar* Mulsant and Rey, 1862: 166 [= 1861: 182] (*Omalium*; Type locality: Hyères).
  - Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *riparium*).
  - Fauvel, 1869a: 152 (*Omalium*; synonym of *riparium*).
  - Fauvel, 1871a: 102 [= 1872: 76] (*Omalium*, cited as *Homalium*; synonym of *riparium*).
  - Mulsant and Rey, 1880: 199 (*Omalium*; characters; France).
  - Ganglbauer, 1895: 734 (*Omalium*; characters; France).
  - Luze, 1906: 513 (*Omalium*; characters; France; Istria; Dalmatia).
  - Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
  - Scheerpeltz, 1933: 1046 (*Omalium*; subspecies of *riparium*).
  - Tóth, 1982: 60 (*Omalium*; cited as valid species; characters).
  - Zanetti, 1987: 217 (*Omalium*; subspecies of *riparium*; characters; Italy).

- Sparacio, 1995: 140 (*Omalium*; subspecies of *riparium*; characters; notes; Sicily).
- Zanetti, 1995: 7 (*Omalium*; subspecies of *riparium*; Italy).

**rivulare** Paykull, 1789: 65 (*Staphylinus*; Type locality: Suecia).

- Olivier, 1795:(42): 35 (*Staphylinus*; characters; France, Sweden).
- Panzer, 1795: 357 (*Staphylinus*; characters; Germany).
- Paykull, 1800: 407 (*Staphylinus*; characters; Sweden).
- Gravenhorst, 1802: 116 (*Omalium*; characters).
- Marsham, 1802: 513 (*Staphylinus*; characters; Britain).
- Latreille, 1804: 373 (*Omalium*; characters; France; Sweden; Germany).
- Latreille, 1806: 298 (*Omalium*; characters; France).
- Panzer, 1808: 13 (*Staphylinus*; characters; illustrations).
- Gyllenhal, 1810: 214 (*Omalium*; characters).
- Olivier, 1811: 477 (*Omalium*; characters; France; Germany; Sweden).
- Leach, 1815: 92 (*Omalium*; characters).
- Samouelle, 1819: 174 (*Omalium*; characters; habitat).
- Gyllenhal, 1827: 465 (*Omalium*).
- Zetterstedt, 1828: 51 (*Omalium*; characters; Lapland).
- Curtis, 1829: 29 (*Omalium*; catalog; Britain).
- C. Sahlberg, 1830: 282 (*Omalium*; characters; Finland).
- Mannerheim, 1830: 53 (*Anthobium*; Finland; Sweden).
- Mannerheim, 1830: 53 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 56 cited *oxyacanthae* Mannerheim as a synonym of *rivulare* Paykull; Mannerheim did not describe the species as new, he attributed it to Gyllenhal]; Finland).
- Mannerheim, 1831: 467 (*Anthobium*; Finland; Sweden).
- Mannerheim, 1831: 467 (*Anthobium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 56 cited *oxyacanthae* Mannerheim as a synonym of *rivulare* Paykull; Mannerheim did not describe the species as new, he attributed it to Gyllenhal]; Finland).
- Stephens, 1834: 354 (*Omalium*; characters; England).
- Runde, 1835: 22 (*Anthobium*; characters; Germany).
- Lacordaire, 1835: 470 (*Anthobium*; characters; France).
- Erichson, 1839a: 629 (*Omalium*; characters; Germany).
- Heer, 1839: 176 (*Omalium*; characters; Switzerland).
- Stephens, 1839: 430 (*Omalium*; characters; England).
- Erichson, 1840: 875 (*Omalium*; characters; Europe).
- Laporte, 1840: 192 (*Anthobium*; characters; France).
- Dufour, 1843: 37 (*Anthobium*; characters; France).
- Hochhuth, 1849: 204 (*Omalium*; characters; Iberia; Lenkoran).
- Redtenbacher, 1849: 751 (*Omalium*; characters; Austria).
- Kiesenwetter, 1851a: 435 (*Omalium*; France).
- Hardy, 1851: 59 (*Omalium*; notes; England).
- Thomson, 1857a: 223 (*Omalium*; characters; Scandinavia).
- Fairmaire and Laboulbène, 1856: 639 (*Omalium*; characters; France).
- Staudinger, 1857: 287 (*Omalium*; notes; Iceland).
- Redtenbacher, 1857: 250 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 978 (*Omalium*; characters; Germany).
- Kraatz, 1858b: 128 (*Omalium*; Greece).
- Thomson, 1859: 51 (type species of *Omalium*).
- Motschulsky, 1860: 546 (*Ochthexenus*).
- Thomson, 1861: 211 (*Omalium*; characters; Scandinavia).
- Fauvel, 1871a: 104 [= 1872: 78] (*Omalium*, cited as *Homalium*; characters; France; Europe; Algeria).
- Redtenbacher, 1874: 274 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 220 (*Omalium*; Finland).
- Fauvel, 1878: 90 [= 1878a: 10] (*Omalium*, cited as *Homalium*; Algeria).
- Fauvel, 1878d: 219 [= 1878e: 55] (*Omalium*, cited as *Homalium*; characters; California).



- Mulsant and Rey, 1880: 202 (*Omalium*; characters; France).
- Gozis, 1886: 16 (type species of *Ochthexenus*).
- Fauvel, 1886: 15 [= 1886a: 7] (*Omalium*, cited as *Homalium*; Algeria).
- Fowler, 1888: 412 (*Omalium*, cited as *Homalium*; characters; Britain).
- Ganglbauer, 1895: 734 (*Omalium*; characters; Europe; Mediterranean region; California).
- Fauvel, 1902b: 55 (*Omalium*, cited as *Homalium*; Algeria; Egypt).
- Poppius, 1905: 12 (*Omalium*; Orkney Islands; Shetland Islands).
- Luze, 1906: 516 (*Omalium*; characters; Europe; Mediterranean region; Caucasus).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 191 (*Omalium*; characters; Germany).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).
- Poppius, 1913: 9 (*Omalium*; Iceland).
- Johansen, 1914: 609 (*Omalium*; characters; Denmark).
- Eichelbaum, 1914: 95 (*Omalium*; abdominal segmentation; apical segments).
- Portevin, 1929: 446 (*Omalium*; characters; France).
- Scheerpeltz, 1933: 1047 (*Omalium*; catalog).
- West, 1937: 46 (*Omalium*; Faroe Islands).
- Paulian, 1941: 146 (*Omalium*; larval characters).
- Español, 1945: 90 (*Omalium*; Spain).
- Hinton, 1945: 49 (*Omalium*; characters).
- Scheerpeltz and Höfler, 1948: 151 (*Omalium*; fungus inhabitant).
- Palm, 1948: 79 (*Omalium*; characters; Sweden; Denmark; Norway; Finland).
- Tottenham, 1949: 406 (*Omalium*; checklist; Britain).
- Jeannel and Jarrige, 1949: 311 (*Omalium*; cave species; France).
- Hatch, 1957: 80 (*Omalium*; characters; British Columbia; Washington; Oregon; Idaho).
- Larsson and Gígja, 1959: 61 (*Omalium*; biological notes; Iceland).
- Scheerpeltz, 1961e: 135 (*Omalium*; Rhodes).
- Ferreira, 1962: 9 (*Omalium*; Portugal).
- Horion, 1963: 77 (*Omalium*; Britain; Faroes; Lapland; Finland; Russia; Italy; Greece; Turkey; Caucasus; Germany; Austria).
- Lohse, 1964: 43 (*Omalium*; characters; central Europe).
- Smetana, 1964d: 53 (*Omalium*; Czechoslovakia).
- Pototskaia, 1967: 20 (*Omalium*; larval characters).
- Szujecki, 1968a: 711 (*Omalium*; Poland).
- Scheerpeltz, 1968a: 10 (*Omalium*; catalog; Austria).
- Bolov, 1969: 513 (*Omalium*; collecting notes; Russia).
- Bolov, 1969a: 328 (*Omalium*; collecting notes; Russia).
- Steel, 1970a: 14 (*Omalium*; biological notes).
- Coiffait, 1970e: 64 (*Omalium*; Taygete).
- Osella and Zanetti, 1975: 85 (*Omalium*; collected from nest of *Talpa europaea*; notes; Italy).
- Coiffait, 1976b: 83 (*Omalium*; Greece).
- Pope, 1977: 23 (*Omalium*; Britain).
- Muona, 1979: 18 (*Omalium*; Finland; Russia; Sweden; Norway; Denmark; Baltic States).
- Burakowski, Mroczkowski, and Stefańska, 1979: 42 (*Omalium*; catalog; Poland).
- Hammond, 1980: 138 (*Omalium*; Ireland).
- Waterston, Owen, Welch, Bacchus and Hammond, 1981: 273 (*Omalium*; Outer Hebrides).
- Tóth, 1982: 59 (*Omalium*; characters; Hungary).
- Frank, 1982: 9 (*Omalium*; list of parasites).
- H. Franz, 1984: 59 (*Omalium*; Macedonia).
- Topp, 1986 (*Omalium*; aestivation; Germany).
- Muona and Viramo, 1986: 15 (*Omalium*; Finland).
- Zanetti, 1987: 219 (*Omalium*; characters; Italy).
- Ádám, 1987: 137 (*Omalium*; collecting notes; Hungary).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Gusarov, 1989: 5 (*Omalium*; habitat notes; Ukraine).

- Zanetti, 1989: 112 (*Omalium*; Italy).
- Nowosad, 1990: 51 (*Omalium*; collected from mole nest; notes; Poland).
- Angelini, 1991: 191 (*Omalium*; Italy).
- Dettner and Reissenweber, 1991 (*Omalium*; defensive secretions: chemistry and systematics).
- Silfverberg, 1992: 21 (*Omalium*; Finland; Russia; Sweden; Norway; Denmark; Estonia; Latvia; Lithuania).
- Welch, 1993: 227 (*Omalium*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- Siitonen, 1993: 230 (*Omalium*; collecting notes; Finland).
- Sadler and Dugmore, 1995: 144 (*Omalium*; habitat notes; Iceland).
- Muona and Viramo, 1995: 9 (*Omalium*; collected from fungus; Finland).
- Gerardi and Zanetti, 1995: 143 (*Omalium*; collecting notes; Italy).
- Sparacio, 1995: 140 (*Omalium*; characters; summary of distribution; notes; Sicily).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Sparacio, 1995: 140 (*Omalium*; characters; notes; Sicily).
- Levesque and Levesque, 1996: 290 (*Omalium*; seasonal abundance; Quebec).
- Downie and Arnett, 1996: 437 (*Omalium*; characters; USA).
- Franzen, 1996: 206 (*Omalium*; collecting notes; Germany).
- Tagliapietra and Zanetti, 1996: 129 (*Omalium*; ecological notes; Italy).
- M. Hansen, 1996: 94 (*Omalium*; checklist; Denmark).
- Ádám, 1996: 238 (*Omalium*; synonym of *cursor*).
- Smoleński, 1997: 79 (*Omalium*; cited as *rvulare*; collecting notes; Poland).
- Eisinger, 1997: 169 (*Omalium*; collecting notes; Germany).
- T. Wagner, 1997: 234 (*Omalium*; collecting notes; Germany).
- Telnov, Bersevskis, Savich, Kovalevsky, Berdnikov, Doronin, Cibulskis, and Ratniece, 1997: 44 (*Omalium*; Latvia).
- Anderson, Nash, and O'Connor, 1997: 15 (*Omalium*; Ireland).
- Zanetti and Sabella, 1998: 29 (*Omalium*; Sicily).
- Outerelo, Gamarra, and Salgado, 1998: 124 (*Omalium*; collected from cave; Spain; Portugal).
- Cibulskis, 1999: 34 (*Omalium*; list; Latvia).
- Owen, 2000: 251 (*Omalium*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Omalium*; collected from xerothermous site; Germany).
- Herman, 2001: 20 (*Omalium*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).
- ▲ **DISTRIBUTION:** Iceland, Shetland Islands, Orkney Islands, Europe, Azerbaijan, Algeria, Egypt, Canada, USA.

*cursor* O. Müller, 1776: 97 (*Staphylinus*; [**Note:** This name is older than *rivulare*]; Type locality: Dania).

- Goeze, 1777: 727 (*Staphylinus*; characters).
- Gmelin, 1790: 2033 (*Staphylinus*; characters; Denmark).
- Turton, 1802: 517 (*Staphylinus*; characters; Denmark).
- Erichson, 1840: 875 (*Omalium*; synonym of *rivulare*).
- Kraatz, 1857d: 978 (*Omalium*; synonym of *rivulare*).
- Ganglbauer, 1895: 734 (*Omalium*; synonym of *rivulare*).
- Luze, 1906: 517 (*Omalium*; synonym of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *rivulare*).
- Ádám, 1996: 238 (*Omalium*; valid name; Hungary).
- Herman, 2001: 20 (*Omalium*; synonym of *rivulare*).

*incisum* Gravenhorst, 1806: 209 (*Omalium*; variety of *rivulare*; Type locality: Not cited).

- Erichson, 1839a: 629 (*Omalium*; synonym of *rivulare*).
- Erichson, 1840: 875 (*Omalium*; synonym of *rivulare*).
- Fairmaire and Laboulbène, 1856: 639 (*Omalium*; synonym of *rivulare*).
- Kraatz, 1857d: 978 (*Omalium*; synonym of *rivulare*).
- Mulsant and Rey, 1880: 203 (*Omalium*; synonym of *rivulare*).

- Ganglbauer, 1895: 734 (*Omalium*; synonym of *rivulare*).
- Luze, 1906: 517 (*Omalium*; synonym of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *rivulare*).
- Zanetti, 1987: 219 (*Omalium*; synonym of *rivulare*).

*piceum* Stephens, 1834: 341 (*Anthobium*; [**preoccupied**]; Type locality: Coombe Wood; London; Devonshire; Norfolk; Suffolk).

- Ganglbauer, 1895: 734 (*Omalium*; synonym of *rivulare*).
- Luze, 1906: 517 (*Omalium*; synonym of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *rivulare*).
- Zanetti, 1987: 219 (*Omalium*; synonym of *rivulare*).

*foraminosum* Scriba, 1866: 378 (*Omalium*; [**preoccupied**]; Type locality: Pompeji).

- Fauvel, 1871a: 104 [= 1872: 78] (*Omalium*, cited as *Homalium*; synonym of *porosum*).
- Luze, 1906: 517 (*Omalium*; synonym of *porosum*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *rivulare*).

*porosum* Scriba, 1867: 72 (*Omalium*; replacement name for *foraminosum* Scriba).

- Fauvel, 1871a: 104 [= 1872: 78] (*Omalium*, cited as *Homalium*; characters; Italy).
- Luze, 1906: 491, 517 (*Omalium*; variety of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; variety of *rivulare*).
- Scheerpeltz, 1933: 1047 (*Omalium*; variety of *rivulare*).

*nitidicolle* Poppius, 1904: 108 (*Omalium*; Type locality: Patsjoki-Tahl im finnischen Lappland auf dem Berge Kalkuoavi).

- Luze, 1906: 491, 517 (*Omalium*; variety of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; variety of *rivulare*).
- Scheerpeltz, 1933: 1047 (*Omalium*; variety of *rivulare*).

*obscuricorne* Poppius, 1904: 110 (*Omalium*; Type locality: Finnisch Lappland, Patsjoki-Tahl, Petschenga-Gebirge).

- Luze, 1906: 491, 517 (*Omalium*; variety of *rivulare*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; variety of *rivulare*).
- Scheerpeltz, 1933: 1047 (*Omalium*; variety of *rivulare*).
- Tóth, 1982: 59 (*Omalium*; aberration of *rivulare*; characters).

*robustum* Heer, 1839, see: *Eusphalerum*.

*robustum* Broun, 1911, see: *Omaliomimus*.

*rotundicolle* C. Sahlberg, 1830, see: *Olophrum*.

*rotundicolle* Say, 1832, see: *Olophrum*.

*rude* Fauvel, 1904, see: *Palpomalium*.

*ruficorne* Stephens, 1834, see: *Phyllodrepa*.

*ruficorne* Kraatz, 1858, see: *Phyllodrepa*.

*rufiventre* Bernhauer, 1939, see: *Stenomalium*.

*rufulum* Erichson, 1840, see: *Hypopycna*.

*rufulum* Lavagne, 1917, see: *nigriceps* Kiesenwetter, 1850.

*rufum* Gravenhorst, 1802, see: *Acidota*.

*rufum* Sachse, 1852, see: *Omalioipsis*.

**rugatum** Mulsant and Rey, 1880: 217 (*Omalium*; Type locality: les collines du Gard et de la Provence).

- Ganglbauer, 1895: 736 (*Omalium*; synonym of *caesum*).
- Luze, 1906: 539 (*Omalium*; synonym of *caesum*).
- Bernhauer and Schubert, 1910: 52 (*Omalium*; synonym of *caesum*).
- Steel, 1953e: 280 (*Omalium*; valid species; characters; Britain).
- Horion, 1956: 2 (*Omalium*; characters; notes).
- Lohse, 1960a: 32 (*Omalium*; characters; notes).

- Palm, 1962: 185, 186 (*Omalium*; characters; notes).
- Horion, 1963: 86 (*Omalium*; Britain; Norway; Sweden; Denmark; Holland; Belgium; France; Italy; Germany; Austria).
- Lohse, 1964: 45 (*Omalium*; characters; central Europe).
- Smetana, 1966: 323, 325 (*Omalium*; characters; notes; Czechoslovakia).
- Korge, 1971a: 5 (*Omalium*; Turkey).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; notes; Ireland).
- Tóth, 1982: 65 (*Omalium*; characters; Hungary).
- Zanetti, 1985: 30 (*Omalium*; characters).
- Zanetti, 1987: 238 (*Omalium*; characters; Italy).
- Drugmand and Haghebaert, 1987: 324 (*Omalium*; Belgium).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Austria; Benelux; Denmark).
- Dettner and Reissenweber, 1991 (*Omalium*; defensive secretions: chemistry and systematics).
- Drugmand, 1993: 169 (*Omalium*; notes; Luxembourg).
- Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
- Allen, 1994a: 30 (*Omalium*; Britain).
- Hodge and Jones, 1995: 31 (*Omalium*; characters; Britain).
- Zanetti, 1995: 7 (*Omalium*; Italy).
- Zanetti and Sabella, 1998: 30 (*Omalium*; Sicily).
- Ødegaard, 1999: 69 (*Omalium*; invasive species associated with compost heaps in Nordic countries).
- Eyre, Luff, and Lott, 2000: 34 (*Omalium*; Britain).
- Assing and Wunderle, 2001: 36 (*Omalium*; Cyprus).

▲ **DISTRIBUTION:** Europe, Turkey.

*subruficornis* Bagnall, 1906: 72 (*Omalium*, cited as *Homalium*; aberration of *caesum*; [Note: **Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Gibside).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; synonym of *caesum*).
- Scheerpeltz, 1933: 1044 (*Omalium*; variety of *caesum*).
- Steel, 1953e: 280 (*Omalium*; synonym of *rugatum*).
- Pope, 1977: 23 (*Omalium*; synonym of *rugatum*).

**rugipenne** Casey, 1885a: 317 (*Omalium*, cited as *Homalium*; Type locality: California: Alameda Co.).

- Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** USA.

**rugulipenne** Rye, 1864a: 58 (*Omalium*; Type locality: London).

- Fauvel, 1873b: 116 [= 1873c: 9] (*Omalium*, cited as *Homalium*; characters; Britain).
- Fowler, 1888: 412 (*Omalium*, cited as *Homalium*; characters; Britain).
- Luze, 1906: 511 (*Omalium*; characters; France; England; Scotland).
- Reitter, 1909: 191 (*Omalium*; characters; Germany).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).
- Scheerpeltz, 1933: 1047 (*Omalium*; catalog).
- Horion, 1935: 174 (*Omalium*; characters; Netherlands).
- Palm, 1948: 82 (*Omalium*; characters).
- Horion, 1963: 73 (*Omalium*; Ireland; England; Scotland; France; Belgium; Holland; Germany).
- Lohse, 1964: 41 (*Omalium*; characters; central Europe).
- Pope, 1977: 23 (*Omalium*; Britain).
- Hammond, 1980: 138 (*Omalium*; notes; Ireland).
- Drugmand and Haghebaert, 1987: 326 (*Omalium*; Belgium).
- Lucht, 1987: 87 (*Omalium*; checklist; Germany; Benelux; Denmark).
- Lohse and Lucht, 1989: 126 (*Omalium*; correction).
- Allen, 1992a: 322 (*Omalium*; collecting notes; England).
- Owen, 1997a: 148 (*Omalium*; collecting sites; Ireland).

▲ **DISTRIBUTION:** Ireland, Britain, France, Germany, Belgium, Netherlands.

*russatum* Fairmaire and Germain, 1861, see: *Omalioipsis*.

*saginatum* Mäklin, 1878, see: *Mannerheimia*.

*sagoloide* Sharp, 1886, see: *Brouniellum*.

*salicinum* Gyllenhal, 1827, see: *Phyllodrepa*.

*salicis* Gyllenhal, 1810, see: *Phyllodrepa*.

*salzmanni* Saulcy, 1864, see: *allardii* Fairmaire and Brisout, 1859.

**sanguineum** Broun, 1914: 90 (*Omalium*; Type locality: Greymouth).

— Scheerpeltz, 1933: 1047 (*Omalium*; catalog).

▲ **DISTRIBUTION:** New Zealand.

**saulcyi** Fauvel, 1875a:V [= 1875b: 207] (*Omalium*, cited as *Homalium*; Type locality: Syrie, Borak, Damas).

— Luze, 1906: 518 (*Omalium*; characters; Syria; Greece).

— Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).

— Coiffait, 1970e: 64 (*Omalium*; Cyprus).

▲ **DISTRIBUTION:** Syria, Greece.

*scabriusculum* Kraatz, 1857, see: *Phyllodrepa*.

**scabrum** Smetana, 1975c: 155 (*Omalium*; Type locality: Mongolie: Uvs aimak: S Rand des Sees Örög nuur, 1500 m).

▲ **DISTRIBUTION:** Mongolia.

**scapulare** Coiffait, 1982: 152 (*Omalium*; Type locality: Nepal: südl. Dhaulagiri, Dhorpatan, 3000–3200 m).

▲ **DISTRIBUTION:** Nepal.

**sculpticolle** Wollaston, 1864: 602 (*Omalium*, cited as *Homalium*; Type locality: Teneriffe: in an open basaltic cavern at the base of the Organo Rocks in the sylvan region above the Agua Mansa. Palma: district of Banda).

— Wollaston, 1865: 522 (*Omalium*, cited as *Homalium*; notes; Canary Islands).

— Wollaston, 1867: 280 (*Omalium*, cited as *Homalium*; synonym of *allardii*).

— Wollaston, 1871: 311 (*Homlium*; valid species).

— Fauvel, 1902b: 54 (*Omalium*, cited as *Homalium*; Canary Islands).

— Luze, 1906: 538 (*Omalium*; characters; Canary Islands).

— Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).

— Hernández, Outerelo, and Gamarra, 1994: 187 (*Omalium*; checklist; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

**secretum** Cameron, 1924b: 167 (*Omalium*; Type locality: Chakrata District, Deoban, 9300 feet).

— Cameron, 1930: 140 (*Omalium*; characters; India).

— Scheerpeltz, 1933: 1047 (*Omalium*; catalog).

— Coiffait, 1977: 244 (*Omalium*; Nepal).

▲ **DISTRIBUTION:** India, Nepal.

*segmentarium* Mäklin, 1852, see: *Eusphalerum*.

**septentrionis** Thomson, 1857a: 223 (*Omalium*; Type locality: Lappland; [**Note:** Date for Thomson's article should be 1857 not 1856 according to work by Charpentier (1972)]).

— Zetterstedt, 1838: 51 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 56 cited *rivulare* Zetterstedt as a synonym of *septentrionis* Thomson; Zetterstedt did not describe the species as new, he attributed it to Gyllenhal who attributed it to Paykull]; characters; habitat; Lapland).

— Kraatz, 1857d: 982 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 56 cited *impressum* Kraatz as a synonym of *septentrionis*; Kraatz did not describe the species as new, he attributed it to Heer]; characters; Germany).

— Thomson, 1861: 211 (*Omalium*; characters; Scandinavia).

— Fauvel, 1871a: 102 [= 1872: 76] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain).

- Fauvel, 1873b: 116 [= 1873c: 9] (*Omalium*, cited as *Homalium*; Lapland).
  - Seidlitz, 1875: 234 (*Omalium*; characters; Baltic region).
  - J. Sahlberg, 1876: 220 (*Omalium*; Finland).
  - Fowler, 1888: 413 (*Omalium*, cited as *Homalium*; characters; Britain).
  - Ganglbauer, 1895: 735 (*Omalium*; characters; Germany; northern Europe).
  - Luze, 1906: 518 (*Omalium*; characters; Germany; northern Europe; Siberia).
  - Reitter, 1909: 191 (*Omalium*; characters; Germany).
  - Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).
  - Poppius, 1913: 9 (*Omalium*; Iceland).
  - Johansen, 1914: 609 (*Omalium*; characters; Denmark).
  - Scheerpeltz, 1929a: 115 (*Omalium*; notes; Lake Baikal).
  - Portevin, 1929: 446 (*Omalium*; characters; France).
  - Scheerpeltz, 1933: 1047 (*Omalium*; catalog).
  - Palm, 1948: 79 (*Omalium*; characters; Sweden; Norway; Finland).
  - Larsson and Gírgja, 1959: 62 (*Omalium*; biological notes; Iceland).
  - Horion, 1963: 77 (*Omalium*; Baikal; Britain; Finland; Russia; Sweden; Czech Republic; Slovakia; Switzerland; Belgium; Holland; Germany; Austria).
  - Lohse, 1964: 43 (*Omalium*; characters; central Europe).
  - Steel, 1970a: 14 (*Omalium*; biological notes).
  - Pope, 1977: 23 (*Omalium*; Britain).
  - Hammond, 1980: 138 (*Omalium*; Ireland).
  - Tóth, 1982: 59 (*Omalium*; characters).
  - Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux; Denmark).
  - Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).
  - Muona and Viramo, 1995: 9 (*Omalium*; collected from dung of *Ursus arctos*; Finland).
  - Ryabukhin, 1999: 17 (*Omalium*; catalog; habitat; distribution; northeastern Russia).
  - Kashcheev, 1999a: 57 (*Omalium*; Kazakhstan).
- ▲ **DISTRIBUTION:** Iceland, Europe, Russia.

*clavicorne* Motschulsky, 1860: 546 (*Ochthexenus*; [**Note:** Preoccupied as a secondary homonym]; Type locality: sur les bords à Tourkinsk dans les parties septentrionales du lac Baical du Sibérie orientale).

- Hochhuth, 1862: 104 (*Omalium*; characters; Siberia).
- Fauvel, 1869: 493 (*Omalium*, cited as *Homalium*; synonym of *clavatum* Fauvel).
- Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; synonym of *laicolle*).
- Fauvel, 1878d: 217 [= 1878e: 53] (*Omalium*, cited as *Homalium*; synonym of *foraminosum*).
- Luze, 1906: 486, 491, 519 (*Omalium*; synonym of *septentrionis*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *septentrionis*).

*clavatum* Fauvel, 1869: 493 (*Omalium*, cited as *Homalium*; replacement name for *clavicorne* Motschulsky).

*languidum* Mäklin, 1878: 29 [= 1878a: 305] (*Omalium*, cited as *Homalium*; Type locality: Worogowa Selo, lat b. 60°50').

- Mäklin, 1881: 43 (*Omalium*, cited as *Homalium*; characters; Siberia).
- Fowler, 1888: 413 (*Omalium*, cited as *Homalium*; synonym of *septentrionis*).
- Luze, 1906: 519 (*Omalium*; synonym of *septentrionis*).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; synonym of *septentrionis*).

*seriatum* Fauvel, 1903, see: *Stenomalium*.

*setipes* Broun, 1909, see: *Omaliomimus*.

**shibatai** Watanabe, 1990: 94 (*Omalium*; Type locality: Japan: Honshu: Tokyo Pref.: Mt. Mitake, Okutama).

▲ **DISTRIBUTION:** Japan.

*sibiricum* Mannerheim, 1830, see: *Arpedium*.

*signatum* Eichelbaum, 1910, see: *Xylostiba*.

*singulare* Kraatz, 1859, see: *Paraphloeostiba*.

**sogai** Jarrige, 1970: 58 (*Omalium*; Type locality: Madagascar Est: Massif du Marojejy).

▲ **DISTRIBUTION:** Madagascar.

*sorbi* Gyllenhal, 1810, see: *Eusphalerum*.

*sorbi* Grimmer, 1841 [**Note: Nomen dubium**], see: *Eusphalerum*.

*sordidum* Stephens, 1834, see: *Philorinum*.

*sordidum* Sharp, 1887, see: *Phloeonomus*.

*spadix* Broun, 1880, see: *Stenomalium*.

**speculipenne** Bernhauer, 1933e: 327 (*Omalium*; Type locality: Argentinien: Territorio Rio Negro, L. Correntoso).

▲ **DISTRIBUTION:** Argentina.

*stenosoma* Broun, 1893, see: *Stenomalium*.

*striatipenne* Aubé, 1850, see: *Dialycera*.

*striatum* Gravenhorst, 1802, see: *Acrolocha*.

**strigicolle** Wankowicz, 1869: 419 (*Omalium*; Type locality: environne Boryssow).

— Luze, 1906: 491 (*Omalium*; synonym of *brevicolle*).

— Luze, 1906: 523 (*Omalium*; synonym of *brevicolle*).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; synonym of *brevicolle*).

— Palm, 1948: 80 (*Omalium*; characters; Sweden; Norway; Finland).

— Horion, 1963: 81 (*Omalium*; cited as valid species; Siberia; Norway; Sweden; Finland; Russia; Austria).

— Lohse, 1964: 43 (*Omalium*; synonym of *brevicolle*).

— Steel, 1964a: 248 (*Omalium*; Alaska).

— Smetana, 1968: 227 (*Omalium*; Mongolia).

— Muona, 1979: 18 (*Omalium*; synonym of *brevicolle*).

— Zanetti, 1987: 222 (*Omalium*; characters; Italy).

— Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).

— Ryabukhin, 1999: 17 (*Omalium*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Europe, Russia, Mongolia, USA.

*lagopinum* J. Sahlberg, 1871a: 426 (*Omalium*; Type locality: Muonioniska).

— Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; synonym of *laticolle*).

— J. Sahlberg, 1876: 221 (*Omalium*; characters; Finland).

— Fauvel, 1878d: 217 [= 1878e: 53] (*Omalium*, cited as *Homalium*; synonym of *foraminosum*).

— Luze, 1906: 491 (*Omalium*; synonym of *brevicolle*).

— Luze, 1906: 523 (*Omalium*; synonym of *brevicolle*).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; synonym of *brevicolle*).

*brevicolle* Thomson, 1884: 1033 (*Omalium*; [**preoccupied**]; Type locality: Lappland).

— Luze, 1906: 523 (*Omalium*; characters; Russia; Siberia; Norway; Tyrol; Switzerland).

— Poppius, 1909: 4 (*Omalium*; Lena Valley, Siberia).

— Reitter, 1909: 191 (*Omalium*; characters; Germany).

— Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).

— Scheerpeltz, 1933: 1043 (*Omalium*; catalog).

— Steel, 1953c: 198 (*Omalium*; not found in Britain).

— Lohse, 1964: 43 (*Omalium*; characters; central Europe).

— Steel, 1964: 248 (*Omalium*; synonym of *strigicolle*).

— Smetana, 1968: 227 (*Omalium*; synonym of *strigicolle*).

— Tóth, 1982: 61 (*Omalium*; cited as valid species; characters; Hungary).

— Zanetti, 1987: 222 (*Omalium*; synonym of *strigicolle*).

— Lucht, 1987: 87 (*Omalium*; checklist; Austria; Switzerland).

— Boháč, 1993: 41 (*Omalium*; synonym of *strigicolle*).

— Muona and Viramo, 1995: 9 (*Omalium*; collected from dung of *Ursus arctos*; Finland).

— Assing, Frisch, Kahlen, et al., 1998: 122 (*Omalium*; synonym of *strigicolle*).

*strigipenne* Mäklin, 1852, see: *Phyllodrepa*.

*subcylindricum* Kiesenwetter, 1877, see: *Allodrepa*.

*subdepressum* Mulsant and Rey, 1880, see: *oxyacanthae* Gravenhorst, 1806.

*subpubescens* Stephens, 1834, see: *Philorinum*.

*subruficornis* Bagnall, 1906 [**Note: Nomen nudum**], see: *rugatum* Mulsant and Rey, 1880.

**subrugosum** Stephens, 1834: 356 (*Omalium*; [**Note: Nomen dubium**]); Type locality: the metropolitan district [London].

— Stephens, 1839: 430 (*Omalium*; characters; England).

▲ **DISTRIBUTION:** Britain.

**subsolanum** Herman, 2001: 38 (*Omalium*; replacement name for *clavatum* Luze).

▲ **DISTRIBUTION:** Mongolia, Russia.

*clavatum* Luze, 1906: 522 (*Omalium*; [**preoccupied**]); Type locality: Eastern Siberia).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Eastern Siberia).

— Smetana 1975c: 155 (*Omalium*; Mongolia).

— Herman, 2001: 38 (*Omalium*; synonym of *subsolanum*).

*subtile* Kraatz, 1858, see: *Phloeostiba*.

*suffusum* Casey, 1894, see: *Phloeonomus*.

*sulcicollis* Fauvel, 1904, see: *Paraphloeostiba*.

*sulcithorax* Broun, 1880, see: *Stenomalium*.

**taschkentense** Solsky, 1874: 208 (*Omalium*; Type locality: fl. Keless).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

— Tikhomirova, 1973a: 138 (*Omalium*; checklist; Central Asia).

▲ **DISTRIBUTION:** Uzbekistan.

*tasmanicum* Blackburn, 1902, see: *Phloeonomus*.

*tectum* Broun, 1880, see: *Ischnoderus*.

*tenellus* Broun, 1893, see: *Stenomalium*.

**tenue** Weise, 1877: 95 (*Omalium*, cited as *Homalium*; Type locality: Hagi).

— Sharp, 1889: 475 (*Omalium*; Japan).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

— Watanabe, 1990: 97 (*Omalium*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*tenuipes* Heer, 1839, see: *Amphichroum*.

**tenuipunctum** Bernhauer, 1940: 132 (*Omalium*; Type locality: Kenya: Mt. Kinangop, bamboo zone; West Aberdare Mts., 10–11,000 ft.).

▲ **DISTRIBUTION:** Kenya.

*testaceum* Gravenhorst, 1806, see: *Eusphalerum*.

*testaceum* Erichson, 1840, see: *Xylodromus*.

**texanum** Fauvel, 1878d: 213 [= 1878e: 49] (*Omalium*, cited as *Homalium*; Type locality: Texas).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** USA.

**theveneti** Fauvel, 1878d: 218 [= 1878e: 54] (*Omalium*, cited as *Homalium*; Type locality: Californie, Mariposa).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

— Scheerpeltz, 1933: 1047 (*Omalium*; catalog).

▲ **DISTRIBUTION:** USA.

*tibiale* Broun, 1880, see: *Anotylus*.



**topali** Scheerpeltz, 1972: 53 (*Omalium*; Type locality: Argentinien: Rio Negro, El Bolson, Pampa Azcona, 350 m).

▲ **DISTRIBUTION:** Argentina.

*translucidum* Kraatz, 1857, see: *Phyllodrepa*.

*tricolor* Wollaston, 1865, see: *Phloeonomus*.

*tricolor* Mulsant and Rey, 1880, see: *italicum* Bernhauer, 1902.

*triste* Sharp, 1887, see: *Phloeonomus*.

*tumidulum* Mäklin, 1853, see: *Acrulia*.

*turanicum* Solsky, 1874, see: *Phyllodrepa*.

**turcicum** Smetana, 1967e: 299 (*Omalium*; Type locality: Türkei: Yeniköy, Toros).

— Assing and Wunderle, 2001: 36 (*Omalium*; Cyprus).

▲ **DISTRIBUTION:** Turkey.

*usambarae* Fauvel, 1904, see: *Phloeostiba*.

**validum** Kraatz, 1857d: 977 (*Omalium*; Type locality: Frafschaft Glatz; Sachsen).

— Redtenbacher, 1857: 994 (*Omalium*; characters; Austria).

— Fauvel, 1871a: 103 [= 1872: 77] (*Omalium*, cited as *Homalium*; characters; France; Germany).

— Redtenbacher, 1874: 276 (*Omalium*; characters).

— Mulsant and Rey, 1880: 222 (*Omalium*; characters; France).

— Ganglbauer, 1895: 737 (*Omalium*; characters; middle Europe).

— Luze, 1906: 515 (*Omalium*; characters; central Europe).

— Reitter, 1909: 191 (*Omalium*; characters; Germany).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

— Portevin, 1929: 447 (*Omalium*; characters; France).

— Scheerpeltz, 1933: 1047 (*Omalium*; catalog).

— Horion, 1933: 148 (*Omalium*; in mole nest; Germany).

— Horion, 1963: 75 (*Omalium*; Holland; Belgium; Luxembourg; Switzerland; Switzerland; Italy; Czechoslovakia; Romania; Hungary; Slovenia; Istria; Dalmatia; Bosnia; Germany; Austria).

— Lohse, 1964: 42 (*Omalium*; characters; central Europe).

— Osella and Zanetti, 1975: 84 (*Omalium*; collected from nest of *Talpa europaea*; notes; Italy).

— Tóth, 1982: 58 (*Omalium*; characters; Hungary).

— Zanetti, 1987: 228 (*Omalium*; characters; Italy).

— Lucht, 1987: 87 (*Omalium*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux).

— Gillerfors, 1993: 107 (*Omalium*; Sweden).

— Boháč, 1993: 41 (*Omalium*; Slovakia; Czech Republic).

— Zanetti, 1995: 7 (*Omalium*; Italy).

— Tronquet, 1998a: 114 (*Omalium*; collected from marmot burrow; France).

— Assing, 2001: 75 (*Omalium*; collected from xerothermous site; Germany).

▲ **DISTRIBUTION:** Europe.

*fuistingi* Reitter, 1895: 199 (*Omalium*, cited as *Homalium*; Type locality: Glatzer-Gebirge).

— Luze, 1906: 491, 515 (*Omalium*; synonym of *validum*).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; synonym of *validum*).

— Scheerpeltz, 1933: 1048 (*Omalium*; variety of *validum*).

— Tóth, 1982: 59 (*Omalium*; cited as *fuistingi*; aberration of *validum*; characters; Hungary).

— Zanetti, 1987: 228 (*Omalium*; synonym of *validum*).

*vanderwieli* Everts, 1920 [**Note: Nomen nudum**], see: *italicum* Bernhauer, 1902.

*variipenne* Lea, 1920, see: *Omaliomimus*.

**vaulogeri** Fauvel, 1905c: 192 (*Omalium*, cited as *Homalium*; Type locality: Tunisie: Kairouan).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Tunisia.

*venator* Broun, 1909, see: *Omaliomimus*.

*viburni* Gravenhorst, 1802, see: *Phyllodrepa*.

*vilis* Erichson, 1840, see: *Phyllodrepa*.

*wittei* Cameron, 1950, see: *Xylostiba*.

**xambeui** Fauvel, 1876a: 50 [= 1876: 235] (*Omalium*, cited as *Homalium*; Type locality: Mont Genève).

- Mulsant and Rey, 1880: 227 (*Omalium*; characters; France).
- Ganglbauer, 1895: 738 (*Omalium*; characters; France).
- Fauvel, 1897c: 230 (*Omalium*, cited as *Homalium*; characters).
- Luze, 1906: 531 (*Omalium*; characters; France; Italy).
- Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).
- Portevin, 1929: 447 (*Omalium*; characters; France).
- Scheerpeltz, 1933: 1048 (*Omalium*; catalog).
- Zanetti, 1987: 229 (*Omalium*; characters; Italy).
- Zanetti, 1995: 7 (*Omalium*; Italy).

▲ **DISTRIBUTION:** France, Italy.

*xanthopterum* Fauvel, 1865, see: *Phloeonomus*.

**xanthorrhoeae** Lea, 1906: 213 (*Omalium*, cited as *Homalium*; Type locality: Darling Ranges, W.A.).

- Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

▲ **DISTRIBUTION:** Australia.

*zealandicum* Cameron, 1948, see: *Nesomalium*.

### **Omalonomus**

[1 species; Nearctic Region]

*Omalonomus* Campbell and Peck, 1990: 950 (species included: *relictus*). **TYPE SPECIES:** *Omalonomus relictus* Campbell and Peck, fixed by original designation and monotypy.

- Newton, Thayer, Ashe, and Chandler, 2000: 337 (1 Nearctic species; notes; characters in key).

**relictus** Campbell and Peck, 1990: 952 (*Omalonomus*; Type locality: Canada: Alberta: Cypress Hills Park, Graburn Creek, 1400 m. Also cited from Saskatchewan, Utah and Washington).

▲ **DISTRIBUTION:** Canada, USA.

### **Palpomalium**

[2 species; Oriental Region]

*Palpomalium* Steel, 1959: 112 (species included: *flavicorne*, *rude*). **TYPE SPECIES:** *Phloeonomus flavicornis* Cameron, fixed by original designation.

**flavicorne** Cameron, 1941b: 432 (*Phloeonomus*; Type locality: Philippines: Samar; Catbalogan).

- Steel, 1959: 113 (*Palpomalium*; characters; Philippines).

▲ **DISTRIBUTION:** Philippines.

**rude** Fauvel, 1904b: 90 (*Omalium*, cited as *Homalium*; Type locality: Sumatra: region de Deli).

- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Hapalaraea*; catalog).
- Cameron, 1928d: 98 (*Phyllodrepa*; subgenus *Hapalaraea*; Sumatra).
- Steel, 1959: 113 (*Palpomalium*; characters; Sumatra).

▲ **DISTRIBUTION:** Indonesia.

### **Paraphloeostiba**

[30 species; Palaearctic, Ethiopian, Madagascan, Oriental, Australian, Oceanic, and Nearctic Regions]

*Paraphloeostiba* Steel, 1960a: 141 (species included: *alutacea*, *specularis*, *rhopalocera*, *coriacea*, *opacicollis*, *similis*, *assamensis*, *impressicollis*, *secretata*, *sonani*, *sulcicollis*, *impressa*, *djawensis*, *papuana*, *obesa*, *solomonensis*, *gayndahense*, *hebridensis*,

*cheesmani*, *seychellensis*, *subopaca*, *singularis*, *norfolcensis*, *fruhstorferi*, *sumatrensis*, *marianicola*, *apicalis*, *tonkinensis*, *celebensis*; key to species). **TYPE SPECIES:** *Paraphloeostiba marianicola* Steel, fixed by original designation.

- Shibata, 1973c: 27 (checklist of species of Taiwan).
- Tikhomirova, 1973a: 139 (checklist of species of USSR).
- Shibata, 1976: 106 (checklist of species of Japan).
- Zanetti, 1995: 7 (list of species of Italy).
- Assing, 1996a: 180, 181 (characters; notes).
- Assing, 1998f: 124 (characters).
- Newton, Thayer, Ashe, and Chandler, 2000: 337 (1 Nearctic species; notes; characters in key).

**alutacea** Cameron, 1941b: 431 (*Phloeonomus*; Type locality: Philippines: Luzon, Imugan).

- Steel, 1960a: 154 (*Paraphloeostiba*; characters; Philippines).

▲ **DISTRIBUTION:** Philippines.

*angulata* Motschulsky, 1861, see: *singulare* Kraatz, 1859.

**apicalis** Cameron, 1925a: 175 (*Phloeonomus*; Type locality: Sumatra: Si Rambé).

- Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).
- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 163 (*Paraphloeostiba*; characters; Sumatra; Java; Lombok; Philippines Islands).

▲ **DISTRIBUTION:** Indonesia, Philippines.

**assamensis** Cameron, 1930: 145 (*Phloeonomus*; Type locality: Assam: Naga Hills, alt. 4000 feet).

- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 149 (*Paraphloeostiba*; characters; Assam).

▲ **DISTRIBUTION:** India.

**celebensis** Steel, 1960a: 169 (*Paraphloeostiba*; Type locality: Celebes: Kandari).

▲ **DISTRIBUTION:** Indonesia.

**cheesmani** Cameron, 1934a: 20 (*Phloeonomus*; Type locality: New Hebrides: Tanna).

- Steel, 1960a: 157 (*Paraphloeostiba*; characters; New Hebrides).

▲ **DISTRIBUTION:** New Hebrides.

**coriacea** Cameron, 1952: 243 (*Phloeonomus*; Type locality: New Guinea: Snow Mountains: Sigi Camp, 1500 m).

- Steel, 1960a: 146 (*Paraphloeostiba*; characters; New Guinea).

▲ **DISTRIBUTION:** New Guinea.

*densepunctatus* Bernhauer, 1915, see: *obesa* Fauvel, 1904.

**djawensis** Steel, 1960a: 154 (*Paraphloeostiba*; Type locality: Java: Tjibodas, 4000 feet).

▲ **DISTRIBUTION:** Indonesia.

**fruhstorferi** Steel, 1960a: 163 (*Paraphloeostiba*; Type locality: Java: Tengger Mts., 2000 feet).

▲ **DISTRIBUTION:** Indonesia.

**gayndahense** W. J. MacLeay, 1873: 151 (*Omalium*; Type locality: Gayndah).

- Fauvel, 1877: 190 (*Omalium*, cited as *Homalium*; characters; Australia).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Bernhauer, 1926f: 312 (*Phloeonomus*; synonym of *singularis*).
- Scheerpeltz, 1933: 1051 (*Phloeonomus*; synonym of *singulare*).
- Steel, 1960a: 161 (*Paraphloeostiba*; valid species; characters; Queensland; New South Wales; Lord Howe Island).
- Kuschel, 1990: 25 (*Paraphloeostiba*; introduced, Australian species; winged; habitat; New Zealand).
- Zanetti, 1995: 7 (*Paraphloeostiba*; Italy).
- Assing, 1996a (*Paraphloeostiba*; characters; collecting notes; Italy; Sicily; Sardinia; Corsica; Canary Islands; Madeira; France; Germany).
- Klimaszewski, Newton, and Thayer, 1996: 146 (*Paraphloeostiba*; adventive in New Zealand).
- Rogé, 1997 (*Paraphloeostiba*; characters; notes; France).

- Tronquet, 1998: 9 (*Paraphloeostiba*; characters; notes; France).
- Mineau, 1998: 272 (*Paraphloeostiba*; notes; France).
- Assing, Frisch, Kahlen, et al., 1998: 124 (*Paraphloeostiba*; characters).
- Assing and Wunderle, 1999: 435 (*Paraphloeostiba*; collecting notes; Canary Islands).
- Tronquet, 1999: 234 (*Paraphloeostiba*; notes; France).
- Letellier and Dauphin, 1999: 80 (*Paraphloeostiba*; notes; France).
- Newton, Thayer, Ashe, and Chandler, 2000: 337 (*Paraphloeostiba*; introduced; notes; California).

▲ **DISTRIBUTION:** Australia, New Zealand, Europe, Canary Islands, Madeira, USA.

**hebridensis** Bernhauer, 1934a: 18 (*Phloeonomus*; Type locality: Neue Hebriden: N.E. Malekula).

- Cameron, 1934a: 20 (*Phloeonomus*; New Hebrides).
- Steel, 1960a: 155 (*Paraphloeostiba*; characters; New Hebrides).

▲ **DISTRIBUTION:** New Hebrides.

**impressicollis** Cameron, 1924c: 312 (*Phloeonomus*; Type locality: Sumatra: Fort de Kock).

- Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 149 (*Paraphloeostiba*; characters; Sumatra).

▲ **DISTRIBUTION:** Indonesia.

**impressa** Cameron, 1928d: 98 (*Phloeonomus*; Type locality: Sumatra: Fort de Kock).

- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 154 (*Paraphloeostiba*; characters; Sumatra).

▲ **DISTRIBUTION:** Indonesia.

**kanalensis** Steel, 1960: 4 (*Paraphloeostiba*; Type locality: New Caledonia: Kanala).

▲ **DISTRIBUTION:** New Caledonia.

*kyushuensis* Watanabe, 1962, see: *Phloeonomus*.

**marianicola** Steel, 1960a: 165 (*Paraphloeostiba*; Type locality: Mariana Is.: Saipan, Sadog Talofof).

▲ **DISTRIBUTION:** Mariana Islands.

**norfolcensis** Steel, 1960a: 161 (*Paraphloeostiba*; Type locality: Norfolk Island).

▲ **DISTRIBUTION:** Norfolk Island.

**obesa** Fauvel, 1904b: 89 (*Omalium*, cited as *Homalium*; Type locality: Sumatra: region de Deli).

- Bernhauer and Schubert, 1910: 49 (*Phyllocrepa*; subgenus *Hapalaraea*; catalog).
- Cameron, 1928d: 98 (*Phyllocrepa*; subgenus *Hapalaraea*; Sumatra).
- Steel, 1960a: 152 (*Paraphloeostiba*; characters; Sumatra; Java; Sarawak; Philippine Islands).
- Hammond, 1984: 195 (*Paraphloeostiba*; Borneo).

▲ **DISTRIBUTION:** Borneo, Malaysia, Indonesia, Philippines.

*densepunctata* Bernhauer, 1915f: 135 (*Phloeonomus*; Type locality: Sarawak: Mt. Matang, 1000 Fuss).

- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 152 (*Paraphloeostiba*; synonym of *obesa*).

**opacicollis** Steel, 1960a: 150 (*Paraphloeostiba*; Type locality: Tonkin: Hoa Binh).

▲ **DISTRIBUTION:** Vietnam.

**papuana** Cameron, 1931: 356 (*Phloeonomus*; Type locality: Mount Lamington, New Guinea).

- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 153 (*Paraphloeostiba*; characters; New Guinea).

▲ **DISTRIBUTION:** New Guinea.

**rhopalocera** Cameron, 1928d: 99 (*Phloeonomus*; Type locality: Sumatra: Fort de Kock).

- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Steel, 1960a: 146 (*Paraphloeostiba*; characters; Sumatra; New Britain).

▲ **DISTRIBUTION:** Indonesia.

- secreta** Cameron, 1928d: 98 (*Phloeonomus*; Type locality: Sumatra: Gunung Singgalang).  
 — Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Steel, 1960a: 152 (*Paraphloeostiba*; characters; Sumatra).  
 ▲ **DISTRIBUTION:** Indonesia.
- seychellensis** Steel, 1960a: 159 (*Paraphloeostiba*; Type locality: Seychelles: Silhouette, high forest over 1000 feet).  
 ▲ **DISTRIBUTION:** Seychelles.
- similis** Steel, 1960a: 150 (*Paraphloeostiba*; Type locality: Sumatra: Palembang).  
 ▲ **DISTRIBUTION:** Indonesia.
- singularis** Kraatz, 1859: 181 (*Omalium*; Type locality: Ceylan).  
 — Fauvel, 1889b: 246 (*Omalium*, cited as *Homalium*; New Caledonia).  
 — Bernhauer, 1902b: 45 (*Omalium*; Ceylon).  
 — Fauvel, 1903d: 258 (*Omalium*, cited as *Homalium*; New Caledonia [**Note:** According to Steel, 1960: 4 the New Caledonia specimens are an undescribed species of *Paraphloeostiba*]; Celebes; Lombok; Java; Sumatra; Borneo; Ceylon).  
 — Fauvel, 1904a: 45 (*Omalium*, cited as *Homalium*; Nilghiris; Ceylan; Sikkim; Sumatra; Borneo; Java; Lombok; Celebes; New Caledonia).  
 — Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Bernhauer, 1920: 4 (*Phloeonomus*; Australia).  
 — Bernhauer, 1922b: 167 (*Phloeonomus*; Seychelles).  
 — Bernhauer, 1926f: 312 (*Phloeonomus*; Buru).  
 — Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).  
 — Cameron, 1930: 145 (*Phloeonomus*; characters; Ceylon; India).  
 — Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Steel, 1960: 4 (*Omalium*, cited as *Homalium*; notes).  
 — Steel, 1960a: 159 (*Paraphloeostiba*; characters; all of distributional records except Ceylon and India are based on misidentifications).  
 — Frank, 1982: 9 (*Phloeonomus*; list of parasites; Sumatra).  
 ▲ **DISTRIBUTION:** Sri Lanka, India.
- angulata* Motschulsky, 1861: 142 (*Phloeonomus*; Type locality: Colombo).  
 — Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).  
 — Cameron, 1930: 146 (*Phloeonomus*; characters; Ceylon).  
 — Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Cameron, 1934d: 78 (*Phloeonomus*; notes on types one of which is *singulare*).  
 — Steel, 1960a: 159 (*Paraphloeostiba*; synonym of *singulare*).  
 — Scheerpeltz, 1966e: 393 (*Phloeonomus*; cited as valid species; [**Note:** Although cited by Scheerpeltz as a valid species, I have followed the work of Steel since Scheerpeltz may have overlooked that article]; New Caledonia).
- solomonensis** Steel, 1960a: 155 (*Paraphloeostiba*; Type locality: Solomon Islands: Guadalcanal, Kukum).  
 ▲ **DISTRIBUTION:** Solomon Islands.
- sonani** Bernhauer, 1943a: 171 (*Phloeonomus*; Type locality: Formosa: Arisan).  
 — Steel, 1960a: 149 (*Paraphloeostiba*; characters; Formosa).  
 — Frank, 1982: 9 (*Paraphloeostiba*; list of parasites).  
 ▲ **DISTRIBUTION:** Taiwan.
- specularis** Bernhauer, 1915g: 181 (*Phloeonomus*; Type locality: Not cited).  
 — Scheerpeltz, 1933: 1051 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Steel, 1960a: 146 (*Paraphloeostiba*; characters; New Britain).  
 ▲ **DISTRIBUTION:** New Britain.
- subopaca** Cameron, 1924b: 168 (*Phloeonomus*; Type locality: Simla Hills; Gahan, 7000 feet).  
 — Cameron, 1930: 144 (*Phloeonomus*; characters; India).  
 — Scheerpeltz, 1933: 1051 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).  
 — Steel, 1960a: 157 (*Paraphloeostiba*; characters; India: Simla Hills, Gahan, 7000 feet).  
 ▲ **DISTRIBUTION:** India.

**sulcicollis** Fauvel, 1904b: 89 (*Omalium*, cited as *Homalium*; Type locality: Sumatra: Palembang).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).
- Steel, 1960a: 148 (*Paraphloeostiba*; characters; Sumatra).

▲ **DISTRIBUTION:** Indonesia.

**sumatrensis** Bernhauer, 1905: 11 (*Phloeonomus*; Type locality: Sumatra: Balighe).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).
- Steel, 1960a: 163 (*Paraphloeostiba*; characters; Sumatra; Lombok).

▲ **DISTRIBUTION:** Indonesia.

**tonkinensis** Cameron, 1940b: 181 (*Phloeonomus*; Type locality: Tonkin: Hoa Binh).

- Steel, 1960a: 167 (*Paraphloeostiba*; characters; Tonkin; Singapore).

▲ **DISTRIBUTION:** Vietnam, Singapore.

### **Phloeonomus**

[57 species; Neotropical, Nearctic, Palaearctic, Ethiopian, Madagascan, Oriental, Australian, and Oceanic Regions]

*Phloeonomus* Heer, 1839: 184 (species included: *monilicornis*, *inflatus*, *lucidus*, *pusillus*, *minimus*). **TYPE SPECIES:** *Omalium pusillus* Gravenhorst, fixed by subsequent designation by Thomson, 1859: 51.

- Lacordaire, 1854: 143 (synonym of *Omalium*).
- Jacquelin du Val, 1857: 76 (synonym of *Omalium*).
- Kraatz, 1857d: 974 (synonym of *Omalium*).
- Thomson, 1859: 51 (characters; type species: *pusillus*).
- Thomson, 1861: 210 (characters).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).
- Mulsant and Rey, 1880: 179 (characters; key to French species).
- Seidlitz, 1891: 339 (key to some European species).
- Seidlitz, 1891a: 361 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 120 (subgenus of *Omalium*; list of species of Europe and Caucasus).
- Ganglbauer, 1895: 731 (characters; key to middle European species).
- Luze, 1906: 589 (characters; key to species).
- Heyden, Reitter, and Weise, 1906: 131 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 36 (key to and annotated list of species of Seine Basin, France).
- Bernhauer and Schubert, 1910: 57 (world catalog; 28 species).
- Petri, 1912: 53 (list of species of Siebenbürgen).
- Johansen, 1914: 606 (characters; key to Danish species).
- Leng, 1920: 94 (catalog of North American species).
- Cameron, 1921a: 350, 399 (characters; key to Singapore species; catalog).
- Cameron, 1924b: 169 (key to Indian species).
- Winkler, 1925: 331 (catalog for Palaearctic region).
- Cameron, 1925: 11, 104 (subgenus of *Omalium*; catalog of Indian species).
- Porta, 1926: 22 (characters; key to species of Italy).
- Portevin, 1929: 445 (characters; key to French species).
- Cameron, 1930: 141 (characters; key to species of British India).
- Roubal, 1930: 310 (catalog; Slovakia).
- Joy, 1932: 100 (key to British species).
- Scheerpeltz, 1933: 1048 (world catalog supplement).
- Blackwelder, 1943: 51 (characters; type species: *pusillus*).
- Blackwelder, 1944: 102 (checklist of species from Mexico, Central and South America, and the West Indies).
- Kloet and Hincks, 1945: 161 (list of British species).
- Palm, 1948: 83 (characters; key to species of Sweden).

- Tottenham, 1949: 355, 406 (type species: *pusillus* Gravenhorst; list of British species).
- Blackwelder, 1952: 305 (type species: *pusillus*).
- Jarrige, 1950a: 93 (cited as *Phlaeonomus*; key to French species).
- Blackwelder, 1952: 305 (type species).
- Tottenham, 1954: 25 (characters; key to British species).
- Hatch, 1957: 52, 81 (characters; key to species of Pacific Northwest).
- Smetana, 1959a: 196 (list of species collected in Albania).
- Székessy, 1963: 15 (characters).
- Lohse, 1964: 46 (characters; key to central European species).
- Smetana, 1964c: 169 (key to European species).
- Pototskaia, 1967: 20 (cited as *Phloeonomus*; larval characters).
- Scheerpeltz, 1968a: 11 (catalog of Austrian species).
- Steel, 1970a: 15 (larval characters; biological notes).
- Tikhomirova, 1973a: 138 (subgenus of *Phloeonomus*; checklist of species of USSR).
- Moore and Legner, 1975: 209 (catalog; North America north of Mexico).
- Shibata, 1976: 104 (checklist of species of Japan).
- Pototskaia, 1976: 162 (larval characters).
- Nikitskii, 1976: 183 (larval characters).
- Pope, 1977: 23 (list of British species).
- Burakowski, Mroczkowski, and Stefańska, 1979: 54 (catalog; Poland).
- Moore and Legner, 1979: 209 (characters; notes).
- Muona, 1979: 18 (list of Scandinavian species).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
- Uhlig and Vogler, 1981: 86 (list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 65 (characters; habitus; key to species of Hungary).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Segers, 1986: 20 (checklist of species; Belgium).
- Zanetti, 1987: 247 (characters; habitus; key to species of Italy).
- Watanabe, 1990: 99 (characters; key to species of Japan).
- Angelini, 1991: 192 (list of species from high elevations of Calabria, Italy).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 7 (list of species of Italy).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- M. Hansen, 1996: 94 (list of Danish species).
- Assing, 1996a: 180, 181 (characters; notes).
- Downie and Arnett, 1996: 438 (characters; species of Northeastern North America).
- Assing, 1998f: 123, 124 (characters; notes).
- Newton, Thayer, Ashe, and Chandler, 2000: 337 (2 Nearctic species; notes; characters in key).

*Phloeonomodes* Smetana, 1964: 163, 168 (subgenus of *Phloeonomus*; species included: *minimus*, *quadrifossulatus*). **TYPE SPECIES:** *Omalium minimus* Erichson, fixed by original designation.

- Horion, 1963: 92 (subgenus of *Phloeonomus*; list of central European species).
- Tikhomirova, 1973a: 138 (cited as *Phloeonomodes*; subgenus of *Phloeonomus*; checklist of species of USSR).
- Zanetti, 1987: 248, 252 (subgenus of *Phloeonomus*; characters; habitus; species of Italy).

*abietinus* Thomson, 1867, see: *pusillus* Gravenhorst, 1806.

**affinis** Cameron, 1933b: 339 (*Phloeonomus*; Type locality: British North Borneo: Kenokok, 3300 feet).

- Hammond, 1984: 195 (*Phloeonomus*; Borneo).

▲ **DISTRIBUTION:** Malaysia.

*africana* Cameron, 1950, see: *Xylostiba*.

*alutaceus* Cameron, 1941, see: *Paraphloeostiba*.

**anceps** Sharp, 1887: 745 (*Omalium*; Type locality: Guatemala, Quiche Mountains 7000 to 9000 feet, Volcan de Agua 8500 to 10,500 feet).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Guatemala.

*angulatus* Motschulsky, 1861, see: *Paraphloeostiba*.

*antennarius* Reitter, 1911, see: *Omalium*.

*apicalis* Cameron, 1925, see: *Paraphloeostiba*.

*assamensis* Cameron, 1930, see: *Paraphloeostiba*.

**atomarius** Fauvel, 1865c: 8 [= 1866: 16] (*Omalium*; Type locality: Mexique: Teapa).

— Sharp, 1887: 746 (*Omalium*; notes; Mexico; Guatemala).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Mexico, Guatemala.

**australiae** Cameron, 1943a: 338 (*Phloeonomus*; Type locality: Australia: Queensland, Evelyne).

▲ **DISTRIBUTION:** Australia.

**azoricus** Fauvel, 1900d: 219 (*Omalium*, cited as *Homalium*; Type locality: Açores: Flores).

— Fauvel, 1902b: 53 (*Omalium*, cited as *Homalium*; Azores).

— Luze, 1906: 593 (*Phloeonomus*; characters; Azores).

— Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).

— Méquignon, 1942a: 16 (*Phloeonomus*; subgenus *Phloeostiba*; Azores).

— Borges, 1990: Table II (*Phloeonomus*; Azores).

▲ **DISTRIBUTION:** Azores.

*baicalensis* Bernhauer, 1903, see: *Phyllodrepa*.

**biformis** Cameron, 1950a: 180 (*Phloeonomus*; subgenus *Phloeostiba*; Type locality: Kenya Colony: Mount Kenya, 9645 feet).

▲ **DISTRIBUTION:** Kenya.

**bolsonensis** Scheerpeltz, 1972: 55 (*Phloeonomus*; subgenus *Phloeonomus*; Type locality: Argentinien: Rio Negro, El Bolson, Pampa Azcona, 350 m).

▲ **DISTRIBUTION:** Argentina.

*bosnicus* Bernhauer, 1902, see: *Xylostiba*.

**caffer** Bernhauer, 1934h: 485 (*Phloeonomus*; Type locality: Pondoland: Port St. Johns).

▲ **DISTRIBUTION:** South Africa.

**capensis** Cameron, 1945c: 705 (*Phloeonomus*; subgenus *Xylostiba*; Type locality: S. Africa: Muizenberg).

▲ **DISTRIBUTION:** South Africa.

*castaneipennis* Cameron, 1928, see: *Metaxylostiba*.

**centralis** Blackwelder, 1944: 102 (*Phloeonomus*; replacement name for *sordidus* Sharp).

— Jimenez-Sanchez, Navarrete-Heredia, and Padilla-Ramirez, 2000: 56 (*Phloeonomus*; necrophilous species; distribution in Mexico).

▲ **DISTRIBUTION:** Mexico, Guatemala.

*sordidus* Sharp, 1887: 744 (*Omalium*; [preoccupied]; Type locality: Mexico, Cordova; Guatemala, Cerro Zunil, Capetillo, Zapote, Carrizal, near the city, San Geronimo).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

*cheesmani* Cameron, 1934, see: *Paraphloeostiba*.

**chlorizans** Fauvel, 1904b: 89 (*Omalium*, cited as *Homalium*; Type locality: Sumatra: Ajer Mantcior).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

— Bernhauer, 1920: 4 (*Phloeonomus*; Australia).

— Cameron, 1928d: 98 (*Phloeonomus*; Sumatra).



- Cameron, 1930b: 161 (*Phloeonomus*; British North Borneo).
- Cameron, 1931: 356 (*Phloeonomus*; New Guinea).
- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Hammond, 1984: 195 (*Phloeonomus*; Borneo).
- Herman, 2001: 21 (*Phloeonomus*; synonymy).

▲ **DISTRIBUTION:** Malaysia, Indonesia, New Guinea, Australia.

*chlorizans* Bernhauer, 1905: 10 (*Phloeonomus*; [Note: **preoccupied**]; Type locality: Sumatra: Balighe).

- Herman, 2001: 21 (*Phloeonomus*; synonymic homonym of *chlorizans*).

*chlorizans* Bernhauer, 1905, see: *chlorizans* Fauvel, 1904.

**clavicornis** Wollaston, 1857: 204 (*Omalium*; Type locality: Madeira: upland region of the Fanal).

- Wollaston, 1865: 523 (*Omalium*, cited as *Homalium*; habitat; Madeira Islands).
- Crotch, 1867a: 385 (*Omalium*, cited as *Homalium*; Azores).
- Wollaston, 1871: 312 (*Omalium*, cited as *Homalium*; notes).
- Fauvel, 1902b: 53 (*Omalium*, cited as *Homalium*; Madeira).
- Luze, 1906: 599 (*Phloeonomus*; characters; Madeira).
- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Xylostiba*; catalog).
- Bernhauer, 1940c: 1 (*Phloeonomus*; subgenus *Xylostiba*; Azores).

▲ **DISTRIBUTION:** Madeira.

**congoensis** Bernhauer, 1934g: 229 (*Phloeonomus*; Type locality: Mts. Nyamukubi, Kivu, 2600 m).

▲ **DISTRIBUTION:** Congo.

*coriaceus* Cameron, 1952, see: *Paraphloeostiba*

**crenicollis** Cameron, 1930b: 161 (*Phloeonomus*; Type locality: North Borneo; Bettotan near Sandakan).

- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Malaysia.

*densepunctatus* Bernhauer, 1915, see: *Paraphloeostiba*.

**discalis** Cameron, 1914: 525 (*Phloeonomus*; Type locality: S. India, Nilgiri Hills).

- Cameron, 1921a: 364, 399 (*Phloeonomus*; characters; Singapore).
- Cameron, 1930: 142 (*Phloeonomus*; characters; India).
- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** India, Singapore.

**distinctus** Cameron, 1933b: 340 (*Phloeonomus*; Type locality: British North Borneo: Kenokok).

▲ **DISTRIBUTION:** Malaysia.

*flavescens* Motschulsky, 1857, see: *Omalium*.

*flavicornis* Cameron, 1941, see: *Palpomalium*.

**flavipennis** Mäklin, 1853: 198 (*Omalium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 211 [= 1878e: 47] (*Omalium*, cited as *Homalium*; characters; Alaska).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** USA.

*foveolatus* Stephens, 1834, see: *pusillus* Gravenhorst, 1806.

**fraternus** Cameron, 1934a: 20 (*Phloeonomus*; Type locality: New Hebrides: Tanna).

▲ **DISTRIBUTION:** New Hebrides.

**germanus** Cameron, 1930b: 161 (*Phloeonomus*; Type locality: North Borneo: Bettotan near Sandakan).

- Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Malaysia.

*granulatus* Wollaston, 1854, see: *pusillus* Gravenhorst, 1806.

*hebridensis* Bernhauer, 1934, see: *Paraphloeostiba*.

*heeri* Heer, 1841, see: *Phyllo drepa*.

**himalayica** Cameron, 1924b: 166 (*Phyllo drepa*; Type locality: Chakrata District, 6500 to 8000 feet; Simla Hills, 9000 feet).

— Cameron, 1930: 146 (*Phloeonomus*; subgenus *Xylostiba*; characters; India).

— Scheerpeltz, 1933: 1048 (*Phloeonomus*; subgenus *Xylostiba*; catalog).

▲ **DISTRIBUTION:** India.

*impressicollis* Cameron, 1924, see: *Paraphloeostiba*.

*impressus* Cameron, 1928, see: *Paraphloeostiba*.

**inconspicuus** Cameron, 1928e: 273 (*Phloeonomus*; Type locality: Rodriguez Island).

— Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Rodriguez Island.

**japonicus** Watanabe, 1963a: 164 (*Phloeonomus*; Type locality: Japan: Tokyo Pref.: Okutama).

— Watanabe, 1990: 104 (*Phloeonomus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**kyushuensis** Watanabe, 1962: 17 (*Paraphloeostiba*; Type locality: Japan: Kyushu: Kagashima Pref.: near Chiran).

— Watanabe, 1990: 102 (*Phloeonomus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*lacrymale* Fleutiaux and Sallé, 1889, see: *pedicularius* Erichson, 1840.

**laesicollis** Mäklin, 1852: 322 (*Omalium*; Type locality: insula Sitkha).

— Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *pusillum*).

— Fauvel, 1871a: 97 [= 1872: 71] (*Omalium*, cited as *Homalium*; synonym of *pusillum*).

— Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *pusillum*).

— Luze, 1906: 600 (*Phloeonomus*; synonym of *pusillum*).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *pusillum*).

— Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; cited as *laevicollis*; synonym of *pusillum*).

— Newton, Thayer, Ashe, and Chandler, 2000: 337 (*Phloeonomus*; North America including Mexico).

▲ **DISTRIBUTION:** Canada, USA, Mexico.

**laeticulus** Sharp, 1887: 747 (*Omalium*; Type locality: Guatemala, Totonicapam 8500 to 10,500 feet).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

— Scheerpeltz, 1953: 601 (*Phloeonomus*; Guatemala).

▲ **DISTRIBUTION:** Guatemala.

**lobeliae** Bernhauer, 1940: 133 (*Phloeonomus*; subgenus *Xylostiba*; Type locality: Kenya: West Aberdare Mts., 10–11,000 ft.).

▲ **DISTRIBUTION:** Kenya.

**machadoi** Cameron, 1951a: 47 (*Phloeonomus*; Type locality: Angola: Serra do Moco, 12°30'S, 15°10'E, Luimbale, alt. 2300 m).

▲ **DISTRIBUTION:** Angola.

*maerkelii* Sachse, 1852, see: *philanthus* Fabricius, 1798.

**minimus** Erichson, 1839a: 631 (*Omalium*; Type locality: Berlin).

— Heer, 1839: 186 (*Phloeonomus*; characters; Switzerland).

— Erichson, 1840: 878 (*Omalium*; characters; Germany).

— Redtenbacher, 1849: 829 (*Omalium*; characters).

— Fairmaire and Laboulbène, 1856: 641 (*Omalium*; characters; France).

— Redtenbacher, 1857: 253 (*Omalium*; characters; Germany).

— Kraatz, 1857d: 984 (*Omalium*; characters; Germany).

— Fauvel, 1871a: 97 [= 1872: 71] (*Omalium*, cited as *Homalium*; characters; France; Germany; Switzerland; Austria).

- Redtenbacher, 1874: 276 (*Omalium*; characters).
- Seidlitz, 1875: 233 (*Omalium*; characters; Baltic region).
- Mulsant and Rey, 1880: 187 (*Phloeonomus*; characters; France).
- Ganglbauer, 1895: 732 (*Phloeonomus*; characters; middle Europe).
- Luze, 1906: 601 (*Phloeonomus*; characters; Central Europe).
- Reitter, 1909: 190 (*Phloeonomus*; characters; Germany).
- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Portevin, 1929: 445 (*Phloeonomus*; characters; France).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; characters; France).
- Horion, 1963: 92 (*Phloeonomus*; subgenus *Phloeonomodes*; France; Italy; Romania; Slovakia; Czech Republic; Albania; Germany; Austria).
- Lohse, 1964: 47 (*Phloeonomus*; subgenus *Phloeonomus*; characters; central Europe).
- Smetana, 1964c: 163, 169, 170 (*Phloeonomus*; subgenus *Phloeonomodes*; characters; notes; Czechoslovakia).
- Smetana, 1966: 325 (*Phloeonomus*; notes; Czechoslovakia).
- Legner and Moore, 1977: 175 (*Phloeonomus*; found under bark).
- Filatova, 1981: 17 (*Phloeonomus*; Russia).
- Tóth, 1982: 66 (*Phloeonomus*; characters; Hungary).
- Zanetti, 1987: 252 (*Phloeonomus*; subgenus *Phloeonomodes*; characters; Italy).
- Lucht, 1987: 88 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France).
- Lohse and Lucht, 1989: 126 (*Phloeonomus*; subgenus *Phloeonomodes*).
- Boháč, 1993: 41 (*Phloeonomus*; subgenus *Phloeonomodes*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Phloeonomus*; Italy).
- ▲ **DISTRIBUTION:** Europe, Russia.

**morosus** Cameron, 1924b: 169 (*Phloeonomus*; Type locality: Chakrata District; Sainj Khud, 6500 feet).

- Cameron, 1930: 145 (*Phloeonomus*; characters; India).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** India.

**nanus** Sharp, 1876: 402 (*Omalium*; Type locality: Not cited, presumably Brazil).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Brazil (?).

**nigritulus** Cameron, 1930: 143 (*Phloeonomus*; Type locality: Assam: Naga Hills, alt. 4000 feet).

- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** India.

**nitidus** Bernhauer, 1908c: 102 (*Phloeonomus*; Type locality: Britisch-Südwestafrika: Klein-Namaland).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** South Africa.

**obscurus** Cameron, 1940b: 181 (*Phloeonomus*; Type locality: Tonkin: Hoa Binh).

▲ **DISTRIBUTION:** Vietnam.

**obscurus** Kraatz, 1859: 181 (*Omalium*; Type locality: Ceylan).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Cameron, 1921a: 364, 399 (*Phloeonomus*; characters; Singapore).
- Cameron, 1930: 142 (*Phloeonomus*; characters; Ceylon).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Cameron, 1934d: 78 (*Phloeonomus*; synonym of *quadrifossulatus*).
- Scheerpeltz, 1957c: 223 (*Phloeonomus*; synonym of *quadrifossulatus*).
- Smetana, 1964c: 169 (*Phloeonomus*; synonym of *quadrifossulatus*).
- Coiffait, 1984: 118 (*Phloeonomus*; cited as valid species; Pakistan).

▲ **DISTRIBUTION:** Pakistan, Sri Lanka, Singapore.

**opacus** Cameron, 1924b: 168 (*Phloeonomus*; Type locality: Chakrata District; Simla Hills, 7000 to 8000 feet).

— Cameron, 1930: 144 (*Phloeonomus*; characters; India).

— Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** India.

**orientalis** Smetana, 1981c: 78 (*Phloeonomus*; Type locality: Kurilskiye Ostrova [Kuril Islands], Island Kunashir, Mendeleevo).

▲ **DISTRIBUTION:** Kuril Islands.

**pallens** Motschulsky, 1857a: 493 (*Arpedium*; Type locality: Bombay).

— Kraatz, 1859: 182 (*Arpedium*; India).

— Bernhauer and Schubert, 1910: 68 (*Arpedium*; catalog).

— Cameron, 1930: 156 (*Arpedium*; characters; India).

— Cameron, 1934d: 78 (transfer from *Arpedium* to *Phloeonomus*).

— Cameron, 1940: 86 (transferred from *Arpedium* to *Phloeonomus*; characters; India).

▲ **DISTRIBUTION:** India.

**pallidus** Coiffait, 1982: 144 (*Phloeonomus*; Type locality: Nepal: occidental, Dzunda, Khola Tal, près Talphi, 3000–3500 m).

▲ **DISTRIBUTION:** Nepal.

*papuanus* Cameron, 1931, see: *Paraphloeostiba*.

**pedicularis** Erichson, 1840: 887 (*Omalium*; Type locality: Puerto Rico).

— Fauvel, 1865c: 8 [= 1866: 16] (*Omalium*; characters; Puerto Rico).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

— Blackwelder, 1943: 52 (*Phloeonomus*; characters; Cuba; Jamaica; Hispaniola; Puerto Rico; Guadeloupe; Grenada; Trinidad).

▲ **DISTRIBUTION:** West Indies.

*lacrymalis* Fleutiaux and Sallé, 1889: 381 (*Omalium*, cited as *Homalium*; Type locality: Gourbeyre).

— Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).

— Blackwelder, 1943: 52 (*Phloeonomus*; synonym of *pedicularis*).

**philanthus** Fabricius, 1798: 181 (*Staphylinus*; Type locality: Cap. Bon.).

— Fabricius, 1801: 600 (*Staphylinus*; characters).

— Erichson, 1840: 887 (*Omalium*; characters; South Africa).

— Boheman, 1848: 297 (*Omalium*; characters; South Africa).

— Bernhauer, 1908c: 102 (*Phloeonomus*; British South Africa).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

— Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** South Africa.

*maerkelii* Sachse, 1852: 148 (*Omalium*; Type locality: Vorgeb. d. g. Hoffnung).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *philanthus*).

**philippinus** Cameron, 1941b: 431 (*Phloeonomus*; subgenus *Phloeostiba*; Type locality: Philippines: Luzon: Imugan).

▲ **DISTRIBUTION:** Philippines.

**pinicola** Champion, 1920: 242 (*Phloeonomus*; subgenus *Phloeostiba*; Type locality: W. Almora, Tanakpur and Ranikhet all in Kumaon).

— Cameron, 1930: 147 (*Phloeonomus*; subgenus *Phloeostiba*; characters; India).

— Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).

▲ **DISTRIBUTION:** India.

**praeustus** Motschulsky, 1857a: 492 (*Phloeonomus*; Type locality: Colombie).

— Fauvel, 1891: 90 (*Omalium*, cited as *Homalium*; Venezuela).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Colombia, Venezuela, Mexico.

*xanthopterus* Fauvel, 1865c: 6 [= 1866: 14] (*Omalium*; Type locality: Vénézuéla: Caracas; Mexique).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *praeustus*).

**punctipennis** Thomson, 1867: 317 (*Phloeonomus*; Type locality: Not cited, presumably Scandinavia).

— Fauvel, 1871a: 97 [= 1872: 71] (*Omalium*, cited as *Homalium*; synonym of *pusillum*).

— Mulsant and Rey, 1880: 185 (*Phloeonomus*; synonym of *pusillus*).

— Fowler, 1888: 416 (*Omalium*, cited as *Homalium*; subgenus *Phloeonomus*; characters; Britain).

— Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *pusillus*).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *pusillus*).

— Sjöberg, 1932 (*Phloeonomus*; characters; notes).

— Scheerpeltz, 1933: 1050 (*Phloeonomus*; aberration of *pusillus*).

— Palm, 1948: 87 (*Phloeonomus*; characters; Sweden; Denmark; Norway; Finland).

— Smetana, 1963b: 31 (*Phloeonomus*; subgenus *Phloeonomus*; Madeira).

— Horion, 1963: 91 (*Phloeonomus*; subgenus *Phloeonomus*; Britain; Norway; Sweden; Finland; Denmark; Holland; Poland; Germany; Austria).

— Lohse, 1964: 47 (*Phloeonomus*; subgenus *Phloeonomus*; characters; central Europe).

— Smetana, 1964c: 163, 170 (*Phloeonomus*; subgenus *Phloeonomus*; characters; Czechoslovakia).

— Szujewski, 1968a: 711 (*Phloeonomus*; Poland).

— Szujewski, 1969a: 248 (*Phloeonomus*; notes; Poland).

— Steel, 1970a: 16 (*Phloeonomus*; biological notes).

— Bacchus and Hammond, 1972: 62 (*Phloeonomus*; donkey dung; Britain).

— Legner and Moore, 1977: 175 (*Phloeonomus*; found under bark).

— Pope, 1977: 23 (*Phloeonomus*; Britain).

— Hammond, 1980: 138 (*Phloeonomus*; Ireland).

— Smetana, 1981c: 80 (*Phloeonomus*; characters).

— Tóth, 1982: 67 (*Phloeonomus*; characters; Hungary).

— Israelson, 1984: 145 (*Phloeonomus*; Azores).

— Zanetti, 1987: 251 (*Phloeonomus*; subgenus *Phloeonomus*; characters; Italy).

— Drugmand and Haghebaert, 1987: 326 (*Phloeonomus*; Belgium).

— Lucht, 1987: 87 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux; Denmark).

— Borges, 1990: Table II (*Phloeonomus*; Azores).

— Welch, 1993: 227 (*Phloeonomus*; ovariole number and ovary structure).

— Boháč, 1993: 41 (*Phloeonomus*; subgenus *Phloeonomus*; Slovakia; Czech Republic).

— Hodge and Jones, 1995: 31 (*Phloeonomus*; characters; Britain).

— Zanetti, 1995: 7 (*Phloeonomus*; Italy).

— Cibulskis, 1998: 67 (*Phloeonomus*; Latvia).

— Zanetti and Sabella, 1998: 30 (*Phloeonomus*; notes; Sicily).

— Fowles, Alexander, and Key, 1999: 129 (*Phloeonomus*; saproxylic species; status as endangered or threatened species; Britain).

— Cibulskis, 1999: 35 (*Phloeonomus*; list; Latvia).

— Lott, 1999: 72 (*Phloeonomus*; saproxylic species; habitat; endangered status; Britain).

▲ **DISTRIBUTION:** Europe, Madeira, Azores.

**pusillum** Gravenhorst, 1806: 205 (*Omalium*; Type locality: Brunsviga).

— Gyllenhal, 1810: 220 (*Omalium*; characters).

— Olivier, 1811: 475 (*Omalium*; characters; Brunswick).

— Gyllenhal, 1827: 466 (*Omalium*).

— C. Sahlberg, 1830: 284 (*Omalium*; characters; Finland).

— Mannerheim, 1830: 53 (*Anthobium*; Finland; Sweden).

— Mannerheim, 1831: 467 (*Anthobium*; Finland; Sweden).

— Stephens, 1834: 353 (*Omalium*; characters; England).

— Erichson, 1839a: 631 (*Omalium*; characters; Germany).

— Heer, 1839: 186 (*Phloeonomus*; characters; Switzerland).

— Stephens, 1839: 429 (*Omalium*; characters; England).

- Erichson, 1840: 879 (*Omalium*; characters; Europe).
- Redtenbacher, 1849: 751 (*Omalium*; characters; Austria).
- Hardy, 1851: 58, 61 (*Phloeonomus* and *Omalium*; [**Note:** Both references are cited as Gyllenhal species, one in Gyllenhal, 1810: 218 on which there is no *pusillus* and the other Gyllenhal, 1810: 220; Gyllenhal attributed the species to Gravenhorst]; notes; England).
- Thomson, 1857a: 225 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 643 (*Omalium*; characters; France).
- Redtenbacher, 1857: 250 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 988 (*Omalium*; characters; Germany).
- Thomson, 1859: 51 (type species of *Phloeonomus*).
- Thomson, 1861: 210 (*Phloeonomus*; characters; Scandinavia).
- Wollaston, 1864: 603 (*Omalium*, cited as *Homalium*; characters; notes; Canary Islands).
- Fauvel, 1865a: 318 [= 1865b: 68] (*Omalium*; habitat; France).
- Wollaston, 1865: 524 (*Omalium*, cited as *Homalium*; habitat; notes; Madeira Islands; Canary Islands).
- Crotch, 1867a: 385 (*Omalium*, cited as *Homalium*; Azores).
- Fauvel, 1871a: 97 [= 1872: 71] (*Omalium*, cited as *Homalium*; characters; France; Algeria; Madeira; North America).
- Redtenbacher, 1874: 274 (*Omalium*; cited as *pusillum*; characters; Austria).
- Seidlitz, 1875: 233 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 220 (*Phloeonomus*; Finland).
- Fauvel, 1878: 89 [= 1878a: 9] (*Omalium*, cited as *Homalium*; Algeria).
- Fauvel, 1878d: 215 [= 1878e: 51] (*Omalium*, cited as *Homalium*; characters; Alaska; California; New York).
- Mulsant and Rey, 1880: 184 (*Phloeonomus*; characters; France).
- Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Algeria).
- Fowler, 1888: 415 (*Omalium*, cited as *Homalium*; subgenus *Phloeonomus*; characters; Britain).
- Ganglbauer, 1895: 732 (*Phloeonomus*; characters; Palaearctic region).
- Fauvel, 1902b: 53 (*Omalium*, cited as *Homalium*; Algeria; Azores; Madeira; Canary Islands).
- Luze, 1906: 600 (*Phloeonomus*; characters; Palaearctic region; North America).
- Sainte-Claire Deville, 1906: 70 (*Omalium*, cited as *Homalium*; Corsica).
- Fall and Cockerell, 1907: 168 (*Omalium*, cited as *Homalium*; New Mexico).
- Reitter, 1909: 190 (*Phloeonomus*; characters; Germany).
- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Johansen, 1914: 607 (*Phloeonomus*; characters; Denmark).
- Portevin, 1929: 445 (*Phloeonomus*; characters; France).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Méquignon, 1942a: 16 (*Phloeonomus*; Azores).
- Palm, 1948: 86 (*Phloeonomus*; characters; Sweden; Denmark; Norway; Finland).
- Scheerpeltz and Höfler, 1948: 153 (*Phloeonomus*; characters; fungus inhabitant).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; characters; France).
- Hatch, 1957: 81 (*Phloeonomus*; characters; British Columbia; Idaho; Washington; Oregon).
- Smetana, 1963b: 31 (*Phloeonomus*; Madeira).
- Horion, 1963: 91 (*Phloeonomus*; subgenus *Phloeonomus*; Lapland to Mediterranean Region; Germany; Austria).
- Lohse, 1964: 47 (*Phloeonomus*; subgenus *Phloeonomus*; characters; central Europe).
- Smetana, 1964c: 163, 170 (*Phloeonomus*; subgenus *Phloeonomus*; characters; Czechoslovakia).
- Pototskaia, 1967: 20 (*Phloeonomus*, cited as *Phloleonomus*; larval characters).
- Szujeci, 1968a: 711 (*Phloeonomus*; Poland).
- Steel, 1970a: 16 (*Phloeonomus*; biological notes).
- Legner and Moore, 1977: 175 (*Phloeonomus*; found under bark).
- Pope, 1977: 23 (*Phloeonomus*; Britain).
- Hammond, 1980: 138 (*Phloeonomus*; Ireland).
- Smetana, 1981c: 80 (*Phloeonomus*; characters).
- Tóth, 1982: 67 (*Phloeonomus*; characters; Hungary).
- Israelson, 1984: 144 (*Phloeonomus*; Azores).

- Zanetti, 1987: 250 (*Phloeonomus*; subgenus *Phloeonomus*; characters; Italy).
- Ádám, 1987: 137 (*Phloeonomus*; collecting notes; Hungary).
- Lucht, 1987: 87 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
- Borges, 1990: Table II (*Phloeonomus*; Azores).
- Israelson, 1990: 2 (*Phloeonomus*; Azores).
- Detner and Reissenweber, 1991 (*Eusphalerum*; defensive secretions: chemistry and systematics).
- Welch, 1993: 227 (*Phloeonomus*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Phloeonomus*; subgenus *Phloeonomus*; Slovakia; Czech Republic).
- Hernández, Outerelo, and Gamarra, 1994: 187 (*Phloeonomus*; checklist of species; Canary Islands).
- Zanetti, 1995: 7 (*Phloeonomus*; Italy).
- Cibujskis, 1998: 67 (*Phloeonomus*; Latvia).
- Assing and Wunderle, 1999: 435 (*Phloeonomus*; collecting notes; Canary Islands).
- Fowles, Alexander, and Key, 1999: 129 (*Phloeonomus*; saproxylic species; status as endangered or threatened species; Britain).
- Ryabukhin, 1999: 18 (*Phloeonomus*; catalog; habitat; distribution; northeastern Russia).
- Cibujskis, 1999: 35 (*Phloeonomus*; list; Latvia).
- Olberg and Andersen, 2000: 223 (*Phloeonomus*; attracted to trunk-window traps baited with *Fomes fomentarius*; Norway).
- ▲ **DISTRIBUTION:** Canary Islands, Madeira Islands, Azores, Algeria, Europe, Russia, Canada, USA.

*foveolatus* Stephens, 1834: 353 (*Omalium*; Type locality: London; Suffolk).

- Stephens, 1839: 429 (*Omalium*; characters; England).
- G. Waterhouse, 1858: 31 (*Omalium*; synonym of *pusillum*).
- Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *pusillum*).
- Luze, 1906: 600 (*Phloeonomus*; synonym of *pusillum*).
- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *pusillum*).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *pusillum*).

*granulatus* Wollaston, 1854: 613 (*Omalium*; Type locality: Madeira: Lombo dos Pecegueiros).

- Wollaston, 1857: 206 (*Omalium*; habitat; Madeira Islands).
- Wollaston, 1865: 524 (*Omalium*, cited as *Homalium*; synonym of *pusillum*).
- Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *pusillum*).
- Luze, 1906: 600 (*Phloeonomus*; synonym of *pusillum*).
- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *pusillum*).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *pusillum*).

*abietinus* Thomson, 1867: 318 (*Phloeonomus*; Type locality: Gran).

- Fauvel, 1871a: 97 [= 1872: 71] (*Omalium*, cited as *Homalium*; synonym of *pusillum*).
- Mulsant and Rey, 1880: 185 (*Phloeonomus*; synonym of *pusillum*).
- Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *pusillum*).
- Luze, 1906: 600 (*Phloeonomus*; synonym of *pusillum*).
- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; synonym of *pusillum*).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *pusillum*).

*quadrifossulatus* Motschulsky, 1860a: 68 (*Phloeonomus*; Type locality: montagnes de Noura-Ellia à Ceylan).

- Motschulsky, 1861: 142 (*Phloeonomus*; Ceylon).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
- Cameron, 1930: 143 (*Phloeonomus*; characters; Ceylon).
- Scheerpeltz, 1933: 1050 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Scheerpeltz, 1957c: 223 (*Phloeonomus*; subgenus *Phloeonomus*; Sumba).
- Smetana, 1964c: 169 (*Phloeonomus*; subgenus *Phloeonomodes*; characters).

▲ **DISTRIBUTION:** Sri Lanka, Indonesia.

*rhopalocerus* Cameron, 1928, see: *Paraphloeostiba*.

**ruficollis** Bernhauer, 1934h: 484 (*Phloeonomus*; Type locality: Cape Province: Montagu; Worcester).

▲ **DISTRIBUTION:** South Africa.

**rufotestaceus** Bernhauer, 1908c: 102 (*Phloeonomus*; Type locality: Britisch-Südafrika, Kapland: Cape flats).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** South Africa.

*secretus* Cameron, 1928, see: *Paraphloeostiba*.

**sjobergi** A. Strand, 1937: 111 (*Phloeonomus*; Type locality: Oslo).

— Palm, 1948: 86 (*Phloeonomus*; characters; Sweden; Norway; Finland).

— Lohse, 1964: 47 (*Phloeonomus*; subgenus *Phloeonomus*; characters; central Europe).

— Smetana, 1964c: 170 (*Phloeonomus*; subgenus *Phloeonomus*; characters).

— Smetana, 1981c: 80 (*Phloeonomus*; characters).

— Lucht, 1987: 87 (*Phloeonomus*; in checklist).

— Assing, 1998f: 124 (*Phloeonomus*; note).

— Burakowski, Mroczkowski, and Stefańska, 2000: 41 (*Phloeonomus*; subgenus *Phloeonomus*; catalog; Poland).

▲ **DISTRIBUTION:** Norway, Sweden, Finland.

*sonani* Bernhauer, 1943, see: *Paraphloeostiba*.

*sordidus* Sharp, 1887, see: *centralis* Blackwelder, 1945.

*specularis* Bernhauer, 1915, see: *Paraphloeostiba*.

**subapicalis** Cameron, 1928d: 99 (*Phloeonomus*; Type locality: Sumatra: Fort de Kock).

— Scheerpeltz, 1933: 1051 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Indonesia.

**sublucidus** Cameron, 1929b: 441 (*Phloeonomus*; Type locality: Selangor: Bukit Kutu).

— Scheerpeltz, 1933: 1051 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Malaysia.

*subopaca* Cameron, 1924, see: *Paraphloeostiba*.

**suffusus** Casey, 1894: 424 (*Omalium*; subgenus *Phloeonomus*; Type locality: Alaska: Hunter's Bay, Prince of Wales Island).

— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** USA.

*sumatrensis* Bernhauer, 1905, see: *Paraphloeostiba*.

**tasmanicus** Blackburn, 1902: 27 (*Omalium*, cited as *Homalium*; Type locality: Tasmania).

— Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).

— Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).

▲ **DISTRIBUTION:** Australia.

**temporalis** Cameron, 1930: 148 (*Phloeonomus*; subgenus *Phloeostiba*; Type locality: Manipur: Shugnu, alt. 3000 feet).

— Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).

▲ **DISTRIBUTION:** India.

*tonkinensis* Cameron, 1940, see: *Paraphloeostiba*.

*toxopeanus* Bernhauer, 1926, see: *Xanthonomus*.

**tricolor** Wollaston, 1865: 523, 75 appendix (*Omalium*, cited as *Homalium*; Type locality: Madeira: Ribeira de São Jorge).

— Fauvel, 1902b: 53 (*Omalium*, cited as *Homalium*; Madeira).

— Luze, 1906: 594 (*Phloeonomus*; characters; Madeira).

— Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Xylostiba*; catalog).

▲ **DISTRIBUTION:** Madeira Islands.



**tristis** Sharp, 1887: 745 (*Omalium*; Type locality: Guatemala, Totonicapam 10,500 feet).  
— Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).

▲ **DISTRIBUTION:** Guatemala.

**turneri** Bernhauer, 1934h: 485 (*Phloeonomus*; Type locality: Pondoland: Port St. Johns).

▲ **DISTRIBUTION:** South Africa.

*ulmi* Motschulsky, 1857, see: *Hapalaraea*.

*usambarae* Fauvel, 1904, see: *Phloeostiba*.

*xanthopterus* Fauvel, 1865, see: *praeustus* Motschulsky, 1857.

### Phloeostiba

[3 species; Nearctic, Palaearctic, Ethiopian, and Oriental Regions]

*Phloeostiba* Thomson, 1858: 38 (species included: *plana*). **TYPE SPECIES:** *Staphylinus planus* Paykull, fixed by monotypy.

- Thomson, 1859: 51 (characters; type species: *plana*).
- Thomson, 1861: 208 (characters).
- Mulsant and Rey, 1880: 171 (characters; key to French species).
- Heyden, 1880: 83 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).
- Seidlitz, 1891: 338 (key to some European species).
- Seidlitz, 1891a: 361 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 120 (subgenus of *Omalium*; list of species of Europe and Caucasus).
- Heyden, 1893: 49 (subgenus of *Omalium*; list of species of Siberian region).
- Heyden, 1896: 37 (subgenus of *Omalium*; list of species of Siberian region).
- Luze, 1906: 589 (synonym of *Phloeonomus*).
- Heyden, Reitter, and Weise, 1906: 132 (subgenus of *Phloeonomus*; list of species of Europe and Caucasus).
- Reitter, 1909: 189 (characters; key to German species).
- Bernhauer and Schubert, 1910: 58 (subgenus of *Phloeonomus*).
- Johansen, 1914: 605 (characters; key to Danish species).
- Cameron, 1925: 11 (subgenus of *Omalium*; catalog of Indian species).
- Portevin, 1929: 444 (characters; key to French species).
- Cameron, 1930: 141, 147 (subgenus of *Phloeonomus*; characters in key; key to species of British India).
- Joy, 1932: 103 (key to British species).
- Scheerpeltz, 1933: 1048 (world catalog supplement; subgenus of *Phloeonomus*).
- Blackwelder, 1943: 51 (subgenus of *Phloeonomus*; type species: *plana*).
- Kloet and Hincks, 1945: 161 (synonym of *Phloeonomus*).
- Tottenham, 1949: 355, 407 (subgenus of *Phloeonomus*; type species: *plana* Paykull; list of British species).
- Blackwelder, 1952: 306 (type species: *plana*).
- Horion, 1963: 90 (subgenus of *Phloeonomus*; list of central European species).
- Lohse, 1964: 46 (subgenus of *Phloeonomus*; characters; key to central European species).
- Steel, 1970a: 15 (cited as valid genus; larval characters; biological notes).
- Tikhomirova, 1973a: 138 (subgenus of *Phloeonomus*; checklist of species of USSR).
- Shibata, 1976: 105 (checklist of species of Japan).
- Pototskaia, 1976: 162 (larval characters).
- Pope, 1977: 23 (list of British species).
- Burakowski, Mroczkowski, and Stefańska, 1979: 47 (catalog; subgenus of *Phloeonomus*; Poland).
- Watanabe, 1990: 111 (characters; species of Japan).
- Segers, 1986: 21 (checklist of species; Belgium).
- Zanetti, 1987: 243 (characters; habitus; key to species of Italy).
- Welch, 1993 (ovariole structure and development).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).

- Zanetti, 1995: 7 (list of species of Italy).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- M. Hansen, 1996: 94 (list of Danish species).
- Assing, 1996a: 180, 181 (characters; notes).
- Assing, 1998f: 124 (valid genus; characters).
- Newton, Thayer, Ashe, and Chandler, 2000: 337 (Nearctic species; notes; characters in key).

*Distemmus* LeConte, 1861a: 69 (species included: *argus*). **TYPE SPECIES:** *Trogophloeus argus* LeConte, fixed by original designation and monotypy.

- LeConte, 1863: 26 (list of North American species).
- Gemminger and Harold, 1868: 655 (catalog).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).
- Fauvel, 1878d: 205 [= 1878e: 41] (synonym of *Omalium*, cited as *Homalium*).
- Luze, 1906: 589 (synonym of *Phloeonomus*).
- Bernhauer and Schubert, 1910: 57 (synonym of *Phloeonomus*).
- Blackwelder, 1943: 51 (synonym of *Phloeonomus*; type species: *argus*).
- Blackwelder, 1952: 130 (type species: *argus*; synonym of *Phloeonomus*).
- Watanabe, 1990: 99 (synonym of *Phloeonomus*).

*argus* LeConte, 1850, see: *lapponica* Zetterstedt, 1838.

*bipunctata* Motschulsky, 1860, see: *plana* Paykull, 1792.

*conformis* Kraatz, 1857, see: *lapponica* Zetterstedt, 1838.

*flavipes* Linné, 1758, see: *plana* Paykull, 1792.

**lapponica** Zetterstedt, 1838: 73 (*Oxytelus*; Type locality: Lapponia Umensis; Lycksele).

- Zetterstedt, 1838: 52 (*Omalium*; [Note: Misidentification: Bernhauer and Schubert, 1910: 58 cited *planus* Zetterstedt as a synonym of *lapponicus* Zetterstedt; Zetterstedt did not describe the species as new, he attributed it to Gravenhorst who attributed it to Paykull]; characters; habitat; Lapland; Sweden).
- Thomson, 1861: 209 (*Phloeostiba*; synonym of *plana*).
- Fauvel, 1871a: 95 [= 1872: 69] (*Omalium*, cited as *Homalium*; characters; France; Lapland; Scandinavia; Britain; Germany; Poland; Switzerland; Siberia; North America).
- Seidlitz, 1875: 233 (*Phloeostiba*; characters; Baltic region).
- J. Sahlberg, 1876: 219 (*Phloeostiba*; Finland).
- Fauvel, 1878d: 214 [= 1878e: 50] (*Omalium*, cited as *Homalium*; characters; Alaska; Colorado; Lake Superior).
- Mulsant and Rey, 1880: 176 (*Phloeostiba*; characters; France).
- Ganglbauer, 1895: 732 (*Phloeonomus*; subgenus *Phloeostiba*; characters; north and middle Europe; Siberia; North America).
- Luze, 1906: 598 (*Phloeonomus*; characters; northern and central Europe; Siberia; British Columbia).
- Fall and Cockerell, 1907: 168 (*Omalium*, cited as *Homalium*; New Mexico).
- Poppius, 1909: 4 (*Phloeonomus*; subgenus *Phloeostiba*; Lena Valley, Siberia).
- Reitter, 1909: 190 (*Phloeostiba* characters; Germany).
- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).
- Notman, 1919a: 96 (*Phloeonomus*; Ontario).
- Fall, 1926: 145 (*Phloeonomus*; Alaska, Yukon Territory).
- Portevin, 1929: 445 (*Phloeostiba*; characters; France).
- Scheerpeltz, 1933: 1048 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).
- Palm, 1948: 86 (*Phloeonomus*; characters; Sweden; Denmark; Norway; Finland).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; subgenus *Phloeostiba*; characters; France).
- Hatch, 1957: 81 (*Phloeonomus*; subgenus *Phloeostiba*; characters; British Columbia; Washington).
- Horion, 1963: 91 (*Phloeonomus*; subgenus *Phloeostiba*; Britain; Norway; Sweden; Finland; Russia; Denmark; Baltic States; Poland; Czechoslovakia; Romania; Italy; Switzerland; France; Holland; Germany; Austria).

- Lohse, 1964: 46 (*Phloeonomus*; subgenus *Phloeostiba*; characters; central Europe).
- Smetana, 1964c: 163 (*Phloeonomus*; subgenus *Phloeostiba*; Czechoslovakia).
- Smetana, 1964c: 169 (*Phloeonomus*; subgenus *Phloeostiba*; characters).
- Szujewski, 1968a: 711 (*Phloeonomus*; Poland).
- Steel, 1970a: 15 (*Phloeostiba*; biological notes).
- Smetana 1975c: 158 (*Phloeonomus*; Mongolia).
- Pope, 1977: 23 (*Phloeostiba*; Britain).
- Tóth, 1982: 68 (*Phloeonomus*; characters; Hungary).
- Zanetti, 1987: 246 (*Phloeostiba*; characters; Italy).
- Lucht, 1987: 87 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
- Welch, 1993: 227 (*Phloeostiba*; ovariole number and ovary structure).
- Boháč, 1993: 41 (*Phloeostiba*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Phloeostiba*; Italy).
- Downie and Arnett, 1996: 438 (*Phloeonomus*; characters; Canada; USA).
- Fowles, Alexander, and Key, 1999: 129 (*Phloeostiba*; saproxylic species; status as endangered or threatened species; Britain).
- Cibulskis, 1999: 35 (*Phloeonomus*; list; Latvia).
- Ryabukhin, 1999: 18 (*Phloeostiba*; catalog; habitat; distribution; northeastern Russia).
- Hågvar, 1999: 28 (*Phloeonomus*; collected on *Fomes fomentarius*; Norway).
- Tronquet, 1999a: 213 (*Phloeostiba*; notes; France).
- Olberg and Andersen, 2000: 223 (*Phloeonomus*; attracted to trunk-window traps baited with *Fomes fomentarius* and *Phellinus* spp.; Norway).
- ▲ **DISTRIBUTION:** Europe, Russia, Mongolia, Canada, USA.
- argus* LeConte, 1850: 220 (*Trogophloeus*; Type locality: Lake Superior).
  - Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *lapponicus*).
  - Luze, 1906: 598 (*Phloeonomus*; synonym of *lapponicus*).
  - Bernhauer and Schubert, 1910: 58 (*Phloeostiba*; synonym of *lapponicus*).
  - Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *lapponicus*).
- planipennis* Mäklin, 1853: 198 (*Omalium*; Type locality: insula Sitkha; peninsula Kenai).
  - Fauvel, 1871a: 95 [= 1872: 69] (*Omalium*, cited as *Homalium*; synonym of *lapponicus*).
  - LeConte, 1873: 327 (*Omalium*; synonym of *pineti*).
  - J. Sahlberg, 1876: 219 (*Phloeostiba*; synonym of *lapponica*).
  - Fauvel, 1878d: 214 [= 1878e: 50] (*Omalium*, cited as *Homalium*; synonym of *lapponicus*).
  - Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *lapponicus*).
  - Luze, 1906: 598 (*Phloeonomus*; synonym of *lapponicus*).
  - Bernhauer and Schubert, 1910: 58 (*Phloeostiba*; synonym of *lapponica*).
  - Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *lapponicus*).
- pineti* Thomson, 1857a: 227 (*Omalium*; Type locality: Not cited, presumably Sverige).
  - Thomson, 1861: 209 (*Phloeostiba*; characters; Scandinavia).
  - Mulsant and Rey, 1880: 177 (*Phloeostiba*; synonym of *lapponica*).
  - Fowler, 1888: 421 (*Omalium*, cited as *Homalium*; subgenus *Phloeostiba*; characters; Britain).
  - Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *lapponicus*).
  - Luze, 1906: 598 (*Phloeonomus*; synonym of *lapponicus*).
  - Bernhauer and Schubert, 1910: 58 (*Phloeostiba*; synonym of *lapponica*).
  - Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *lapponicus*).
  - Legner and Moore, 1977: 175 (*Phloeonomus*; cited as *peneti*; found under bark).
  - Pope, 1977: 23 (*Phloeostiba*; synonym of *lapponica*).
  - Zanetti, 1987: 246 (*Phloeostiba*; synonym of *lapponica*).
- conformis* Kraatz, 1857d: 987 (*Omalium*; Type locality: Baiern).
  - Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
  - Thomson, 1861: 209 (*Phloeostiba*; synonym of *plana*).
  - Fauvel, 1871a: 95 [= 1872: 69] (*Omalium*, cited as *Homalium*; synonym of *lapponicus*).
  - Redtenbacher, 1874: 277 (*Omalium*; characters).
  - J. Sahlberg, 1876: 219 (*Phloeostiba*; synonym of *lapponica*).

- Mulsant and Rey, 1880: 177 (*Phloeostiba*; synonym of *lapponica*).
- Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *lapponicus*).
- Luze, 1906: 598 (*Phloeonomus*; synonym of *lapponicus*).
- Bernhauer and Schubert, 1910: 58 (*Phloeostiba*; synonym of *lapponicus*).
- Jarrige, 1950a: 95 (*Phloeonomus*, cited as *Phlaeonomus*; synonym of *lapponicus*).
- Zanetti, 1987: 246 (*Phloeostiba*; synonym of *lapponica*).

*subtilis* Kraatz, 1857d: 987 (*Omalium*; Type locality: Sächsische Schweiz).

- Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
- Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *lapponicum*).
- Fauvel, 1871a: 95 [= 1872: 69] (*Omalium*, cited as *Homalium*; synonym of *lapponicum*).
- Redtenbacher, 1874: 278 (*Omalium*; characters).
- Ganglbauer, 1895: 732 (*Phloeonomus*; synonym of *lapponicus*).
- Luze, 1906: 598 (*Phloeonomus*; synonym of *lapponicus*).
- Bernhauer and Schubert, 1910: 58 (*Phloeostiba*; synonym of *lapponica*).
- Zanetti, 1987: 246 (*Phloeostiba*; synonym of *lapponica*).

*pineti* Thomson, 1857, see: *lapponica* Zetterstedt, 1838.

*planipennis* Mäklin, 1853, see: *lapponica* Zetterstedt, 1838.

**plana** Paykull, 1792: 145 (*Staphylinus*; Type locality: Uplandia).

- Paykull, 1800: 405 (*Staphylinus*; characters; Sweden).
- Gravenhorst, 1802: 112 (*Omalium*; characters).
- Latreille, 1804: 370 (*Omalium*; characters; Germany; Sweden).
- Gravenhorst, 1806: 204 (*Omalium*; characters).
- Gyllenhal, 1810: 221 (*Omalium*; characters; Sweden).
- Olivier, 1811: 475 (*Omalium*; characters; Europe).
- Gyllenhal, 1827: 466 (*Omalium*).
- Zetterstedt, 1828: 53 (*Omalium*; characters; Lapland).
- Curtis, 1829: 29 (*Omalium*; catalog; Britain).
- C. Sahlberg, 1830: 284 (*Omalium*; characters; Finland).
- Mannerheim, 1830: 54 (*Anthobium*; Finland; Sweden).
- Mannerheim, 1831: 468 (*Anthobium*; Finland; Sweden).
- Stephens, 1834: 346 (*Omalium*; characters; England).
- Lacordaire, 1835: 475 (*Anthobium*; characters; France).
- Erichson, 1839a: 636 (*Omalium*; characters; Germany).
- Heer, 1839: 175 (*Xylodromus*; characters; Switzerland).
- Stephens, 1839: 427 (*Omalium*; characters; England).
- Erichson, 1840: 886 (*Omalium*; characters; Europe).
- Redtenbacher, 1849: 753 (*Omalium*; characters; Austria).
- Thomson, 1857a: 227 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 644 (*Omalium*; characters; France).
- Redtenbacher, 1857: 253 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 986 (*Omalium*; characters; Germany).
- Thomson, 1858: 38 (*Phloeostiba*; type species).
- Thomson, 1859: 51 (type species of *Phloeostiba*).
- Thomson, 1861: 208 (*Phloeostiba*; characters; Scandinavia).
- Fauvel, 1871a: 96 [= 1872: 70] (*Omalium*, cited as *Homalium*; characters; France).
- Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 233 (*Phloeostiba*; characters; Baltic region).
- J. Sahlberg, 1876: 219 (*Phloeostiba*; Finland).
- Mulsant and Rey, 1880: 173 (*Phloeostiba*; characters; France).
- Gozis, 1886: 16 (type species of *Omalium*).
- Fowler, 1888: 421 (*Omalium*, cited as *Homalium*; subgenus *Phloeostiba*; characters; Britain).
- Ganglbauer, 1895: 732 (*Phloeonomus*; subgenus *Phloeostiba*; characters; Europe; Siberia).
- Luze, 1906: 596 (*Phloeonomus*; characters; Europe; Siberia).
- Sainte-Claire Deville, 1906: 70 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 189 (*Phloeostiba* characters; Germany).

- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).
  - Johansen, 1914: 606 (*Phloeostiba*; characters; Denmark).
  - Portevin, 1929: 444 (*Phloeostiba*; characters; France).
  - Scheerpeltz, 1933: 1049 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).
  - Hinton, 1945: 50 (*Phloeonomus*; subgenus *Phloeostiba*; characters).
  - Palm, 1948: 85 (*Phloeonomus*; characters; Sweden; Denmark; Norway; Finland).
  - Tottenham, 1949: 407 (*Phloeonomus*; checklist; Britain).
  - Jarrige, 1950a: 94 (*Phloeonomus*, cited as *Phlaeonomus*; subgenus *Phloeostiba*; characters; France).
  - Horion, 1963: 90 (*Phloeonomus*; subgenus *Phloeostiba*; Transbaical; Scotland; Lapland; France to Poland and Russia; Iberian Peninsula; Sardinia; Italy; Balkans to Greece; Germany; Austria).
  - Lohse, 1964: 46 (*Phloeonomus*; subgenus *Phloeostiba*; characters; central Europe).
  - Smetana, 1964c: 169 (*Phloeonomus*; subgenus *Phloeostiba*; characters).
  - Szujewski, 1968a: 711 (*Phloeonomus*; Poland).
  - Scheerpeltz, 1968a: 11 (*Phloeonomus*; catalog; Austria).
  - Steel, 1970a: 15 (*Phloeostiba*; biological notes).
  - Shibata, 1974: 34 (*Phloeostiba*; Japan).
  - Legner and Moore, 1977: 175 (*Phloeonomus*; found under bark).
  - Pope, 1977: 23 (*Phloeostiba*; Britain).
  - Muona, 1979: 18 (*Phloeonomus*; Finland; Russia; Sweden; Norway; Denmark; Baltic States).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 46 (*Phloeonomus*; catalog; Poland).
  - Hammond, 1980: 139 (*Phloeostiba*; Ireland).
  - Tóth, 1982: 67 (*Phloeonomus*; characters; Hungary).
  - Zanetti, 1987: 244 (*Phloeostiba*; characters; Italy).
  - Ádám, 1987: 137 (*Phloeostiba*; collecting notes; Hungary).
  - Filatova, 1981: 17 (*Phloeonomus*; Russia).
  - Muona and Viramo, 1986: 15 (*Phloeonomus*; Finland).
  - Lucht, 1987: 87 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark).
  - Gusarov, 1989: 5 (*Phloeonomus*; habitat notes; Ukraine).
  - Watanabe, 1990: 114 (*Phloeonomus*; characters; Japan).
  - Silfverberg, 1992: 21 (*Phloeonomus*; Finland; Russia; Sweden; Norway; Denmark; Estonia; Lithuania).
  - Boháč, 1993: 41 (*Phloeostiba*; Slovakia; Czech Republic).
  - Sparacio, 1995: 141 (*Phloeostiba*; characters; summary of distribution; notes; Sicily).
  - Zanetti, 1995: 7 (*Phloeostiba*; Italy).
  - Sparacio, 1995: 141 (*Phloeostiba*; characters; notes; Sicily).
  - Zanetti, 1995: 7 (*Phloeostiba*; Italy).
  - Franzen, 1996: 206 (*Phloeonomus*; collecting notes; Germany).
  - M. Hansen, 1996: 94 (*Phloeostiba*; checklist; Denmark).
  - Ádám, 1996: 238 (*Phloeostiba*; synonym of *flavipes*).
  - Eisinger, 1997: 169 (*Phloeonomus*; collecting notes; Germany).
  - T. Wagner, 1997: 234 (*Phloeonomus*; collecting notes; Germany).
  - Anderson, Nash, and O'Connor, 1997: 15 (*Phloeostiba*; Ireland).
  - Fowles, Alexander, and Key, 1999: 129 (*Phloeostiba*; saproxylic species; status as endangered or threatened species; Britain).
  - Cibulskis, 1999: 35 (*Phloeonomus*; list; Latvia).
  - Ryabukhin, 1999: 19 (*Phloeostiba*; catalog; habitat; distribution; northeastern Russia).
  - Herman, 2001: 21 (*Phloeostiba*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).
- ▲ **DISTRIBUTION:** Iceland, Europe, Russia, Japan.

*flavipes* Linné, 1758: 423 (*Staphylinus*; Type locality: Europa; [**Note:** This name is older than *plana*. Bernhauer and Schubert (1910, 1911, 1912, 1914, 1916, 1926) listed no *flavipes* described by Linné however they cited *flavipes* Fabricius twice; *flavipes* Fabricius, 1793: 527 was listed in *Phloeonomus* (Bernhauer and Schubert, 1910: 58)

and *flavipes* Fabricius, 1775: 268 was cited in *Tachinus* (Bernhauer and Schubert, 1916: 483). Fabricius credited the species to Linné (1767: 685) who attributed it to his earlier description (1758: 423). This confusion must be resolved by examination of the type]).

- Linné, 1760: 233 (*Staphylinus*; characters; Sweden).
- O. Müller, 1764: 23 (*Staphylinus*; characters).
- Linné, 1767: 685 (*Staphylinus*; characters; Europe).
- Füessly, 1775: 21 (*Staphylinus*).
- O. Müller, 1776: 97 (*Staphylinus*; characters).
- Goeze, 1777: 721 (*Staphylinus*; characters).
- Fabricius, 1793: 527 (*Staphylinus*; [**Note:** This reference was cited by Bernhauer and Schubert (1910: 58) as the original description for *flavipes* but Fabricius attributed the species to Linné]; characters; Selandia).
- Fabricius, 1801: 599 (*Staphylinus*; characters).
- Erichson, 1839a: 636 (*Omalium*; [**Note:** Attributed to Fabricius who attributed it to Linné]; characters; Germany).
- Heer, 1839: 175 (*Xylodromus*; [**Note:** Attributed *flavipes* to Fabricius who attributed it to Linné]; synonym of *planus*).
- Erichson, 1840: 886 (*Omalium*; [**Note:** Attributed to Linné]; synonym of *planum*).
- Fairmaire and Laboulbène, 1856: 644 (*Omalium*; [**Note:** Attributed to Linné]; synonym of *planum*).
- Kraatz, 1857d: 986 (*Omalium*; synonym of *planum*).
- Ganglbauer, 1895: 732 (*Phloeonomus*; attributed to Fabricius; synonym of *planus*).
- Luze, 1906: 597 (*Phloeonomus*; synonym of *planus*).
- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; synonym of *planus*).
- Watanabe, 1990: 114 (*Phloeonomus*; synonym of *planus*).
- Ádám, 1996: 238 (*Phloeostiba*; valid name; Hungary).
- Herman, 2001: 21 (*Phloeostiba*; synonym of *plana*).

*bipunctata* Motschulsky, 1860: 545 (*Xylodromus*; Type locality: Pologne).

- Hochhuth, 1862: 105 (*Omalium*; characters; Poland).
- Luze, 1906: 486, 597 (*Phloeonomus*; synonym of *planus*).
- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; synonym of *planus*).
- Watanabe, 1990: 114 (*Phloeonomus*; synonym of *planus*).

*subtilis* Kraatz, 1857, see: *lapponica* Zetterstedt, 1838.

**usambarae** Fauvel, 1904d: 291 (*Omalium*, cited as *Homalium*; subgenus *Phloeostiba*; Type locality: Usambara: Derema, 850 m).

- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Phloeostiba*; catalog).
- Bernhauer, 1942c: 349 (*Phloeonomus*; Cameroon).
- Cameron, 1950g: 8 (*Phloeonomus*; subgenus *Xylostiba*; Belgian Congo).
- Fagel, 1957a: 27 (*Phloeostiba*; Ruanda).

▲ **DISTRIBUTION:** Tanzania, Rwanda, Congo, Cameroon.

### Phyllodrepa

[57 species; Neotropical, Nearctic, Palaearctic, Oriental, and Australian Regions]

*Phyllodrepa* Thomson, 1859: 52 (species included: *floralis*). **TYPE SPECIES:** *Staphylinus floralis* Paykull, fixed by original designation and monotypy.

- Thomson, 1861: 214 (characters).
- Mulsant and Rey, 1880: 230 (characters; key to French species).
- Heyden, 1880: 83 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).
- Fowler, 1888: 417 (notes; group of *Omalium*; key to British species).
- Seidlitz, 1891: 341 (key to some European species).
- Seidlitz, 1891a: 363 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 120 (subgenus of *Omalium*; list of species of Europe and Caucasus).

- Heyden, 1893: 49 (subgenus of *Omalium*; list of species of Siberian region).
- Ganglbauer, 1895: 738 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Luze, 1906: 547 (characters; key to species).
- Heyden, Reitter, and Weise, 1906: 130 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 28 (key to and annotated list of species of Seine Basin, France).
- Reitter, 1909: 192 (characters; key to German species).
- Bernhauer and Schubert, 1910: 46 (world catalog; 46 species).
- Petri, 1912: 52 (list of species of Siebenbürgen).
- Johansen, 1914: 613 (characters; key to Danish species).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 328 (catalog for Palaearctic region).
- Cameron, 1925: 103 (catalog of Indian species).
- Porta, 1926: 20 (characters; key to species of Italy).
- Portevin, 1929: 448 (characters; key to French genera).
- Cameron, 1930: 136 (characters; key to British Indian species).
- Roubal, 1930: 305 (catalog; Slovakia).
- Joy, 1932: 104 (key to British species).
- Scheerpeltz, 1933: 1039 (world catalog supplement).
- Normand, 1935: 357 (list of species of Tunisia).
- Scheerpeltz, 1937b: 187 (list of Bulgarian species).
- Jeannel, 1940: 116 (characters in key; type species: *florale* Paykull).
- Blackwelder, 1944: 102 (checklist of species from Mexico, Central and South America, and the West Indies).
- Kloet and Hincks, 1945: 160 (list of British species).
- Palm, 1948: 66 (characters; Swedish species).
- Tottenham, 1949: 355, 406 (subgenus of *Hapalaraea*; type species: *floralis* Paykull; list of British species).
- Blackwelder, 1952: 307 (type species: *floralis*).
- Hatch, 1957: 76 (subgenus of *Hapalaraea*; characters; key to species of Pacific Northwest).
- Smetana, 1959a: 196 (list of species collected in Albania).
- Horion, 1963: 59 (list of central European species).
- Lohse, 1964: 38 (characters; key to central European species).
- Scheerpeltz, 1968a: 8 (catalog of Austrian species).
- Steel, 1970a: 12 (larval characters; biological notes).
- Tikhomirova, 1973a: 137 (checklist of species of USSR).
- Pope, 1977: 23 (list of British species).
- Topp, 1978: 308 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 30 (catalog; subgenus of *Hapalaraea*; Poland).
- Muona, 1979: 17 (synonym of *Hapalarea*).
- Uhlig, 1979: 242 (some species collected in Germany).
- Uhlig and Vogler, 1981: 84 (list of some species collected in Germany; habitat and collecting notes).
- Zanetti, 1983a: 461 (characters; valid genus).
- Segers, 1986: 19 (checklist of species; Belgium).
- Zanetti, 1987: 168 (characters; habitus; key to species of Italy).
- Lohse and Lucht, 1989: 126 (note).
- Angelini, 1991: 192 (list of species from high elevations of Calabria, Italy).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 40 (subgenus of *Hapalaraea*; list of species of Czech Republic and Slovakia).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- Zanetti, 1995: 6 (list of species of Italy).

- M. Hansen, 1996: 94 (list of Danish species).
  - M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
  - M. Hansen, Palm, Pedersen, and Runge, 1998: 69 (list of species collected in 1997; Denmark).
  - Newton, Thayer, Ashe, and Chandler, 2000: 337 (11 Nearctic species; notes; characters in key).
- Dropephylla* Mulsant and Rey, 1880: 242 (subgenus of *Phyllodrepa*; species included: *lucida*, *linearis*, *heeri*, *scabriuscula*, *brevicornis*, *vilis*, *gracilicornis*). **TYPE SPECIES:** *Omaliium lucida* Erichson, fixed by subsequent designation by Blackwelder, 1952: 136.
- Luze, 1906: 547 (synonym of *Phyllodrepa*).
  - Heyden, Reitter, and Weise, 1906: 130 (subgenus of *Phyllodrepa*; list of species of Europe and Caucasus).
  - Bernhauer and Schubert, 1910: 47 (subgenus of *Phyllodrepa*; catalog).
  - Tottenham, 1939d: 229 (type species designation: *iopterum*).
  - Palm, 1948: 66 (subgenus of *Phyllodrepa*; characters; species of Sweden).
  - Tottenham, 1949: 355, 406 (subgenus of *Hapalaraea*; type species: *ioptera* Stephens = *lucidum* Erichson; list of British species).
  - Lohse, 1964: 39 (subgenus of *Phyllodrepa*; characters; key to species of central Europe).
  - Steel, 1970a: 11 (valid genus; larval characters; biological notes).
  - Tikhomirova, 1973a: 138 (subgenus of *Phyllodrepa*; checklist of species of USSR).
  - Pope, 1977: 23 (list of British species).
  - Ádám, 1985: 251 (cited as subgenus of *Hapalaraea*; list of species from southeast Hungary).
  - Segers, 1986: 19 (cited as valid genus; checklist of species; Belgium).
  - Zanetti, 1987: 171, 181 (subgenus of *Phyllodrepa*; characters; habitus; key to species of Italy).
  - Welch, 1993 (ovariole structure and development).
  - Boháč, 1993: 40 (subgenus of *Hapalaraea*; list of species of Czech Republic and Slovakia).
  - Newton, Thayer, Ashe, and Chandler, 2000: 336 (2 Nearctic species; appears to be distinct group; cited as valid genus; notes; characters in key).
- afghanica** Coiffait, 1982b: 80 (*Phyllodrepa*; subgenus *Phyllodrepa*; Type locality: Afghanistan: Nouristan: Kamdesch, 2200 m).  
▲ **DISTRIBUTION:** Afghanistan.
- akbesiana* Pic, 1898, see: *aspera* Eppelsheim, 1889.
- almorensis** Champion, 1920: 241 (*Omaliium*; Type locality: W. Almora in Kumaon).  
— Cameron, 1930: 137 (*Phyllodrepa*; subgenus *Dropephylla*; characters; India).  
— Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
— Coiffait, 1984: 118 (*Phyllodrepa*; Pakistan).  
▲ **DISTRIBUTION:** India, Pakistan.
- alutacea** Reitter, 1909: 193 (*Phyllodrepa*; subgenus *Hapalaraea*; Type locality: Circassien).  
— Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Hapalaraea*; catalog).  
— Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Hapalaraea*; checklist; Central Asia).  
▲ **DISTRIBUTION:** Caucasus.
- amanni** Bernhauer, 1940b: 624 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Ötztal in Tirol, Ochsegarten, 1557 m).  
— Horion, 1963: 67 (*Phyllodrepa*; subgenus *Dropephylla*; cited as *ammani*; Austria).  
— Lohse, 1964: 40 (*Phyllodrepa*; subgenus *Dropephylla*; cited as *ammani*; characters; central Europe).  
— Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dropephylla*; cited as *ammani*; checklist; Tirol).  
— Zanetti, 1987: 186 (*Phyllodrepa*; subgenus *Dropephylla*; cited as *ammani*; characters; Italy).  
— Lucht, 1987: 87 (*Phyllodrepa*; checklist; Austria).  
— Zanetti, 1995: 6 (*Phyllodrepa*; cited as *ammani*; Italy).  
▲ **DISTRIBUTION:** Austria, Italy.
- angustata** Mäklin, 1878: 28 [= 1878a: 304] (*Omaliium*, cited as *Homaliium*; Type locality: Mesenkin).  
— J. Sahlberg, 1880: 111 (*Phyllodrepa*; characters; Siberia).  
— Mäklin, 1881: 43 (*Omaliium*, cited as *Homaliium*; characters; Mesenkin, lat. bor. 71°20').



- J. Sahlberg, 1897: 365 (*Phyllodrepa*; Siberia).
- Luze, 1906: 555 (*Phyllodrepa*; characters; Arctic Siberia).
- Poppius, 1909: 4 (*Phyllodrepa*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Munster, 1925: 5 (*Phyllodrepa*; notes; Novaya Zemlya).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Ryabukhin, 1999: 16 (*Hapalaraea*; subgenus *Phyllodrepa*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia.

*obscuricornis* J. Sahlberg, 1897: 365 (*Phyllodrepa*; variety of *angustata*; Type locality: Novaja Semlia ad Maly Karmakuli).

- Luze, 1906: 491, 555 (*Phyllodrepa*; aberration of *angustata*).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *angustata*).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; variety of *angustata*).

*obscurata* Luze, 1906: 491, 555 (*Phyllodrepa*; aberration of *angustata*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; no locality cited).

*apicalis* Bernhauer, 1939, see: *Stenomaliium*.

*armena* Khnzorian, 1959, see: *Dialycera*.

**aspera** Eppelsheim, 1889: 183 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; Type locality: Syrien).

- Luze, 1906: 485, 581 (*Dialycera*; characters; Syria).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Dialycera*; catalog).
- Khnzorian, 1959: 68 (*Phyllodrepa*; subgenus *Dialycera*; characters).

▲ **DISTRIBUTION:** Syria.

*akbesiana* Pic, 1898: 91 (*Omalium*, cited as *Homalium*; Type locality: Akbès dans la Haute Syrie).

- Luze, 1906: 485, 581 (*Omalium*; synonym of *asperum*).
- Bernhauer and Schubert, 1910: 50 (*Phyllodrepa*; synonym of *aspera*).

**atra** Casey, 1894: 420 (*Omalium*; [**preoccupied**]; Type locality: California: Santa Cruz Co.).

- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Herman, 2001: 39 (*Phyllodrepa*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** USA.

**atricapilla** Bernhauer, 1903b: 191 (*Phyllodrepa*, cited as *Phylodrepa*; Type locality: Central Altai).

- Luze, 1906: 565 (*Phyllodrepa*; characters; Altai).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Pototskaia, 1967: 21 (*Hapalaraea*; larval characters).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dropephylla*; checklist; Altai).

▲ **DISTRIBUTION:** Altai region.

**baicalensis** Bernhauer, 1903c: 591 (*Phloeonomus*; Type locality: Baikalsee).

- Luze, 1906: 485, 562 (*Phyllodrepa*; characters; eastern Siberia).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Palm, 1948: 72 (*Phyllodrepa*; characters; Sweden; Norway).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Phyllodrepa*; checklist; northern Europe; eastern Siberia).

▲ **DISTRIBUTION:** Norway, Sweden, Russia.

**beieri** Scheerpeltz, 1958c: 387 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: bei Nisista in den Xerovuni im südlichen Epirus, etwa 800 m Seehöhe).

▲ **DISTRIBUTION:** Greece.

**bolsonensis** Scheerpeltz, 1972: 50 (*Phyllodrepa*; subgenus *Phyllodrepa*; Type locality: Argentinien: Rio Negro, El Bolson, Vorberg des Mt. Piltriquitron, 370 m).

▲ **DISTRIBUTION:** Argentina.

- bonariensis** Bernhauer, 1912d: 29 (*Phyllodrepa*; Type locality: Argentinien: Prov. Buenos Aires).  
 — Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 ▲ **DISTRIBUTION:** Argentina.
- brevicornis* Erichson, 1840, see: *vilis* Erichson, 1840.
- brunnea* Paykull, 1789, see: *melanocephala* Fabricius, 1787.
- cacti** Schwarz, 1899: 9 (*Omalium*; subgenus *Phyllodrepa*; Type locality: Tucson, Arizona).  
 — Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 — Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Dropephylla*).  
 ▲ **DISTRIBUTION:** USA.
- caseyi** Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; replacement name for *pacifica* Casey).  
 — Hatch, 1957: 76 (*Hapalaraea* subgenus *Phyllodrepa*; characters; British Columbia; Oregon).  
 ▲ **DISTRIBUTION:** USA.
- pacifica* Casey, 1894: 421 (*Omalium*; [preoccupied]; Type locality: California: Siskiyou Co.).  
 — Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *caseyi*).
- caucasica** Kolenati, 1846: 28 (*Omalium*; Type locality: Caucasus et trans Caucasus).  
 — Hochhuth, 1849: 205 (*Omalium*; characters; Caucasus).  
 — Luze, 1906: 568 (*Phyllodrepa*; characters; Caucasus; Turkestan; Asia Minor).  
 — Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 — Pototskaia, 1967: 21 (*Hapalaraea*; larval characters).  
 — Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Drepophylla*; checklist; Asia Minor; Central Asia).  
 ▲ **DISTRIBUTION:** Caucasus, Turkestan, Turkey.
- clavigera** Luze, 1906: 566 (*Phyllodrepa*; Type locality: Nord-Finland: Kittilä; Mittle-Finland, Jisalmi).  
 — Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 — Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 — Y. Kangas, 1937 (*Phyllodrepa*; natural history).  
 — Palm, 1948: 73 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Sweden; Finland).  
 — Silfverberg, 1992: 21 (*Hapalaraea*; Finland; Sweden; Norway).  
 ▲ **DISTRIBUTION:** Finland, Sweden, Norway.
- crassicornis* A. Matthews, 1863, see: *salicis* Gyllenhal, 1810.
- crassicornis* J. Sahlberg, 1876, see: *sahlbergi* Luze, 1906.
- cribripennis** Fauvel, 1878: 88 [= 1878a: 8] (*Omalium*, cited as *Homalium*; Type locality: Daya; Bou-Saada; Caucase).  
 — Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Algeria).  
 — Eppelsheim, 1892: 346 (*Omalium*; Turkestan).  
 — Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Algeria).  
 — Luze, 1906: 558 (*Phyllodrepa*; characters; notes; Algeria).  
 — Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 ▲ **DISTRIBUTION:** Algeria, Uzbekistan, Caucasus.
- curticollis** Eppelsheim, 1889: 182 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; Type locality: Beyrut, Syrien).  
 — Luze, 1906: 573 (*Phyllodrepa*; characters; Lebanon).  
 — Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 ▲ **DISTRIBUTION:** Lebanon.
- devillei** Bernhauer, 1902d: 705 (*Phyllodrepa*; cited as *Phylodrepa*; Type locality: Alpes maritimes, Mont Macaron).  
 — Luze, 1906: 566 (*Phyllodrepa*; characters; Maritime Alps).  
 — Luze, 1906: 563 (*Phyllodrepa*; characters; cited as *gobanzi*; Sardinia [**Note:** Misidentification of *devillei*, according to Zanetti, 1987: 191]).

- Bernhauer and Schubert, 1910: 48 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Zanetti, 1987: 189 (*Phyllo drepa*; subgenus *Dropephylla*; characters; Italy).
- Whitehead, 1990b: 190 (*Dropephylla*; collecting notes; Wales).
- Zanetti, 1995: 6 (*Phyllo drepa*; Italy).
- Owen, 1997: 302 (*Dropephylla*; Britain).
- Fowles, Alexander, and Key, 1999: 129 (*Dropephylla*; saproxylic species; status as endangered or threatened species; Britain).
- Owen, 2000: 251 (*Dropephylla*; pitfall trap collections from underground at roots of trees; Britain).

▲ **DISTRIBUTION:** Italy, France, Britain.

*grandiloqua* Luze, 1910a: 394 (*Phyllo drepa*; Type locality: Schottland, Nordengland).

- Scheerpeltz, 1933: 1041 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Steel, 1970a: 11 (*Dropephylla*; biological notes).
- Pope, 1977: 23 (*Dropephylla*; Britain).
- Hammond, 1980: 137 (*Dropephylla*; notes; Ireland).
- Zanetti, 1987: 189 (*Phyllo drepa*; synonym of *devillei*).
- Luff, 1996: 30 (*Dropephylla*; collecting notes; Isle of Man).
- Owen, 1997: 302 (*Dropephylla*; synonym of *devillei*).

*propinqua* Bernhauer, 1943a: 172 (*Phyllo drepa*; subgenus *Dropephylla*; Type locality: Schottland: Oban).

- Pope, 1977: 23 (*Dropephylla*; synonym of *grandiloqua*).

**elegans** Kraatz, 1857d: 989 (*Omalium*; Type locality: Grafschaft Glatz).

- Redtenbacher, 1857: 994 (*Omalium*; characters).
- Redtenbacher, 1874: 278 (*Omalium*; characters).
- Ganglbauer, 1895: 741 (*Phyllo drepa*; subgenus *Dropephylla*; characters; Europe).
- Luze, 1906: 492, 564 (*Phyllo drepa*; synonym of *linearis*).
- Bernhauer and Schubert, 1910: 48 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Scheerpeltz, 1933: 1041 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Horion, 1963: 67 (*Phyllo drepa*; species unclear).
- Horion, 1965: 176 (*Phyllo drepa*; discussed as doubtful: Grafschaft Glatz, Galtzer Schneeberg, Biskiden).
- Lohse, 1964: 40 (*Phyllo drepa*; subgenus *Dropephylla*; characters; only holotype from Glatz; perhaps a specimen of *linearis*; central Europe).
- Lucht, 1987: 87 (*Phyllo drepa*; in checklist).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; Czech Republic).

▲ **DISTRIBUTION:** Poland, Czech Republic.

**flavipennis** Cameron, 1930: 138 (*Phyllo drepa*; subgenus *Dropephylla*; Type locality: Dehra Dun).

- Scheerpeltz, 1933: 1041 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).

▲ **DISTRIBUTION:** India.

**floralis** Paykull, 1789: 67 (*Staphylinus*; Type locality: Suecia).

- Fabricius, 1793: 530 (*Staphylinus*; characters).
- Panzer, 1795: 358 (*Staphylinus*; characters; Germany).
- Paykull, 1800: 406 (*Staphylinus*; characters; Sweden).
- Fabricius, 1801: 604 (*Stenus*; characters; France).
- Turtun, 1802: 514 (*Staphylinus*; characters; France).
- Gravenhorst, 1802: 118 (*Omalium*; characters).
- Latreille, 1804: 373 (*Omalium*; characters; France; Germany; Sweden).
- Gravenhorst, 1806: 210 (*Omalium*; characters).
- Olivier, 1811: 477 (*Omalium*; characters; France; Germany; Sweden).
- Curtis, 1829: 29 (*Omalium*; catalog; Britain).
- Mannerheim, 1830: 54 (*Anthobium*; Russia).
- Mannerheim, 1831: 468 (*Anthobium*; Russia).

- Stephens, 1834: 350 (*Omalium*; characters; England).
- Erichson, 1839a: 633 (*Omalium*; characters; Germany).
- Heer, 1839: 177 (*Omalium*; characters; Switzerland).
- Stephens, 1839: 429 (*Omalium*; characters; England).
- Erichson, 1840: 879 (*Omalium*; characters; Europe).
- P. Lucas, 1846: 127 (*Anthobium*; notes; Algeria).
- Hochhuth, 1849: 204 (*Omalium*; characters).
- Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).
- Kiesenwetter, 1851a: 435 (*Omalium*; France).
- Hardy, 1851: 61 (*Omalium*; notes; England).
- Thomson, 1857a: 225 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 642 (*Omalium*; characters; France).
- Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 996 (*Omalium*; characters; Germany).
- Thomson, 1859: 52 (type species of *Phyllodrepa*).
- Thomson, 1861: 214 (*Phyllodrepa*; characters; Scandinavia).
- Hochhuth, 1862: 108 (*Omalium*; Russia).
- Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 46 cited *rufipes* Fauvel as a synonym of *floralis*; Fauvel did not describe the species as new, he attributed it to Fourcroy. I have assumed that the species cited by Fourcroy referred to the *rufipes* of Linné a species that is now in *Tachinus*]; characters; France; Algeria).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- Fauvel, 1878d: 210 [= 1878e: 46] (*Omalium*, cited as *Homalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 46 cited *rufipes* Fauvel as a synonym of *floralis*; Fauvel did not describe the species as new, he attributed it to Fourcroy. I have assumed that the species cited by Fourcroy referred to the *rufipes* of Linné and species that is now in *Tachinus*]; characters; Lake Superior; Michigan; Pennsylvania).
- Mulsant and Rey, 1880: 234 (*Phyllodrepa*; characters; France).
- Fowler, 1888: 418 (*Omalium*, cited as *Homalium*; cited as *rufipes* Fourcroy; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; characters; Europe; Algeria; Caucasus; North America).
- Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Algeria).
- Luze, 1906: 560 (*Phyllodrepa*; characters; northern and central Europe; Caucasus; Asia Minor; Algeria).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 192 (*Phyllodrepa*; characters; Germany).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Blatchley, 1910: 480 (*Omalium*, cited as *Homalium*; characters; Indiana).
- Johansen, 1914: 614 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Denmark).
- Portevin, 1929: 448 (*Phyllodrepa*; cited as *rufipes*; characters; France).
- Portevin, 1929: 452 (*Anthobium*; characters; France).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- C. Koch, 1940: 373 (*Phyllodrepa*; Spain).
- Palm, 1948: 71 (*Phyllodrepa*; characters; Sweden; Denmark; Norway; Finland).
- Jeannel and Jarrige, 1949: 313 (*Phyllodrepa*; cave species; Algeria).
- Hatch, 1957: 76 (*Hapalaraea* subgenus *Phyllodrepa*; characters; British Columbia; Idaho; Washington; Oregon).
- Larsson and Gígja, 1959: 58 (*Phyllodrepa*; collecting notes; Iceland).
- Horion, 1963: 65 (*Phyllodrepa*; subgenus *Phyllodrepa*; Algeria; Turkey; Caucasus; Lapland to Mediterranean region; Germany; Austria).
- Lohse, 1964: 38 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).
- Smetana, 1964d: 53 (*Phyllodrepa*; subgenus *Phyllodrepa*; Czechoslovakia).
- Szujeci, 1968a: 711 (*Hapalaraea*; Poland).
- Steel, 1970a: 12 (*Phyllodrepa*; notes on classification; larval characters; biological notes).

- Pope, 1977: 23 (*Phyllodrepa*; Britain).
  - Hammond, 1980: 137 (*Phyllodrepa*; Ireland).
  - Tóth, 1982: 53 (*Hapalaraea*; characters; Hungary).
  - Zanetti, 1987: 180 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Italy).
  - Ádám, 1987: 137 (*Phyllodrepa*; collecting notes; Hungary).
  - Lucht, 1987: 86 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
  - Dettner and Reissenweber, 1991 (*Phyllodrepa*; defensive secretions: chemistry and systematics).
  - Boháč, 1993: 40 (*Hapalaraea*; subgenus *Phyllodrepa*; Czech Republic; Slovakia).
  - Sparacio, 1995: 140 (*Phyllodrepa*; characters; notes; Sicily).
  - Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
  - Downie and Arnett, 1996: 436 (*Hapalaraea*; characters; USA).
  - Zanetti and Sabella, 1998: 28 (*Phyllodrepa*; Sicily).
  - Cibulskis, 1999: 34 (*Hapalaraea*; list; Latvia).
  - ▲ **DISTRIBUTION:** Iceland, Europe, Russia, Turkey, Algeria, Caucasus, Canada, USA.
- viburni* Gravenhorst, 1802: 117 (*Omalium*; Type locality: Not cited, but presumably Brunsvigae).
- Latreille, 1804: 373 (*Omalium*; characters; Germany).
  - Gravenhorst, 1806: 210 (*Omalium*; characters).
  - Gyllenhal, 1810: 224 (*Omalium*; characters; Sweden).
  - Olivier, 1811: 477 (*Omalium*; characters; Germany).
  - Gyllenhal, 1827: 467 (*Omalium*).
  - Mannerheim, 1830: 54 (*Anthobium*; Finland; Sweden; Russia).
  - Mannerheim, 1831: 468 (*Anthobium*; Finland; Sweden; Russia).
  - Stephens, 1834: 351 (*Omalium*; characters; England).
  - C. Sahlberg, 1830: 285 (*Omalium*; characters; Finland).
  - Runde, 1835: 23 (*Anthobium*; characters; Germany).
  - Lacordaire, 1835: 472 (*Anthobium*; characters; France).
  - Erichson, 1839a: 633 (*Omalium*; synonym of *floralis*).
  - Heer, 1839: 177 (*Omalium*; synonym of *florale*).
  - Stephens, 1839: 429 (*Omalium*; variety of *florale*; characters; England).
  - Erichson, 1840: 879 (*Omalium*; synonym of *florale*).
  - Laporte, 1840: 192 (*Anthobium*; characters; France).
  - Hardy, 1851: 61 (*Omalium*; synonym of *florale*).
  - Thomson, 1857a: 225 (*Omalium*; synonym of *florale*).
  - Fairmaire and Laboulbène, 1856: 642 (*Omalium*; synonym of *florale*).
  - Kraatz, 1857d: 996 (*Omalium*; synonym of *florale*).
  - Thomson, 1861: 214 (*Phyllodrepa*; synonym of *floralis*).
  - Mulsant and Rey, 1880: 235 (*Phyllodrepa*; synonym of *floralis*).
  - Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *floralis*).
  - Luze, 1906: 560 (*Phyllodrepa*; synonym of *floralis*).
  - Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *floralis*).
- ruficornis* Stephens, 1834: 352 (*Omalium*; Type locality: Suffolk; Norfolk; near Bristol).
- Stephens, 1839: 429 (*Omalium*; characters; England).
  - G. Waterhouse, 1858: 32 (*Omalium*; synonym of *florale*).
  - Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; synonym of *rufipes*).
  - Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *floralis*).
  - Luze, 1906: 560 (*Phyllodrepa*; synonym of *floralis*).
  - Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *floralis*).
- fahraei* Zetterstedt, 1838: 52 (*Omalium*; Type locality: Norvegiae Dowre).
- Erichson, 1840: 888 (*Omalium*; characters; Lapland).
  - Thomson, 1857a: 225 (*Omalium*; synonym of *florale*).
  - Thomson, 1861: 214 (*Phyllodrepa*; synonym of *floralis*).
  - Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; synonym of *rufipes*).
  - Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *floralis*).

- Luze, 1906: 560 (*Phyllodrepa*; synonym of *floralis*).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *floralis*).

*maculicornis* Heer, 1839: 178 (*Omalium*; Type locality: monts Jura).

- Redtenbacher, 1857: 253 (*Omalium*; characters; Austria).
- Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; synonym of *rufipes*).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Mulsant and Rey, 1880: 235 (*Phyllodrepa*; synonym of *floralis*).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *floralis*).
- Luze, 1906: 560 (*Phyllodrepa*; synonym of *floralis*).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *floralis*).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; synonym of *floralis*).
- Zanetti, 1987: 180 (*Phyllodrepa*; synonym of *floralis*).

*fahraei* Zetterstedt, 1838, see: *floralis* Paykull, 1789.

*gagliardii* C. Koch, 1937, see: *ioptera* Stephens, 1832.

**gobanzi** Ganglbauer, 1904: 650 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Insel Meleda, Dalmatia).

- Luze, 1906: 563 (*Phyllodrepa*; characters; Meleda Island; Greece; Sardinia [**Note:** Misidentification of *devillei*, according to Zanetti, 1987: 191]).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Zanetti, 1987: 191 (*Phyllodrepa*; subgenus *Dropephylla*; characters; possibly in Italy).

▲ **DISTRIBUTION:** Croatia, Greece.

**gracilicornis** Fairmaire and Laboulbène, 1856: 642 (*Omalium*; Type locality: Fontainebleau).

- Kraatz, 1857d: 993 (*Omalium*; characters).
- Fauvel, 1871a: 90 [= 1872: 64] (*Omalium*, cited as *Homalium*; characters; France; Britain).
- Mulsant and Rey, 1880: 257 (*Phyllodrepa*; subgenus *Dropephylla*; characters; France).
- Fowler, 1888: 420 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; subgenus *Dropephylla*; characters; western middle Europe).
- Luze, 1906: 571 (*Phyllodrepa*; characters; western central Europe).
- Reitter, 1909: 193 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Germany).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- J. Sahlberg, 1913: 58 (*Phyllodrepa*; Anatolia).
- Johansen, 1914: 617 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Denmark).
- Portevin, 1929: 449 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Palm, 1948: 74 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Sweden; Denmark).
- Horion, 1963: 68 (*Phyllodrepa*; subgenus *Dropephylla*; Britain; Denmark; Sweden; Holland; France; Switzerland; Spain; Poland; Germany; Austria).
- Lohse, 1964: 40 (*Phyllodrepa*; subgenus *Dropephylla*; characters; central Europe).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).
- Pope, 1977: 23 (*Dropephylla*; Britain).
- Hammond, 1980: 137 (*Dropephylla*; notes; Ireland).
- Tóth, 1982: 56 (*Hapalaraea*; characters).
- Zanetti, 1987: 188 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Austria; Switzerland; Benelux; Denmark).
- Allen, 1988b: 210 (*Dropephylla*; collecting notes; Britain).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; Czech Republic).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Morgan, 1996: 60 (*Dropephylla*; Britain).
- M. Hansen, 1996: 94 (*Phyllodrepa*).
- Assing, Frisch, Kahlen, et al., 1998: 122 (*Phyllodrepa*; note).

▲ **DISTRIBUTION:** Europe, Turkey.

*hiemalis* Fuss, 1868: 355 (*Omalium*; Type locality: Cleve, Thiergarten).

- Fauvel, 1871a: 93 [= 1872: 67] (*Omalium*, cited as *Homalium*; characters; France).
- Fauvel, 1873b: 114 [= 1873c: 7] (*Omalium*, cited as *Homalium*; synonym of *gracilicorne*).

- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; synonym of *gracilicornis*).
- Luze, 1906: 571 (*Phyllodrepa*; synonym of *gracilicornis*).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; synonym of *gracilicornis*).
- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; synonym of *gracilicornis*).

**graeca** Bernhauer, 1929g: 178 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Griechenland: Parnass).

- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).

▲ **DISTRIBUTION:** Greece.

*grandiloqua* Luze, 1910, see: *devellei* Bernhauer, 1902.

**heeri** Heer, 1841: 571 (*Phloeonomus*; cited as *heerii*; Type locality: Salève, Pittous 4200').

- Fauvel, 1871a: 90 [= 1872: 65] (*Omalium*, cited as *Homalium*; cited as *heeri*; synonym of *vile*).
- Mulsant and Rey, 1880: 248 (*Phyllodrepa*; subgenus *Dropephylla*; cited as *heeri*; characters; France).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; cited as *heeri*; synonym of *vilis*).
- Luze, 1906: 572 (*Phyllodrepa*; cited as *heeri*; synonym of *vilis*).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; cited as *heeri*; synonym of *vilis*).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; cited as *heeri*; synonym of *vilis*).
- Pope, 1977: 23 (*Dropephylla*; cited as *heeri*; cited as valid species; Britain).
- Fowles, Alexander, and Key, 1999: 129 (*Dropephylla*; saproxylic species; status as endangered or threatened species; Britain).

▲ **DISTRIBUTION:** France, Britain.

*hiemalis* Fuss, 1868, see: *gracilicornis* Fairmaire and Laboulbène, 1856.

*himalayica* Cameron, 1924, see: *Phloeonomus*.

**hispanica** Bernhauer, 1929g: 177 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Nordspanien: Caboalles, Cancas).

- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).

▲ **DISTRIBUTION:** Spain.

**humleri** Bernhauer, 1936g: 303 (*Phyllodrepa*; Type locality: Bosnien: Hranisava).

▲ **DISTRIBUTION:** Bosnia Hercegovina.

**ioptera** Stephens, 1832: 349 (*Omalium*; Type locality: Hertford; London; New Forest; Devonshire; Suffolk).

- Paykull, 1789: 64 (*Staphylinus*; variation  $\beta$  of *brunneus* is described; cited as synonym of *ioptera* by Bernhauer and Schubert, 1910: 48; Sweden).
- Gravenhorst, 1806: 206 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 48 cited *brunnea* variety 1 Gravenhorst as a synonym of *ioptera*; there is no available name]; characters).
- Gyllenhal, 1810: 227 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 48 cited *brunnea* variety b Gyllenhal as a synonym of *ioptera*; there is no available name]; characters; Sweden).
- Stephens, 1834: 349 (*Omalium*; characters; England).
- Stephens, 1839: 428 (*Omalium*; characters; England).
- Hardy, 1851: 58 (*Phloeonomus*; notes; England).
- Fauvel, 1871a: 90 [= 1872: 64] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Austria).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 223 (*Phyllodrepa*; Finland).
- Fauvel, 1878: 88 [= 1878a: 8] (*Omalium*, cited as *Homalium*; Algeria).
- Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Algeria).
- Fowler, 1888: 420 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 741 (*Phyllodrepa*; subgenus *Dropephylla*; characters; north and middle Europe; Italy).
- Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Algeria).

- Luze, 1906: 569 (*Phyllodrepa*; characters; northern and central Europe).
- Reitter, 1909: 193 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Germany).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Johansen, 1914: 616 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Denmark).
- Portevin, 1929: 449 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Roubal, 1933a: 83 (*Phyllodrepa*; characters; notes).
- Tottenham, 1939d: 229 (type species of *Dropephylla*).
- Palm, 1948: 73 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 68 (*Phyllodrepa*; subgenus *Dropephylla*; Britain; Denmark; Norway; Sweden; Finland; Russia; Poland; Czech Republic; Romania; Serbia; Bosnia Hercegovina; Macedonia; Dalmatia; Italy; Switzerland; Belgium; Holland; Germany; Austria).
- Lohse, 1964: 39 (*Phyllodrepa*; subgenus *Dropephylla*; characters; central Europe).
- Steel, 1970a: 11 (*Dropephylla*; biological notes).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).
- Pope, 1977: 23 (*Dropephylla*; Britain).
- Tóth, 1982: 55 (*Hapalaraea*; characters; Hungary).
- Zanetti, 1987: 193 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- M. Hansen, 1996: 94 (*Phyllodrepa*).
- Cibulskis, 1999: 34 (*Hapalaraea*; list; Latvia).
- Owen, 1999b: 61 (*Dropephylla*; captured underground at roots of old trees; Britain).
- Fowles, Alexander, and Key, 1999: 129 (*Dropephylla*; saproxylic species; status as endangered or threatened species; Britain).
- Owen, 2000: 251 (*Dropephylla*; pitfall trap collections from underground at roots of trees; Britain).

▲ **DISTRIBUTION:** Europe, Algeria.

- lucida* Erichson, 1839a: 634 (*Omalium*; Type locality: Mark Brandenburg).
- Heer, 1839: 185 (*Phloeonomus*; characters; Switzerland).
  - Erichson, 1840: 881 (*Omalium*; characters; Germany; France; Sweden).
  - Redtenbacher, 1849: 751 (*Omalium*; characters; Austria).
  - Thomson, 1857a: 226 (*Omalium*; characters).
  - Fairmaire and Laboulbène, 1856: 643 (*Omalium*; characters; France).
  - Redtenbacher, 1857: 250 (*Omalium*; characters; Austria).
  - Kraatz, 1857d: 995 (*Omalium*; characters; Germany).
  - Thomson, 1861: 215 (*Phyllodrepa*; characters; Scandinavia).
  - Fauvel, 1871a: 90 [= 1872: 64] (*Omalium*, cited as *Homalium*; synonym of *ioptera*).
  - Redtenbacher, 1874: 274 (*Omalium*; characters; Austria).
  - Mulsant and Rey, 1880: 242 (*Phyllodrepa*; subgenus *Dropephylla*; characters; France).
  - Ganglbauer, 1895: 741 (*Phyllodrepa*; synonym of *ioptera*).
  - Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; synonym of *ioptera*).
  - Scheerpeltz, 1933: 1041 (*Phyllodrepa*; synonym of *ioptera*).
  - Zanetti, 1987: 192 (*Phyllodrepa*; synonym of *ioptera*).
- medioglabra* Roubal, 1933a: 85 (*Phyllodrepa*; form of *ioptera*; Type locality: Slovakia: Levice, B. Bystrica, Gemer).
- gagliardii* C. Koch, 1937: 84 (*Phyllodrepa*; subgenus *Dropephylla*; subspecies of *ioptera*; Type locality: Assergi, Gran Sasso; Mte. Giovi, Firenze).
- Zanetti, 1986: 95 (*Phyllodrepa*; synonym of *ioptera*).
  - Zanetti, 1987: 193 (*Phyllodrepa*; synonym of *ioptera*).
- melanocollis* Roelofs, 1945: 197 (*Phyllodrepa*; aberration of *ioptera*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Berchem [Anvers] sur Aubépine).



*jailaensis* Bernhauer, 1915, see: *palpalis* Luze, 1906.

**kashmirica** Cameron, 1941: 57 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Kashmir: Gulmarg, alt. 8000–9000 feet; Khelanmarg, alt. 10,000 feet).

▲ **DISTRIBUTION:** India.

**klapperichi** Coiffait, 1982b: 81 (*Phyllodrepa*; subgenus *Phyllodrepa*; Type locality: Afghanistan: Nouristan: Kamdesch, 2200 m).

▲ **DISTRIBUTION:** Afghanistan.

**linderi** Scheerpeltz, 1966c: 248 (*Phyllodrepa*; subgenus *Phyllodrepa*; Type locality: Umgebung von Freiburg).

▲ **DISTRIBUTION:** Switzerland.

**linearis** Zetterstedt, 1828: 53 (*Omalium*; Type locality: Lapponia Tornensis; Juckasjervi).

- Zetterstedt, 1838: 53 (*Omalium*; characters; habitat; Lapland).
- Erichson, 1839a: 636 (*Omalium*; characters; Germany).
- Erichson, 1840: 884 (*Omalium*; characters; Lapland; Germany).
- Redtenbacher, 1849: 829 (*Omalium*; characters).
- Thomson, 1857a: 227 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 644 (*Omalium*; characters; France).
- Redtenbacher, 1857: 253 (*Omalium*; characters; Germany).
- Kraatz, 1857d: 990 (*Omalium*; characters; Germany).
- Thomson, 1861: 216 (*Phyllodrepa*; characters; Scandinavia).
- Fauvel, 1871a: 92 [= 1872: 66] (*Omalium*, cited as *Homalium*; characters; France; Germany; Lapland; Scandinavia; Austria).
- Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; Russia).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 223 (*Phyllodrepa*; Finland).
- Mulsant and Rey, 1880: 245 (*Phyllodrepa*; subgenus *Dropephylla*; characters; France).
- Ganglbauer, 1895: 741 (*Phyllodrepa*; subgenus *Dropephylla*; characters; north and middle Europe).
- Luze, 1906: 564 (*Phyllodrepa*; characters; northern and central Europe).
- Reitter, 1909: 193 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Germany).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Portevin, 1929: 449 (*Phyllodrepa*; characters; France).
- Donisthorpe, 1930: 143 (*Phyllodrepa*; characters; Britain).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Palm, 1948: 73 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Sweden; Norway; Finland).
- Horion, 1963: 66 (*Phyllodrepa*; subgenus *Dropephylla*; Dalmatia; Greece; Britain; Norway; Sweden; Finland; Russia; France; Italy; Switzerland; Romania; Hungary; Slovakia; Czech Republic; Germany; Austria).
- Lohse, 1964: 40 (*Phyllodrepa*; subgenus *Dropephylla*; characters; central Europe).
- Smetana, 1964c: 162 (*Phyllodrepa*; subgenus *Dropephylla*; Czechoslovakia).
- Tóth, 1982: 56 (*Hapalaraea*; characters).
- Zanetti, 1987: 194 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Olberg and Andersen, 2000: 223 (*Hapalaraea*; attracted to trunk-window traps baited with *Fomes fomentarius* and *Phellinus* spp.; Norway).

▲ **DISTRIBUTION:** Europe, Russia.

**scabriuscula** Kraatz, 1857d: 988 (*Omalium*; Type locality: Oberbaiern; Grafschaft Glatz).

- Redtenbacher, 1857: 994 (*Omalium*; characters; Germany).
- Fauvel, 1865a: 318 [= 1865b: 68] (*Omalium*; habitat; France).
- Fauvel, 1871a: 92 [= 1872: 66] (*Omalium*, cited as *Homalium*; characters; France; Germany).

- Redtenbacher, 1874: 278 (*Omalium*; characters).
- Mulsant and Rey, 1880: 249 (*Phyllodrepa*; subgenus *Dropephylla*; characters; France).
- Ganglbauer, 1895: 741 (*Phyllodrepa*; subgenus *Dropephylla*; characters; middle Europe; Dalmatia; Greece).
- Luze, 1906: 492, 564 (*Phyllodrepa*; synonym of *linearis*).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; variety of *linearis*).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; variety of *linearis*).
- Palm, 1948: 73 (*Phyllodrepa*; subgenus *Dropephylla*; variety of *linearis*; characters; Sweden).
- Lohse, 1964: 40 (*Phyllodrepa*; subgenus *Dropephylla*; cited as valid species; characters; central Europe).
- Tóth, 1982: 56 (*Hapalaraea*; characters).
- Lucht, 1987: 87 (*Phyllodrepa*; cited as valid species; checklist; Poland; Austria).
- Zanetti, 1987: 194 (*Phyllodrepa*; synonym of *linearis*).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; [**Note:** I assume the synonymy of this species with *linearis* was overlooked]; Slovakia; Czech Republic).

**longula** Mäklin, 1852: 323 (*Omalium*; Type locality: insula Sitkha).

- Fauvel, 1878d: 212 [= 1878e: 48] (*Omalium*, cited as *Homalium*; characters; Alaska; California).
- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Van Dyke, 1924: 16 (*Omalium*; Alaska).
- Moore and Legner, 1975: 193 (*Hapalaraea*).
- Furniss, 1995: 180 (*Hapalaraea*; prey on larval *Dendroctonus punctatus*; correct placement of species under investigation by M. Thayer; Alaska; Montana; Alberta; British Columbia; Northwest Territories).
- Newton, Thayer, Ashe, and Chandler, 2000: 336 (*Dropephylla*).

▲ **DISTRIBUTION:** USA, Canada.

*lucida* Erichson, 1839, see: *ioptera* Stephens, 1832.

*luigionii* Bernhauer, 1929, see: *palpalis* Luze, 1906.

*luteicornis* Roubal, 1927 [**Note: Nomen nudum**], see: *nigra* Gravenhorst, 1806.

**luzei** Hubenthal, 1911a: 185 (*Phyllodrepa*; Type locality: Trencsin, Ungarn).

- Roubal, 1930: 306 (*Phyllodrepa*; characters; Slovakia).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Lohse, 1964: 39 (*Phyllodrepa*; subgenus *Dropephylla*; characters; central Europe).
- Tóth, 1982: 55 (*Hapalaraea*; characters).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Czechoslovakia).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Dropephylla*; Slovakia).

▲ **DISTRIBUTION:** Slovakia.

*maculicornis* Heer, 1839, see: *floralis* Paykull, 1789.

*medioglabra* Roubal, 1933, see: *ioptera* Stephens, 1832.

**melanocephala** Fabricius, 1787: 222 (*Staphylinus*; [**Note: preoccupied**; This species is the type species of *Anthobium* according Blackwelder, 1952: 55–56, who used the *melanocephalum* cited by Marsham, 1802 on page 523 rather than that cited on page 127; Tottenham, 1939d: 225 cited as type species Marsham's *melanocephalum* but did not mention which of Marsham's usages but in 1949: 357 referred to the species cited on Marsham's page 127. The *melanocephalum* that Blackwelder cited as type species of *Anthobium* is in *Phyllodrepa*; the one that Tottenham cited is in *Anthobium* as a misidentification of *atrocephalum*]; Type locality: Suecia).

- Paykull, 1789: 59 (*Staphylinus*; redescription; Sweden).
- Gmelin, 1790: 2031 (*Staphylinus*; characters).
- Fabricius, 1793: 529 (*Staphylinus*; characters).
- Panzer, 1795: 357 (*Staphylinus*; characters; Germany).
- Cederhjelm, 1798: 119 (*Staphylinus*; characters).
- Paykull, 1800: 416 (*Staphylinus*; characters; Sweden).

- Fabricius, 1801: 601 (*Staphylinus*; characters).
- Turtton, 1802: 514 (*Staphylinus*; characters; Sweden).
- Marsham, 1802: 523 (*Staphylinus*; characters; Britain).
- Leach, 1819: 175 (type species of *Anthobium*).
- Stephens, 1834: 341 (*Anthobium*; characters; England).
- Erichson, 1839a: 633 (*Omalium*; synonym of *brunnea*).
- Heer, 1839: 177 (*Omalium*; synonym of *brunnea*).
- Erichson, 1840: 881 (*Omalium*; synonym of *brunneum*).
- Kraatz, 1857d: 995 (*Omalium*; synonym of *brunneum*).
- Fauvel, 1871a: 89 [= 1872: 63] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Switzerland; Italy; Austria).
- Fauvel, 1874: 322 [= 1874b: 28] (*Omalium*, cited as *Homalium*; Poland; Russia).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; characters; north and middle Europe).
- Luze, 1906: 552 (*Phyllodrepa*; characters; northern and central Europe).
- Reitter, 1909: 193 (*Phyllodrepa*; characters; Germany).
- Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Johansen, 1914: 615 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Denmark).
- Portevin, 1929: 448 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Palm, 1948: 70 (*Phyllodrepa*; characters; Sweden; Denmark; Norway; Finland).
- Scheerpeltz, 1956: 9, 10 (*Phyllodrepa*; subspecies added; comparative notes).
- Szujewski, 1963a: 31 (*Hapalareae*; Poland).
- Horion, 1963: 59 (*Phyllodrepa*; subgenus *Phyllodrepa*; Norway; Sweden; Finland; Britain; Russia; Denmark; Poland; France; Bosnia; Macedonia; Italy; Germany; Austria).
- Lohse, 1964: 38 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).
- Strand, 1967: 2 (*Phyllodrepa*; from nest of *Buteo buteo*; Norway).
- Scheerpeltz, 1968a: 8 (*Phyllodrepa*; catalog; Austria).
- Vogt, 1968: 52 (*Phyllodrepa*; with *Lasius brunneus*; Sweden).
- Muona, 1979: 17 (*Hapalareae*; Finland; Russia; Sweden; Norway; Denmark).
- Burakowski, Mroczkowski, and Stefańska, 1979: 31 (*Hapalareae*; catalog; Poland).
- Bangsholt, 1981: 65 (*Phyllodrepa*; Denmark).
- Tóth, 1982: 53 (*Hapalareae*; characters; Hungary).
- Terlutter, 1984: 17, 38 (*Phyllodrepa*; habitat notes; Germany).
- Zanetti, 1986: 94 (*Phyllodrepa*; synonymic note).
- Zanetti, 1987: 175 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Italy).
- Jensen, 1987: 117 (*Phyllodrepa*; carrion collection; Denmark).
- Lucht, 1987: 86 (*Phyllodrepa*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Denmark; Sweden).
- Köhler, 1988: 162 (*Phyllodrepa*; notes; Germany).
- K. Koch, 1989: 221 (*Phyllodrepa*; habitat).
- Angelini, 1991: 193 (*Phyllodrepa*; collection site for one subspecies; Italy).
- Silfverberg, 1992: 21 (*Hapalareae*; Finland; Russia; Sweden; Norway; Denmark; Estonia).
- Boháč, 1993: 40 (*Hapalareae*; subgenus *Phyllodrepa*; Czech Republic; Slovakia).
- Kocian, 1993b: 92 (*Hapalareae*; Czech Republic).
- Hansen, Mahler, Pritzl, and Runge, 1994: 68 (*Phyllodrepa*; Denmark).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Ádám, 1995: 41 (*Phyllodrepa*; Hungary).
- Šustek, 1995: 394 (*Hapalareae*; notes; Czech Republic).
- M. Hansen, 1996: 94 (*Phyllodrepa*).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (*Phyllodrepa*; Denmark).
- Böhme, 1996: 46 (*Phyllodrepa*; humus collection; Germany).
- Hansen, Pedersen, and Pritzl, 1999: 77 (*Phyllodrepa*; Denmark).
- Cibulskis, 1999: 34 (*Hapalareae*; list; Latvia).
- Jørum, 2000: 38 (*Phyllodrepa*; Denmark).
- Olberg and Andersen, 2000: 223 (*Hapalareae*; attracted to trunk-window traps baited with *Fomes fomentarius* and *Phellinus* spp.; Norway).

- Herman, 2001: 39 (*Phyllodrepa*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Europe.

*brunnea* Paykull, 1789: 63 (*Staphylinus*; Type locality: Uplandia).

- Paykull, 1792: 146 (*Staphylinus*; characters of variety).  
 — Fabricius, 1798: 180 (*Staphylinus*; characters; Sweden).  
 — Paykull, 1800: 404 (*Staphylinus*; characters; Sweden).  
 — Fabricius, 1801: 600 (*Staphylinus*; characters).  
 — Gravenhorst, 1802: 113 (*Omalium*; characters).  
 — Latreille, 1804: 371 (*Omalium*; characters).  
 — Olivier, 1811: 475 (*Omalium*; characters; Sweden; Prussia).  
 — Mannerheim, 1830: 54 (*Anthobium*; Finland; Sweden).  
 — Mannerheim, 1831: 468 (*Anthobium*; Finland; Sweden).  
 — Stephens, 1834: 348 (*Omalium*; characters; England).  
 — C. Sahlberg, 1830: 287 (*Omalium*; characters; Finland).  
 — Lacordaire, 1835: 473 (*Anthobium*; characters; France).  
 — Erichson, 1839a: 633 (*Omalium*; characters; Germany).  
 — Heer, 1839: 177 (*Omalium*; characters; Switzerland).  
 — Stephens, 1839: 428 (*Omalium*; characters; England).  
 — Erichson, 1840: 881 (*Omalium*; characters; Europe).  
 — Laporte, 1840: 192 (*Anthobium*; characters; France).  
 — Redtenbacher, 1849: 751 (*Omalium*; characters; Austria).  
 — Thomson, 1857a: 226 (*Omalium*; characters).  
 — Fairmaire and Laboulbène, 1856: 643 (*Omalium*; characters; France).  
 — Redtenbacher, 1857: 250 (*Omalium*; characters; Austria).  
 — Kraatz, 1857d: 995 (*Omalium*; characters; Germany).  
 — Thomson, 1861: 215 (*Phyllodrepa*; characters; Scandinavia).  
 — Fauvel, 1871a: 89 [= 1872: 63] (*Omalium*, cited as *Homalium*; synonym of *melanocephalum*).  
 — Redtenbacher, 1874: 274 (*Omalium*; characters; Austria).  
 — Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).  
 — J. Sahlberg, 1876: 223 (*Phyllodrepa*; Finland).  
 — Mulsant and Rey, 1880: 239 (*Phyllodrepa*; characters; France).  
 — Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *melanocephala*).  
 — Luze, 1906: 553 (*Phyllodrepa*; synonym of *melanocephala*).  
 — Bernhauer and Schubert, 1910: 46 (*Phyllodrepa*; synonym of *melanocephalus*).  
 — Scheerpeltz, 1933: 1040 (*Phyllodrepa*; synonym of *melanocephala*).  
 — Zanetti, 1987: 175 (*Phyllodrepa*; synonym of *melanocephala*).

*pollinensis* Scheerpeltz, 1956: 9 (*Phyllodrepa*; subgenus *Phyllodrepa*; subspecies of *melanocephala*; Type locality: Gebiet des Mte. Pollino).

- Zanetti, 1987: 175 (*Phyllodrepa*; subgenus *Phyllodrepa*; subspecies of *melanocephala*; characters; Italy).  
 — Zanetti, 1995: 6 (*Phyllodrepa*; subspecies of *melanocephala*; Italy).

*rufotestacea* Scheerpeltz, 1956: 10 (*Phyllodrepa*; subgenus *Phyllodrepa*; Type locality: Mte. Pollino).

- Zanetti, 1986: 94 (*Phyllodrepa*; synonym of *melanocephala pollinensis*).  
 — Zanetti, 1987: 175 (*Phyllodrepa*; synonym of *melanocephala pollinensis*).

*melanocollis* Roelofs, 1945 [**Note: Nomen nudum**], see: *ioptera* Stephens, 1832.

**melis** V. Hansen, 1940: 579 (*Phyllodrepa*; Type locality: Denmark: Nørholm forest in Jutland; Lejre forest on Sealand).

- Horion, 1963: 65 (*Phyllodrepa*; subgenus *Phyllodrepa*; Denmark; Finland; Austria; Germany).  
 — Lohse, 1964: 39 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).  
 — Tóth, 1982: 54 (*Hapalaraea*; characters).  
 — Zanetti, 1987: 180 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Finland; Denmark; Germany; Poland; Austria; Switzerland; possibly in Italy).

- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Poland; Austria; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Phyllodrepa*; Czech Republic; Slovakia).
- M. Hansen, 1996: 94 (*Phyllodrepa*; Denmark).
- ▲ **DISTRIBUTION:** Finland, Denmark, Germany, Poland, Slovakia, Czech Republic, Austria, Switzerland.

**monticola** Cameron, 1930: 137 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Chakrata district: Bodyar, alt. 8300 feet).

- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Coiffait, 1977: 244 (*Phyllodrepa*; Nepal).
- Coiffait, 1981d: 325 (*Phyllodrepa*; subgenus *Dropephylla*; Nepal).
- ▲ **DISTRIBUTION:** India, Nepal.

**nigra** Gravenhorst, 1806: 212 (*Omalium*; Type locality: Not cited).

- Olivier, 1811: 478 (*Omalium*; characters; Germany).
- Mannerheim, 1830: 54 (*Anthobium*; Finland).
- Mannerheim, 1831: 468 (*Anthobium*; Finland).
- Erichson, 1840: 880 (*Omalium*; characters; Sweden; Germany).
- Redtenbacher, 1849: 829 (*Omalium*; characters; Austria).
- Scriba, 1855: 302 (*Omalium*; Venezuela [**Note:** Misidentification ?]).
- Thomson, 1857a: 225 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 644 (*Omalium*; characters; France).
- Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 997 (*Omalium*; characters; Germany).
- Thomson, 1861: 214 (*Phyllodrepa*; characters; Scandinavia).
- A. Matthews, 1863: 8650 (*Omalium*; characters; England).
- Rye, 1864a: 65 (*Omalium*; characters; Britain).
- Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 47 cited *rufipes* Fauvel as a synonym of *nigra*; Fauvel did not describe the species as new, he attributed it to Fourcroy. I have assumed that the species cited by Fourcroy referred to the *rufipes* of Linné and species that is now in *Tachinus*]; characters; France; Algeria).
- Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; synonym of *rufipes*).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- Mulsant and Rey, 1880: 238 (*Phyllodrepa*; characters; France).
- Fowler, 1888: 418 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; characters; north and middle Europe).
- Luze, 1906: 558 (*Phyllodrepa*; characters; northern and central Europe; Caucasus; Siberia).
- Reitter, 1909: 193 (*Phyllodrepa*; characters; Germany).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Johansen, 1914: 615 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Denmark).
- Donisthorpe, 1930: 143 (*Phyllodrepa*; characters; Britain).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Jarrige, 1946a: 111 (*Phyllodrepa*; France).
- Palm, 1948: 71 (*Phyllodrepa*; characters; Sweden; Denmark; Norway; Finland).
- Jeannel and Jarrige, 1949: 313 (*Phyllodrepa*; cave species; Romania).
- Szujewski, 1963a: 31 (*Hapalaraea*; Poland).
- Horion, 1963: 63 (*Phyllodrepa*; subgenus *Phyllodrepa*; Britain; Denmark; Norway; Sweden; Finland; Russia; Poland; Czechoslovakia; Hungary; Romania; Bosnia; Croatia; Italy; Switzerland; France; Belgium; Holland; Germany; Austria).
- Lohse, 1964: 38 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).
- Smetana, 1964c: 162 (*Phyllodrepa*; subgenus *Phyllodrepa*; Czechoslovakia).
- Szujewski, 1968a: 711 (*Hapalaraea*; Poland).
- Pope, 1977: 23 (*Phyllodrepa*; Britain).
- Tóth, 1982: 54 (*Hapalaraea*; characters; Hungary).

- Zanetti, 1987: 178 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Italy).
- Lucht, 1987: 86 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Phyllodrepa*; Czech Republic; Slovakia).
- Hodge and Jones, 1995: 30 (*Phyllodrepa*; characters; Britain).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Cibulskis, 1999: 34 (*Hapalaraea*; list; Latvia).
- Fowles, Alexander, and Key, 1999: 129 (*Phyllodrepa*; saproxylic species; status as endangered or threatened species; Britain).

▲ **DISTRIBUTION:** Russia, Europe.

*salicina* Gyllenhal, 1827: 467 (*Omalium*; Type locality: Vestrogothia, Gottlandia).

- Mannerheim, 1830: 54 (*Anthobium*; Finland; Sweden; Russia).
- Mannerheim, 1831: 468 (*Anthobium*; Finland; Sweden; Russia).
- Stephens, 1834: 352 (*Omalium*; characters; England).
- Stephens, 1839: 429 (*Omalium*; characters; England).
- Erichson, 1840: 880 (*Omalium*; synonym of *nigrum*).
- Thomson, 1857a: 225 (*Omalium*; synonym of *nigrum*).
- Redtenbacher, 1857: 253 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 997 (*Omalium*; synonym of *nigrum*).
- Thomson, 1861: 215 (*Phyllodrepa*; synonym of *nigra*).
- Fauvel, 1874: 321 [= 1874b: 27] (*Omalium*, cited as *Homalium*; Russia).
- Mulsant and Rey, 1880: 238 (*Phyllodrepa*; synonym of *nigra*).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *nigra*).
- Luze, 1906: 558 (*Phyllodrepa*; synonym of *nigra*).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; synonym of *nigra*).
- Zanetti, 1987: 178 (*Phyllodrepa*; synonym of *nigra*).

*luteicornis* Roubal, 1927: 95 (*Phyllodrepa*; aberration of *nigra*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Bystrica).

- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; aberration of *nigra*).
- Tóth, 1982: 54 (*Hapalaraea*; aberration of *nigra*; characters; Hungary).

*obscuricornis* J. Sahlberg, 1897, see: *angustata* Mäklin, 1878.

*obscurata* Luze, 1906 [**Note: Nomen nudum**], see: *angustata* Mäklin, 1878.

*obsoleta* Mulsant and Rey, 1880, see: *vilis* Erichson, 1840.

*pacifica* Casey, 1894, see: *caseyi* Bernhauer and Schubert, 1910.

**palpalis** Luze, 1906: 567 (*Phyllodrepa*; Type locality: Italien: Landschaft Emilia).

- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Zanetti, 1987: 187 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Gusarov, 1993: 65 (*Phyllodrepa*; subgenus *Dropephylla*; Ukraine).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Zanetti and Sabella, 1998: 29 (*Phyllodrepa*; notes; Sicily).

▲ **DISTRIBUTION:** Italy, Ukraine.

*jailaensis* Bernhauer, 1915j: 262 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Jaila-Gebirge, Krim; [**Note:** See lectotype designation by Gusarov, 1993]).

- Bernhauer, 1923d: 179 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Crimea).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Gusarov, 1993: 65 (*Phyllodrepa*; lectotype designation; synonym of *palpalis*).

*luigionii* Bernhauer, 1929g: 179 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Italien: Oriolo Rom, Lazio).

- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).
- Zanetti, 1986: 95 (*Phyllodrepa*; synonym of *palpalis*).
- Zanetti, 1987: 187 (*Phyllodrepa*; synonym of *palpalis*).

**perforata** Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Dropephylla*; variety of *vilis*; Type locality: Croara; [**Note:** See lectotype designation by Zanetti, 1986]).

Originally cited from ditorni di Bologna by Fiori, 1900a: 89, who first published the name but as a nomen nudum).

- Fiori, 1900a: 89 (*Phyllodrepa*; subgenus *Dropephylla*; aberration of *vilis*; [**Note:** Unavailable name by Fiori 1900a because it was described as an aberration. Bernhauer and Schubert, 1910 cited it as a variety thereby making it available]).
- Luze, 1906: 492, 572 (*Phyllodrepa*; synonym of *vilis*).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; variety of *vilis*).
- Zanetti, 1986: 95, 97 (*Phyllodrepa*; valid species; lectotype designation: Croara).
- Zanetti, 1987: 192 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).

▲ **DISTRIBUTION:** Italy.

**peruviana** Bernhauer, 1941c: 279 [= 1951: 269] (*Phyllodrepa*; Type locality: Süd-Peru: Tambo, 3190 m).

▲ **DISTRIBUTION:** Peru.

**philorinoides** Fauvel, 1878g: 485 (*Omalium*, cited as *Homalium*; Type locality: Australie, Victoria).

- Blackburn, 1888d: 191 (*Omalium*, cited as *Homalium*; Australia).
- Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).

▲ **DISTRIBUTION:** Australia.

**polaris** J. Sahlberg, 1897: 366 (*Phyllodrepa*; Type locality: Novaja Semlja).

- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Phyllodrepa*; checklist; Novaya Zemlya).

▲ **DISTRIBUTION:** Russia.

*pollinensis* Scheerpeltz, 1957, see: *melanocephala* Fabricius, 1787.

*propinqua* Bernhauer, 1943, see: *devellei* Bernhauer, 1902.

**puberula** Bernhauer, 1903b: 191 (*Phyllodrepa*; cited as *Phylodrepa*; Type locality: Bosnien).

- Luze, 1906: 556 (*Phyllodrepa*; characters; Bosnia; Carniola; Switzerland; Germany).
- Reitter, 1909: 193 (*Phyllodrepa*; characters; Germany).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Donisthorpe, 1930: 143 (*Phyllodrepa*; characters; Britain).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Palm, 1948: 70 (*Phyllodrepa*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 62 (*Phyllodrepa*; subgenus *Phyllodrepa*; Bosnia; Slovakia; Czech Republic; Italy; Spain; France; Switzerland; Holland; Britain; Denmark; Norway; Sweden; Finland; Germany; Austria).
- Lohse, 1964: 38 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).
- Smetana, 1964c: 162 (*Phyllodrepa*; subgenus *Phyllodrepa*; Czechoslovakia).
- Pope, 1977: 23 (*Phyllodrepa*; Britain).
- Hammond, 1980: 137 (*Phyllodrepa*; Ireland).
- Tóth, 1982: 54 (*Hapalaraea*; characters; Hungary).
- Zanetti, 1987: 179 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Italy).
- Lucht, 1987: 86 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Phyllodrepa*; Czech Republic; Slovakia).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).
- Ødegaard, 1999: 69 (*Hapalaraea*; invasive species associated with compost heaps in Sweden, Denmark, and Norway).

▲ **DISTRIBUTION:** Europe.

**ruficornis** Kraatz, 1857d: 997 (*Omalium*; [**preoccupied**]; Type locality: Baiern).

- Luze, 1906: 556 (*Phyllodrepa*; synonym of *puberula*).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; synonym of *puberula*).
- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; synonym of *puberula*).
- Zanetti, 1987: 179 (*Phyllodrepa*; synonym of *puberula*).

- puella** J. Sahlberg, 1880: 111 (*Phyllodrepa*; Type locality: Polovinka).  
 — Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 — Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dropephylla*; checklist; eastern Siberia).  
 ▲ **DISTRIBUTION:** Russia.
- pulchella* Luze, 1906 [**Note: Nomen nudum**], see: *vilis* Erichson, 1840.
- punctiventris** Fauvel, 1878d: 210 [= 1878e: 46] (*Omalium*, cited as *Homalium*; Type locality: Pennsylvania; Missouri).  
 — Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 — Downie and Arnett, 1996: 436 (*Hapalaraea*; characters; USA).  
 ▲ **DISTRIBUTION:** USA.
- reitteri** Luze, 1906: 570 (*Phyllodrepa*; Type locality: Lenkoran).  
 — Bernhauer and Schubert, 1910: 48 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).  
 — Tikhomirova, 1973a: 138 (*Phyllodrepa*; subgenus *Dropephylla*; checklist; Talysh).  
 ▲ **DISTRIBUTION:** Azerbaijan.
- rufa** Coiffait, 1982: 143 (*Phyllodrepa*; subgenus *Dropephylla*, cited as *Dropephylla*; Type locality: Inde: Cachemire, Pahalgam).  
 ▲ **DISTRIBUTION:** India.
- ruficornis* Stephens, 1834, see: *floralis* Paykull, 1789.
- ruficornis* Kraatz, 1857, see: *puberula* Bernhauer, 1903.
- rufipennis** Luze, 1906: 554 (*Phyllodrepa*; Type locality: Sibirien, Baikalsee).  
 — Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 — Tikhomirova, 1973a: 137 (*Phyllodrepa* subgenus *Phyllodrepa*; checklist; eastern Siberia; Far East).  
 ▲ **DISTRIBUTION:** Russia.
- rufotestacea* Scheerpeltz, 1956, see: *melanocephala* Fabricius, 1787.
- sahlbergi** Luze, 1906: 561 (*Phyllodrepa*; replacement name for *crassicornis* J. Sahlberg).  
 — Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 — J. Sahlberg, 1920: 262 (*Phyllodrepa*; [**Note:** Misidentification: Scheerpeltz, 1933: 1041 cited *rufipennis* Sahlberg as a synonym of *sahlbergi*; Sahlberg did not describe the species as new; the species was simply cited in a list]).  
 — Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).  
 — Palm, 1948: 72 (*Phyllodrepa*; characters; Sweden; Finland).  
 — Huggert and Ulefors, 1971: 57 (*Phyllodrepa*; Sweden).  
 — Tikhomirova, 1973a: 137 (*Phyllodrepa* subgenus *Phyllodrepa*; checklist; northern Europe; northern Siberia).  
 ▲ **DISTRIBUTION:** northern Europe, Russia.
- crassicornis* J. Sahlberg, 1876: 217 (*Etheothassa*; [**preoccupied**]; Type locality: Kouta i Ryska Lappmarken).  
 — Luze, 1906: 561 (*Phyllodrepa*; synonym of *sahlbergi*).  
 — Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; synonym of *sahlbergi*).
- salicina* Gyllenhal, 1827, see: *nigra* Gravenhorst, 1806.
- salicis** Gyllenhal, 1810: 226 (*Omalium*; Type locality: Westrogothia).  
 — Gyllenhal, 1827: 467 (*Omalium*).  
 — Curtis, 1829: 29 (*Omalium*; catalog; Britain).  
 — Mannerheim, 1830: 54 (*Anthobium*; Finland).  
 — Mannerheim, 1831: 468 (*Anthobium*; Finland).  
 — Stephens, 1834: 351 (*Omalium*; characters; England).  
 — C. Sahlberg, 1830: 286 (*Omalium*; characters; Finland).  
 — Stephens, 1839: 429 (*Omalium*; characters; England).  
 — Erichson, 1840: 880 (*Omalium*; characters; Sweden).  
 — Laporte, 1840: 192 (*Anthobium*; characters; France).  
 — Redtenbacher, 1857: 253 (*Omalium*; characters; Germany).  
 — Thomson, 1857a: 225 (*Omalium*; characters).  
 — Kraatz, 1857d: 994 (*Omalium*; characters; Germany).



- Thomson, 1861: 215 (*Phyllodrepa*; characters; Scandinavia).
- Rye, 1870a: 87 (*Omalium*, cited as *Homalium*; notes; Britain).
- Fauvel, 1871a: 88 [= 1872: 61] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 223 (*Phyllodrepa*; Finland).
- Mulsant and Rey, 1880: 231 (*Phyllodrepa*; characters; France).
- Fowler, 1888: 419 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; characters; north and middle Europe).
- Luze, 1906: 553 (*Phyllodrepa*; characters; northern and central Europe).
- Reitter, 1909: 193 (*Phyllodrepa*; characters; Germany).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Portevin, 1929: 448 (*Phyllodrepa*; characters; France).
- Scheerpeltz, 1933: 1041 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Palm, 1948: 70 (*Phyllodrepa*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 61 (*Phyllodrepa*; subgenus *Phyllodrepa*; Russia; Greece; Bosnia Hercegovina; Slovenia; Romania; Hungary; Slovakia; Czech Republic; Italy; Switzerland; France; Belgium; Holland; Denmark; Norway; Sweden; Finland; Russia; Germany; Austria).
- Lohse, 1964: 38 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; central Europe).
- Pope, 1977: 23 (*Phyllodrepa*; Britain).
- Tóth, 1982: 53 (*Hapalaraea*; characters; Hungary).
- Zanetti, 1987: 177 (*Phyllodrepa*; subgenus *Phyllodrepa*; characters; Italy).
- Lucht, 1987: 86 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Benelux; Denmark; Sweden).
- Zanetti, 1995: 6 (*Phyllodrepa*; Italy).

▲ **DISTRIBUTION:** Europe.

*crassicornis* A. Matthews, 1863: 8650 (*Omalium*; Type locality: near Waddington, Lincolnshire).

- Rye, 1864a: 64 (*Omalium*; characters; Britain).
- Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *salicis*).
- Fauvel, 1871a: 88 [= 1872: 62] (*Omalium*, cited as *Homalium*; synonym of *salicis*).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; synonym of *salicis*).
- Luze, 1906: 554 (*Phyllodrepa*; synonym of *salicis*).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; synonym of *salicis*).

*scabriuscula* Kraatz, 1857, see: *linearis* Zetterstedt, 1828.

**schatzmayri** Bernhauer, 1932c: 232 (*Phyllodrepa*; subgenus *Dropephylla*; Type locality: Algier: Laverdure).

▲ **DISTRIBUTION:** Algeria.

*sekeræ* Reitter, 1905, see: *Dialycera*.

*sharpi* Bernhauer, 1939, see: *Stenomalium*.

**strigipennis** Mäklin, 1852: 320 (*Omalium*; Type locality: insula Sitkha).

- Mäklin, 1853: 197 (*Omalium*; characters; Sitka Island; Kadjak Island).
- Fauvel, 1878d: 210 [= 1878e: 46] (*Omalium*, cited as *Homalium*; characters; Alaska; California; Siberia).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).

▲ **DISTRIBUTION:** USA, Russia.

**translucida** Kraatz, 1857d: 998 (*Omalium*; Type locality: südliches Deutschland).

- Redtenbacher, 1857: 994 (*Omalium*; characters; Austria).
- Redtenbacher, 1874: 278 (*Omalium*; characters).
- Ganglbauer, 1895: 740 (*Phyllodrepa*; characters; Germany).
- Luze, 1906: 492, 558 (*Phyllodrepa*; synonym of *nigra*).
- Reitter, 1909: 193 (*Phyllodrepa*; variety of *translucida*; characters; Germany).
- Bernhauer and Schubert, 1910: 47 (*Phyllodrepa*; subgenus *Phyllodrepa*; catalog).
- Scheerpeltz, 1933: 1040 (*Phyllodrepa*; aberration of *nigra*).

- Horion, 1963: 64 (*Phyllo drepa*; not aberration of *nigra*).
- Lohse, 1964: 38 (*Phyllo drepa*; subgenus *Phyllo drepa*; valid species; characters; central Europe).
- Lucht, 1987: 86 (*Phyllo drepa*).
- Haghebaert, Bruge, and Drugmand, 1990: 35 (*Phyllo drepa*; Belgium).
- Boháč, 1993: 40 (*Hapalaraea*; subgenus *Phyllo drepa*; Czech Republic).
- ▲ **DISTRIBUTION:** Belgium, Germany, Austria.

**turanica** Solsky, 1874: 209 (*Omalium*; Type locality: Maracandam).

- Bernhauer and Schubert, 1910: 47 (*Phyllo drepa*; subgenus *Phyllo drepa*; catalog).
- Tikhomirova, 1973a: 138 (*Phyllo drepa*; subgenus *Phyllo drepa*; checklist; Central Asia).
- ▲ **DISTRIBUTION:** Uzbekistan.

*viburni* Gravenhorst, 1802, see: *floralis* Paykull, 1789.

**vilis** Erichson, 1840: 882 (*Omalium*; Type locality: Saxonia montana).

- Redtenbacher, 1849: 829 (*Omalium*; characters).
- Thomson, 1857a: 226 (*Omalium*; characters).
- Fairmaire and Laboulbène, 1856: 641 (*Omalium*; characters; France).
- Redtenbacher, 1857: 253 (*Omalium*; characters; Germany).
- Kraatz, 1857d: 993 (*Omalium*; characters; Germany).
- Thomson, 1861: 216 (*Phyllo drepa*; characters; Scandinavia).
- Rye, 1870a: 88 (*Omalium*, cited as *Homalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 49 cited *gracilicornis* Rye as a synonym of *vilis*; Rye did not describe the species as new, he attributed it to Fairmaire and Laboulbène]; notes; Britain).
- Fauvel, 1871a: 91 [= 1872: 65] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Corsica; Algeria; Cyprus).
- Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; Sicily).
- Fauvel, 1874: 322 [= 1874b: 28] (*Omalium*, cited as *Homalium*; Sardinia).
- Redtenbacher, 1874: 277 (*Omalium*; characters).
- Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).
- Fauvel, 1878: 89 [= 1878a: 9] (*Omalium*, cited as *Homalium*; Algeria).
- Mulsant and Rey, 1880: 254 (*Phyllo drepa*; subgenus *Dropephylla*; characters; France).
- Fauvel, 1886: 14 [= 1886a: 6] (*Omalium*, cited as *Homalium*; Algeria).
- Fowler, 1888: 419 (*Omalium*, cited as *Homalium*; subgenus *Phyllo drepa*; characters; Britain).
- Ganglbauer, 1895: 742 (*Phyllo drepa*; subgenus *Dropephylla*; characters; north and middle Europe; Mediterranean region).
- Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Algeria; Tunisia).
- Luze, 1906: 572 (*Phyllo drepa*; characters; Europe; Mediterranean region; Greece; Lenkoran).
- Sainte-Claire Deville, 1906: 69 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 193 (*Phyllo drepa*; subgenus *Dropephylla*; characters; Germany).
- Bernhauer and Schubert, 1910: 49 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Johansen, 1914: 616 (*Phyllo drepa*; subgenus *Dropephylla*; characters; Denmark).
- Portevin, 1929: 449 (*Phyllo drepa*; characters; France).
- Bernhauer, 1931e: 8 (*Phyllo drepa*; Spain).
- Scheerpeltz, 1933: 1042 (*Phyllo drepa*; subgenus *Dropephylla*; catalog).
- Palm, 1948: 74 (*Phyllo drepa*; subgenus *Dropephylla*; characters; Sweden; Denmark; Norway).
- Horion, 1963: 69 (*Phyllo drepa*; subgenus *Dropephylla*; Algeria; Tunisia; Cyprus; Turkey; Georgia; Armenia; Azerbaijan; Britain; Norway; Sweden; Holland; Belgium; France; Spain; Corsica; Sardinia; Sicily; Italy; Dalmatia; Bosnia Hercegovina; Greece; Hungary; Czechoslovakia; Poland; Russia; Germany; Austria).
- Lohse, 1964: 40 (*Phyllo drepa*; subgenus *Dropephylla*; characters; central Europe).
- Coiffait, 1968c: 505 (*Phyllo drepa*; Corsica).
- Steel, 1970a: 11 (*Dropephylla*; biological notes).
- Tikhomirova, 1973a: 138 (*Phyllo drepa*; subgenus *Dropephylla*; checklist; Central Asia).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).
- Pope, 1977: 23 (*Dropephylla*; Britain).
- Hammond, 1980: 137 (*Dropephylla*; Ireland).
- Tóth, 1982: 56 (*Hapalaraea*; characters; Hungary).

- Zanetti, 1987: 191 (*Phyllodrepa*; subgenus *Dropephylla*; characters; Italy).
- Lucht, 1987: 87 (*Phyllodrepa*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Welch, 1993: 227 (*Dropephylla*; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Hapalaraea*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Phyllodrepa*; Italy).
- M. Hansen, 1996: 94 (*Phyllodrepa*).
- Fowles, Alexander, and Key, 1999: 129 (*Dropephylla*; saproxylic species; status as endangered or threatened species; Britain).

▲ **DISTRIBUTION:** Europe, Algeria, Tunisia, Azerbaijan, “Central Asia”.

*brevicornis* Erichson, 1840: 884 (*Omalium*; Type locality: Sardinia).

- Kraatz, 1857d: 993 (*Omalium*; notes).
- A. Matthews, 1863: 8650 (*Omalium*; characters; England).
- Rye, 1864a: 63 (*Omalium*; characters; notes; Britain).
- Fauvel, 1871a: 91 [= 1872: 65] (*Omalium*, cited as *Homalium*; characters; Sardinia; Britain).
- Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; synonym of *vile*).
- Mulsant and Rey, 1880: 251 (*Phyllodrepa*; subgenus *Dropephylla*; characters; France).
- Fowler, 1888: 419 (*Omalium*, cited as *Homalium*; subgenus *Phyllodrepa*; characters; Britain).
- Ganglbauer, 1895: 742 (*Phyllodrepa*; synonym of *vilis*).
- Luze, 1906: 572 (*Phyllodrepa*; synonym of *vilis*).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; synonym of *vilis*).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; synonym of *vilis*).
- Legner and Moore, 1977: 175 (*Hapalaraea*; found under bark).

*obsoleta* Mulsant and Rey, 1880: 254 (*Phyllodrepa*; subgenus *Dropephylla*; variety of *vilis*;  
Type locality: Not cited).

- Ganglbauer, 1895: 742 (*Phyllodrepa*; synonym of *vilis*).
- Luze, 1906: 572 (*Phyllodrepa*; synonym of *vilis*).
- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; synonym of *vilis*).

*pulchella* Luze, 1906: 572 (*Phyllodrepa*; [**Note: Nomen nudum**]; aberration of *vilis*;  
locality cited: Lenkoran).

- Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; variety of *vilis*).
- Scheerpeltz, 1933: 1042 (*Phyllodrepa*; variety of *vilis*).

### **Prosopaspis**

[4 species; Palaearctic Region]

*Prosopaspis* Smetana, 1987: 367 (species included: *gibbicollis*, *puncticeps*). **TYPE SPECIES:**  
*Prosopaspis gibbicollis* Smetana, fixed by original designation.

**gibbicollis** Smetana, 1987: 372 (*Prosopaspis*; Type locality: Nepal: Lalitpur Distr., Phulcoki,  
2600 m).

- Smetana, 1997c: 25 (*Prosopaspis*; characters).

▲ **DISTRIBUTION:** Nepal.

**pluvialis** Smetana, 1997c: 23 (*Prosopaspis*; Type locality: China: Sichuan, Gongga Shan,  
Hailuogou, above Camp 3, 3200 m, 29°35N, 102°00E).

▲ **DISTRIBUTION:** China.

**puncticeps** Smetana, 1987: 378 (*Prosopaspis*; Type locality: Nepal: Khandbari District: forest  
NE Kuwapani, 2500 m).

- Smetana, 1997c: 25 (*Prosopaspis*; characters).

▲ **DISTRIBUTION:** Nepal.

**rougemonti** Smetana, 1997c: 24 (*Prosopaspis*; Type locality: China: Yunnan, Ruili).

▲ **DISTRIBUTION:** China.

### **Pycnoglypta**

[9 species; Nearctic and Palaearctic Regions]

*Pycnoglypta* Thomson, 1858: 38 (species included: *lurida*). **TYPE SPECIES:** *Omalium luridum*  
Gyllenhal, fixed by monotypy.

- Thomson, 1859: 50 (characters; type species: *lurida*).
- Thomson, 1861: 198 (characters).
- Gemminger and Harold, 1868: 662 (catalog).
- Fauvel, 1871a: 80 [= 1872: 54] (characters).
- Redtenbacher, 1874: 271 (characters; cited as *Pycnoclypta*).
- Fauvel, 1875a: IV [= 1875b: 206] (catalog).
- Mulsant and Rey, 1880: 269 (characters).
- Heyden, 1880: 84 (list of species of Siberian region).
- Duvivier, 1883: 196 (catalog).
- Heyden, Reitter, and Weise, 1891: 121 (list of species of Europe and Caucasus).
- Heyden, 1893: 49 (list of species of Siberian region).
- Ganglbauer, 1895: 744 (characters).
- Luze, 1906: 583 (characters; key to species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Heyden, Reitter, and Weise, 1906: 130 (list of species of Europe and Caucasus).
- Reitter, 1909: 194 (characters).
- Bernhauer and Schubert, 1910: 45 (world catalog; 5 species).
- Johansen, 1914: 620 (characters).
- Leng, 1920: 94 (catalog of North American species).
- Winkler, 1925: 328 (catalog for Palaearctic region).
- Scheerpeltz, 1933: 1038 (world catalog supplement).
- Palm, 1948: 63 (characters; species of Sweden).
- Blackwelder, 1952: 333 (type species: *lurida*).
- Hatch, 1957: 52, 79 (characters; species of Pacific Northwest).
- Horion, 1963: 54 (list of central European species).
- Székessy, 1963: 12 (characters).
- Lohse, 1964: 36 (characters; key to central European species).
- Tikhomirova, 1973a: 137 (checklist of species of USSR).
- Moore and Legner, 1975: 214 (catalog; North America north of Mexico).
- Burakowski, Mroczkowski, and Stefańska, 1979: 28 (catalog; Poland).
- Moore and Legner, 1979: 211 (characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Watanabe, 1980: 271 (characters; key to Japanese species).
- Campbell, 1983a: 361 (characters; key to species of North America).
- Zanetti, 1987: 158 (characters; habitus; key to species of Italy).
- Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
- Watanabe, 1990: 70 (characters; key to species of Japan).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Campbell and Davies, 1991: 88 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
- Gusarov, 1995: 230 (classification of species groups).
- M. Hansen, 1996: 93 (list of Danish species).
- Downie and Arnett, 1996: 437 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 338 (3 Nearctic species; notes; characters in key).

*alpina* Zetterstedt, 1838, see: *lurida* Gyllenhal, 1813.

**aptera** Campbell, 1983a: 366 (*Pycnoglypta*; Type locality: Kouchibouguac N. P., New Brunswick. Also cited from Newfoundland, Ontario, Quebec, and New York).  
— Downie and Arnett, 1996: 437 (*Pycnoglypta*; characters; Canada; USA).

▲ **DISTRIBUTION:** Canada, USA.

*arctica* Luze, 1906, see: *heydeni* Eppelsheim, 1886.

**baicalica** Motschulsky, 1860: 544 (*Omalium*; Type locality: lac Baical en Sibérie orientale; [Note: See lectotype designation by Gusarov, 1991]).

- Hochhuth, 1862: 107 (*Omalium*; characters; Siberia).
- Fauvel, 1871a: 86 [= 1872: 60] (*Omalium*, cited as *Homalium*; synonym of *striatum*).
- Luze, 1906: 588 (*Pycnoglypta*; characters; eastern Siberia).

- Bernhauer and Schubert, 1910: 45 (*Pycnoglypta*; catalog).
- Tikhomirova, 1973a: 137 (*Pycnoglypta*; checklist; eastern Siberia).
- Gusarov, 1991: 3 (*Pycnoglypta*; synonymic notes; lectotype designation).
- Gusarov, 1995: 240 (*Pycnoglypta*; characters).

▲ **DISTRIBUTION:** Russia.

*baicalensis* Motschulsky, 1860: 549 (*Acidota*; Type locality: environs du lac Baical en Sibérie orientale; [**Note:** See lectotype designation by Gusarov, 1991]).

- Bernhauer and Schubert, 1910: 69 (*Acidota*; catalog).
- Scheerpeltz, 1947: 269 (*Acidota*; characters).
- Tikhomirova, 1973a: 140 (*Acidota*; checklist; Baikal).
- Gusarov, 1991: 3 (*Pycnoglypta*; transferred from *Acidota*; synonym of *baicalica*; lectotype designation).

*baicalensis* Motschulsky, 1860, see: *baicalica* Motschulsky, 1860.

**campbelli** Gusarov, 1995: 232 (*Pycnoglypta*; Type locality: Alaska: Kenai Pen., Moose Pass, 300 m. Also cited from Massachusetts, Alberta, Manitoba, New Brunswick, Nova Scotia, Ontario, Quebec, Saskatchewan, Yukon Territory).

- Campbell, 1983a: 364 (*Pycnoglypta*; [**Note:** According to Gusarov, 1995: 232 *lurida* was misidentified by Campbell, 1983: 364; the correct identity is *campbelli*; *lurida* does not occur in North America]; characters; in North America is trancontinental as far south as Massachusetts down Appalachians to North Carolina).

▲ **DISTRIBUTION:** Canada, USA.

**denticollis** Sharp, 1889: 475 (*Omalium*; [**preoccupied**]; Type locality: Miyanoshta; Nagasaki).

- Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).
- Nakane, 1963a: 82 (*Omalium*; characters; habitus photograph; Japan).
- Watanabe, 1980: 272 (*Pycnoglypta*; characters; Japan).
- Watanabe, 1990: 73 (*Pycnoglypta*; characters; Japan).
- Herman, 2001: 39 (*Pycnoglypta*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).

▲ **DISTRIBUTION:** Japan.

**heydeni** Eppelsheim, 1886: 45 (*Pycnoglypta*; Type locality: Chabarofka; [**Note:** See lectotype designation by Gusarov, 1995]).

- Luze, 1906: 588 (*Pycnoglypta*; characters; eastern Siberia).
- Bernhauer and Schubert, 1910: 45 (*Pycnoglypta*; catalog).
- Tikhomirova, 1973a: 137 (*Pycnoglypta*; checklist; Far East).
- Gusarov, 1995: 238 (*Pycnoglypta*; lectotype designation; characters; Russia; Alaska, Northwest Territories, Yukon Territory).
- Ryabukhin, 1999: 15 (*Pycnoglypta*; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Russia, Canada, USA.

*arctica* Luze, 1906: 586 (*Pycnoglypta*; Type locality: Arktisches Sibirien; [**Note:** See lectotype designation by Gusarov, 1995]).

- Bernhauer and Schubert, 1910: 45 (*Pycnoglypta*; catalog).
- Tikhomirova, 1973a: 137 (*Pycnoglypta*; checklist; northern Siberia).
- Gusarov, 1995: 238 (*Pycnoglypta*; lectotype designation; synonym of *heydeni*).

**lurida** Gyllenhal, 1813: 701 (*Omalium*; Type locality: Smolandiae Paroecia Saeby; Finlandia).

- C. Sahlberg, 1830: 285 (*Omalium*; characters; Finland).
- Erichson, 1840: 889 (*Omalium*; characters; Finland).
- Thomson, 1857a: 226 (*Omalium*; characters).
- Redtenbacher, 1857: 253 (*Omalium*; characters; Germany).
- Redtenbacher, 1857: 992 (*Arpedium* ?; characters; Austria).
- Kraatz, 1857d: 960 (*Arpedium*; characters; Germany).
- Thomson, 1858: 38 (*Pycnoglypta*; type species).
- Thomson, 1859: 50 (type species of *Pycnoglypta*).
- Thomson, 1861: 199 (*Pycnoglypta*; characters; Scandinavia).

- Fauvel, 1871a: 80 [= 1872: 54] (*Pycnoglypta*; characters; Lapland; Scandinavia; Poland; Prussia).
- Redtenbacher, 1874: 271 (*Pycnoglypta*; characters; Austria).
- Seidlitz, 1875: 239 (*Pycnoglypta*; characters; Baltic region).
- J. Sahlberg, 1876: 214 (*Pycnoglypta*; Finland).
- Fauvel, 1878d: 204 [= 1878e: 40] (*Pycnoglypta*; characters; British Columbia; Lake Superior; Massachusetts; New Jersey).
- Mulsant and Rey, 1880: 271 (*Pycnoglypta*; characters; France).
- Seidlitz, 1891: 344 (*Pycnoglypta*; characters; Europe).
- Seidlitz, 1891a: 366 (*Pycnoglypta*; characters; Europe).
- Ganglbauer, 1895: 744 (*Pycnoglypta*; characters; Germany; northern Europe; North America).
- Luze, 1906: 585 (*Pycnoglypta*; characters; northern Europe; Germany; North America).
- Poppius, 1909: 3 (*Pycnoglypta*; Lena Valley, Siberia).
- Reitter, 1909: 194 (*Pycnoglypta*; characters; Germany).
- Bernhauer and Schubert, 1910: 45 (*Pycnoglypta*; catalog).
- Blatchley, 1910: 479 (*Pycnoglypta*; Ohio).
- Johansen, 1914: 620 (*Pycnoglypta*; characters; Denmark).
- Fall, 1926: 145 (*Pycnoglypta*; Alaska).
- Portevin, 1929: 450 (*Pycnoglypta*; characters; France).
- Scheerpeltz, 1933: 1039 (*Pycnoglypta*; catalog).
- Palm, 1948: 63 (*Pycnoglypta*; characters; Sweden; Denmark; Norway; Finland).
- Hatch, 1957: 79 (*Pycnoglypta*; characters; cited literature references for British Columbia and Oregon).
- Horion, 1963: 54 (*Pycnoglypta*; Norway; Sweden; Finland; Russia; Denmark; Germany).
- Lohse, 1964: 36 (*Pycnoglypta*; characters; central Europe).
- Ashworth, 1972: 214 (*Pycnoglypta*; late-glacial subfossil; Britain).
- Legner and Moore, 1977: 175 (*Pycnoglypta*; found under bark).
- Zanetti, 1987: 160 (*Pycnoglypta*; characters; may not occur in Italy).
- Lucht, 1987: 86 (*Pycnoglypta*; checklist; Poland; Denmark; Sweden).
- Boháč, 1993: 40 (*Pycnoglypta*; Czech Republic).
- Gusarov, 1995: 234 (*Pycnoglypta*; characters; species not in North America; Denmark, Finland, Germany/Poland, Poland, Russia, Sweden).
- Downie and Arnett, 1996: 437 (*Pycnoglypta*; characters; Canada; USA).
- Ryabukhin, 1999: 15 (*Pycnoglypta*; catalog; habitat; distribution; northeastern Russia).
- Neuhäuser-Happe, 2000: 157 (*Pycnoglypta*; discussion of distribution; aedeagus; Austria).
- ▲ **DISTRIBUTION:** Europe, Russia.

*alpina* Zetterstedt, 1838: 53 (*Omalium*; Type locality: Lapponia Umensis, Stoettingsfjellet).

- Erichson, 1840: 889 (*Omalium*; characters; Lapland).
- Thomson, 1857a: 227 (*Omalium*; synonym of *luridum* Gyllenhal).
- Thomson, 1861: 199 (*Pycnoglypta*; synonym of *lurida*).
- Mulsant and Rey, 1880: 272 (*Pycnoglypta*; synonym of *lurida*).
- Ganglbauer, 1895: 744 (*Pycnoglypta*; synonym of *lurida*).
- Luze, 1906: 585 (*Pycnoglypta*; synonym of *lurida*).
- Herman, 2001: 36 (*Pycnoglypta*; nomen oblitum).

**maritima** Gusarov, 1995: 236 (*Pycnoglypta*; Type locality: Russia: Primorsk Terr., Dalnegorsk Reg., Rudnaya Pristan', Smychka).

▲ **DISTRIBUTION:** Russia.

**nipponica** Watanabe, 1980: 274 (*Pycnoglypta*; Type locality: Japan: Honshu: Gunma Pref.: near Sugenuma, Oku-Nikko).

- Watanabe, 1990: 75 (*Pycnoglypta*; cited as *japonica*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**sibirica** Mäklin, 1878: 24 [= 1878a: 300] (*Pycnoglypta*; Type locality: 60°55' nordl. lat.).

- J. Sahlberg, 1880: 109 (*Pycnoglypta*; characters; Siberia).
- Mäklin, 1881: 44 (*Pycnoglypta*; characters; lat. bor. 60°55').
- Luze, 1906: 587 (*Pycnoglypta*; characters; Arctic Siberia).
- Poppius, 1909: 4 (*Pycnoglypta*; Lena Valley, Siberia).

- Bernhauer and Schubert, 1910: 45 (*Pycnoglypta*; catalog).
- Tikhomirova, 1973a: 137 (*Pycnoglypta*; checklist; eastern Siberia).
- Smetana 1975c: 155 (*Pycnoglypta*; Mongolia).
- Gusarov, 1995: 230 (*Pycnoglypta*; characters; Russia).
- Ryabukhin, 1999: 15 (*Pycnoglypta*; catalog; habitat; distribution; northeastern Russia).
- ▲ **DISTRIBUTION:** Russia, Mongolia.

### Selonomus

[1 species; Antarctic Region]

- Selonomus* Steel, 1964: 341 (species included: *linearis*). **TYPE SPECIES:** *Selonomus linearis* Steel, fixed by original designation and monotypy.
- Steel, 1970a: 23 (larval characters; biological notes).
  - Newton, 1985: 199 (notes on austral distribution).
- linearis** Steel, 1964: 342 (*Selonomus*; also larval characters; Type locality: Campbell Island: Perseverance Harbor, Lookout Bay).
- Steel, 1970a: 23 (*Selonomus*; larval characters).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (*Selonomus*; endemic to Campbell Island).
  - ▲ **DISTRIBUTION:** Campbell Island.

### Stenomaliium

[15 species; Australian and Oceanic Regions]

- Stenomaliium* Blackwelder, 1943: 53 (subgenus of *Omalium*; species included: *rufiventre*, *cottieri*, *parkeri*; [**Note:** Bernhauer did not designate a type species. The name was unavailable until 1943 when Blackwelder designated the type species (Article 13.3) so he is the author (Article 50.1) of the genus]). **TYPE SPECIES:** *Omalium rufiventre* Bernhauer, fixed by original designation.
- Bernhauer, 1939f: 194 (characters; [**Note:** Bernhauer published the first use and description of *Stenomaliium* but he did not designate a type species so the name was unavailable (Article 13.3)]).
  - Cameron, 1945d: 781 (subgenus of *Omalium*; characters).
  - Blackwelder, 1952: 358 (subgenus of *Omalium*; type species).
  - Steel, 1960: 2 (valid genus).
  - Steel, 1970a: 24 (larval characters).
  - Newton, 1985: 199 (notes on austral distribution).
  - Kuschel, 1990: 25 (list of some New Zealand species).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (species of New Zealand may belong in another genus).
  - Thayer, 1996: 159 (nomenclatural discussion; author of genus is Blackwelder; notes).
- antipodum** Broun, 1893: 1036 (*Omalium*; Type locality: Boatman's, Reefton).
- Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).
  - Cameron, 1945d: 782 (*Omalium*; subgenus *Stenomaliium*).
  - Thayer, 1996: 159 (*Stenomaliium*).
  - ▲ **DISTRIBUTION:** New Zealand.
- prolixum* Broun, 1893: 1039 (*Omalium*; Type locality: Taieri, Otago).
- Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).
  - Cameron, 1945d: 782 (*Omalium*; synonym of *antipodum*).
- stenosoma* Broun, 1893: 1040 (*Omalium*; Type locality: Mount Cook).
- Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).
  - Cameron, 1945d: 782 (*Omalium*; synonym of *antipodum*).
- fusciventre* Broun, 1894: 426 (*Omalium*; Type locality: West Plains, Invercargill).
- Bernhauer and Schubert, 1910: 53 (*Omalium*; subgenus *Omalium*; catalog).
  - Cameron, 1945d: 782 (*Omalium*; synonym of *antipodum*).
- apicale* Bernhauer, 1939f: 196 (*Phyllodrepa*; Type locality: Neu-Seeland: Greymouth; Picton).
- Cameron, 1945d: 782 (*Omalium*; synonym of *antipodum*).

*apicalis* Bernhauer, 1939, see: *antipodum* Broun, 1893.

**cottieri** Bernhauer, 1939f: 195 (*Omalium*; subgenus *Stenomalium*; Type locality: Neu-Seeland: North Island: Palmerston).

— Kuschel, 1990: 25 (*Stenomalium*; endemic; winged; habitat; New Zealand).

— Thayer, 1996: 159 (not in *Stenomalium* and will be transferred).

▲ **DISTRIBUTION:** New Zealand.

**debile** Broun, 1893: 1039 (*Omalium*; Type locality: Mount Egmont).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Thayer, 1996: 159 (*Stenomalium*).

▲ **DISTRIBUTION:** New Zealand.

*fusciventre* Broun, 1894, see: *antipodum* Broun, 1893.

**helmsi** Cameron, 1945b: 179 (*Omalium*; Type locality: Wellington: Mount Hutt).

— Watson, 1967: 35 (*Stenomalium*; notes; habitat; Macquarie Island).

— Kuschel, 1990: 25 (*Stenomalium*; endemic; winged; habitat; New Zealand).

— P. Greenslade, 1990: 48 (*Stenomalium*; winged; on carrion; Macquarie Island).

— Thayer, 1996: 159 (not in *Stenomalium* and will be transferred).

▲ **DISTRIBUTION:** New Zealand, Macquarie Island.

**micrarthrum** Broun, 1893: 1037 (*Omalium*; Type locality: Stratford, near Mount Egmont).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Thayer, 1996: 159 (*Stenomalium*).

▲ **DISTRIBUTION:** New Zealand.

**moniliferum** Broun, 1893: 1038 (*Omalium*; cited as monilifer; Type locality: Whangarata, near Tuakau).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Kuschel, 1990: 25 (*Stenomalium*; cited as *moniliferum*; endemic; winged; habitat; New Zealand).

— Thayer, 1996: 159 (*Stenomalium*).

▲ **DISTRIBUTION:** New Zealand.

**nemobium** Broun, 1910: 18 (*Omalium*; Type locality: Waimarino).

— Scheerpeltz, 1933: 1046 (*Omalium*; catalog).

— Thayer, 1996: 159 (*Stenomalium*; probably is same as *micrarthrum*).

▲ **DISTRIBUTION:** New Zealand.

**parkeri** Bernhauer, 1939f: 195 (*Omalium*; subgenus *Stenomalium*; Type locality: Neu-Seeland: North Island).

— Thayer, 1996: 159 (*Stenomalium*).

▲ **DISTRIBUTION:** New Zealand.

**philpotti** Broun, 1894: 427 (*Omalium*; Type locality: West Plains, Invercargill).

— Bernhauer and Schubert, 1910: 55 (*Omalium*; subgenus *Omalium*; catalog).

— Kuschel, 1990: 25 (*Stenomalium*; endemic; winged; habitat; New Zealand).

— Thayer, 1996: 159 (*Stenomalium*).

▲ **DISTRIBUTION:** New Zealand.

*prolixum* Broun, 1893, see: *antipodum* Broun, 1893.

**rufiventre** Bernhauer, 1939f: 194 (*Omalium*; subgenus *Stenomalium*; Type locality: Neu-Seeland: Picton; Auckland).

— Thayer, 1996: 159 (*Stenomalium*; probably is same as *philpotti*).

▲ **DISTRIBUTION:** New Zealand.

**seriatum** Fauvel, 1903d: 258 (*Omalium*, cited as *Homalium*; Type locality: Boulari).

— Bernhauer and Schubert, 1910: 49 (*Phyllodrepa*; subgenus *Dropephylla*; catalog).

— Steel, 1960: 2 (*Stenomalium*; characters; New Caledonia).

▲ **DISTRIBUTION:** New Caledonia.

**sharpi** Bernhauer, 1939f: 197 (*Phyllodrepa*; Type locality: Neu-Seeland: Auckland).

— Thayer, 1996: 159 (*Stenomalium*; probably is same as *moniliferum*).

▲ **DISTRIBUTION:** New Zealand.



**spadix** Broun, 1880: 117 (*Omalium*; Type locality: Parua).

- Bernhauer and Schubert, 1910: 56 (*Omalium*; subgenus *Omalium*; catalog).
- Kuschel, 1990: 26 (*Stenomaliium*; endemic; winged; habitat; New Zealand).
- Thayer, 1996: 159 (not in *Stenomaliium* and will be transferred).

▲ **DISTRIBUTION:** New Zealand.

*stenosoma* Broun, 1893, see: *antipodum* Broun, 1893.

**sulcithorax** Broun, 1880: 116 (*Omalium*; Type locality: Whangarei Harbour).

- Bernhauer and Schubert, 1910: 57 (*Omalium*; subgenus *Omalium*; catalog).
- Watson, 1967: 35 (*Stenomaliium*; notes; habitat; Macquarie Island).
- Kuschel, 1990: 26 (*Stenomaliium*; endemic; winged; habitat; New Zealand).
- P. Greenslade, 1990: 48 (*Stenomaliium*; notes; winged; on carrion; Macquarie Island).
- Thayer, 1996: 159 (not in *Stenomaliium* and will be transferred).

▲ **DISTRIBUTION:** New Zealand, Macquarie Island.

**tenellum** Broun, 1893: 1410 (*Omalium*, cited as *Homaliium*; Type locality: Maketu, Hunua Range).

- Bernhauer and Schubert, 1910: 59 (*Phloeonomus*; subgenus *Phloeonomus*; catalog).
- Thayer, 1996: 159 (*Stenomaliium*).

▲ **DISTRIBUTION:** New Zealand.

### Tetradelus

[1 species; Palaearctic Region]

*Tetradelus* Fauvel, 1904b: 90 (species included: *trigonooides*). **TYPE SPECIES:** *Tetradelus trigonooides* Fauvel, fixed by monotypy.

- Bernhauer and Schubert, 1910: 82 (world catalog; 1 species).
- Cameron, 1925: 12 (catalog of Indian species).
- Cameron, 1930: 167 (characters).
- Scheerpeltz, 1933: 1070 (world catalog supplement).
- Blackwelder, 1952: 382 (type species: *trigonooides*).
- Steel, 1966a: 78 (characters).

**trigonooides** Fauvel, 1904b: 91 (*Tetradelus*; Type locality: Sikkim: Darjeeling).

- Bernhauer and Schubert, 1910: 81 (*Tetradelus*; catalog).
- Cameron, 1930: 167 (*Tetradelus*; characters; Sikkim).
- Scheerpeltz, 1933: 1070 (*Tetradelus*; catalog).
- Steel, 1966: 80 (*Tetradelus*; characters; Sikkim).

▲ **DISTRIBUTION:** India.

### Ulommia

[1 species; Oriental Region]

*Ulommia* Steel, 1960a: 169 (species included: *antennata*). **TYPE SPECIES:** *Ulommia antennata* Steel, fixed by original designation and monotypy.

**antennata** Steel, 1960a: 169 (*Ulommia*; Type locality: Sumatra: Deli region).

▲ **DISTRIBUTION:** Indonesia.

### Xanthonomus

[2 species; Oriental Region]

*Xanthonomus* Bernhauer, 1926f: 312 (subgenus of *Phloeonomus*; species included: *toxopeanus*). **TYPE SPECIES:** *Phloeonomus (Xanthonomus) toxopeanus* Bernhauer, fixed by monotypy.

- Scheerpeltz, 1933: 1051 (synonym of *Phloeonomus*).
- Blackwelder, 1943: 51 (subgenus of *Phloeonomus*; type species: *toxopeanus*).
- Blackwelder, 1952: 405 (type species: *toxopeanus*).
- Steel, 1955a: 275 (valid genus; characters; type species: *toxopeanus*).

**latus** Steel, 1955a: 278 (*Xanthonomus*; Type locality: Pahang F.M.S., Gunong Tahan Padang, 5500 feet).

▲ **DISTRIBUTION:** Malaysia.

**toxopeanus** Bernhauer, 1926f: 312 (*Phloeonomus*; subgenus *Xanthonomus*; Type locality: Buru, 800–1300 m).

— Scheerpeltz, 1933: 1051 (*Phloeonomus*; subgenus *Xanthonomus*; catalog).

— Steel, 1955a: 276 (*Xanthonomus*; characters; Buru).

▲ **DISTRIBUTION:** Indonesia.

### **Xenanthobium**

[1 species; Neotropical Region]

*Xenanthobium* Coiffait and Saiz, 1968: 452 (species included: *andicola*). **TYPE SPECIES:** *Anthobium andicola* Fauvel, fixed by original designation and monotypy.

**andicola** Fauvel, 1867a: 46 [= 1868: 51] (*Anthobium*; Type locality: Chillan).

— Bernhauer and Schubert, 1910: 38 (*Anthobium*; catalog).

— Coiffait and Saiz, 1968: 453 (*Xenanthobium*; characters; Chile).

▲ **DISTRIBUTION:** Chile.

### **Xylodromus**

[13 species; Neotropical, Nearctic, Palaearctic, and Australian Regions]

*Xylodromus* Heer, 1839: 174 (species included: *deplanatus*, *depressus*, *planus*). **TYPE SPECIES:** *Omalium depressum* Gravenhorst, fixed by subsequent designation by R. Lucas, 1920: 676.

— Lacordaire, 1854: 143 (synonym of *Omalium*).

— Jacquelin du Val, 1857: 76 (synonym of *Omalium*).

— Kraatz, 1857d: 974 (synonym of *Omalium*).

— Thomson, 1859: 51 (characters; type species: *monilicornis*).

— Thomson, 1861: 209 (characters).

— Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).

— Mulsant and Rey, 1880: 158 (characters; key to French species).

— Heyden, 1880: 83 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).

— Fowler, 1888: 417 (notes; group of *Omalium*).

— Heyden, Reitter, and Weise, 1891: 119 (list of species of Europe and Caucasus).

— Ganglbauer, 1895: 729 (characters; key to middle European species).

— Luze, 1906: 493 (characters; key to species).

— Heyden, Reitter, and Weise, 1906: 132 (list of species of Europe and Caucasus).

— Sainte-Claire Deville, 1907: 38 (key to and annotated list of species of Seine Basin, France).

— Reitter, 1909: 189 (characters; key to German species).

— Bernhauer and Schubert, 1910: 60 (world catalog; 7 species).

— Petri, 1912: 53 (list of species of Siebenbürgen).

— Johansen, 1914: 603 (characters; key to Danish species).

— Winkler, 1925: 331 (catalog for Palaearctic region).

— Porta, 1926: 23 (characters; key to species of Italy).

— Portevin, 1929: 443 (characters; key to French species).

— Roubal, 1930: 311 (catalog; Slovakia).

— Joy, 1932: 103 (key to British species).

— Scheerpeltz, 1933: 1051 (world catalog supplement).

— Scheerpeltz, 1937b: 187 (list of Bulgarian species).

— Tottenham, 1939d: 227 (type species designation).

— Kloet and Hincks, 1945: 161 (list of British species; type species: *depressus*).

— Blackwelder, 1952: 407 (type species).

— Palm, 1948: 87 (characters; key to species of Sweden).

— Tottenham, 1949: 356, 407 (type species: *depressus* Gravenhorst = *deplanatus* Gyllenhal; list of British species; notes).

— Blackwelder, 1952: 407 (type species).

— Tottenham, 1954: 27 (characters; key to British species).

— Hatch, 1957: 50, 63 (characters; key to species of Pacific Northwest).

— Smetana, 1959a: 196 (list of species collected in Albania).

- Horion, 1963: 93 (list of central European species).
  - Székessy, 1963: 17 (characters).
  - Lohse, 1964: 47 (characters; key to central European species).
  - Moore, 1966: 48, 53 (characters; notes).
  - Kasule, 1968: 133, 136 (larval characters; notes).
  - Scheerpeltz, 1968a: 12 (catalog of Austrian species).
  - Steel, 1970a: 16 (larval characters; biological notes).
  - Tikhomirova, 1973a: 139 (checklist of species of USSR).
  - Moore and Legner, 1975: 221 (catalog; North America north of Mexico).
  - Shibata, 1976: 107 (checklist of species of Japan).
  - Pope, 1977: 23 (list of British species).
  - Topp, 1978: 309 (larval characters).
  - Burakowski, Mroczkowska, and Stefańska, 1979: 49 (catalog; Poland).
  - Moore and Legner, 1979: 201 (characters; notes).
  - Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
  - Uhlig and Vogler, 1981: 86 (list of some species collected in Germany; habitat and collecting notes).
  - Tóth, 1982: 70 (characters; habitus; key to species of Hungary).
  - Segers, 1986: 21 (checklist of species; Belgium).
  - Zanetti, 1987: 259 (characters; habitus; key to species of Italy).
  - Muona and Viramo, 1986: 15 (list of species of northeastern Finland).
  - Watanabe, 1990: 255 (characters; species of Japan).
  - M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
  - Campbell and Davies, 1991: 91 (checklist of species; Alaska and Canada).
  - Silfverberg, 1992: 22 (list of species of Fennoscandia, Denmark, and the Baltic States).
  - Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
  - M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
  - Zanetti, 1995: 7 (list of species of Italy).
  - M. Hansen, 1996: 94 (list of Danish species).
  - M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
  - Downie and Arnett, 1996: 433 (characters; key to species of Northeastern North America).
  - M. Hansen, Palm, Pedersen, and Runge, 1998: 69 (list of species collected in 1997; Denmark).
  - Newton, Thayer, Ashe, and Chandler, 2000: 338 (2 Nearctic species; notes; characters in key).
- Etheothassa* Thomson, 1858: 38 (species included: *deplanata*). **TYPE SPECIES:** *Omalium deplanatum* Gyllenhal, fixed by monotypy.
- Thomson, 1859: 51 (characters; type species: *deplanata*).
  - Thomson, 1861: 206 (characters).
  - Fauvel, 1875a: IV [= 1875b: 206] (catalog; group of *Omalium*, cited as *Homalium*).
  - Heyden, 1880: 83 (subgenus of *Omalium*, cited as *Homalium*; list of species of Siberian region).
  - Fowler, 1888: 421 (notes; group of *Omalium*; key to British species).
  - Seidlitz, 1891: 340 (key to some European species).
  - Seidlitz, 1891a: 363 (key to some European species).
  - Luze, 1906: 493 (synonym of *Xylodromus*).
  - Bernhauer and Schubert, 1910: 60 (synonym of *Xylodromus*).
  - Tottenham, 1949: 356 (synonym of *Xylodromus*; type species: *depressa* Gravenhorst = *deplanata* Gyllenhal).
  - Blackwelder, 1952: 152 (type species: *deplanata*).
  - Pope, 1977: 23 (synonym of *Xylodromus*).
  - Zanetti, 1987: 259 (synonym of *Xylodromus*).
  - Watanabe, 1990: 255 (synonym of *Xylodromus*).
- Drephopylla* Fiori, 1900a: 90, 93 (subgenus of *Phyllodrepa*; species included: *depressus*, *testaceus*, *heterocerus*). **TYPE SPECIES:** *Omalium depressum* Gravenhorst, fixed by subsequent designation by Tottenham, 1939d: 227.
- Luze, 1906: 493 (synonym of *Xylodromus*).

- Bernhauer and Schubert, 1910: 60 (synonym of *Xylodromus*).
- Tottenham, 1939d: 227 (cited as *Drephophylla*; type species designation; synonym of *Xylodromus*).
- Tottenham, 1949: 356 (cited as *Drephophylla*; synonym of *Xylodromus*; type species: *depressa* Gravenhorst).
- Blackwelder, 1952: 135 (type species).
- Zanetti, 1987: 259 (synonym of *Xylodromus*).
- Watanabe, 1990: 255 (synonym of *Xylodromus*).

*Omaliissus* Broun, 1893: 1042 (species included: *castaneus*). **TYPE SPECIES:** *Omaliissus castaneus* Broun, fixed by monotypy.

- Bernhauer and Schubert, 1910: 50 (world catalog; 1 species).
- Scheerpeltz, 1933: 1043 (world catalog supplement).
- Cameron, 1945d: 782 (synonym of *Xylodromus* by synonymy of *castaneus* with *concinus*).
- Blackwelder, 1952: 273 (type species: *castaneus*).
- Thayer, 1996: 159 (synonym of *Xylodromus*).

**affinis** Gerhardt, 1877: 32 (*Omaliium*; Type locality: Liegnitz).

- Ganglbauer, 1895: 740 (*Phyllo-drepa*; synonym of *floralis*).
- Luze, 1906: 499 (*Xylodromus*; characters; Germany; Austria; France; Hungary; Prussia; Caucasus).
- Reitter, 1909: 189 (*Xylodromus*; characters; Germany).
- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).
- Fiori, 1915: 5 (*Xylodromus*; Italy).
- Scheerpeltz, 1933: 1051 (*Xylodromus*; catalog).
- Horion, 1933: 148 (*Xylodromus*; in mole nest; Germany).
- Palm, 1948: 90 (*Xylodromus*; characters; Denmark).
- Horion, 1963: 94 (*Xylodromus*; Caucasus; Denmark; Holland; Belgium; France; Italy; Sicily; Romania; Hungary; Czechoslovakia; Poland; Germany; Austria).
- Lohse, 1964: 47 (*Xylodromus*; characters; central Europe).
- Smetana, 1964d: 53 (*Xylodromus*; Czechoslovakia).
- Osella and Zanetti, 1975: 86 (*Xylodromus*; collected from nest of *Talpa europaea*; notes; Italy).
- Tóth, 1982: 71 (*Xylodromus*; characters; Hungary).
- H. Franz, 1984: 59 (*Xylodromus*; Macedonia).
- Zanetti, 1987: 263 (*Xylodromus*; characters; Italy).
- Lucht, 1987: 88 (*Xylodromus*; checklist; Germany; Poland; Czechoslovakia; Austria; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 41 (*Xylodromus*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Xylodromus*; Italy).
- Tronquet, 1998a: 114 (*Xylodromus*; collected from marmot burrow; France).
- Assing, 2001: 75 (*Xylodromus*; collected from xerothermous site; Germany).

▲ **DISTRIBUTION:** Germany, France, Italy, Austria, Czechoslovakia, Hungary, Macedonia, Caucasus, Tunisia.

*cephalotes* Eppelsheim, 1884: 170 (*Omaliium*, cited as *Homaliium*; Type locality: Wimpfen; Heilbronn).

- Ganglbauer, 1895: 730 (*Xylodromus*; characters; France; Germany; Austria).
- Luze, 1906: 485, 490, 499 (*Xylodromus*; synonym of *affine*).
- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *affinis*).
- Scheerpeltz, 1933: 1051 (*Xylodromus*; synonym of *affinis*).
- Zanetti, 1987: 263 (*Xylodromus*; synonym of *affinis*).

*cuniculorum* Normand, 1935: 357 (*Xylodromus*; aberration of *affinis*; [**Note: Nomen nudum** (Articles 1.3.4, 45.5)]; locality cited: Tunisie: Le Kef).

*ater* Gerhardt, 1901, see: *concinus* Marsham, 1802.

*aterrimus* Tottenham, 1954, see: *depressus* Gravenhorst, 1802.

*bipunctatus* Motschulsky, 1860, see: *Phloeostiba*.

*brunnipes* Stephens, 1834, see: *concinus* Marsham, 1802.

**capito** Casey, 1894: 423 (*Omalium*; Type locality: Wisconsin).

— Bernhauer and Schubert, 1910: 52 (*Omalium*; subgenus *Omalium*; catalog).

— Moore, 1966: 53 (*Xylodromus*).

— Downie and Arnett, 1996: 433 (*Xylodromus*; characters; USA).

▲ **DISTRIBUTION:** USA.

*castaneus* Broun, 1893, see: *concinus* Marsham, 1802.

*cephalotes* Eppelsheim, 1884, see: *affinis* Gerhardt, 1877.

**concinus** Marsham, 1802: 510 (*Staphylinus*; [**preoccupied**]; Type locality: Britain).

— Curtis, 1829: 29 (*Omalium*; catalog; Britain).

— Stephens, 1834: 347 (*Omalium*; characters; England).

— Stephens, 1839: 427 (*Omalium*; characters; England).

— Erichson, 1840: 886 (*Omalium*; characters; Germany).

— Heer, 1841: 567 (*Xylodromus*; characters; Switzerland).

— Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).

— Hardy, 1851: 61 (*Xylodromus*; notes; England).

— Thomson, 1857a: 227 (*Omalium*; characters).

— Fairmaire and Laboulbène, 1856: 642 (*Omalium*; characters; France).

— Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).

— Kraatz, 1857d: 991 (*Omalium*; characters; Germany).

— Thomson, 1861: 206 (*Etheothassa*; characters; Scandinavia).

— Wollaston, 1871: 313 (*Omalium*, cited as *Homalium*; characters; notes; Madeira).

— Fauvel, 1871a: 94 [= 1872: 68] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Germany; Switzerland; Italy; Russia; Madeira).

— Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).

— Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).

— J. Sahlberg, 1876: 219 (*Etheothassa*; Finland).

— Mulsant and Rey, 1880: 167 (*Xylodromus*; characters; France).

— Fowler, 1888: 422 (*Omalium*, cited as *Homalium*; subgenus *Etheothassa*; characters; Britain).

— Ganglbauer, 1895: 730 (*Xylodromus*; characters; Europe).

— Fauvel, 1902b: 53 (*Omalium*, cited as *Homalium*; Madeira).

— Luze, 1906: 500 (*Xylodromus*; characters; Europe; Caucasus).

— Sainte-Claire Deville, 1906: 70 (*Omalium*, cited as *Homalium*; Corsica).

— Reitter, 1909: 189 (*Xylodromus*; characters; Germany).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Johansen, 1914: 605 (*Xylodromus*; characters; Denmark).

— Henriksen and Lundbeck, 1918: 499 (*Xylodromus*; Greenland).

— Munster, 1925: 5 (*Xylodromus*; Novaya Zemlya).

— Portevin, 1929: 443 (*Xylodromus*; characters; France).

— Scheerpeltz, 1933: 1051 (*Xylodromus*; catalog).

— West, 1937: 45 (*Xylodromus*; Faroe Islands).

— Henriksen, 1939: 44 (*Xylodromus*; Greenland).

— Hinton, 1945: 50 (*Xylodromus*; characters).

— Palm, 1948: 89 (*Xylodromus*; characters; Sweden; Denmark; Norway; Finland).

— Tottenham, 1954: 27 (*Xylodromus*; characters; Britain).

— Hatch, 1957: 64 (*Xylodromus*; characters; Washington).

— Larsson and Gígja, 1959: 64 (*Xylodromus*; collecting notes; Iceland).

— Horion, 1963: 94 (*Xylodromus*; Caucasus; Novaya Zemlya; Greenland; Madeira; Norway; Lapland; Spain; Sardinia; Sardinia; Italy; Greece; Germany; Austria).

— Lohse, 1964: 48 (*Xylodromus*; characters; central Europe).

— Szujewski, 1968a: 712 (*Xylodromus*; Poland).

— Scheerpeltz, 1968a: 12 (*Xylodromus*; catalog; Austria).

— Steel, 1970a: 16 (*Xylodromus*; biological notes).

— Tikhomirova, 1973a: 139 (*Xylodromus*; checklist; USSR).

— Pope, 1977: 23 (*Xylodromus*; Britain).

— Topp, 1978: 317 (*Xylodromus*; illustration).

— Muona, 1979: 18 (*Xylodromus*; Russia; Finland; Sweden; Norway; Denmark; Britain).

- Moore and Legner, 1979: 221 (*Xylodromus*; USA; Europe).
- Burakowski, Mroczkowski, and Stefańska, 1979: 49 (*Xylodromus*; catalog; Poland).
- Hammond, 1980: 139 (*Xylodromus*; Ireland).
- Uhlig and Vogler, 1981: 86 (*Xylodromus*; habitat and collecting notes; Germany).
- Tóth, 1982: 73 (*Xylodromus*; characters; Hungary).
- Frank, 1982: 9 (*Xylodromus*; list of parasites).
- Muona and Viramo, 1986: 15 (*Xylodromus*; Finland).
- Zanetti, 1987: 265 (*Xylodromus*; characters; Italy).
- Ádám, 1987: 137 (*Xylodromus*; collecting notes; Hungary).
- Lucht, 1987: 88 (*Xylodromus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Nowosad, 1990: 51 (*Xylodromus*; collected from mole nest; notes; Poland).
- Silfverberg, 1992: 22 (*Xylodromus*; synonym of *brunneipennis*).
- Boháč, 1993: 41 (*Xylodromus*; Czech Republic; Slovakia).
- Zanetti, 1995: 7 (*Xylodromus*; Italy).
- M. Hansen, 1996: 94 (*Xylodromus*; synonym of *brunneipennis*).
- Downie and Arnett, 1996: 433 (*Xylodromus*; cited as valid species; characters; USA).
- Klimaszewski, Newton, and Thayer, 1996: 146 (*Xylodromus*; adventive species in New Zealand).
- Owen, 1997a: 148 (*Xylodromus*; cited as valid species; collecting sites; Ireland).
- Assing, Frisch, Kahlen, et al., 1998: 124 (*Xylodromus*; synonym of *brunnipennis*).
- Herman, 2001: 39 (*Xylodromus*; although a junior primary homonym, prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.5).
- ▲ **DISTRIBUTION:** Greenland, Iceland, Faroe Islands, Europe, Madeira, Russia, USA, New Zealand.

*brunnipennis* Stephens, 1834: 348 (*Omalium*; Type locality: vicinity of the metropolis [London]; Suffolk; Norfolk).

- Stephens, 1839: 428 (*Omalium*; characters; England).
- G. Waterhouse, 1858: 31 (*Omalium*; synonym of *concinnum*).
- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *concinus*).
- M. Hansen, 1996: 94 (*Xylodromus*; valid name for species).
- Assing, Frisch, Kahlen, et al., 1998: 124 (*Xylodromus*; valid name for species).
- Herman, 2001: 39 (*Xylodromus*; may not be conspecific with *concinus*).

*brunnipes* Stephens, 1834: 347 (*Omalium*; Type locality: Dover; Oakhampton, Somersetshire).

- Stephens, 1839: 427 (*Omalium*; characters; England).
- G. Waterhouse, 1858: 31 (*Omalium*; synonym of *concinnum*).
- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *concinus*).

*picinus* Stephens, 1834: 348 (*Omalium*; Type locality: London; Devonshire).

- Stephens, 1839: 428 (*Omalium*; characters; England).
- G. Waterhouse, 1858: 31 (*Omalium*; synonym of *concinnum*).

*fuliginosus* Heer, 1839: 175 (*Xylodromus*; variety of *deplanatus*; Type locality: Basel).

- Fauvel, 1871a: 94 [= 1872: 68] (*Omalium*, cited as *Homalium*; variety of *concinnum*).
- Ganglbauer, 1895: 730 (*Xylodromus*; synonym of *concinus*).
- Luze, 1906: 490 (*Xylodromus*; synonym of *concinus*).
- Luze, 1906: 500 (*Phyllodrepa*; variety of *concinus*).
- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *concinus*).

*castaneus* Broun, 1893: 1042 (*Omalissus*; Type locality: Port Chalmers).

- Bernhauer and Schubert, 1910: 50 (*Omalissus*; catalog).
- Cameron, 1945d: 782 (*Xylodromus*; synonym of *concinus*).

*lacustris* Casey, 1894: 422 (*Omalium*; Type locality: Michigan).

- Bernhauer and Schubert, 1910: 54 (*Omalium*; subgenus *Omalium*; catalog).
- Moore, 1966: 53 (*Xylodromus*; synonym of *concinus*).

*ater* Gerhardt, 1901: 158 (*Omalium*; variety of *concinus*; [**preoccupied**]; Type locality: Buchwald i. Rsg.).

- Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *concinus*).

*scutosus* Broun, 1915: 281 (*Omalissus*; Type locality: Pudding Hill, near Methven).

— Scheerpeltz, 1933: 1043 (*Omalissus*; catalog).

— Thayer, 1996: 159 (*Xylodromus*; synonym of *concinus*).

*crassicornis* J. Sahlberg, 1876, see: *Phyllodrepa*.

*cuniculorum* Normand, 1935 [**Note: Nomen nudum**], see: *affinis* Gerhardt, 1877.

**daimio** Sharp, 1889: 475 (*Omalium*; Type locality: Yuyama).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Watanabe, 1990: 258 (*Xylodromus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

*deplanatus* Gyllenhal, 1810, see: *depressus* Gravenhorst, 1802.

**depressus** Gravenhorst, 1802: 113 (*Omalium*; Type locality: Not cited, but presumably Brunsvigae).

— Latreille, 1804: 371 (*Omalium*; characters; Germany).

— Gravenhorst, 1806: 205 (*Omalium*; characters; Germany).

— Gyllenhal, 1810: 222 (*Omalium*; synonym of *deplanatus* Gyllenhal).

— Olivier, 1811: 475 (*Omalium*; characters; Europe).

— Samouelle, 1819: 175 (type species of *Omalium*).

— Lacordaire, 1835: 474 (*Anthobium*; characters; France).

— Heer, 1839: 175 (*Xylodromus*; synonym of *deplanatus*).

— Erichson, 1840: 885 (*Omalium*; synonym of *deplanatum*).

— Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).

— Mulsant and Rey, 1880: 164 (*Xylodromus*; synonym of *deplanatus*).

— Ganglbauer, 1895: 730 (*Xylodromus*; characters; Europe).

— Luze, 1906: 498 (*Xylodromus*; characters; Europe).

— Reitter, 1909: 189 (*Xylodromus*; characters; Germany).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Johansen, 1914: 604 (*Xylodromus*; characters; Denmark).

— Fiori, 1915: 5 (*Xylodromus*; Italy).

— Portevin, 1929: 443 (*Xylodromus*; characters; France).

— Scheerpeltz, 1933: 1051 (*Xylodromus*; catalog).

— West, 1937: 45 (*Xylodromus*; Faroe Islands).

— Tottenham, 1939d: 227 (type species of *Xylodromus* and *Drephophylla*, cited as *Drephophylla*).

— Hinton, 1945: 50 (*Xylodromus*; characters).

— Palm, 1948: 88 (*Xylodromus*; characters; Sweden; Denmark; Norway; Finland).

— Hatch, 1957: 64 (*Xylodromus*; characters; British Columbia; Oregon).

— Larsson and Gígia, 1959: 66 (*Xylodromus*; biological notes; Iceland).

— Horion, 1963: 93 (*Xylodromus*; Britain; Norway; Sweden; Finland; Russia; Denmark; France; Iberian Peninsula; Italy; Sicily; Albania; Macedonia; Greece; Germany; Austria).

— Lohse, 1964: 48 (*Xylodromus*; characters; central Europe).

— Steel, 1970a: 16 (*Xylodromus*; biological notes).

— Pope, 1977: 23 (*Xylodromus*; Britain).

— Hammond, 1980: 139 (*Xylodromus*; Ireland).

— Tóth, 1982: 73 (*Xylodromus*; characters; Hungary).

— Zanetti, 1987: 260 (*Xylodromus*; characters; Italy).

— Lucht, 1987: 88 (*Xylodromus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).

— Boháč, 1993: 41 (*Xylodromus*; Slovakia; Czech Republic).

— Sadler and Dugmore, 1995: 144 (*Xylodromus*; habitat notes; Iceland).

— Zanetti, 1995: 7 (*Xylodromus*; Italy).

▲ **DISTRIBUTION:** Iceland, Faroe Islands, Europe, Egypt, Russia, Canada, USA, Venezuela.

*deplanatus* Gyllenhal, 1810: 222 (*Omalium*; Type locality: Sweden).

— Gyllenhal, 1827: 466 (*Omalium*).

— C. Sahlberg, 1830: 284 (*Omalium*; characters; Finland).

— Mannerheim, 1830: 54 (*Anthobium*; Finland; Russia).

- Mannerheim, 1831: 468 (*Anthobium*; Finland; Russia).
  - Stephens, 1834: 346 (*Omalium*; [**Note:** Stephens attributed this name to Gravenhorst, 1802: 113 who did not cite the species at all]; characters; England).
  - Erichson, 1839a: 635 (*Omalium*; characters; Germany).
  - Heer, 1839: 175 (*Xylodromus*; characters; Switzerland).
  - Stephens, 1839: 427 (*Omalium*; characters; England).
  - Erichson, 1840: 885 (*Omalium*; characters; Europe).
  - Redtenbacher, 1849: 753 (*Omalium*; characters; Austria).
  - Scriba, 1855: 302 (*Omalium*; Venezuela).
  - Thomson, 1857a: 227 (*Omalium*; characters).
  - Fairmaire and Laboulbène, 1856: 644 (*Omalium*; characters; France).
  - Redtenbacher, 1857: 253 (*Omalium*; characters; Austria).
  - Kraatz, 1857d: 991 (*Omalium*; characters; Germany).
  - Kraatz, 1858b: 128 (*Omalium*; Greece).
  - Thomson, 1858: 38 (*Etheothassa*; type species).
  - Thomson, 1859: 51 (type species of *Etheothassa*).
  - Thomson, 1861: 206 (*Etheothassa*; characters; Scandinavia).
  - Hochhuth, 1862: 108 (*Omalium*; Russia).
  - Fauvel, 1871a: 94 [= 1872: 68] (*Omalium*, cited as *Homalium*; characters; France).
  - Fauvel, 1874: 322 [= 1874b: 28] (*Omalium*, cited as *Homalium*; Siberia).
  - Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).
  - J. Sahlberg, 1876: 218 (*Etheothassa*; Finland).
  - Mulsant and Rey, 1880: 163 (*Xylodromus*; characters; France).
  - Fowler, 1888: 422 (*Omalium*, cited as *Homalium*; subgenus *Etheothassa*; characters; Britain).
  - Ganglbauer, 1895: 730 (*Xylodromus*; synonym of *depressus*).
  - Fauvel, 1902b: 52 (*Omalium*, cited as *Homalium*; Egypt).
  - Luze, 1906: 498 (*Xylodromus*; synonym of *depressus*).
  - Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *depressus*).
  - Scheerpeltz, 1933: 1051 (*Xylodromus*; synonym of *depressus*).
  - Pope, 1977: 23 (*Xylodromus*; synonym of *depressus*).
  - Zanetti, 1987: 260 (*Xylodromus*; synonym of *depressus*).
- oblongus* Lacordaire, 1835: 473 (*Anthobium*; Type locality: Paris).
- Erichson, 1840: 885 (*Omalium*; synonym of *deplanatum*).
  - Kraatz, 1857d: 991 (*Omalium*; synonym of *deplanatum*).
  - Fauvel, 1869: 494 (*Omalium*, cited as *Homalium*; synonym of *deplanatum*).
  - Mulsant and Rey, 1880: 164 (*Xylodromus*; synonym of *deplanatus*).
  - Ganglbauer, 1895: 730 (*Xylodromus*; synonym of *depressus*).
  - Luze, 1906: 498 (*Xylodromus*; synonym of *depressus*).
  - Bernhauer and Schubert, 1910: 60 (*Xylodromus*; synonym of *depressus*).
- aterrimus* Tottenham, 1954: 27 (*Xylodromus*; variety of *depressus*; Type locality: Not cited, presumably Britain).
- fleischeri** Lokay, 1918: 9 (*Xylodromus*; Type locality: Urwald am Buczecz in den Transsylv. Alpen).
- Scheerpeltz, 1933: 1052 (*Xylodromus*; catalog).
  - Tóth, 1982: 71 (*Xylodromus*; characters).
- ▲ **DISTRIBUTION:** Romania.
- fuliginosus* Heer, 1839, see: *concinus* Marsham, 1802.
- heterocerus* Fiori, 1900, see: *testaceus* Erichson, 1840.
- lacustre* Casey, 1894, see: *concinus* Marsham, 1802.
- noricus** Gistel, 1857: 68 (*Xylodromus*; [**Note:** *Nomen dubium*]; Type locality: Alpes noricae).
- ▲ **DISTRIBUTION:** Alps.
- oblongus* Lacordaire, 1835, see: *depressus* Gravenhorst, 1802.
- obscurus* Kirshenblat, 1936, see: *sassuchini* Kirshenblat, 1936.



**opaculus** Luze, 1906: 497 (*Xylodromus*; Type locality: Sibirien).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Tikhomirova, 1973a: 139 (*Xylodromus*; checklist; northern Siberia).

▲ **DISTRIBUTION:** Russia.

**opacus** Bernhauer, 1903c: 592 (*Xylodromus*; Type locality: Altaigebirge).

— Luze, 1906: 496 (*Xylodromus*; characters; Altai region).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Tikhomirova, 1973a: 139 (*Xylodromus*; checklist; Altai).

▲ **DISTRIBUTION:** Altai region.

*picinum* Stephens, 1834, see: *concinus* Marsham, 1802.

*pygmaeus* Gravenhorst, 1806, see: *testaceus* Erichson, 1840.

**sassuchini** Kirshenblat, 1936a: 252, 253 (*Xylodromus*; Type locality: Chapov, Ural'sk. okr.; Nov. Ushtagan).

— Tikhomirova, 1973a: 138 (*Xylodromus*; checklist; near Caspian Sea).

▲ **DISTRIBUTION:** Russia.

*obscurellus* Kirshenblat, 1936a: 252, 253 (*Xylodromus*; subspecies of *sassuchini*; Type locality: Nov. Ushtagan).

— Tikhomirova, 1973a: 138 (*Xylodromus*; checklist; near Caspian Sea).

*scutosus* Broun, 1915, see: *concinus* Marsham, 1802.

**testaceus** Erichson, 1840: 885 (*Omalium*; [**preoccupied**]; Type locality: Germany).

— Gravenhorst, 1802: 114 (*Omalium*; [**Note:** Bernhauer and Schubert, 1910: 60 cited *brunneum* variety 3 as a synonym of *testaceus*; there is no available name]; characters).

— Erichson, 1839a: 635 (*Omalium*; *deplanatus* variety b; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 60 cited *deplanatus* variety b Erichson as a synonym of *testaceus*; there is no available name]; characters).

— Redtenbacher, 1849: 752 (*Omalium*; characters; Austria).

— Thomson, 1857a: 227 (*Omalium*; characters).

— Fairmaire and Laboulbène, 1856: 645 (*Omalium*; characters; France).

— Redtenbacher, 1857: 252 (*Omalium*; characters; Austria).

— Kraatz, 1857d: 992 (*Omalium*; characters; Germany).

— Thomson, 1861: 207 (*Etheothassa*; characters; Scandinavia).

— A. Matthews, 1863: 8650 (*Omalium*; characters; England).

— Rye, 1864a: 62 (*Omalium*; characters; notes; Britain).

— Fauvel, 1871a: 93 [= 1872: 67] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Germany; Switzerland; Italy; Austria).

— Fauvel, 1873b: 115 [= 1873c: 8] (*Omalium*, cited as *Homalium*; Sicily; Russia).

— Fauvel, 1874: 322 [= 1874b: 28] (*Omalium*, cited as *Homalium*; Britain).

— Redtenbacher, 1874: 276 (*Omalium*; characters; Austria).

— Seidlitz, 1875: 235 (*Omalium*; characters; Baltic region).

— Mulsant and Rey, 1880: 161 (*Xylodromus*; characters; France).

— Fowler, 1888: 422 (*Omalium*, cited as *Homalium*; subgenus *Etheothassa*; characters; Britain).

— Ganglbauer, 1895: 730 (*Xylodromus*; characters; north and middle Europe).

— Luze, 1906: 500 (*Xylodromus*; synonym of *pygmaeus*).

— Reitter, 1909: 189 (*Xylodromus*; characters; Germany).

— Bernhauer and Schubert, 1910: 60 (*Xylodromus*; catalog).

— Johansen, 1914: 603 (*Xylodromus*; characters; Denmark).

— Portevin, 1929: 443 (*Xylodromus*; characters; France).

— Scheerpeltz, 1933: 1052 (*Xylodromus*; catalog).

— Palm, 1948: 89 (*Xylodromus*; characters; Sweden; Denmark; Finland).

— Tottenham, 1949: 407 (*Xylodromus*; checklist; Britain).

— Horion, 1963: 95 (*Xylodromus*; Caucasus; Britain; Sweden; Finland; Denmark; Russia; Poland; Czechoslovakia; Hungary; Romania; Serbia; Bosnia; Macedonia; Dalmatia; Croatia; Italy; Sicily; Spain; France; Switzerland; Belgium; Holland; Germany; Austria).

— Lohse, 1964: 48 (*Xylodromus*; characters; central Europe).

— Szujewski, 1968a: 712 (*Xylodromus*; Poland).

- Scheerpeltz, 1968a: 12 (*Xylodromus*; catalog; Austria).
  - Korge, 1971a: 6 (*Xylodromus*; Turkey).
  - Huggert and Ulefors, 1971: 57 (*Xylodromus*; notes; Sweden).
  - Tikhomirova, 1973a: 139 (*Xylodromus*; checklist; USSR).
  - Pope, 1977: 23 (*Xylodromus*; Britain).
  - Muona, 1979: 18 (*Xylodromus*; Russia; Sweden; Denmark).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 51 (*Xylodromus*; catalog; Poland).
  - Tóth, 1980: 97 (*Xylodromus*; Hungary).
  - Uhlig and Vogler, 1981: 86 (*Xylodromus*; collecting notes; Germany).
  - Tóth, 1982: 72 (*Xylodromus*; characters; Hungary).
  - Terlutter, 1984: 25, 41 (*Xylodromus*; notes; Germany).
  - Zanetti, 1986: 95 (*Xylodromus*; senior synonym of *heterocerus*).
  - Zanetti, 1987: 266 (*Xylodromus*; characters; Italy).
  - Lucht, 1987: 88 (*Xylodromus*; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Belgium; Netherlands; Luxembourg; Denmark; Sweden).
  - Gusarov, 1989: 5 (*Xylodromus*; habitat notes; Ukraine).
  - Silfverberg, 1992: 22 (*Xylodromus*; Russia; Sweden; Denmark).
  - Boháč, 1993: 41 (*Xylodromus*; Czech Republic; Slovakia).
  - Zanetti, 1995: 7 (*Xylodromus*; Italy).
  - M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (*Xylodromus*; Denmark).
  - M. Hansen, 1996: 94 (*Xylodromus*; checklist; Denmark).
  - Ádám, 1996: 238 (*Xylodromus*; synonym of *heterocerus*).
  - Eisinger, 1997: 169 (*Xylodromus*; collecting notes; Germany).
  - Zanetti and Sabella, 1998: 31 (*Xylodromus*; Sicily).
  - M. Hansen, Pedersen, and Pritzl, 1999: 77 (*Xylodromus*; Denmark).
  - Fowles, Alexander, and Key, 1999: 129 (*Xylodromus*; saproxylic species; status as endangered or threatened species; Britain).
  - Herman, 2001: 21 (*Xylodromus*; prevailing use as valid maintained pending outcome of application to Commission under Article 23.9.3).
- ▲ **DISTRIBUTION:** Europe, Russia, Turkey.

- pygmaeus* Gravenhorst, 1806: 206 (*Omalium*; [Note: This name is older than *testaceus* which is preoccupied]; Type locality: Not cited).
- Gyllenhal, 1810: 223 (*Omalium*; [Note: Gyllenhal cited *pygmaeus* of both Gravenhorst, 1806: 206 and Paykull, 1800: 410 as referring to the same species]; characters; Sweden).
  - Olivier, 1811: 475 (*Omalium*; characters; Europe).
  - Gyllenhal, 1827: 466 (*Omalium*).
  - Curtis, 1829: 29 (*Omalium*; catalog; Britain).
  - Mannerheim, 1830: 52 (*Omalium*; Sweden).
  - Mannerheim, 1831: 466 (*Omalium*; Sweden).
  - Stephens, 1834: 356 (*Omalium*; [Note: Stephens, 1834: 356 cited Paykull as the author of this name; Stephens, 1829: 298 cited *pygmaeus* with references by Gravenhorst, 1806: 206 and Paykull, 1800: 410 as the same species; however the Paykull and Gravenhorst species were described in different genera, *Staphylinus* and *Omalium* respectively, and Gravenhorst did not attribute his *pygmaeus* to Paykull]; characters; England).
  - Heer, 1839: 175 (*Xylodromus*; cited as variation of *deplanatus*; characters; Switzerland).
  - Erichson, 1840: 885 (*Omalium*; synonym of *testaceus*).
  - Redtenbacher, 1849: 752 (*Omalium*; synonym of *testaceum*).
  - Kraatz, 1857d: 992 (*Omalium*; synonym of *testaceum*).
  - Mulsant and Rey, 1880: 162 (*Xylodromus*; synonym of *testaceus*).
  - Ganglbauer, 1895: 730 (*Xylodromus*; synonym of *testaceus*).
  - Luze, 1906: 500 (*Xylodromus*; characters; northern and central Europe; Caucasus).
  - Bernhauer and Schubert, 1910: 61 (*Xylodromus*; synonym of *testaceus*).
  - Zanetti, 1987: 266 (*Xylodromus*; synonym of *testaceus*).
- heterocerus* Fiori, 1900a: 90 (*Phyllodrepa*; subgenus *Drephopylla*; Type locality: Croara, nei colli Bolognesi; bosco del Teso, nell'Apennino Toscano).
- Luze, 1906: 500 (*Phyllodrepa*; synonym of *pygmaeus*).

- Bernhauer and Schubert, 1910: 61 (*Xylodromus*; synonym of *testaceus*).
- Scheerpeltz, 1933: 1052 (*Xylodromus*; variety of *testaceus*).
- Zanetti, 1986: 95 (*Xylodromus*; synonym of *testaceus*).
- Zanetti, 1987: 266 (*Xylodromus*; synonym of *testaceus*).
- Ádám, 1996: 238 (*Xylodromus*; valid name; Hungary).
- Herman, 2001: 21 (*Xylodromus*; synonym of *testaceus*).

**transversiceps** Smetana, 1968: 227 (*Xylodromus*; Type locality: Mongolei: Cojbalsan aimak, 80 km NW von Cojbalsan, 700 m).

- Tikhomirova, 1973a: 139 (*Xylodromus*; checklist; Mongolia).

▲ **DISTRIBUTION:** Mongolia.

**uralensis** Kirshenblat, 1936a: 252, 253 (*Xylodromus*; Type locality: Chapov, Ural'sk. okr.).

▲ **DISTRIBUTION:** Russia.

### **Xylostiba**

[12 species; Palaearctic, Ethiopian, and Madagascan Regions]

*Xylostiba* Ganglbauer, 1895: 731 (subgenus of *Phloeonomus*; species included: *monilicornis*).

**TYPE SPECIES:** *Omalium monilicorne* Gyllenhal, fixed by monotypy.

- Heyden, Reitter, and Weise, 1891: 120 (cited as *Xylodromus*; subgenus of *Omalium*; list of species of Europe and Caucasus).
- Luze, 1906: 590 (synonym of *Phloeonomus*).
- Heyden, Reitter, and Weise, 1906: 131 (subgenus of *Phloeonomus*; list of species of Europe and Caucasus).
- Reitter, 1909: 190 (subgenus of *Phloeonomus*).
- Bernhauer and Schubert, 1910: 58 (catalog; subgenus of *Phloeonomus*).
- Cameron, 1930: 141 (subgenus of *Phloeonomus*; characters in key).
- Joy, 1932: 104 (key to British species).
- Scheerpeltz, 1933: 1048 (world catalog supplement; subgenus of *Phloeonomus*).
- Blackwelder, 1943: 51 (subgenus of *Phloeonomus*; type species: *monilicornis*).
- Kloet and Hincks, 1945: 161 (synonym of *Phloeonomus*).
- Tottenham, 1949: 355, 407 (subgenus of *Phloeonomus*; type species: *monilicorne* Gyllenhal; list of British species).
- Blackwelder, 1952: 408 (type species: *monilicornis*).
- Tottenham, 1954: 25 (subgenus of *Phloeonomus*; characters; British species).
- Fagel, 1956 (used as valid genus).
- Horion, 1963: 88 (subgenus of *Phloeonomus*; list of central European species).
- Lohse, 1964: 46 (subgenus of *Phloeonomus*).
- Steel, 1970a: 14 (larval characters; biological notes).
- Tikhomirova, 1973a: 139 (subgenus of *Phloeonomus*; checklist of species of USSR).
- Pototskaia, 1976: 162 (larval characters).
- Pope, 1977: 23 (list of British species).
- Burakowski, Mroczkowski, and Stefańska, 1979: 45 (catalog; subgenus of *Phloeonomus*; Poland).
- Zanetti, 1987: 254 (valid genus; characters; habitus; key to species of Italy).
- Boháč, 1993: 41 (list of species of Czech Republic and Slovakia).
- Zanetti, 1995: 7 (list of species of Italy).
- Sparacio, 1995: 141 (*Xylostiba*; characters; notes; Sicily).
- Assing, 1996a: 180, 181 (characters; notes).
- Assing, 1998f: 124 (valid genus; characters).

**abyssinica** Tottenham, 1953b: 485 (*Omalium*; subgenus *Omalioipsis*; Type locality: Abyssinia: Mt. Zuquala, forest near top, circa 9665 ft.).

- Bernhauer, 1912h: 469 (*Omalium*; [Note: According to Fagel, 1956: 3 Bernhauer's use of *algidum* is a misidentification of *Xylostiba abyssinica*]; Albert-Edward Lake).
- Bernhauer, 1931d: 566 (*Omalium*; [Note: According to Fagel, 1956: 3 Bernhauer's use of *algidum* is a misidentification of *Xylostiba abyssinica*]; Abyssinia).
- Fagel, 1956: 3 (*Xylostiba*; notes).

▲ **DISTRIBUTION:** Ethiopia.

- africana** Cameron, 1950g: 7 (*Phloeonomus*; subgenus *Xylostiba*; Type locality: Belgian Congo: Tshamugussa).  
 — Fagel, 1956: 8 (*Xylostiba*; characters).  
 ▲ **DISTRIBUTION:** Congo.  
*germana* Fagel, 1956: 9 (*Xylostiba*; variety of *africana*; Type locality: Congo Belge: Kivu, territoire d'Uvira, Haute Luvubu, 2750 m).
- algida** Fauvel, 1907: 12 (*Omalium*, cited as *Homalium*; Type locality: Kilimandjaro: Kiboscho, 3000 m).  
 — Bernhauer and Schubert, 1910: 51 (*Omalium*; subgenus *Omalium*; catalog).  
 — Fagel, 1956: 4 (*Xylostiba*; characters).  
 ▲ **DISTRIBUTION:** Ethiopia, Tanzania.  
*signata* Eichelbaum, 1910: 83 (*Omalium*; variety of *algidum*; Type locality: Kilimandjaro: Kiboscho, Bergwiesen in der Ericinellaregion 3000–3500 m).  
 — Bernhauer and Schubert, 1910: 51 (*Omalium*; synonym of *algidum*).
- bosnica** Bernhauer, 1902d: 701 (*Phloeonomus*; subspecies of *monilicornis*; Type locality: Ivan in Bosnien).  
 — Luze, 1906: 596 (*Phloeonomus*; characters; Bosnia; Croatia; Siebenbürgen; Hungary; Austria; Sicily).  
 — Reitter, 1909: 190 (*Phloeonomus*; subgenus *Xylostiba*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Xylostiba*; catalog).  
 — Scheerpeltz, 1933: 1048 (*Phloeonomus*; subgenus *Xylostiba*; catalog).  
 — Horion, 1935: 173 (*Phloeonomus*; Austria).  
 — Jarrige, 1950a: 94 (*Phloeonomus*, cited as *Phlaeonomus*; subgenus *Xylostiba*; characters; France).  
 — Horion, 1963: 89 (*Phloeonomus*; subgenus *Xylostiba*; Bosnia Hercegovina; Croatia; Romania; Hungary; Czechoslovakia; Switzerland; Sicily; Austria; Germany).  
 — Lohse, 1964: 46 (*Phloeonomus*; subgenus *Xylostiba*; characters; central Europe).  
 — Smetana, 1964c: 163 (*Phloeonomus*; subgenus *Xylostiba*; Czechoslovakia).  
 — Tóth, 1982: 66 (*Phloeonomus*; characters).  
 — Zanetti, 1987: 258 (*Xylostiba*; characters; Italy).  
 — Lucht, 1987: 87 (*Phloeonomus*; checklist; Czechoslovakia; Austria).  
 — Haghebaert, Bruge, and Drugmand, 1990: 36 (*Xylostiba*; Belgium).  
 — Wittwer, 1993: 248 (*Phloeonomus*; Switzerland).  
 — Boháč, 1993: 41 (*Xylostiba*; Slovakia; Czech Republic).  
 — Zanetti, 1995: 7 (*Xylostiba*; Italy).  
 — Zanetti and Sabella, 1998: 31 (*Xylostiba*; notes; Sicily).  
 — Assing, 1998f: 124 (*Xylostiba*; Germany; Belgium).  
 — Burakowski, Mroczkowski, and Stefańska, 2000: 41 (*Phloeonomus*; subgenus *Xylostiba*; catalog; Poland).  
 ▲ **DISTRIBUTION:** Bosnia Hercegovina, Croatia, Romania, Slovakia, Czech Republic, Austria, Switzerland, Belgium, Germany, France, Italy.  
*germana* Fagel, 1956, see: *africana* Cameron, 1950.
- leleupi** Fagel, 1956: 6 (*Xylostiba*; Type locality: Congo Belge: Kivu, territoire d'Uvira, Haute Ngovi, 3000–3200 m).  
 ▲ **DISTRIBUTION:** Congo.
- lobelicola** Fagel, 1956: 7 (*Xylostiba*; Type locality: Congo Belge: Kibali-Ituri, Mont Bughera, 2200 m).  
 ▲ **DISTRIBUTION:** Congo.
- mikenensis** Fagel, 1956: 10 (*Xylostiba*; Type locality: Congo Belge: Parc National Albert, volcan Mikeno, vers Rweru, 2400 m. Also cited from Ruanda).  
 ▲ **DISTRIBUTION:** Rwanda, Congo.
- monilicornis** Gyllenhal, 1810: 219 (*Omalium*; Type locality: Sweden).  
 — Gyllenhal, 1827: 466 (*Omalium*).  
 — Curtis, 1829: 29 (*Omalium*; catalog; Britain).

- C. Sahlberg, 1830: 283 (*Omalium*; characters; Finland).
- Stephens, 1834: 347 (*Omalium*; characters; England).
- Heer, 1839: 185 (*Phloeonomus*; characters; Switzerland).
- Stephens, 1839: 428 (*Omalium*; characters; England).
- Erichson, 1840: 876 (*Omalium*; characters; Sweden; montibus Hercyniae).
- Redtenbacher, 1849: 751 (*Omalium*; characters; Austria).
- Thomson, 1857a: 224 (*Omalium*; characters; Scandinavia).
- Fairmaire and Laboulbène, 1856: 639 (*Omalium*; characters; France).
- Redtenbacher, 1857: 251 (*Omalium*; characters; Austria).
- Kraatz, 1857d: 985 (*Omalium*; characters; Germany; Switzerland).
- Thomson, 1859: 51 (type species of *Xylodromus*).
- Thomson, 1861: 210 (*Xylodromus*; characters; Scandinavia).
- Hochhuth, 1862: 108 (*Omalium*; Russia).
- Fauvel, 1871a: 96 [= 1872: 70] (*Omalium*, cited as *Homalium*; characters; France; Scandinavia; Britain; Switzerland; Italy; Germany; Poland; Russia; Siberia).
- Fauvel, 1874: 322 [= 1874b: 28] (*Omalium*, cited as *Homalium*; Corsica).
- Redtenbacher, 1874: 275 (*Omalium*; characters; Austria).
- Seidlitz, 1875: 233 (*Omalium*; characters; Baltic region).
- J. Sahlberg, 1876: 219 (*Xylodromus*; Finland).
- Mulsant and Rey, 1880: 181 (*Phloeonomus*; characters; France).
- Fowler, 1888: 417 (*Omalium*, cited as *Homalium*; subgenus *Xylodromus*; characters; Britain).
- Seidlitz, 1891: 339 (*Omalium*; subgenus *Xylodromus*; characters; Europe).
- Seidlitz, 1891a: 361 (*Omalium*; subgenus *Xylodromus*; characters; Europe).
- Ganglbauer, 1895: 731 (*Phloeonomus*; subgenus *Xylostiba*; characters; north and middle Europe; Italy; Bosnia; Siberia).
- Luze, 1906: 594 (*Phloeonomus*; characters; northern and central Europe).
- Sainte-Claire Deville, 1906: 70 (*Omalium*, cited as *Homalium*; Corsica).
- Reitter, 1909: 190 (*Phloeonomus*; subgenus *Xylostiba*; characters; Germany).
- Bernhauer and Schubert, 1910: 58 (*Phloeonomus*; subgenus *Xylostiba*; catalog).
- Portevin, 1929: 445 (*Phloeonomus*; characters; France).
- Scheerpeltz, 1933: 1048 (*Phloeonomus*; subgenus *Xylostiba*; catalog).
- Palm, 1948: 84 (*Phloeonomus*; characters; Sweden; Norway; Finland).
- Jarrige, 1950a: 94 (*Phloeonomus*, cited as *Phlaeonomus*; subgenus *Xylostiba*; characters; France).
- Horion, 1963: 88 (*Phloeonomus*; subgenus *Xylostiba*; Britain; Norway; Sweden; Finland; France; Switzerland; Italy; Bosnia; Romania; Hungary; Czechoslovakia; Poland; Caucasus; Germany; Austria).
- Lohse, 1964: 46 (*Phloeonomus*; subgenus *Xylostiba*; characters; central Europe).
- Smetana, 1964c: 169 (*Phloeonomus*; subgenus *Xylostiba*; characters).
- Szujewski, 1969a: 248 (*Phloeonomus*; notes; Poland).
- Steel, 1970a: 14 (*Xylostiba*; larval characters; biological notes).
- Legner and Moore, 1977: 175 (*Xylodromus*; found under bark).
- Tóth, 1982: 66 (*Phloeonomus*; characters).
- Segers, 1986: 20 (*Xylostiba*; checklist of species; Belgium).
- Zanetti, 1987: 255 (*Xylostiba*; characters; Italy).
- Lucht, 1987: 87 (*Phloeonomus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Schülke and Uhlig, 1988: 3 (*Phloeonomus*; notes; Germany).
- Boháč, 1993: 41 (*Xylostiba*; Slovakia; Czech Republic).
- Zanetti, 1995: 7 (*Xylostiba*; Italy).
- Cibulskis, 1998: 67 (*Phloeonomus*; Latvia).
- Cibulskis, 1999: 35 (*Phloeonomus*; list; Latvia).
- Hågvar, 1999: 28 (*Phloeonomus*; collected on *Fomes fomentarius*; Norway).
- Fowles, Alexander, and Key, 1999: 129 (*Xylostiba*; saproxylic species; status as endangered or threatened species; Britain).

▲ **DISTRIBUTION:** Europe, Russia.

**pauliani** Jarrige, 1970: 59 (*Xylostiba*; Type locality: Madagascar: Mt. Tsaratanana, 2200 m).

▲ **DISTRIBUTION:** Madagascar.

**scotti** Fagel, 1956: 3 (*Xylostiba*; Type locality: Ethiopia: Simien, nr. Mindigabsa, c. 10,000 ft).

▲ **DISTRIBUTION:** Ethiopia.

*signata* Eichelbaum, 1910, see: *algida* Fauvel, 1907.

**tahirai** Watanabe, 1997: 760 (*Xylostiba*; Type locality: Japan: Honshu: Shizuoka Pref.: Abe Pass, Shizuoka-shi).

▲ **DISTRIBUTION:** Japan.

**wittei** Cameron, 1950g: 6 (*Omalium*; Type locality: Belgian Congo: sommet Visoke, alt. 3770 m).

— Fagel, 1956: 4 (*Xylostiba*; characters).

▲ **DISTRIBUTION:** Congo.

### **Zeolymma**

[1 species; Australian Region]

*Zeolymma* Steel, 1950d: 29 (species included: *brachypterum*). **TYPE SPECIES:** *Zeolymma brachypterum* Steel, fixed by original designation and monotypy.

**brachypterum** Steel, 1950d: 31 (*Zeolymma*; Type locality: New Zealand: Queenstown).

— Klimaszewski, Newton, and Thayer, 1996: 146 (*Zeolymma*; endemic to New Zealand).

▲ **DISTRIBUTION:** New Zealand.

## **OMALIINAE: TRIBE INCERTAE SEDIS**

### **Archodromus†**

[2 species; Palaearctic Region]

*Archodromus*† Tikhomirova, 1968: 143 (Jurassic fossil; species included: *comptus*, *brachypterus*). **TYPE SPECIES:** *Archodromus comptus* Tikhomirova, fixed by original designation.

— Carpenter, 1992: 298 (checklist; similar to *Porrhodromus*).

**brachypterus**† Tikhomirova, 1968: 143 (*Archodromus*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).

▲ **DISTRIBUTION:** Kazakhstan.

**comptus**† Tikhomirova, 1968: 143 (*Archodromus*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).

▲ **DISTRIBUTION:** Kazakhstan.

### **Daiodromus†**

[1 species; Palaearctic Region]

*Daiodromus*† Ryvkin, 1990a: 55 (Mesozoic Fossil; species included: *umbrosus*). **TYPE SPECIES:** *Daiodromus umbrosus* Ryvkin, fixed by original designation and monotypy.

**umbrosus**† Ryvkin, 1990a: 56 (*Daiodromus*; Mesozoic Fossil; Type locality: Daia).

▲ **DISTRIBUTION:** Russia.

### **Eophyllodrepa†**

[1 species; Palaearctic Region]

*Eophyllodrepa*† Ryvkin, 1985: 89 (Jurassic fossil; species included: *propinqua*). **TYPE SPECIES:** *Eophyllodrepa propinqua* Ryvkin, fixed by original designation and monotypy.

**propinqua**† Ryvkin, 1985: 90 (*Eophyllodrepa*; Jurassic Fossil; Type locality: Nizhniaia ili sredniaia iura, Zabaikal'e, Novospasskoe ichtuiskaia svita).

▲ **DISTRIBUTION:** Russia.

**Globoides**†

[2 species; Palaearctic Region]

*Globoides*† Tikhomirova, 1968: 144 (Jurassic fossil; species included: *oculatus*, *microps*).**TYPE SPECIES:** *Globoides oculatus* Tikhomirova, fixed by original designation.— Carpenter, 1992: 298 (checklist; Jurassic fossil; similar to *Porrhodromus*).**oculatus**† Tikhomirova, 1968: 145 (*Globoides*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).▲ **DISTRIBUTION:** Kazakhstan.**microps**† Tikhomirova, 1968: 146 (*Globoides*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).▲ **DISTRIBUTION:** Kazakhstan.**Mesodeliphrum**†

[1 species; Palaearctic Region]

*Mesodeliphrum*† Ryvkin, 1990a: 58 (Mesozoic Fossil; species included: *rufulum*). **TYPE SPECIES:** *Mesodeliphrum rufulum* Ryvkin, fixed by original designation and monotypy.**rufulum**† Ryvkin, 1990a: 59 (*Mesodeliphrum*; Mesozoic Fossil; Type locality: Turga).▲ **DISTRIBUTION:** Russia.**Morsum**†

[1 species; Palaearctic Region]

*Morsum*† Ryvkin, 1985: 90 (Jurassic fossil; species included: *abdominale*). **TYPE SPECIES:** *Morsum abdominale* Ryvkin, fixed by original designation and monotypy.**abdominale**† Ryvkin, 1985: 90 (*Morsum*; Jurassic Fossil; Type locality: Sredniaia iura Krasnoarskogo Kraia, perednegrudi i nog, Kubekovo, itatskaia svita).▲ **DISTRIBUTION:** Russia.**Porrhodromus**†

[1 species; Palaearctic Region]

*Porrhodromus*† Tikhomirova, 1968: 141 (Jurassic fossil; species included: *communis*). **TYPE SPECIES:** *Porrhodromus communis* Tikhomirova, fixed by original designation.— Carpenter, 1992: 299 (checklist; Jurassic Fossil; similar to *Porrhodites*).**communis**† Tikhomirova, 1968: 142 (*Porrhodromus*; Jurassic Fossil; Type locality: Karatau, s. Michailovka).▲ **DISTRIBUTION:** Kazakhstan.**Prodaia**†

[1 species; Palaearctic Region]

*Prodaia*† Ryvkin, 1990a: 57 (Mesozoic Fossil; species included: *inflata*). **TYPE SPECIES:** *Prodaia inflata* Ryvkin, fixed by original designation and monotypy.**inflata**† Ryvkin, 1990a: 58 (*Prodaia*; Mesozoic Fossil; Type locality: Daia).▲ **DISTRIBUTION:** Russia.**Pseudolestea**†

[1 species; Palaearctic Region]

*Pseudolestea*† Schaufuss, 1890: 69 (species included: *insinuans*). **TYPE SPECIES:** *Pseudolestea insinuans* Schaufuss, fixed by monotypy.

— Blackwelder, 1952: 327 (type species; no evidence of misspelling).

— Spahr, 1981: 96 (references to specimens from amber and copal).

**insinuans**† Schaufuss, 1890: 69 (*Pseudolestea*; Oligocene Fossil; Type locality: Baltic amber).— Handlirsch, 1907: 730 (*Pseudolestea*, cited as *Pseudolesteva*; catalog; Oligocene; Baltic amber).— Carpenter, 1992: 299 (*Pseudolestea*, cited as *Pseudolesteva*; checklist; similar to *Lesteva*).▲ **DISTRIBUTION:** Baltic region.



## PROTEINIINAE



[11 genera; 193 species; Neotropical, Nearctic, Palearctic, Ethiopian, Oriental, Oceanic, and Australian Regions]

### Proteiniinae Erichson, 1839a.

- Portevin, 1929: 456 (characters; key to French genera).
- Böving and Craighead, 1930: 29 (larval characters).
- Bernet Kempers, 1941: 34, 36 (larval characters).
- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).
- Palm, 1948: 38 (characters; key to Swedish genera and species).
- Tottenham, 1954: 13 (characters).
- Crowson, 1955: 33, 37 (adult and larval characters in key; relationships).
- Lohse, 1964: 22 (characters; key to central European genera and species).
- Steel, 1966 (adult and larval characters; key to adult and larval genera).
- Kasule, 1966: 265, 279 (larval characters; key to some genera).
- Coiffait and Saiz, 1968: 456 (Chilean species).
- Steel and Woodroffe, 1969: 134 (list of species collected from Isle of Rhum; collecting notes).
- Abdullah and Qadri, 1970: 130 (discussion of status; characters).
- Moore and Legner, 1974: 14 (characters; key to North American genera).
- Moore and Legner, 1974g: 556 (key to genera of America north of Mexico).
- Moore and Legner, 1974h: 474 (catalog of the taxonomy, biology, and ecology of developmental stages of species of America north of Mexico).
- Topp, 1978: 306, 307 (larval characters; key to genera).
- Burakowski, Mroczkowski, and Stefańska, 1979: 10 (catalog; Poland).
- Moore and Legner, 1979: 156 (characters; tabular key to genera of North America north of Mexico).
- Muona, 1979: 17 (list of Scandinavian species).
- Spahr, 1981: 93 (references to specimens from amber and copal).
- Tóth, 1981: 94 (list of species of Hortobágy National Park, Hungary).
- Watt and McColl, 1982: 18, 19 (characters; notes on New Zealand taxa).
- Tóth, 1982: 22 (characters; key to genera and species of Hungary).
- Outerelo and Gamarra, 1985: 76 (key to genera of Iberian Peninsula).
- Dettner, 1987: 28 (defensive glands).
- Thayer, 1987: 400 (phylogenetic relationships).
- Gusarov, 1989 (list of species from the Crimea; ecological and habitat notes).
- Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
- Frank, 1991: 344 (larval characters).
- Newton and Thayer, 1992: 13, 63 (summary of current classification).
- Welch, 1993 (ovariole structure and development).
- Dettner, 1993a (summary and discussion of defensive secretions and exocrine glands and their bearing on phylogeny).
- Newton and Thayer, 1995: 247–286, 296 (phylogenetic relationships; characters; discussion; key to tribes).
- Lawrence and Newton, 1995: 824 (discussion).
- Sparacio, 1995: 137 (characters; species of Sicily).
- Klimaszewski, Newton, and Thayer, 1996: 146 (review of subfamily for New Zealand; notes; list of New Zealand genera; number of New Zealand species).
- M. Hansen, 1996: 35, 96 (listed in Omaliine group of subfamilies; list of Danish species).
- Downie and Arnett, 1996: 429 (characters; species of Northeastern North America).
- M. Hansen, 1997: 83, 84, 86, 114, 176, 177, 178 (characters supporting clade; autapomorphic features; key adult and larval characters; notes).
- Anderson, Nash, and O'Connor, 1997: 16 (annotated checklist; Ireland).
- Cuccodoro, 1999: 388 (device for rearing small hygrophilous beetles).



- Newton, Thayer, Ashe, and Chandler, 2000: 286, 343 (key to Nearctic genera; characters; notes).
- Klimaszewski, 2000: 32 (characters; notes on classification, natural history, distribution in Canada and Alaska).

### Tribe Anepiini

- Anepiini Steel, 1966: 292, 306 (genera included: *Anepius*, *Eupsorus*). **TYPE GENUS:** *Anepius* (see Newton and Thayer, 1992: 63).
- Newton, 1985: 196 (notes on austral distribution and taxonomic position).
  - Newton and Thayer, 1992: 63 (tribe of Proteininae).
  - Newton and Thayer, 1995: 247–286, 299 (phylogenetic relationships; characters; discussion; includes *Anepius* and *Eupsorus*).
  - Klimaszewski, Newton, and Thayer, 1996: 146 (list of New Zealand genera; number of New Zealand species).

### *Anepius*

[1 species; Palaearctic(?) and Australian Regions]

- Anepius* Blackburn, 1902: 29 (species included: *raucus*, *koebeleri*). **TYPE SPECIES:** *Anepius koebeleri* Blackburn, fixed by subsequent designation (see Blackwelder, 1952: 52).
- Bernhauer and Schubert, 1910: 34 (world catalog; 2 species).
  - Steel, 1966: 308 (characters).
  - Newton and Thayer, 1995: 299 (Anepiini).

- Nepalarthrus* Coiffait, 1982: 133 (species included: *himalayicus*). **TYPE SPECIES:** *Nepalarthrus himalayicus* Coiffait, fixed by original designation and monotypy.
- Newton and Thayer, 1995: 299 (synonym of *Anepius*).

*himalayicus* Coiffait, 1982, see: *koebeleri* Blackburn, 1902.

**koebeleri** Blackburn, 1902: 30 (*Anepius*; Type locality: Australia).

- Bernhauer and Schubert, 1910: 34 (*Anepius*; catalog).
- Steel, 1966: 308 (*Anepius*; characters; Australia).
- ▲ **DISTRIBUTION:** Australia, Nepal (?).

*himalayicus* Coiffait, 1982: 134 (*Nepalarthrus*; Type locality: Nepal occidental: region de Rara-See).

- Newton and Thayer, 1995: 299 (*Anepius*; synonym of *koebeleri*; locality may be an error of mislabelling).

*raucus* Blackburn, 1902, see: *Austrorhysus*.

### *Eupsorus*

[1 species; Australian Region]

*Eupsorus* Broun, 1904: 45 (species included: *costatus*). **TYPE SPECIES:** *Eupsorus costatus* Broun, fixed by monotypy.

- Bernhauer and Schubert, 1910: 82 (world catalog; 1 species).
- Blackwelder, 1952: 158 (type species: *costatus*).
- Steel, 1966: 309 (characters).
- Newton and Thayer, 1995: 299 (Anepiini).

**costatus** Broun, 1904: 46 (*Eupsorus*; Type locality: Ida Valley, New Zealand).

- Bernhauer and Schubert, 1910: 82 (*Eupsorus*; catalog).
- Steel, 1966: 310 (*Eupsorus*; characters; New Zealand).
- Klimaszewski, Newton, and Thayer, 1996: 146 (*Eupsorus*; endemic to New Zealand).
- ▲ **DISTRIBUTION:** New Zealand.

### Tribe Austrorhysini

Austrorhysini Newton and Thayer, 1995: 247–286, 298 (description; phylogenetic relationships; discussion; includes *Austrorhysus* and *Megarhroides*).

**Austrorhysus**

[1 species; Australian Region]

*Austrorhysus* Steel, 1966: 297 (species included: *raucus*). **TYPE SPECIES:** *Anepius raucus* Blackburn, fixed by original designation and monotypy.

— Newton and Thayer, 1995: 298 (Austrorhysini).

**raucus** Blackburn, 1902: 30 (*Anepius*; Type locality: Victoria, Dividing Range).

— Bernhauer and Schubert, 1910: 34 (*Anepius*; catalog).

— Steel, 1966: 297 (*Austrorhysus*; characters; Australia).

▲ **DISTRIBUTION:** Australia.

**Megarthroides**

[1 species; Neotropical Region]

*Megarthroides* Steel, 1966: 298 (species included: *chilensis*). **TYPE SPECIES:** *Megarthroides chilensis* Steel, fixed by original designation and monotypy.

— Newton and Thayer, 1995: 298 (Austrorhysini).

**chilensis** Steel, 1966: 300 (*Megarthroides*; Type locality: Chile: Isla Picton).

▲ **DISTRIBUTION:** Chile.

**Tribe Neosoneini**

Nesoneini Steel, 1966: 292 (genera included: *Paranesoneus*, *Austrorhysus*, *Nesoneus*, *Megarthroides*, *Silphotelus*, *Alloproteinus*). **TYPE GENUS:** *Nesoneus* (see Newton and Thayer, 1992: 63).

— Newton, 1985: 196, 197 (notes on austral distribution and taxonomic position).

— Newton and Thayer, 1992: 63 (tribe of Proteininae).

— Newton and Thayer, 1995: 247–286, 298 (phylogenetic relationships; characters; discussion; some genera removed; includes *Nesoneus* and *Paranesoneus*).

— Klimaszewski, Newton, and Thayer, 1996: 146 (list of New Zealand genera; number of New Zealand species).

**Nesoneus**

[1 species; Australian Region]

*Nesoneus* Bernhauer, 1939f: 205 (species included: *acuticeps*). **TYPE SPECIES:** *Nesoneus acuticeps* Bernhauer, fixed by monotypy.

— Blackwelder, 1952: 261 (type species: *acuticeps*).

— Steel, 1966: 288, 293 (adult and larval characters).

— Newton and Thayer, 1995: 298 (Nesoneini).

*Nesoneus* Cameron, 1945d: 780 (species included: *acuticeps*, *sparsior*; **preoccupied** by Bernhauer, 1939). **TYPE SPECIES:** *Nesoneus acuticeps* Cameron, fixed by original designation.

— Steel, 1966: 293 (synonym of *Nesoneus* Bernhauer).

*acuticeps* Cameron, 1945, see: *acuticeps* Bernhauer, 1939.

**acuticeps** Bernhauer, 1939f: 207 (*Nesoneus*; Type locality: Neu-Seeland: North Island: Waitakerei Range, Auckland).

— Steel, 1966: 293 (*Nesoneus*; characters; New Zealand).

— Kuschel, 1990: 25 (*Nesoneus*; endemic; winged; habitat; New Zealand).

▲ **DISTRIBUTION:** New Zealand.

*acuticeps* Cameron, 1945d: 780 (*Nesoneus*; [**preoccupied**]; Type locality: New Zealand: Waitak, North Island).

— Steel, 1966: 293 (*Nesoneus*; isogenotypic synonym of *acuticeps* Bernhauer).

*sparsior* Cameron, 1945, see: *Paranesoneus*.

**Paranesoneus**

[1 species; Australian Region]

*Paranesoneus* Steel, 1966: 294 (species included: *sparsior*). **TYPE SPECIES:** *Nesoneus sparsior* Cameron, fixed by original designation.

— Newton and Thayer, 1995: 298 (*Nesoneini*).

**sparsior** Cameron, 1945d: 781 (*Nesoneus*; Type locality: New Zealand: Midhurst).

— Steel, 1966: 294 (*Paranesoneus*; characters; New Zealand).

— Klimaszewski, Newton, and Thayer, 1996: 146 (*Paranesoneus*; endemic to New Zealand).

▲ **DISTRIBUTION:** New Zealand.

**Tribe Proteinini**

Proteinini Erichson, 1839a: 641 (genera included: *Proteinus*, *Megarthus*, *Micropeplus*).

**TYPE GENUS:** *Proteinus* (see Newton and Thayer, 1992: 63).

— Eichelbaum, 1909: 108 (list of genera with some references; generic synonyms; number of genera; number of species in each genus; general distribution of genera).

— Bernhauer and Schubert, 1910: 32 (world catalog; *Phloeobium*, *Proteinus*, *Anepius*, *Megarthus*).

— Johansen, 1914: 626 (characters; key to Danish genera).

— Kemner, 1925: 62 (larval characters; discussion).

— Porta, 1926: 8 (characters; species of Italy).

— Cameron, 1930: 123 (characters; key to British Indian genera).

— Scheerpeltz, 1933: 1025 (world catalog supplement).

— Scheerpeltz, 1940: 13 (key to Palaeartic genera).

— Jeannel and Jarrige, 1949: 322 (characters).

— Steel, 1966: 292 (characters).

— Tikhomirova, 1973a: 136 (checklist of species of USSR).

— Muona, 1979: 17 (list of Scandinavian species).

— Newton and Thayer, 1992: 63 (tribe of Proteininae).

— Newton and Thayer, 1995: 247–286, 299 (phylogenetic relationships; characters; discussion; includes *Megarthus*, *Metopsia* and *Proteinus*).

— M. Hansen, 1996: 96 (list of Danish species).

— Cuccodoro and Löbl, 1997: 1347 (characters).

— Newton, Thayer, Ashe, and Chandler, 2000: 343 (characters; notes).

Proteinina Heer, 1839: 170 (genera included: *Proteinus*, *Megarthus*). **TYPE GENUS:**

*Proteinus* (see Newton and Thayer, 1992: 63).

— Heer, 1839a: 4 (cited as tribe of Omalida).

— Newton and Thayer, 1992: 63 (synonym of Proteininae; [**Note:** Newton and Thayer cited a different 1839 article by Heer as his first use of the name but on page 24 write that the article cited here was published first]).

Protinina:

— Jakobson, 1908: 445 (characters).

Proteini:

— Pototskaia, 1967: 18, 19 (larval characters; key to some genera).

Phléobiens Mulsant and Rey, 1878b: 251 (genera included: *Phloeobium*). **TYPE GENUS:**

*Phloeobium* (see Newton and Thayer, 1992: 63).

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

Phloeobiinae Fowler, 1888: 431 (genera included: *Phloeobium*). **TYPE GENUS:** *Phloeobium* (see Newton and Thayer, 1992: 63).

— Scheerpeltz, 1933: 1025 (synonym of Proteinini).

— Tottenham, 1954: 13 (synonym of Metopsiinae).

— Burakowski, Mroczkowski, and Stefańska, 1979: 9 (catalog; Poland).

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

Megarthrini Joy, 1932: 93 (genera included: *Megarthus*). **TYPE GENUS:** *Megarthus* (see Newton and Thayer, 1992: 63).

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

Metopsiinae Tottenham, 1954: 8, 13 (genera included: *Metopsia*). **TYPE GENUS:** *Metopsia* (see Newton and Thayer, 1992: 63).

— Lohse, 1964: 21 (characters; key to central European species).

— Topp, 1978: 306 (larval characters).

— Tóth, 1981: 94 (list of species of Hortobágy National Park, Hungary).

— Tóth, 1982: 21 (characters; species of Hungary).

— Outerelo and Gamarra, 1985: 75 (genera of Iberian Peninsula).

— Gusarov, 1989 (list of species from the Crimea; ecological and habitat notes).

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

— Boháč, 1993: 40 (taxa of Czech Republic and Slovakia).

— Assing, Frisch, Kahlen, et al., 1998: 120 (note).

Pteroniinae Moore, 1964a: 88 (replacement name for Proteininae). **TYPE GENUS:** *Pteronius* (see Newton and Thayer, 1992: 63).

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

Pteronini:

— Arnett, 1963: 254 (tribe of Oxytelinae; characters; list of North American genera).

Metopsidinae:

— Newton and Thayer, 1992: 63 (synonym of Proteinini).

Metopsiini:

— Muona, 1979: 17 (list of Scandinavian species).

### **Megarthus**

[136 species; Neotropical, Nearctic, Palaearctic, Ethiopian, Oriental, Australian, and Oceanic Regions]

*Megarthus* Curtis, 1829: 28 (species included: *depressus*, *macropterus*). **TYPE SPECIES:** *Staphylinus depressus* Paykull, fixed by subsequent designation by Westwood, 1838a: 18 [**Note:** Most of the early citations to *M. depressus* are misidentifications of *M. prosseni* (Cuccodoro and Löbl, 1997: 1369). *Megarthus* was erected by Curtis, who also misidentified *M. depressus*, so presumably the type species of *Megarthus* is based on a misidentification].

— Stephens, 1829a: 24 (catalog; Britain).

— Stephens, 1829: 295 (catalog; Britain).

— Stephens, 1834: 330 (characters; habitat).

— Westwood, 1838a: 18 (characters; type species).

— Erichson, 1839a: 643 (characters).

— Heer, 1839: 171 (characters).

— Stephens, 1839: 422 (characters).

— Erichson, 1840: 904 (characters).

— Redtenbacher, 1849: 756 (characters).

— Schaum, 1852: 31 (list of species; Europe).

— Lacordaire, 1854: 147 (characters; notes; list of species).

— Wollaston, 1854: 614 (characters; notes).

— Fairmaire and Laboulbène, 1856: 654 (characters).

— Jacquelin du Val, 1857: 79 (characters).

— Redtenbacher, 1857: 257 (characters; key to Austrian species).

— Kraatz, 1857d: 1027 (characters).

— Thomson, 1858: 38 (characters).

— G. Waterhouse, 1858: 32 (catalog of British species).

— Thomson, 1859: 52 (characters; type species: *depressus*).

— Schaum, 1859: 33 (catalog; European species).

- LeConte, 1861a: 71 (characters).
- Thomson, 1861: 218 (characters).
- Saulcy, 1862: 70 (key to species).
- Gredler, 1863: 127 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 37 (list of species; collecting notes; France).
- Gemminger and Harold, 1868: 672 (catalog).
- Jacquelin du Val, 1868: 82 (catalog; European species).
- Fauvel, 1871a: 51 [= 1872: 25] (characters; key to species).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 282 (characters; key to Austrian species).
- Fauvel, 1878d: 190 [= 1878e: 26] (key to North American species).
- Mulsant and Rey, 1878b: 232 (characters; key to French species).
- Heyden, 1880: 84 (list of species of Siberian region).
- Duvivier, 1883: 201 (catalog).
- Sharp, 1887: 743 (notes; Mexican and Central American species).
- Fowler, 1888: 429 (notes; key to British species).
- Seidlitz, 1891: 336 (key to some European species).
- Seidlitz, 1891a: 359 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 122 (list of species of Europe and Caucasus).
- Heyden, 1893: 49 (list of species of Siberian region).
- Ganglbauer, 1895: 760 (characters; key to middle European species).
- Heyden, 1896: 37 (list of species of Siberian region).
- Fauvel, 1897d: 242 (catalog of species of Barbary; Madeira; Canaries).
- Heyden, Reitter, and Weise, 1906: 127 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 15 (key to species of Seine Basin, France).
- Reitter, 1909: 198 (characters; key to German species).
- Bernhauer and Schubert, 1910: 34 (world catalog; 28 species).
- Blatchley, 1910: 482 (characters).
- Petri, 1912: 50 (list of species of Siebenbürgen).
- Johansen, 1914: 628 (characters; key to Danish species).
- Leng, 1920: 93 (catalog of North American species).
- Cameron, 1924b: 165 (key to Indian species).
- Winkler, 1925: 325 (catalog for Palaearctic region).
- Cameron, 1925: 9, 103 (catalog of Indian species).
- Porta, 1926: 9 (characters; key to species of Italy).
- Portevin, 1929: 456 (characters; key to French species).
- Cameron, 1930: 125 (characters; key to British Indian species).
- Scheerpeltz, 1931a: 188 (key to European species).
- Roubal, 1930: 301 (catalog; Slovakia).
- Joy, 1932: 93 (key to British species).
- Scheerpeltz, 1933: 1028 (world catalog supplement).
- Kuusinen, 1933: 65, 70 (notes; key to Finnish species).
- Normand, 1935: 356 (list of species of Tunisia).
- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).
- Kloet and Hincks, 1945: 160 (list of British species).
- Scheerpeltz, 1947: 257 (key to European species).
- Palm, 1948: 39 (characters; key to species of Sweden).
- Tottenham, 1949: 353, 405 (type species: *depressus* Paykull; list of British species; notes).
- Cameron, 1950g: 6 (key to African species).
- Blackwelder, 1952: 236 (type species).
- Tottenham, 1954: 15 (characters; key to British species).
- Hatch, 1957: 106, 107 (characters; key to species of Pacific Northwest).
- Kocher, 1958: 92 (checklist of species; Morocco).
- Sawada, 1962: 9 (key to Japanese species).

- Ferreira, 1962a: 9 (list of Portuguese species).
  - Horion, 1963: 21 (list of central European species).
  - Székessy, 1963: 10 (characters).
  - Lohse, 1964: 22 (characters; key to central European species).
  - Steel, 1966: 288 (larval characters).
  - Kasule, 1966: 279 (larval characters).
  - Pototskaia, 1967: 19 (larval characters).
  - Scheerpeltz, 1968a: 3 (catalog of Austrian species).
  - Bordoni, 1973j: 655 (list of species from islands near Sicily).
  - Tikhomirova, 1973a: 136 (checklist of species of USSR).
  - Moore and Legner, 1974: 16 (characters; notes).
  - Moore and Legner, 1975: 175 (catalog; North America north of Mexico).
  - Shibata, 1976: 91 (checklist of species of Japan).
  - Pope, 1977: 22 (list of British species).
  - Topp, 1978: 307 (larval characters).
  - Burakowski, Mroczkowski, and Stefańska, 1979: 10 (catalog; Poland).
  - Moore and Legner, 1979: 157 (characters; notes).
  - Muona, 1979: 17 (list of Scandinavian species).
  - Uhlig and Vogler, 1981: 83 (list of some species collected in Germany; habitat and collecting notes).
  - Tóth, 1982: 28 (characters; habitus; key to species of Hungary).
  - Muona and Viramo, 1986: 14 (list of species of northeastern Finland).
  - Segers, 1986: 17 (checklist of species; Belgium).
  - Dettner and Reissenweber, 1991 (defensive secretions: chemistry and systematics).
  - Campbell and Davies, 1991: 87 (checklist of species; Alaska and Canada).
  - Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
  - Siitonen, 1993: 230 (list of Finnish species).
  - Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
  - Welch, 1993: 227 (ovariole number and ovary structure).
  - Hernández, Outerelo, and Gamarra, 1994: 187 (checklist of species; Canary Islands).
  - Cuccodoro, 1995: 262 (water loading behavior).
  - Cuccodoro and Löbl, 1995 (revision of and key to afrotropical species; characters; distribution).
  - Newton and Thayer, 1995: 299 (Proteinini).
  - Zanetti, 1995: 5 (list of species of Italy).
  - M. Hansen, 1996: 96 (list of Danish species).
  - Cuccodoro, 1996 (revision of and key to species of Japan).
  - Cuccodoro and Löbl, 1996 (revision of and key to species of USA and Canada; note on natural history, ecology and distribution in North America).
  - Downie and Arnett, 1996: 429 (characters; key to species of Northeastern North America).
  - Ádám, 1996: 237 (list of species collected in Bükk National Park, Hungary).
  - Cuccodoro and Löbl, 1997 (revision of Palaearctic species; taxonomic history; natural history characters; key to species; discussion; checklist of names of Palaearctic region).
  - Cuccodoro, 1998 (revision of and key to species of New Guinea, New Caledonia, and Fiji; collecting notes; phylogeny).
  - M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
  - Assing, Frisch, Kahlen, et al., 1998: 120 (note).
  - Cuccodoro, 1999a: 374 (key to species of Ethiopia).
  - Newton, Thayer, Ashe, and Chandler, 2000: 343 (12 Nearctic species; notes; characters in key).
  - Jimenez-Sanchez, Navarrete-Heredia, and Padilla-Ramirez, 2000: 57 (necrophilous species in Mexico).
- Phloeobium* Dejean, 1833: 69 (species included: *depressum* and four unavailable names).
- TYPE SPECIES:** *Staphylinus depressus* Paykull, fixed by monotypy.
- Lacordaire, 1835: 492 (characters).
  - Erichson, 1840: 907 (characters).
  - Heer, 1841: 566 (characters).

- Redtenbacher, 1849: 757 (characters).
- Lacordaire, 1854: 147 (synonym of *Megarthus*).
- Fairmaire and Laboulbène, 1856: 655 (characters).
- Jacquelin du Val, 1857: 80 (characters).
- Redtenbacher, 1857: 258 (characters).
- Kraatz, 1857d: 1032 (characters).
- G. Waterhouse, 1858: 32 (catalog of British species).
- Schaum, 1859: 33 (catalog; European species).
- Jacquelin du Val, 1868: 82 (catalog; European species).
- Gemminger and Harold, 1868: 673 (catalog).
- Fauvel, 1871a: 50 [= 1872: 24] (characters).
- Sharp, 1871d: 15 (list of British species).
- Redtenbacher, 1874: 283 (characters).
- Fowler, 1888: 431 (notes).
- Scheerpeltz, 1933: 1026 (world catalog supplement).
- Tottenham, 1939d: 227 (type species designation).
- Tottenham, 1949: 353 (synonym of *Megarthus*; type species: *depressus*).
- Blackwelder, 1952: 304 (type species: *depressum*).
- Pope, 1977: 22 (synonym of *Megarthus*).
- Boháč, 1993: 40 (synonym of *Megarthus*).

*Psyllius* Gistel, 1834: 9 (species included: *depressus* along with one unavailable name).

**TYPE SPECIES:** *Staphylinus depressus* Paykull, fixed by monotypy.

- Blackwelder, 1952: 331 (synonym of *Megarthus*; type species: *depressus*).

**abessinus** Bernhauer, 1931d: 566 (*Megarthus*; Type locality: Abyssinia: Jem-Jem Forest, ca. 9,000 feet; [Note: See lectotype designation by Cuccodoro and Löbl, 1995]).

- Scheerpeltz, 1933: 1028 (*Megarthus*; catalog).
- Cuccodoro and Löbl, 1995: 664 (*Megarthus*; lectotype designation; characters; Ethiopia).
- Cuccodoro, 1999a: 374, 376 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION:** Ethiopia.

*adelphus* Bierig, 1940, see: *solitarius* Sharp, 1887.

*affinis* Miller, 1853, see: *bellevoyei* Saulcy, 1862.

*affinis* Stephens, 1834, see: *denticollis* Beck, 1817.

**africanus** Eichelbaum, 1913: 114 (*Megarthus*; Type locality: Tanzania, Tanga distr., E Usambara Range, Mt. Bomole, Amani; [Note: See lectotype designation by Cuccodoro and Löbl, 1995]).

- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).
- Cuccodoro and Löbl, 1995: 665 (*Megarthus*; lectotype designation: Tanzania, Tanga distr., E Usambara Range, Mt. Bomole, Amani; characters; Tanzania).

▲ **DISTRIBUTION:** Tanzania.

**aino** Cuccodoro, 1996: 478 (*Megarthus*; Type locality: Japan: Honshu: Iwate Pref.: Kawai, Yoshibezawa, 600–700 m).

▲ **DISTRIBUTION:** Japan.

**alienus** Cuccodoro, 1998: 106 (*Megarthus*; Type locality: New Caledonia: Col des Roussettes, north of Bourail, 500 m).

▲ **DISTRIBUTION:** New Caledonia.

**alticola** Cameron, 1924b: 164 (*Megarthus*; Type locality: Simla Hills: Narkanda, 9200 feet).

- Cameron, 1930: 131 (*Megarthus*; characters; India).
- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** India.

**altivagans** Bernhauer, 1929h: 187 (*Megarthus*; Type locality: Mexiko: Desierto de los Leones, Meereshöhe von 3000 bis 4000 m).

- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** Mexico.

- americanus** Sachse, 1852: 149 (*Megarthus*; Type locality: Georgia; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1996]).
- Fauvel, 1878d: 192 [= 1878e: 28] (*Megarthus*; characters; Lake Superior).
  - Fall and Cockerell, 1907: 168 (*Megarthus*; New Mexico).
  - Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).
  - Blatchley, 1910: 482 (*Megarthus*; characters; Indiana).
  - Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).
  - Campbell and Davies, 1991: 87 (*Megarthus*; checklist; Canada).
  - Cuccodoro and Löbl, 1996: 147 (*Megarthus*; lectotype designation; characters; collecting notes; Alabama; Arkansas; District of Columbia; Florida; Georgia; Illinois; Indiana; Kentucky; Louisiana; Mississippi; Missouri; New York; North Carolina; Oklahoma; South Carolina; Texas).
  - Levesque and Levesque, 1996: 291 (*Megarthus*; seasonal abundance; Quebec).
  - Downie and Arnett, 1996: 429 (*Megarthus*; characters; USA).
- ▲ **DISTRIBUTION:** USA.
- angiensis** Cuccodoro, 1998: 109 (*Megarthus*; Type locality: Indonesia: Irian Jaya, Anggi, Tetaho, Kosmena, 1400–1750 m).
- ▲ **DISTRIBUTION:** New Guinea.
- angulicollis** Mäklin, 1852: 325 (*Megarthus*; Type locality: insula Sitkha; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1996]).
- Fauvel, 1869: 494 (*Megarthus*; synonym of *sinuatocollis*).
  - Fauvel, 1871a: 54 [= 1872: 28] (*Megarthus*; synonym of *sinuatocollis*).
  - Fauvel, 1878d: 191 [= 1878e: 27] (*Megarthus*; synonym of *sinuatocollis*).
  - Fauvel, 1878d: 191 [= 1878e: 27] (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1996: 151]; characters; Alaska; West Virginia).
  - Notman, 1919a: 96 (*Megarthus*; Ontario).
  - Fall, 1926: 145 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1996: 151]; Yukon Territory).
  - Scheerpeltz, 1933: 1030 (*Megarthus*; synonym of *sinuatocollis*).
  - Hatch, 1957: 107 (*Megarthus*; cited as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1996: 151]; characters; British Columbia; Washington; Oregon).
  - Campbell and Davies, 1991: 87 (*Megarthus*; checklist; USA; Canada).
  - Campbell and Davies, 1991: 87 (*Megarthus*; cited as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1996: 151]; checklist; USA; Canada).
  - Downie and Arnett, 1996: 429 (*Megarthus*; cited as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1996: 151]; characters; USA).
  - Cuccodoro and Löbl, 1996: 151 (*Megarthus*; lectotype designation; valid species; characters; collecting notes; Alberta; British Columbia; New Brunswick; Northwest Territories; Nova Scotia; Ontario; Quebec; Yukon Territory; Alaska; Arizona; Colorado; Maine; Montana; New Mexico; Oregon; South Dakota; Utah; Wyoming).
- ▲ **DISTRIBUTION:** Canada, USA.
- antennalis** Cameron, 1941: 57 (*Megarthus*; Type locality: Darjeeling: Ghum district).
- ▲ **DISTRIBUTION:** India.
- apicicornis** Cameron, 1950g: 5 (*Megarthus*; cited as *apicornis* on pages 5 and 81 and as *apicicornis* on page 6; [**Note:** See corrected spellings by Cuccodoro and Löbl, 1995]; Type locality: Belgian Congo: vers Rweru, volc. Mikeno, alt. 2400 m).
- Fagel, 1957a: 30 (*Megarthus*; cited as *apicicornis*; characters; notes; Urundi).
  - Cuccodoro and Löbl, 1995: 666 (*Megarthus*; corrected spelling of original, *apicornis*, to *apicicornis*; characters; Zaire).
- ▲ **DISTRIBUTION:** Congo.
- arcuatus** Hatch, 1957: 107 (*Megarthus*; Type locality: British Columbia: Fernie).
- Legner and Moore, 1977: 175 (*Megarthus*; found under bark).
  - Campbell and Davies, 1991: 87 (*Megarthus*; checklist; USA; Canada).
  - Cuccodoro and Löbl, 1996: 154 (*Megarthus*; characters; collecting notes; Alberta; British Columbia; Nova Scotia; California; New Hampshire; Oregon).
- ▲ **DISTRIBUTION:** Canada, USA.



- ashei** Cuccodoro and Löbl, 1996: 157 (*Megarthus*; Type locality: USA: Arizona: Apache Co., Escudilla Mt., 8 mi NE Alpine, 2730 m. Also cited from New Mexico).  
 ▲ **DISTRIBUTION:** USA.
- atratus** Mäklin, 1852: 325 (*Megarthus*; Type locality: insula Sitkha; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1996]).  
 — Fauvel, 1878d: 191 [= 1878e: 27] (*Megarthus*; characters; Sitka Island).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
 — Van Dyke, 1924: 15 (*Megarthus*; Alaska).  
 — Campbell and Davies, 1991: 87 (*Megarthus*; checklist; USA; Canada).  
 — Cuccodoro and Löbl, 1996: 160 (*Megarthus*; lectotype designation: Sitka, pr. Müh.; characters; collecting notes; Alberta; British Columbia; Alaska).  
 — Ryabukhin, 1999: 13 (*Megarthus*; catalog; habitat; distribution; northeastern Russia).  
 ▲ **DISTRIBUTION:** Russia, Canada, USA.
- auricola** Cuccodoro, 1995: 254 (*Megarthus*; Type locality: Papua New Guinea, Morobe district, Bulldog Road, Hidden Valley Gold, 7°27'47"S, 146°40'30"E, 2550 m; also water loading behavior described).  
 — Cuccodoro, 1996a: 108 (*Megarthus*; water loading behavior).  
 — Cuccodoro, 1998: 111 (*Megarthus*; characters; Papua New Guinea).  
 ▲ **DISTRIBUTION:** New Guinea.
- balensis** Cuccodoro, 1999a: 378 (*Megarthus*; Type locality: Ethiopia: Bale region, Bale Mountain National Park, Dinsho Hill, above National Park Headquarters, 3200 m).  
 ▲ **DISTRIBUTION:** Ethiopia.
- baliemensis** Cuccodoro, 1998: 111 (*Megarthus*; Type locality: Indonesia: Irian Jaya, Baliem Valley, Jiwika-Wandaku, 1900–2300 m).  
 ▲ **DISTRIBUTION:** New Guinea.
- bantu** Cuccodoro and Löbl, 1995: 666 (*Megarthus*; Type locality: Zaire: Ruwenzori Range, Albert N. P., Kalonge, river Nyamwamba, tributary of Butahu, 2010 m. Also cited from Burundi and Uganda).  
 ▲ **DISTRIBUTION:** Burundi, Congo, Uganda.
- basicornis** Fauvel, 1904b: 87 (*Megarthus*; Type locality: Sikkim: Darjeeling).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
 — Cameron, 1924b: 164, 165 (*Megarthus*; characters; India).  
 — Cameron, 1930: 129 (*Megarthus*; characters; India).  
 — Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).  
 ▲ **DISTRIBUTION:** India.
- basilewskyi** Fagel, 1957a: 27 (*Megarthus*; Type locality: Ruanda: territoire de Kibuye, Yanina, 2300 m. Also cited from Belgian Congo).  
 — Cuccodoro and Löbl, 1995: 667 (*Megarthus*; characters; Rwanda; Zaire).  
 ▲ **DISTRIBUTION:** Congo, Rwanda.
- bellevoyei** Saulcy, 1862: 69 (*Megarthus*; Type locality: Metz; Norroy-le-Sec; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).  
 — Brisout, 1862: xlvi (characters).  
 — Fauvel, 1871a: 53 [= 1872: 27] (*Megarthus*; synonym of *affinis*).  
 — Mulsant and Rey, 1878b: 241 (*Megarthus*; synonym of *affinis*).  
 — Ganglbauer, 1895: 762 (*Megarthus*; synonym of *affinis*).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *affinis*).  
 — Scheerpeltz, 1933: 1029 (*Megarthus*; synonym of *affinis*).  
 — Cuccodoro and Löbl, 1997: 1354 (*Megarthus*; valid species; lectotype designation: [**Note:** Locality not cited]; characters; collecting notes; summary of distribution, Europe, North Africa, Middle East, Caucasus, Far East Russia).  
 — Assing, Frisch, Kahlen, et al., 1998: 120 (*Megarthus*; note).  
 — Assing and Wunderle, 2001: 36 (*Megarthus*; Cyprus).  
 ▲ **DISTRIBUTION:** Europe, Caucasus, Algeria, Tunisia, Libya, Turkey, Far Eastern Russia.

- affinis* Miller, 1853: 28 (*Megarthus*; [**preoccupied**]; Type locality: Wien).  
 — Redtenbacher, 1857: 258 (*Megarthus*; characters; Austria).  
 — Kraatz, 1857d: 1029 (*Megarthus*; [**Note**: Misidentification: Bernhauer and Schubert, 1910: 35 cited *sinuatocollis* Kraatz as a synonym of *affinis*; Kraatz did not describe the species as new, he attributed it to Lacordaire]; characters; Germany).  
 — Kraatz, 1857d: 1029 (*Megarthus*; synonym of *sinuatocollis*).  
 — Kraatz, 1868c: 350 (*Megarthus*; synonym of *sinuatocollis*).  
 — Fauvel, 1871a: 53 [= 1872: 27] (*Megarthus*; characters; France; Britain; Germany; Austria; Italy; Corsica; Spain; Turkey; Algeria).  
 — Fauvel, 1873b: 110 [= 1873c: 3] (*Megarthus*; Sicily).  
 — Redtenbacher, 1874: 283 (*Megarthus*; characters; Austria).  
 — Fauvel, 1878: 86 [= 1878a: 6] (*Megarthus*; Algeria).  
 — Mulsant and Rey, 1878b: 240 (*Megarthus*; characters; France).  
 — Fauvel, 1886: 12 [= 1886a: 4] (*Megarthus*; Algeria; Tunisia).  
 — Fowler, 1888: 430 (*Megarthus*; characters; Britain).  
 — Ganglbauer, 1895: 762 (*Megarthus*; characters; middle Europe; Mediterranean region).  
 — Fauvel, 1902b: 49 (*Megarthus*; Algeria; Tunisia).  
 — Sainte-Claire Deville, 1906: 67 (*Megarthus*; Corsica).  
 — Montandon, 1908: 77 (*Megarthus*; Romania).  
 — Reitter, 1909: 198 (*Megarthus*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
 — Portevin, 1929: 457 (*Megarthus*; characters; France).  
 — Gridelli, 1930: 60 (*Megarthus*; Libya).  
 — Scheerpeltz, 1931a: 188 (*Megarthus*; characters in key).  
 — Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).  
 — Paulian, 1941: 145 (*Megarthus*; larval characters).  
 — Scheerpeltz, 1947: 259 (*Megarthus*; characters).  
 — Horion, 1963: 23 (*Megarthus*; Algeria; eastern Russia; Britain; Holland; Belgium; France; Spain; Italy; Dalmatia; Greece; Crete; Turkey; Romania; Hungary; Czechoslovakia; Poland; Russia; Germany; Austria).  
 — Lohse, 1964: 23 (*Megarthus*; characters; central Europe).  
 — Pototskaia, 1967: 19 (*Megarthus*; larval characters).  
 — Pope, 1977: 22 (*Megarthus*; Britain).  
 — Hammond, 1980: 135 (*Megarthus*; Ireland).  
 — Tóth, 1982: 29 (*Megarthus*; characters; Hungary).  
 — Lucht, 1987: 85 (*Megarthus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).  
 — Boháč, 1993: 40 (*Megarthus*; Czech Republic; Slovakia).  
 — Sparacio, 1995: 137 (*Megarthus*; characters; notes; Sicily).  
 — Zanetti, 1995: 5 (*Megarthus*; Italy).  
 — Krasutskii, 1997: 304 (*Megarthus*; found on *Pleurotus calyptratus*; western Siberia).  
 — Cuccodoro and Löbl, 1997: 1354 (*Megarthus*; synonym of *bellevoyei*).  
 — Assing, Frisch, Kahlen, et al., 1998: 120 (*Megarthus*; synonym of *bellevoyei*).
- bimaculatus** Fauvel, 1904b: 87 (*Megarthus*; Type locality: Ceylan).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
 — Cameron, 1924b: 165 (*Megarthus*; characters; India).  
 — Cameron, 1930: 128 (*Megarthus*; characters; Ceylon; India).  
 — Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).  
 ▲ **DISTRIBUTION:** India, Sri Lanka.
- birmanus** Fauvel, 1895: 194 (*Megarthus*; Type locality: Bírmanie, Carin Asciiui Ghécu, 1400–1500 m).  
 — Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
 — Cameron, 1924b: 163, 165 (*Megarthus*; characters; India).  
 — Cameron, 1930: 128 (*Megarthus*; characters; Burma; India).  
 — Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).  
 ▲ **DISTRIBUTION:** Myanmar, India.

- borealis** Cuccodoro and Löbl, 1996: 163 (*Megarthus*; Type locality: USA: Alaska: Prudhoe Bay Rd., Fish Cr., 150°50'W, 66°32'N, 250 m).  
▲ **DISTRIBUTION:** USA.
- calcaratus** Coiffait, 1977: 256 (*Megarthus*; Type locality: Khumba Pari, Népal, 3550 m).  
— Coiffait, 1982: 40 (*Megarthus*; Nepal).  
▲ **DISTRIBUTION:** Nepal.
- chatterjeei** Cameron, 1924b: 162, 165 (*Megarthus*; Type locality: Chakrata District, 5000 to 6500 feet).  
— Cameron, 1930: 130 (*Megarthus*; characters; India).  
— Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).  
▲ **DISTRIBUTION:** India.
- chinese** J. Li, 1993: 53 (*Megarthus*; Type locality: Mount Laoye).  
▲ **DISTRIBUTION:** China.
- chobauti** Fauvel, 1902b: 49, 179 (*Megarthus*; Type locality: Yakouren, Kabylie; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]. Originally cited from Kabylië: sommet du Djebel Bou-Berak près Dellys; forêt d'Yakouren; Bougie).  
— Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
— Cuccodoro and Löbl, 1997: 1357 (*Megarthus*; lectotype designation: Yakouren, Kabylie; characters; Algeria).  
▲ **DISTRIBUTION:** Algeria.
- clarkei** Cuccodoro and Löbl, 1995: 668 (*Megarthus*; Type locality: Ethiopia: Shewa prov., Addis Abeba).  
— Cuccodoro, 1999a: 376 (*Megarthus*; characters; Ethiopia).  
▲ **DISTRIBUTION:** Ethiopia.
- conformis** Sawada, 1962: 11, 15 (*Megarthus*; Type locality: Japan: Honshu: Kitashirakawa, Kyoto City).  
— Cuccodoro, 1996: 480 (*Megarthus*; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- congoensis** Cameron, 1950g: 4 (*Megarthus*; Type locality: Belgian Congo: volc. Visoke, alt. 2800–3300 m).  
— Cuccodoro and Löbl, 1995: 669 (*Megarthus*; characters; Rwanda).  
▲ **DISTRIBUTION:** Congo, Rwanda.
- conspirator** Cuccodoro, 1996: 481 (*Megarthus*; Type locality: Japan: Honshu: Gunma Pref.: Nikko N. P., below Konsei Pass, 1500–1600 m. Also cited from Sakhalin).  
— Cuccodoro and Löbl, 1997: 1360 (*Megarthus*; characters; Japan; Far East Russia).  
▲ **DISTRIBUTION:** Japan, Sakhalin, Russia.
- constrictus** Cuccodoro, 1996: 482 (*Megarthus*; Type locality: Japan: Honshu: Nagano Pref.: Minami Alps, Kitazawa Toge, 2000 m).  
▲ **DISTRIBUTION:** Japan.
- convexus** Sharp, 1874: 100 (*Megarthus*; Type locality: Simabara; [**Note:** See lectotype designation by Cuccodoro, 1996]).  
— Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
— Sawada, 1962: 11 (*Megarthus*; cited as *convex*; characters; Japan).  
— Nakane, 1963a: 82 (*Megarthus*; characters; habitus photograph; Japan).  
— Watanabe and Shibata, 1972: 60 (*Megarthus*; Yaku-shima Island).  
— Cuccodoro, 1996: 482 (*Megarthus*; lectotype designation; characters; Japan).  
▲ **DISTRIBUTION:** Japan.
- corticale** Lacordaire, 1835, see: *Metopsia*.
- corticalis** Sharp, 1889: 468 (*Megarthus*; Type locality: Oyayama; [**Note:** See lectotype designation by Cuccodoro, 1996]).  
— Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).  
— Sawada, 1962: 10 (*Megarthus*; characters; Japan).

- Nakane, 1963a: 82 (*Megarthus*; characters; habitus photograph; Japan).
- Cuccodoro, 1996: 483 (*Megarthus*; lectotype designation; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**danieli** Cuccodoro, 1999a: 380 (*Megarthus*; Type locality: Ethiopia: Bale region, Bale Mountains National Park, Harena Forest, Katcha area, 2400 m).

▲ **DISTRIBUTION:** Ethiopia.

**dentatus** Coiffait, 1977: 258 (*Megarthus*; Type locality: Khumba Lager, Népal, 2200 m).

▲ **DISTRIBUTION:** Nepal.

**denticollis** Beck, 1817: 26 (*Omalium*; Type locality: München Umg., Engl. Garten Heu; [Note: See neotype designation by Cuccodoro and Löbl, 1997]. Originally cited from Baiern).

- Illiger, 1798: 355 (*Silpha*; variety  $\alpha$  of *hemipterus*; [Note: Cited as a synonym of *denticollis* by Mulsant and Rey, 1878b: 246 and Bernhauer and Schubert, 1910: 35; there is no available name]; characters).
- Erichson, 1840: 906 (*Megarthus*; characters; Europe).
- Redtenbacher, 1849: 756 (*Megarthus*; characters; Austria).
- Hardy, 1851: 64 (*Megarthus*; notes; England).
- Fairmaire and Laboulbène, 1856: 655 (*Megarthus*; characters; France).
- Redtenbacher, 1857: 257 (*Megarthus*; characters; Austria).
- Kraatz, 1857d: 1030 (*Megarthus*; characters; Germany).
- Peyron, 1858: 434 (*Megarthus*; Turkey).
- Thomson, 1861: 219 (*Megarthus*; characters; Scandinavia).
- Saulcy, 1862: 70 (*Megarthus*; key characters).
- Fauvel, 1871a: 54 [= 1872: 28] (*Megarthus*; characters; France; Scandinavia; Britain; Germany).
- Fauvel, 1873b: 110 [= 1873c: 3] (*Megarthus*; Austria; Russia).
- Redtenbacher, 1874: 282 (*Megarthus*; characters; Austria).
- Seidlitz, 1875: 232 (*Megarthus*; characters; Baltic region).
- J. Sahlberg, 1876: 225 (*Megarthus*; Finland).
- Mulsant and Rey, 1878b: 246 (*Megarthus*; characters; France).
- Fowler, 1888: 429 (*Megarthus*; characters; Britain).
- Ganglbauer, 1895: 762 (*Megarthus*; characters; north and middle Europe; Asia Minor).
- Reitter, 1909: 198 (*Megarthus*; characters; Germany).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; catalog).
- Johansen, 1914: 630 (*Megarthus*; characters; Denmark).
- Portevin, 1929: 457 (*Megarthus*; characters; France).
- Scheerpeltz, 1931a: 191 (*Megarthus*; characters in key).
- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).
- Kuusinen, 1933: 69 (*Megarthus*; characters; illustrations; Finland).
- Scheerpeltz, 1947: 262 (*Megarthus*; characters).
- Palm, 1948: 42 (*Megarthus*; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 24 (*Megarthus*; eastern Russia; Caucasus; Ireland; Scotland; Lapland; Russia; France; Italy; Balkans; Germany; Austria).
- Lohse, 1964: 23 (*Megarthus*; characters; central Europe).
- Raianu, 1964: 106 (*Megarthus*; Romania).
- Kasule, 1966: 279 (*Megarthus*; larval characters).
- Bacchus and Hammond, 1972: 62 (*Megarthus*; donkey dung; Britain).
- Pope, 1977: 22 (*Megarthus*; Britain).
- Hammond, 1980: 135 (*Megarthus*; Ireland).
- Tóth, 1982: 30 (*Megarthus*; characters; Hungary).
- Lucht, 1987: 85 (*Megarthus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Dettner and Reissenweber, 1991 (*Megarthus*; defensive secretions: chemistry and systematics).
- Welch, 1993: 227 (*Megarthus*; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Megarthus*; Czech Republic; Slovakia).

- Zanetti, 1995: 5 (*Megarthus*; Italy).
- Muona and Viramo, 1995: 9 (*Megarthus*; collected from fungus and dung of *Ursus arctos*; Finland).
- Cuccodoro, 1996: 484 (*Megarthus*; characters; Japan).
- Cuccodoro and Löbl, 1997: 1361 (*Megarthus*; neotype designation: München Umg., Engl. Garten Heu; characters; collecting notes; Palaearctic region; Syrian record needs confirmation).
- Assing, Frisch, Kahlen, et al., 1998: 120 (*Megarthus*; note).
- Kashcheev, 1999a: 57 (*Megarthus*; Kazakhstan).
- ▲ **DISTRIBUTION:** Europe, Russia, Turkey, Japan.

*rufescens* Stephens, 1834: 331 (*Megarthus*; Type locality: Hertford; Ripley; London; Somersetshire; Salop; New Forest; Suffolk; Norfolk; Devon; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).

- Stephens, 1839: 423 (*Megarthus*; characters; England).
- Erichson, 1840: 906 (*Megarthus*; synonym of *hemipterus*).
- Kraatz, 1857d: 1031 (*Megarthus*; synonym of *hemipterus*).
- G. Waterhouse, 1858: 32 (*Megarthus*; synonym of *denticollis*).
- Ganglbauer, 1895: 762 (*Megarthus*; synonym of *denticollis*).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *denticollis*).
- Cuccodoro and Löbl, 1997: 1361, 1363 (*Megarthus*; lectotype designation: [**Note:** Locality not cited]; synonym of *denticollis*).

*affinis* Stephens, 1834: 333 (*Megarthus*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: Devonshire).

- Stephens, 1839: 424 (*Megarthus*; characters; England).
- G. Waterhouse, 1858: 32 (*Megarthus*; synonym of *denticollis*).
- Ganglbauer, 1895: 762 (*Megarthus*; synonym of *denticollis*).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *denticollis*).
- Pope, 1977: 22 (*Megarthus*; synonym of *denticollis*).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

*marginatus* Stephens, 1834: 333 (*Megarthus*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: Essex near Southend).

- Stephens, 1839: 424 (*Megarthus*; characters; England).
- Hardy, 1851: 64 (*Megarthus*; synonym of *denticollis*).
- G. Waterhouse, 1858: 32 (*Megarthus*; synonym of *depressus* and *denticollis*).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *denticollis*).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

*marginicollis* Lacordaire, 1835: 492 (*Phloeobium*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: Paris).

- Erichson, 1839a: 644 (*Megarthus*; characters; Germany).
- Heer, 1839: 171 (*Megarthus*; characters; Switzerland).
- Erichson, 1840: 906 (*Megarthus*; synonym of *denticollis*).
- Redtenbacher, 1849: 756 (*Megarthus*; synonym of *denticollis*).
- Hardy, 1851: 64 (*Megarthus*; synonym of *denticollis*).
- Kraatz, 1857d: 1030 (*Megarthus*; synonym of *denticollis*).
- Mulsant and Rey, 1878b: 246 (*Megarthus*; synonym of *denticollis*).
- Ganglbauer, 1895: 762 (*Megarthus*; synonym of *denticollis*).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *denticollis*).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

*minimus* Bruce, 1931: 194 (*Megarthus*; variety of *denticollis*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: Tullstuguputten).

- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

**dentipes** Bernhauer, 1938: 17 (*Megarthus*; Type locality: Nordwestl. China: Chinkiang; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).

- Cuccodoro and Löbl, 1997: 1364 (*Megarthus*; lectotype designation; characters; China).

▲ **DISTRIBUTION:** China.

- depressus** Paykull, 1789: 70 (*Staphylinus*; Type locality: Suecia; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).
- Erichson, 1840: 905 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Switzerland; France).
  - Heer, 1841: 566 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Switzerland).
  - Hochhuth, 1849: 206 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Imeretia; Iberia).
  - Hardy, 1851: 64 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; notes; England).
  - Fairmaire and Laboulbène, 1856: 655 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; France).
  - Redtenbacher, 1857: 258 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Austria).
  - Kraatz, 1858b: 129 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Greece).
  - Thomson, 1861: 218 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Scandinavia).
  - Saulcy, 1862: 70 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; key characters).
  - Brisout, 1862: xlvi (sic) (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters).
  - Hochhuth, 1862: 112 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Russia).
  - Kraatz, 1868c: 349 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; notes).
  - Fauvel, 1871a: 54 [= 1872: 28] (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; France; Scandinavia; Britain; Germany; Switzerland; Austria; Greece; Russia; Alaska [**Note:** According to Cuccodoro and Löbl, 1996: 151, North American records cited as *sinuatocollis* are misidentifications of *angulicollis*]).
  - Fauvel, 1873b: 110 [= 1873c: 3] (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Caucasus).
  - Fauvel, 1874: 320 [= 1874b: 26] (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Siberia).
  - Redtenbacher, 1874: 283 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Austria).
  - Seidlitz, 1875: 231 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Baltic region).
  - J. Sahlberg, 1876: 224 (*Megarthus*; cited as *sinuatocollis*, spelled as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Finland).
  - Mulsant and Rey, 1878b: 243 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; France).
  - Fowler, 1888: 430 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Britain).
  - Ganglbauer, 1895: 762 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Palaeartic region; North America [**Note:** According to Cuccodoro and Löbl, 1996: 151, North American records cited as *sinuatocollis* are misidentifications of *angulicollis*]).
  - Montandon, 1908: 77 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Romania).
  - Poppius, 1909: 3 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Lena Valley, Siberia).
  - Reitter, 1909: 198 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Germany).

- Bernhauer and Schubert, 1910: 36 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; catalog).
- Johansen, 1914: 629 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Denmark).
- Kemner, 1925: 71 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; larval characters).
- Portevin, 1929: 457 (*Megarthus*; cited as *sinuatocollis*, spelled as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; France).
- Scheerpeltz, 1931a: 190 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters in key).
- Scheerpeltz, 1933: 1030 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; catalog).
- Kuusinen, 1933: 69 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; illustrations; Finland).
- Scheerpeltz, 1947: 260 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters).
- Palm, 1948: 42 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 24 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Transbaikal; Scotland; Lapland; France; Italy; Dalmatia; Balkans; Romania; Hungary; Czechoslovakia; Germany; Austria).
- Lohse, 1964: 23 (*Megarthus*; cited as *sinuatocollis*, spelled as *sinuaticollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; central Europe).
- Pope, 1977: 22 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Britain).
- Hammond, 1980: 135 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Ireland).
- Tóth, 1982: 29 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; characters; Hungary).
- Lucht, 1987: 85 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Detner and Reissenweber, 1991 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; defensive secretions: chemistry and systematics).
- Welch, 1993: 227 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Megarthus*; Czech Republic; Slovakia).
- Boháč, 1993: 40 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Czech Republic; Slovakia).
- Øland, 1995: 23 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; host mushroom; Norway).
- Muona and Viramo, 1995: 9 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; collected from dung of *Ursus arctos*; Finland).
- Zanetti, 1995: 5 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1369]; Italy).
- Cuccodoro and Löbl, 1997: 1364 (*Megarthus*; lectotype designation; specimens identified as *sinuatocollis* Lacordaire are *depressus*; characters; collecting notes; Palaearctic region, absent from southern Mediterranean region and Japan).
- Ryabukhin, 1999: 12 (*Megarthus*; cited as *sinuatocollis*; [**Note:** Presumably misidentified, see Cuccodoro and Löbl, 1997: 1369]; catalog; habitat; distribution; northeastern Russia).
- Kashcheev, 1999a: 57 (*Megarthus*; Kazakhstan).
- ▲ **DISTRIBUTION:** Europe, Russia.
- emarginatus* Stephens, 1834: 332 (*Megarthus*; [**Note:** **Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: London; Suffolk; Woodland, Devon.; Raehills).
- Stephens, 1839: 423 (*Megarthus*; characters; England).
- Hardy, 1851: 64 (*Megarthus*; synonym of *denticollis*).

- Ganglbauer, 1895: 762 (*Megarthus*; synonym of *depressus*).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; synonym of *depressus*).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

*pusillus* Stephens, 1834: 333 (*Megarthus*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: New Forest, Hants).

- Stephens, 1839: 424 (*Megarthus*; characters; England).
- Hardy, 1851: 64 (*Megarthus*; synonym of *depressus*).
- G. Waterhouse, 1858: 32 (*Megarthus*; synonym of *depressus*).
- Ganglbauer, 1895: 762 (*Megarthus*; synonym of *depressus*).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; synonym of *depressus*).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

*depressus*: sensu Fauvel and others, see: *prosseni* Schatzmayr, 1904.

**dissymmetricus** Coiffait, 1977: 259 (*Megarthus*; Type locality: Phulchoki près Katmandu).

▲ **DISTRIBUTION**: Nepal.

**dominicæ** Cuccodoro and Löbl, 1995: 670 (*Megarthus*; Type locality: Uganda: Toro prov., Ruwenzori N. P., John Mate Camp, 3350 m).

▲ **DISTRIBUTION**: Uganda.

**elevatus** Coiffait, 1977: 254 (*Megarthus*; Type locality: Vallée Dzunda Khola près Talpi, région de Jumla, Népal occidental, 3000–3500 m).

▲ **DISTRIBUTION**: Nepal.

*emarginatus* Stephens, 1834, see: *depressus* Paykull, 1789.

**excisus** LeConte, 1863a: 58 (*Megarthus*; Type locality: Lake Superior).

- Fauvel, 1878d: 193 [= 1878e: 29] (*Megarthus*; characters; Lake Superior; New York).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).
- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).
- Campbell and Davies, 1991: 87 (*Megarthus*; checklist; Canada).
- Cuccodoro and Löbl, 1996: 165 (*Megarthus*; characters; collecting notes; Alberta; British Columbia; Manitoba; New Brunswick; Newfoundland; Nova Scotia; Ontario; Prince Edward Island; Quebec; Yukon Territory; Alaska; Colorado; Illinois; Massachusetts; Minnesota; New Hampshire; New Jersey; New Mexico; New York; North Carolina; Oregon; Pennsylvania; South Dakota; Vermont; West Virginia; Wisconsin).
- Downie and Arnett, 1996: 429 (*Megarthus*; characters; USA).

▲ **DISTRIBUTION**: Canada, USA.

**falasha** Cuccodoro and Löbl, 1995: 671 (*Megarthus*; Type locality: Ethiopia: Gojam prov., 8 km W Falega, Birham, 10°46'N, 38°03'E, 2820 m).

- Cuccodoro, 1999a: 374, 376, 380 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION**: Ethiopia.

**fennicus** Lahtinen, 1938: 254 (*Megarthus*; Type locality: Alajärvi; [**Note**: See lectotype designation by Cuccodoro and Löbl, 1997]. Also cited from Turku, Ruissalo).

- Palm, 1948: 43 (*Megarthus*; characters; Sweden; Norway; Finland).
- Cuccodoro and Löbl, 1997: 1369 (*Megarthus*; lectotype designation: Alajärvi; characters; collecting notes; North Europe; Siberia).

▲ **DISTRIBUTION**: Europe, Russia.

*fernandezii* Jarrige, 1952, see: *Metopsia*.

**fijianus** Cuccodoro, 1998: 107 (*Megarthus*; Type locality: Fiji: Viti Levu, Navai, base of Mt. Tamanivi, 1000 m).

▲ **DISTRIBUTION**: Fiji.

**flavolimbatus** Cameron, 1924b: 164, 165 (*Megarthus*; Type locality: Simla Hills: Matiana, Narkanda, Kotgarh, 7000 to 9200 feet).

- Cameron, 1930: 131 (*Megarthus*; characters; India).
- Scheerpeltz, 1933: 1029 (*Megarthus*; catalog).

▲ **DISTRIBUTION**: India.



- flavosignatus** Bierig, 1940: 378 (*Megarthus*; Type locality: Costa Rica: Carpintera).  
 ▲ **DISTRIBUTION:** Costa Rica.
- flavus* Stephens, 1834, see: *Metopsia*.
- franzi* Scheerpeltz, 1947, see: *stercorarius* Mulsant and Rey, 1878.
- gallicus* C. Koch, 1938, see: *Metopsia*.
- gigas** Fagel, 1957a: 29 (*Megarthus*; Type locality: Urundi: territoire de Ngozi, Samutuku, 2600 m. Also cited from Belgian Congo).  
 — Cuccodoro and Löbl, 1995: 672 (*Megarthus*; characters; Burundi, Zaire).  
 ▲ **DISTRIBUTION:** Burundi, Congo.
- gomerense* H. Franz, 1986, see: *Metopsia*.
- gressitti** Cuccodoro, 1998: 107 (*Megarthus*; Type locality: New Caledonia: Col des Roussettes, 450–550 m).  
 ▲ **DISTRIBUTION:** New Caledonia.
- harenaensis** Cuccodoro, 1999a: 380 (*Megarthus*; Type locality: Ethiopia: Bale region, Bale Mountains National Park, Harena Forest, 2 km below Rira, 2850 m).  
 ▲ **DISTRIBUTION:** Ethiopia.
- hemipterus** Illiger, 1794: 597 (*Silpha*; Type locality: Amt Campen, einige Stunden von Braunschweig).  
 — Olivier, 1795:(42): 38 (*Staphylinus*; [**Note:** Misidentified as *melanocephalus* Fabricius but cited by Bernhauer and Schubert, 1910: 36 as synonym of *hemipterus*; Olivier attributed *melanocephalus* to Paykull who attributed it to Fabricius. Cuccodoro and Löbl, 1997: 1372 cited *melanocephalus* Olivier as a synonym of *hemipterus*]; characters).  
 — Illiger, 1798: 355 (*Silpha*; also variety  $\beta$ ; characters).  
 — Gyllenhal, 1813: 699 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 36 cited *depressus* variety  $c$  Gyllenhal as a synonym of *hemipterus* Illiger; Gyllenhal's variety is not an available name]; characters; Sweden).  
 — Gyllenhal, 1813: 699 (*Omalium*; synonym of *depressus*).  
 — Erichson, 1839a: 645 (*Megarthus*; characters; Germany).  
 — Heer, 1839: 172 (*Megarthus*; characters; Switzerland).  
 — Erichson, 1840: 906 (*Megarthus*; characters; Europe).  
 — Redtenbacher, 1849: 757 (*Megarthus*; characters; Austria).  
 — Fairmaire and Laboulbène, 1856: 655 (*Megarthus*; characters; France).  
 — Redtenbacher, 1857: 258 (*Megarthus*; characters; Austria).  
 — Kraatz, 1857d: 1031 (*Megarthus*; characters; Germany).  
 — Thomson, 1861: 219 (*Megarthus*; characters; Scandinavia).  
 — Saulcy, 1862: 70 (*Megarthus*; key characters).  
 — Fauvel, 1871a: 54 [= 1872: 28] (*Megarthus*; characters; France; Europe).  
 — Redtenbacher, 1874: 283 (*Megarthus*; characters; Austria).  
 — Seidlitz, 1875: 232 (*Megarthus*; characters; Baltic region).  
 — Mulsant and Rey, 1878b: 249 (*Megarthus*; characters; France).  
 — Sharp, 1889: 468 (*Megarthus*; Japan).  
 — Fowler, 1888: 430 (*Megarthus*; characters; Britain).  
 — Ganglbauer, 1895: 763 (*Megarthus*; characters; Europe).  
 — Reitter, 1909: 198 (*Megarthus*; characters; Germany).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Johansen, 1914: 631 (*Megarthus*; characters; Denmark).  
 — Portevin, 1929: 457 (*Megarthus*; characters; France).  
 — Scheerpeltz, 1931a: 191 (*Megarthus*; characters in key).  
 — Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).  
 — Scheerpeltz, 1947: 262 (*Megarthus*; characters).  
 — Sawada, 1962: 14 (*Megarthus*; characters; Japan).  
 — Raianu, 1963: 85 (*Megarthus*; Romania).  
 — Horion, 1963: 26 (*Megarthus*; eastern Russia; England; Holland; Belgium; France; Spain; Switzerland; Italy; Romania; Hungary;p Slovakia; Czech Republic; Germany; Austria).

- Lohse, 1964: 23 (*Megarthus*; characters; central Europe).
- Szujewski, 1969a: 247 (*Megarthus*; notes; Poland).
- Pope, 1977: 22 (*Megarthus*; Britain).
- Hammond, 1980: 135 (*Megarthus*; may not be in Ireland).
- Tóth, 1982: 30 (*Megarthus*; characters; Hungary).
- Lucht, 1987: 85 (*Megarthus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Welch, 1993: 227 (*Megarthus*; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Megarthus*; Czech Republic; Slovakia).
- Zanetti, 1995: 5 (*Megarthus*; Italy).
- Cuccodoro, 1996: 485 (*Megarthus*; characters; Japan).
- Cuccodoro and Löbl, 1997: 1372 (*Megarthus*; characters; collecting notes; Palearctic region including Far East Russia and Japan).
- Fowles, Alexander, and Key, 1999: 129 (*Megarthus*; saproxylic species; status as endangered or threatened species; Britain).
- Kashcheev, 1999a: 57 (*Megarthus*; Kazakhstan).

▲ **DISTRIBUTION:** Europe, Russia, China, Japan.

*nitiduloides* Lacordaire, 1835: 493 (*Phloeobium*; Type locality: Paris; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).

- Erichson, 1839a: 645 (*Megarthus*; synonym of *hemipterus*).
- Erichson, 1840: 906 (*Megarthus*; synonym of *denticollis*).
- Redtenbacher, 1849: 757 (*Megarthus*; synonym of *hemipterus*).
- Kraatz, 1857d: 1031 (*Megarthus*; synonym of *hemipterus*).
- Mulsant and Rey, 1878b: 250 (*Megarthus*; synonym of *hemipterus*).
- Ganglbauer, 1895: 763 (*Megarthus*; synonym of *hemipterus*).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; synonym of *hemipterus*).
- Cuccodoro and Löbl, 1997: 1372 (*Megarthus*; lectotype designation; synonym of *hemipterus*).

*heteropus* Sawada, 1962: 14, 15 (*Megarthus*; Type locality: Japan: Honshu: Aomori Pref.: Tsuta).

- J. Li, 1993: 18 (*Megarthus*; cited as *heterops*; China).
- Cuccodoro, 1996: 495 (*Megarthus*; synonym of *hemipterus*).
- Cuccodoro and Löbl, 1997: 1372 (*Megarthus*; synonym of *hemipterus*).

*heteropus* Sawada, 1962, see: *hemipterus* Illiger, 1794.

*hispanicum* Scheerpeltz, 1960, see: *Metopsia*.

**horticola** Cuccodoro and Löbl, 1995: 673 (*Megarthus*; Type locality: Uganda: Bugisu prov., Mt. Elgon, Sipi, 1750 m. Also cited from Kenya and Zaire).

▲ **DISTRIBUTION:** Congo, Kenya, Uganda.

**hutu** Cuccodoro and Löbl, 1995: 673 (*Megarthus*; Type locality: Rwanda: Albert N. P., V. Visoke, Bishoke, 2800–3300 m. Also cited from Zaire).

▲ **DISTRIBUTION:** Congo, Rwanda.

**inaequalis** Bierig, 1940: 379 (*Megarthus*; Type locality: Costa Rica: Vara Blanca, 1800 m, entre volcanes Barba y Poás).

▲ **DISTRIBUTION:** Costa Rica.

**incubifer** Cuccodoro, 1996: 486 (*Megarthus*; Type locality: Japan).

▲ **DISTRIBUTION:** Japan.

**integricollis** Coiffait, 1977: 253 (*Megarthus*; Type locality: Phulchoki près Katmandu).

▲ **DISTRIBUTION:** Nepal.

**impressicollis** Eppelsheim, 1893: 67 (*Megarthus*; Type locality: Ost-Sibirien, in der Nähe von Irkutsk, von Tunka bis Munku-Sardik im Sajan'schen Gebirge).

- Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).
- Cuccodoro, 1996: 485 (*Megarthus*; characters; Japan).
- Cuccodoro and Löbl, 1997: 1375 (*Megarthus*; characters; Russia; Japan).

▲ **DISTRIBUTION:** Russia, Japan.

- japonicus** Sharp, 1874: 99 (*Megarthus*; Type locality: Japan; [**Note:** See lectotype designation by Cuccodoro, 1996]).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Cameron, 1949b: 460 (*Megarthus*; Japan).  
 — Sawada, 1962: 12 (*Megarthus*; characters; Japan).  
 — Nakane, 1963a: 82 (*Megarthus*; characters; habitus photograph; Japan).  
 — Watanabe and Shibata, 1972: 60 (*Megarthus*; Yaku-shima Island).  
 — Cuccodoro, 1996: 488 (*Megarthus*; lectotype designation; characters; Japan; China; Russia).  
 — Cuccodoro and Löbl, 1997: 1375 (*Megarthus*; characters; China; Asian Russia).  
 — Watanabe, 1998: 313 (*Megarthus*; Japan).  
 ▲ **DISTRIBUTION:** Japan, China, Russia.
- kamerunensis** Bernhauer, 1942c: 348 (*Megarthus*; Type locality: Mont Cameroun: 1800–2000 m, versant Sud-Est).  
 — Cuccodoro and Löbl, 1995: 674 (*Megarthus*; notes; Cameroon).  
 ▲ **DISTRIBUTION:** Cameroon.
- kuscheli** Cuccodoro, 1998: 108 (*Megarthus*; Type locality: New Caledonia: Table Unio, near Col d'Amieu, 900 m).  
 ▲ **DISTRIBUTION:** New Caledonia.
- longicornis** Wollaston, 1854: 615 (*Megarthus*; Type locality: Madeira: Funchal).  
 — Wollaston, 1857: 206 (*Megarthus*; habitat; Madeira Islands).  
 — Wollaston, 1865: 525 (*Megarthus*; notes; Madeira Islands; [**Note:** Also listed from the Canary Islands but these specimens were misidentified according to Cuccodoro and Löbl, 1997: 1376 and are now identified as *wollastoni*]).  
 — Wollaston, 1871: 313 (*Megarthus*; notes).  
 — Fauvel, 1902b: 49 (*Megarthus*; Madeira).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Smetana, 1963b: 31 (*Megarthus*; Madeira).  
 — Cuccodoro and Löbl, 1997: 1376 (*Megarthus*; characters; collecting notes; Madeira).  
 ▲ **DISTRIBUTION:** Madeira.
- magnicaudatus** Cuccodoro and Löbl, 1995: 674 (*Megarthus*; Type locality: Ethiopia: Balê prov., Adelay Forest, 3100 m).  
 — Cuccodoro, 1999a: 376 (*Megarthus*; characters; Ethiopia).  
 ▲ **DISTRIBUTION:** Ethiopia.
- mahnerti** Cuccodoro and Löbl, 1995: 675 (*Megarthus*; Type locality: Kenya: Central prov., Mt. Aberdares, near N. P. entrance, 2300 m. Also cited from Tanzania).  
 ▲ **DISTRIBUTION:** Kenya, Tanzania.
- major** Cuccodoro and Löbl, 1995: 675 (*Megarthus*; Type locality: Zaire: Kivu, Albert N. P., Tshiaberimu sect., Kirungu, 2720 m).  
 ▲ **DISTRIBUTION:** Congo.
- malaisei** Scheerpeltz, 1965: 144 (*Megarthus*; Type locality: N.E. Burma, Kambaiti, 7000 ft.).  
 ▲ **DISTRIBUTION:** Myanmar.
- mammiger** Bierig, 1940: 375 (*Megarthus*; Type locality: Costa Rica: Vara Blanca, 1800 m, entre volcanes Barba y Poás).  
 ▲ **DISTRIBUTION:** Costa Rica.
- maniwaata** Cuccodoro and Löbl, 1995: 676 (*Megarthus*; Type locality: Zaire: Ruwenzori Range, Albert N. P., Kalonge, river Nyamwamba, tributary of Butahu, 2010 m. Also cited from Rwanda).  
 ▲ **DISTRIBUTION:** Congo, Rwanda.
- marginatus* Stephens, 1834, see: *denticollis* Beck, 1817.
- marginicollis* Lacordaire, 1835, see: *denticollis* Beck, 1817.
- maronitus** Fagel, 1968a: 190 (*Megarthus*; Type locality: Liban: Nabeh Safa, 1000 m).  
 — Cuccodoro and Löbl, 1997: 1379 (*Megarthus*; characters; collecting notes; Lebanon).  
 ▲ **DISTRIBUTION:** Lebanon.

- martensi** Coiffait, 1982: 131 (*Megarthus*; Type locality: Nepal: nördl. Dhaulagiri, Gompa/Tarakot, 3300–3400 m).  
 ▲ **DISTRIBUTION:** Nepal.
- mastiger** Bierig, 1940: 376 (*Megarthus*; Type locality: Costa Rica: Vara Blanca, 1800 m, entre volcanes Barba y Poás).  
 ▲ **DISTRIBUTION:** Costa Rica.
- merabet** Cuccodoro and Löbl, 1995: 676 (*Megarthus*; Type locality: Rwanda: Cyangugu Pref., around Nyakabuye. Also cited from Zaire).  
 ▲ **DISTRIBUTION:** Congo, Rwanda.
- minus* Bruce, 1932, see: *denticollis* Beck, 1817.
- minor** Coiffait, 1977: 251 (*Megarthus*; Type locality: Région de Taksang près Tukche, Takala, Népal central).  
 ▲ **DISTRIBUTION:** Nepal.
- montanus** Sawada, 1962: 14, 15 (*Megarthus*; Type locality: Japan: Honshu: Nagano Pref.: Inago-yu, 1500–2000 m).  
 — Cuccodoro, 1996: 489 (*Megarthus*; characters; China; Japan; Russia).  
 — Cuccodoro and Löbl, 1997: 1381 (*Megarthus*; characters; Far East Russia; China; Japan).  
 ▲ **DISTRIBUTION:** Russia, China, Japan.
- subangulatus* Sawada, 1962: 14, 15 (*Megarthus*; subspecies of *montanus*; Type locality: Japan: Honshu: Nara Pref.: Mt. Oodaigahara).  
 — Cuccodoro, 1996: 489 (*Megarthus*; synonym of *montanus*).  
 — Cuccodoro and Löbl, 1997: 1381 (*Megarthus*; synonym of *montanus*).
- monticola** Cameron, 1942b: 322 (*Megarthus*; Type locality: Chyulu Hills, altitude 5600 feet).  
 — Cuccodoro and Löbl, 1995: 677 (*Megarthus*; characters; Kenya).  
 ▲ **DISTRIBUTION:** Kenya.
- mukankundiyeorum** Cuccodoro and Löbl, 1995: 678 (*Megarthus*; Type locality: Rwanda: 25 km, N. Kibuye, Kayove, 2100 m).  
 ▲ **DISTRIBUTION:** Rwanda.
- mwami** Cuccodoro and Löbl, 1995: 679 (*Megarthus*; Type locality: Burundi, Bururi terr., Nyamurenbe, 900 m. Also cited from Rwanda).  
 ▲ **DISTRIBUTION:** Burundi, Rwanda.
- nanus** Cuccodoro and Löbl, 1995: 680 (*Megarthus*; Type locality: Africa or., Katona [= Tanzania, Moshi prov.], Mt. Kilimanjaro).  
 ▲ **DISTRIBUTION:** Tanzania.
- negus** Cuccodoro and Löbl, 1995: 680 (*Megarthus*; Type locality: Ethiopia: Balê prov., Dinshu, 3200 m).  
 — Cuccodoro, 1999a: 376, 382 (*Megarthus*; characters; Ethiopia).  
 ▲ **DISTRIBUTION:** Ethiopia.
- newtoni** Cuccodoro and Löbl, 1996: 168 (*Megarthus*; Type locality: USA: Arizona: Apache Co., Big L., 22 mi SW Eagar, 2700 m. Also cited from New Mexico).  
 ▲ **DISTRIBUTION:** USA.
- nigerrimus** Cameron, 1941: 56 (*Megarthus*; Type locality: Kashmir: Gulmarg).  
 ▲ **DISTRIBUTION:** India.
- nigrinus** J. Sahlberg, 1876: 225 (*Megarthus*; variety of *sinuatocollis*; Type locality: Ryska Lappmarken, Porjeguba, Finland; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]. Also cited from Pekkala i Ruovesi; Gorki).  
 — Ganglbauer, 1895: 762 (*Megarthus*; variety of *sinuatocollis*).  
 — Münster, 1911: 277 (*Megarthus*; synonym of *sahlbergi*).  
 — Scheerpeltz, 1931a: 190 (*Megarthus*; characters in key).  
 — Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).  
 — Kuusinen, 1933: 67 (*Megarthus*; characters; illustrations; Finland).  
 — Scheerpeltz, 1947: 261 (*Megarthus*; characters).

- Palm, 1948: 42 (*Megarthus*; characters; Sweden; Norway; Finland).
- Muona and Viramo, 1995: 9 (*Megarthus*; collected from fungus; Finland).
- Cuccodoro and Löbl, 1997: 1381 (*Megarthus*; lectotype designation: Ryska Lappmarken, Porjeguba, Finland; characters; collecting notes; North Europe; Asian Russia).

▲ **DISTRIBUTION:** Europe, Russia.

*sahlbergi* Münster, 1911: 277 (*Megarthus*; Type locality: Lakselv in Porsanger; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]. Also cited from Norwegen: Südvaranger; Karasjok; Målselvtal; Kongsberg und Kristiana).

- Scheerpeltz, 1931a: 190 (*Megarthus*; synonym of *nigrinus*).
- Scheerpeltz, 1933: 1030 (*Megarthus*; synonym of *nigrinus*).
- Scheerpeltz, 1947: 261 (*Megarthus*; synonym of *nigrinus*).
- Cuccodoro and Löbl, 1997: 1381 (*Megarthus*; lectotype designation: Lakselv, Pors.; synonym of *nigrinus*).

**niloticus** Cuccodoro and Löbl, 1995: 681 (*Megarthus*; Type locality: Uganda: Bugisu prov., Mt. Elgon, Sipi, 1750 m. Also cited from Rwanda and Zaire).

▲ **DISTRIBUTION:** Congo, Rwanda, Uganda.

*nitiduloides* Lacordaire, 1835 see: *hemipterus* Illiger, 1794.

**nitidulus** Kraatz, 1857d: 1028 (*Megarthus*; Type locality: Mollenfalde; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]. Originally cited from Grafschaft Glatz; Cassel).

- Redtenbacher, 1857: 995 (*Megarthus*; characters; Austria).
- Saulcy, 1862: 70 (*Megarthus*; key characters).
- Fauvel, 1871a: 53 [= 1872: 27] (*Megarthus*; characters; France; Poland; Germany).
- Fauvel, 1873b: 109 [= 1873c: 2] (*Megarthus*; Siberia).
- Redtenbacher, 1874: 283 (*Megarthus*; characters).
- Mulsant and Rey, 1878b: 248 (*Megarthus*; characters; Switzerland; Germany).
- Ganglbauer, 1895: 763 (*Megarthus*; characters; Germany; Austria; Poland).
- Reitter, 1909: 198 (*Megarthus*; characters; Germany).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).
- Portevin, 1929: 457 (*Megarthus*; characters; France).
- Scheerpeltz, 1931a: 191 (*Megarthus*; characters in key).
- Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).
- Kuusinen, 1933: 70 (*Megarthus*; characters; illustrations; Finland).
- Scheerpeltz, 1947: 262 (*Megarthus*; characters).
- Horion, 1963: 25 (*Megarthus*; Transbaikal; Britain; Norway; Sweden; Finland; Russia; Poland; Czech Republic; Slovakia; Romania; Balkans; Switzerland; Italy; France; Holland; Germany; Austria).
- Lohse, 1964: 23 (*Megarthus*; characters; central Europe).
- Smetana, 1964d: 51 (*Megarthus*; Czechoslovakia).
- Smetana, 1968: 227 (*Megarthus*; Mongolia).
- Smetana 1975c: 154 (*Megarthus*; Mongolia).
- Tóth, 1982: 30 (*Megarthus*; characters).
- Lucht, 1987: 85 (*Megarthus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Sweden).
- Boháč, 1993: 40 (*Megarthus*; Czech Republic; Slovakia).
- Muona and Viramo, 1995: 9 (*Megarthus*; collected from dung of *Ursus arctos*; Finland).
- Zanetti, 1995: 5 (*Megarthus*; Italy).
- Cuccodoro and Löbl, 1997: 1384 (*Megarthus*; lectotype designation: Mollenfalde; characters; Europe, Far East Russia; Mongolia).

▲ **DISTRIBUTION:** Europe, Russia, Mongolia.

**notabilis** Cameron, 1941: 56 (*Megarthus*; Type locality: Darjeeling: Ghum district).

▲ **DISTRIBUTION:** India.

**occidentalis** Cuccodoro and Löbl, 1996: 171 (*Megarthus*; Type locality: Canada: British Columbia: Vancouver, Stanley Park, sea level. Also cited from Oregon).

▲ **DISTRIBUTION:** Canada, USA.

- ogloblini** Bruch, 1940: 111 (*Megarthus*; Type locality: Argentina: Misiones, Loreto).  
 ▲ **DISTRIBUTION:** Argentina.
- oromo** Cuccodoro, 1999a: 382 (*Megarthus*; Type locality: Ethiopia: Bale region, Bale Mountains National Park, around Finchaya Habera, 3400 m).  
 ▲ **DISTRIBUTION:** Ethiopia.
- ovalis** Cameron, 1950g: 5 (*Megarthus*; Type locality: Belgian Congo: volc. Visoke, alt. 2800–3300 m).  
 — Cuccodoro and Löbl, 1995: 681 (*Megarthus*; characters; Rwanda; Zaire).  
 — Assing and Wunderle, 2001: 36 (*Proteinus*; Cyprus).  
 ▲ **DISTRIBUTION:** Congo, Rwanda.
- palmense* H. Franz, 1986, see: *Metopsia*.
- panga** Cuccodoro and Löbl, 1995: 682 (*Megarthus*; Type locality: Zaire: Kivu prov., Albert N. P., V. Mikeno, near Rweru, 2400 m).  
 ▲ **DISTRIBUTION:** Congo.
- parallelus** Sharp, 1874: 99 (*Megarthus*; Type locality: Nagasaki; [**Note:** See lectotype designation by Cuccodoro, 1996]).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Sawada, 1962: 12 (*Megarthus*; characters; Japan).  
 — Cuccodoro, 1996: 491 (*Megarthus*; lectotype designation; characters; Japan).  
 ▲ **DISTRIBUTION:** Japan.
- subparallelus* Sawada, 1962: 12, 15 (*Megarthus*; Type locality: Japan: Honshu: Osaka Pref.: Katsuoji, Minoo).  
 — Watanabe and Shibata, 1972: 60 (*Megarthus*; Yaku-shima Island).  
 — Cuccodoro, 1996: 491 (*Megarthus*; synonym of *parallelus*).
- pecki** Cuccodoro and Löbl, 1996: 173 (*Megarthus*; Type locality: Canada: British Columbia: Metlakatla. Also cited from Alberta, Ontario, Illinois, Iowa, Michigan, Minnesota, New Hampshire, New York, North Carolina, Pennsylvania, Tennessee, Washington, and West Virginia).  
 ▲ **DISTRIBUTION:** Canada, USA.
- peckorum** Cuccodoro, 1998: 109 (*Megarthus*; Type locality: New Caledonia: Col d'Amieu, north of La Foa, 500 m).  
 ▲ **DISTRIBUTION:** New Caledonia.
- pictus** Motschulsky, 1845a: 39 (*Megarthus*; Type locality: Sitka; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1996]. Originally cited from Nord de la Californie).  
 — Mäklin, 1852: 324 (*Megarthus*; characters; notes; Sitka).  
 — Fauvel, 1878d: 193 [= 1878e: 29] (*Megarthus*; characters; Sitka Island).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).  
 — Hatch, 1957: 108 (*Megarthus*; characters; British Columbia; Washington; Oregon).  
 — Campbell and Davies, 1991: 87 (*Megarthus*; checklist; USA; Canada).  
 — Cuccodoro and Löbl, 1996: 177 (*Megarthus*; lectotype designation: Sitka; characters; British Columbia; California; Oregon; Washington).  
 ▲ **DISTRIBUTION:** Canada, USA.
- primus** Cuccodoro, 1995: 259 (*Megarthus*; Type locality: Papua New Guinea, Morobe district, Biar Road, Mt. Kolorong, 7°28'40"S, 146°49'20"E, 2200 m).  
 — Cuccodoro, 1998: 112 (*Megarthus*; characters; Papua New Guinea; Irian Jaya).  
 ▲ **DISTRIBUTION:** New Guinea.
- proseni** Schatzmayr, 1904: 212 (*Megarthus*; Type locality: Teufelsgraben, Villach, Dobratschgebiet, Carinthia, Austria; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).  
 — Olivier, 1795:(42): 36 (*Staphylinus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters).  
 — Paykull, 1800: 412 (*Staphylinus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Sweden).

- Gyllenhal, 1810: 210 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters).
- Gyllenhal, 1813: 699 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters for two varieties; Sweden).
- Gyllenhal, 1827: 464 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]).
- C. Sahlberg, 1827: 280 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Finland).
- Curtis, 1829: 28 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; catalog; Britain).
- Curtis, 1829: 28 (*Megarthus*; cited as *macropterus* Gravenhorst; catalog; Britain).
- Mannerheim, 1830: 53 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Finland; Sweden).
- Mannerheim, 1831: 467 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Finland; Sweden).
- Stephens, 1834: 332 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; England).
- Stephens, 1834: 332 (*Megarthus*; cited as *macropterus* Gravenhorst; characters; England).
- Lacordaire, 1835: 494 (*Phloeobium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; France).
- Zetterstedt, 1838: 50 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; habitat; Lapland; Sweden).
- Westwood, 1838a: 18 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; type species).
- Erichson, 1839a: 644 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Germany).
- Heer, 1839: 171 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Switzerland).
- Stephens, 1839: 423 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; England).
- Erichson, 1839a: 644 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Stephens, 1839: 423 (*Megarthus*; cited as *macropterus* Gravenhorst; characters; England).
- Erichson, 1840: 905 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Europe).
- Erichson, 1840: 905 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Laporte, 1840: 191 (*Omalium*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; England; France; Sweden).
- Redtenbacher, 1849: 756 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Austria).
- Hardy, 1851: 64 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; notes; England).
- Hardy, 1851: 64 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Fairmaire and Laboulbène, 1856: 654 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; France).
- Fairmaire and Laboulbène, 1856: 654 (*Megarthus*; cited as *macropterus* Gravenhorst; characters; France).
- Redtenbacher, 1857: 258 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Austria).
- Kraatz, 1857d: 1027 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Germany).
- Thomson, 1859: 52 (type species of *Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]).
- Thomson, 1861: 218 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Scandinavia).
- Saulcy, 1862: 70 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; key characters).

- Hochhuth, 1862: 112 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Russia).
- Fauvel, 1871a: 52 [= 1872: 26] (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; France; Europe).
- Redtenbacher, 1874: 283 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Austria).
- Seidlitz, 1875: 231 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Baltic region).
- J. Sahlberg, 1876: 224 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Finland).
- Mulsant and Rey, 1878b: 235 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; France).
- Mulsant and Rey, 1878b: 236 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Fowler, 1888: 430 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Britain).
- Ganglbauer, 1895: 762 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Europe).
- Ganglbauer, 1895: 762 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Poppius, 1905: 12 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Orkney Islands).
- Poppius, 1909: 3 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Lena Valley, Siberia).
- Reitter, 1909: 198 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Germany).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).
- Bernhauer and Schubert, 1910: 35 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; catalog).
- Bernhauer and Schubert, 1910: 36 (*Megarthus*; cited as *macropterus* Gravenhorst; synonym of *depressus*).
- Johansen, 1914: 629 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Denmark).
- Kemner, 1925: 64 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; larval characters).
- Portevin, 1929: 456 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; France).
- Scheerpeltz, 1931a: 189 (*Megarthus*; characters in key).
- Scheerpeltz, 1931a: 188 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters in key).
- Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).
- Scheerpeltz, 1933: 1029 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; catalog).
- Kuusinen, 1933: 66 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; illustrations; Finland).
- Scheerpeltz, 1947: 258 (*Megarthus*; characters).
- Scheerpeltz, 1947: 257 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters).
- Palm, 1948: 41 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 22 (*Megarthus*; Alps).
- Horion, 1963: 21 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Germany; Austria).
- Lohse, 1964: 23 (*Megarthus*; characters; central Europe).
- Lohse, 1964: 23 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; central Europe).



- Smetana, 1964d: 51 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Czechoslovakia).
- Smetana, 1968: 226 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Mongolia).
- Szujeci, 1968a: 710 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Poland).
- Bacchus and Hammond, 1972: 62 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; donkey and elephant dung; Britain).
- Smetana 1975c: 154 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Mongolia).
- Pope, 1977: 22 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Britain).
- Hammond, 1980: 135 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; Ireland).
- Tóth, 1982: 29 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; Hungary).
- Lucht, 1987: 85 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Welch, 1993: 227 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; ovariole number and ovary structure).
- Zanetti, 1995: 5 (*Megarthus*; “*depressus* Auct. nec Paykull, 1789” cited as synonym; Italy).
- Cuccodoro, 1995: 262 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; water loading behavior).
- Muona and Viramo, 1995: 9 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; collected from dung of *Ursus arctos*; Finland).
- Sparacio, 1995: 137 (*Megarthus*; cited as *depressus*; [**Note:** Misidentified according to Cuccodoro and Löbl, 1997: 1387]; characters; notes; Sicily).
- Cuccodoro and Löbl, 1997: 1387 (*Megarthus*; lectotype designation: Teufelsgraben, Villach, Dobratschgebiet, Carinthia, Austria; characters; collecting notes; western Palaearctic region, evidently absent from Mediterranean region, records from Siberia and Far Eastern Russia need verification).
- Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; cited as *macropterus* Gravenhorst; nomen dubium).
- Ryabukhin, 1999: 13 (*Megarthus*; cited as *depressus*; [**Note:** Based on the subsequent literature cited by Ryabukhin, I assume this reference is based on misidentifications; see Cuccodoro and Löbl, 1997: 1387]; catalog; habitat; distribution; northeastern Russia).

▲ **DISTRIBUTION:** Europe, Russia.

*pusillus* Stephens, 1834, see: *depressus* Paykull, 1789.

**ras** Cuccodoro and Löbl, 1995: 683 (*Megarthus*; Type locality: Ethiopia: Gonder [= Simên] prov., Arghine, 3500 m or higher).

— Cuccodoro, 1999a: 374 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION:** Ethiopia.

*retusus* Stephens, 1834, see: *Metopsia*.

**riedeli** Cuccodoro, 1998: 113 (*Megarthus*; Type locality: Indonesia: Irian Jaya, Jayawijaya, Diuremna, 1900–2100 m).

▲ **DISTRIBUTION:** New Guinea.

**rougemonti** Cuccodoro and Löbl, 1995: 683 (*Megarthus*; Type locality: Ethiopia: Balê prov., Dinshu, 3200 m).

— Cuccodoro, 1999a: 376, 386 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION:** Ethiopia.

**rufomarginatus** Cameron, 1914: 525 (*Megarthus*; Type locality: S. India: Nilgiri Hills).

— Cameron, 1924b: 166 (*Megarthus*; characters; India).

— Cameron, 1928d: 98 (*Megarthus*; Sumatra).

- Cameron, 1930: 129 (*Megarthus*; characters; India; Sumatra).
- Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).
- Cameron, 1934: 17 (*Megarthus*; India).
- ▲ **DISTRIBUTION:** India, Indonesia.

*rufescens* Stephens, 1834, see: *denticollis* Beck, 1817.

*sahlbergi* Munster, 1911, see: *nigrinus* J. Sahlberg, 1876.

**sawadai** Cuccodoro, 1996: 492 (*Megarthus*; Type locality: Japan: Honshu: Gunma Pref.: below Usui Pass, 750 m).

▲ **DISTRIBUTION:** Japan.

**scotti** Cuccodoro and Löbl, 1995: 684 (*Megarthus*; Type locality: Ethiopia: Gamo Gofa prov., Gughé highlands, Dita, c. 3000 m).

— Cuccodoro, 1999a: 376 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION:** Ethiopia.

**scriptus** Sharp, 1889: 469 (*Megarthus*; Type locality: Chuzenji, Gunma Pref., Honshu, Japan; [Note: See lectotype designation by Cuccodoro, 1996]. Also cited from Yuyama).

— Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).

— Sawada, 1962: 10 (*Megarthus*; characters; Japan).

— Nakane, 1963a: 82 (*Megarthus*; characters; habitus photograph; Japan).

— Cuccodoro, 1996: 492 (*Megarthus*; lectotype designation: Chuzenji, Gunma Pref., Honshu, Japan; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**sculpticollis** Coiffait, 1982: 131 (*Megarthus*; Type locality: Nepal: environs de Lughla, Khumbu).

▲ **DISTRIBUTION:** Nepal.

**selenitus** Cuccodoro and Löbl, 1995: 684 (*Megarthus*; Type locality: Uganda: Ruwenzori Range, Toro prov., above Kilembe, 2000 m).

▲ **DISTRIBUTION:** Uganda.

**septempunctatus** Champion, 1925: 102 (*Megarthus*; Type locality: W. Almora in Kumaon).

— Cameron, 1930: 132 (*Megarthus*; characters; India).

— Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** India.

**serrula** Wollaston, 1865: 525, 76 appendix (*Megarthus*; Type locality: Gomera: above Hermitage; [Note: See lectotype designation by Cuccodoro and Löbl, 1997]).

— Fauvel, 1902b: 50 (*Megarthus*; Canary Islands).

— Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).

— Cuccodoro and Löbl, 1997: 1390 (*Megarthus*; lectotype designation; characters; collecting notes; Canary Islands).

— Hernández, Outerelo, and Gamarra, 1994: 192 (*Megarthus*; Canary Islands).

— Assing, 1999a: 345 (*Megarthus*; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

**sexpunctatus** Cameron, 1941: 57 (*Megarthus*; Type locality: Darjeeling: Ghum district).

▲ **DISTRIBUTION:** India.

**shibatai** Sawada, 1962: 13, 15 (*Megarthus*; Type locality: Japan: Honshu: Nagano Pref.: Inago-yu, 1500–2000 m).

— Cuccodoro, 1996: 494 (*Megarthus*; characters; Japan).

▲ **DISTRIBUTION:** Japan.

**simienensis** Fagel, 1957a: 30 (*Megarthus*; Type locality: Ethiopia: Simien, E. of Mindigabsa, over 10,000 ft.).

— Cuccodoro and Löbl, 1995: 685 (*Megarthus*; characters; Ethiopia).

— Cuccodoro, 1999a: 376 (*Megarthus*; characters; Ethiopia).

▲ **DISTRIBUTION:** Ethiopia.

- sinuatocollis** Lacordaire, 1835: 493 (*Phloeobium*; Type locality: Paris; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]).  
 — Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).  
 ▲ **DISTRIBUTION:** France.
- smetanai** Cuccodoro and Löbl, 1996: 181 (*Megarthus*; Type locality: Canada: British Columbia: 4 mi W Midway. Also cited from Northwest Territories, Quebec, and Alaska).  
 ▲ **DISTRIBUTION:** Canada, USA.
- solitarius** Sharp, 1887: 743 (*Megarthus*; Type locality: Guatemala, Purula).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 ▲ **DISTRIBUTION:** Costa Rica, Guatemala.
- adelphus* Bierig, 1940: 377 (*Megarthus*; variety of *solitarius*; Type locality: Costa Rica: Carpintera, 1800 m).
- spathuliformis** Assing and Wunderle, 1999: 438 (*Megarthus*; Type locality: E. Islas Canarias, 11, La Palma, SW Laguna de Barlovento, Mte. Hueco, 1000 m).  
 — Assing, 2000b: 115 (*Megarthus*; collecting notes; Canary Islands).  
 ▲ **DISTRIBUTION:** Canary Islands.
- spinus** Cuccodoro and Löbl, 1995: 686 (*Megarthus*; Type locality: Uganda: Bugisu prov., Mt. Elgon, Sipi, 1750 m).  
 ▲ **DISTRIBUTION:** Uganda.
- stercorarius** Mulsant and Rey, 1878b: 238 (*Megarthus*; Type locality: Hautes-Pyrénées; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).  
 — Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).  
 — Scheerpeltz, 1931a: 188 (*Megarthus*; characters in key).  
 — Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).  
 — Scheerpeltz, 1947: 257 (*Megarthus*; characters).  
 — Zanetti, 1995: 5 (*Megarthus*; Italy).  
 — Cuccodoro and Löbl, 1997: 1392 (*Megarthus*; lectotype designation; characters; collecting notes; Pyrenees; Alps; Carpathians; Caucasus).  
 — Assing, Frisch, Kahlen, et al., 1998: 120 (*Megarthus*; note).  
 ▲ **DISTRIBUTION:** Pyrenees, Alps, Carpathians, Caucasus.
- franzi* Scheerpeltz, 1947: 252 (*Megarthus*; Type locality: Österreich: Kärnten, Hohe Tauern, Sonnblick-Gruppe, Fleissgasthof; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).  
 — Horion, 1963: 22 (*Megarthus*; Austria; Switzerland).  
 — Lohse, 1964: 23 (*Megarthus*; characters; central Europe).  
 — Lucht, 1987: 85 (*Megarthus*; checklist; Germany; Austria; Switzerland).  
 — Zanetti, 1995: 5 (*Megarthus*; synonym of *stercorarius*).  
 — Cuccodoro and Löbl, 1997: 1392 (*Megarthus*; lectotype designation: Fleissgasthof, Sonnblick-Gruppe, Hohe Tauern, Kärnten, Austria; synonym of *stercorarius*).  
 — Assing, Frisch, Kahlen, et al., 1998: 120 (*Megarthus*; synonym of *stercorarius*).
- strandi** Scheerpeltz, 1931a: 188, 189 (*Megarthus*; Type locality: Asker am Westufer des Oslo-Fjords, zwischen Drammen und Oslo; [**Note:** See lectotype designation by Cuccodoro and Löbl, 1997]).  
 — Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).  
 — Kuusinen, 1933: 66 (*Megarthus*; characters; illustrations; Finland).  
 — Scheerpeltz, 1947: 260 (*Megarthus*; characters).  
 — Palm, 1948: 41 (*Megarthus*; characters; Sweden; Norway; Finland).  
 — Cuccodoro and Löbl, 1997: 1395 (*Megarthus*; lectotype designation: W Oslo Fjord, Asker, Vestfold, Norway; characters; collecting notes; North Europe).  
 ▲ **DISTRIBUTION:** Finland, Sweden, Norway.
- stylifer** Cuccodoro and Löbl, 1995: 686 (*Megarthus*; Type locality: Zaire: Ruwenzori range, Albert N. P., Kyandolire, river Mulaku, tributary of Kakalari, 1750 m).  
 ▲ **DISTRIBUTION:** Congo.

*subangulatus* Sawada, 1962, see: *montanus* Sawada, 1963.

*subparallelus* Sawada, 1962, see: *parallelus* Sharp, 1874.

**sumatrensis** Cameron, 1928d: 98 (*Megarthus*; Type locality: Sumatra: Fort de Kock).

— Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).

— Cameron, 1933b: 339 (*Megarthus*; British North Borneo).

— Hammond, 1984: 195 (*Megarthus*; Borneo).

▲ **DISTRIBUTION:** Indonesia, Borneo.

*tenoense* H. Franz, 1986, see: *Metopsia*.

**thomsoni** Varenus, 1891: 22 (*Megarthus*; [**Note: Nomen dubium**; see Cuccodoro and Löbl, 1997]; Type locality: Skåne).

— Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).

— Scheerpeltz, 1931a: 191 (*Megarthus*; characters in key).

— Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).

— Cuccodoro and Löbl, 1997: 1351 (*Megarthus*; nomen dubium).

▲ **DISTRIBUTION:** Sweden.

**tibialis** Coiffait, 1977: 255 (*Megarthus*; Type locality: Vallée Dzunda Khola près Talphi, région de Jumla, 3000–3500 m).

▲ **DISTRIBUTION:** Nepal.

**trisinuatus** Cameron, 1924b: 163, 165 (*Megarthus*; Type locality: Chakrata District; Manjgaon, 6500 feet).

— Cameron, 1930: 130 (*Megarthus*; characters; India).

— Scheerpeltz, 1933: 1030 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** India.

**tukchensis** Coiffait, 1984e: 383 (*Megarthus*; Type locality: Nepal central region de Taksang près de Tukche Takola).

▲ **DISTRIBUTION:** Nepal.

**twa** Cuccodoro and Löbl, 1995: 687 (*Megarthus*; Type locality: Kenya: Katamayu river [= Rift Valley prov., Gatamayu river?]. Also cited from Zaire).

▲ **DISTRIBUTION:** Congo, Kenya.

**uhligi** Cuccodoro and Löbl, 1997: 1398 (*Megarthus*; Type locality: Altai Sibir.).

▲ **DISTRIBUTION:** Kazakhstan.

**umbonatus** Fauvel, 1895: 194 (*Megarthus*; Type locality: Birmanie, Carin Asciiui Ghécu, 1400–1500; Sikkim, Darjeeling).

— Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).

— Cameron, 1924b: 165 (*Megarthus*; characters; India).

— Cameron, 1930: 127 (*Megarthus*; characters; Burma; Sikkim).

— Scheerpeltz, 1933: 1031 (*Megarthus*; catalog).

— Scheerpeltz, 1965: 99 (*Megarthus*; Burma).

▲ **DISTRIBUTION:** Myanmar, India.

**vanschuytbroeckii** Cuccodoro and Löbl, 1995: 687 (*Megarthus*; Type locality: Zaire: Ruwenzori Range, Albert N. P., Kalonge, river Nyamwamba, tributary of Butahu, 2010 m).

▲ **DISTRIBUTION:** Congo.

**vastus** Wendeler, 1926: 71 (*Megarthus*; Type locality: Philippineninsel Tabla).

— Scheerpeltz, 1933: 1031 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** Philippines.

**watutsi** Cuccodoro and Löbl, 1995: 688 (*Megarthus*; Type locality: Rwanda: Albert N. P., at foot of V. Karisimbi, Lake n'Gando, 2400 m).

▲ **DISTRIBUTION:** Rwanda.

**wittei** Cameron, 1950g: 5 (*Megarthus*; Type locality: Belgian Congo: Sake, Kivu, alt. 1560 m).

— Cuccodoro and Löbl, 1995: 689 (*Megarthus*; characters; Cameroon, Kenya, Zaire).

▲ **DISTRIBUTION:** Cameroon, Congo, Kenya.

**wollastoni** Cuccodoro and Löbl, 1997: 1398 (*Megarthus*; Type locality: Canary Is.: Hierro: El Golfo, 800–1000 m).

- Wollaston, 1864: 604 (*Megarthus*; [**Note:** Misidentified as *longicornis* according to Cuccodoro and Löbl, 1997: 1376]; characters; notes; Canary Islands).
- Wollaston, 1865: 525 (*Megarthus*; [**Note:** The Canary Island specimens were misidentified as *longicornis* according to Cuccodoro and Löbl, 1997: 1376]; notes; Canary Islands).
- Coiffait, 1954: 162 (*Megarthus*; [**Note:** Misidentified as *longicornis* according to Cuccodoro and Löbl, 1997: 1376]; Canary Islands).
- Assing, 1999a: 345 (*Megarthus*; Canary Islands).
- Assing and Wunderle, 1999: 437 (*Megarthus*; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

**zekorum** Cuccodoro and Löbl, 1997: 1404 (*Megarthus*; Type locality: Pjestschanka, 8 km öst. Tschita, Transbaikalien).

▲ **DISTRIBUTION:** Russia.

**zerchei** Cuccodoro and Löbl, 1997: 1406 (*Megarthus*; Type locality: Russia: Primorskiy Kray, Sikhote-Alin, Biol. Stat. 30 km SE Chuguyevka, 44°05'N, 134°12'E, 650 m).

▲ **DISTRIBUTION:** Russia.

**zulu** Cuccodoro and Löbl, 1995: 690 (*Megarthus*; Type locality: Republic of South Africa: Cape Prov., S. Marathon, 34°02'S, 23°19'E. Also cited from Lesotho).

▲ **DISTRIBUTION:** Lesotho, South Africa.

**zunilensis** Sharp, 1887: 743 (*Megarthus*; Type locality: Guatemala, Cerro Zunil).

- Bernhauer and Schubert, 1910: 36 (*Megarthus*; catalog).

▲ **DISTRIBUTION:** Guatemala.

### Metopsia

[12 species; Palearctic Region]

*Metopsia* Wollaston, 1854: 616 (species included: *ampliata*). **TYPE SPECIES:** *Metopsia ampliata* Wollaston, fixed by monotypy.

- Gemminger and Harold, 1868: 673 (catalog).
- Schaum, 1852: 31 (cited as *Phloeobium*; list of species; Europe).
- Wencker and Silbermann, 1866: 37 (list of species; collecting notes; France).
- Fauvel, 1875a: II [= 1875b: 204] (synonym of *Phloeobium*).
- Mulsant and Rey, 1878b: 254 (characters; cited as *Phloeobium*).
- Heyden, Reitter, and Weise, 1891: 122 (cited as *Phloeobium*; list of species of Europe and Caucasus).
- Ganglbauer, 1895: 764 (cited as *Phloeobium*; characters).
- Fauvel, 1897d: 242 (catalog of species of Barbary, Madeira, and Canaries; cited as *Phloeobium*).
- Heyden, Reitter, and Weise, 1906: 127 (list of species of Europe and Caucasus).
- Reitter, 1909: 198 (characters).
- Bernhauer and Schubert, 1910: 33 (world catalog; cited as *Phloeobium* with *Metopsia* as junior synonym; 3 species).
- Petri, 1912: 50 (list of species of Siebenbürgen).
- Johansen, 1914: 631 (characters; cited as *Phloeobium*).
- Winkler, 1925: 325 (catalog for Palearctic region; cited as *Phloeobium*).
- Porta, 1926: 8 (characters; species of Italy).
- Roubal, 1930: 300 (catalog; cited as *Phloeobium*; Slovakia).
- Joy, 1932: 93 (key to British species).
- Scheerpeltz, 1933: 1026 (synonym of *Phloeobium*).
- Kloet and Hincks, 1945: 160 (list of British species; type species: *clypeata*).
- Palm, 1948: 38 (cited as *Phloeobium*; characters; species of Sweden).
- Tottenham, 1949: 353, 405 (type species: *ampliata* Wollaston; list of British species).
- Blackwelder, 1952: 242 (type species: *ampliata*).
- Tottenham, 1954: 13 (characters; key to British species).

- Scheerpeltz, 1960a: 64 (key to species).
- Székessy, 1963: 10 (cited as *Phloeobium*; characters).
- Lohse, 1964: 21 (characters; key to central European species).
- Steel, 1966: 288 (larval characters).
- Kasule, 1966: 279 (larval characters).
- Scheerpeltz, 1968a: 3 (cited as *Phloeobium*; catalog of Austrian species).
- Tikhomirova, 1973a: 136 (cited as *Phloeobium*; checklist of species of USSR).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 307 (larval characters).
- Burakowski, Mroczkowski, and Stefańska, 1979: 9 (catalog; Poland).
- Muona, 1979: 17 (list of Scandinavian species).
- Uhlig and Vogler, 1981: 83 (list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 21 (characters; habitus; key to species of Hungary).
- H. Franz, 1986: 82 (cited as *Phloeobium*; key to species of Canary Islands).
- Segers, 1986: 17 (checklist of species; Belgium).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Welch, 1993: 227 (ovariole number and ovary structure).
- Newton and Thayer, 1995: 299 (Proteinini).
- M. Hansen, 1996: 96 (list of Danish species).
- Angelini, 1991: 191 (list of species from high elevations of Calabria, Italy).
- Hernández, Outerelo, and Gamarra, 1994: 187 (checklist of species; Canary Islands).
- Zanetti, 1995: 4 (list of species of Italy).
- Sparacio, 1995: 138 (*Metopsia*; characters; notes; Sicily).
- Dauphin, 1997 (notes on species of France).
- Zerche, 1998 (revision, phylogeny and zoogeography; characters; habitus photographs; key to species; discussions; checklist of species).
- M. Hansen, Palm, Pedersen, and Runge, 1998: 70 (list of species collected in 1997; Denmark).
- Assing, Frisch, Kahlen, et al., 1998: 120 (Proteininae).

**ampliata** Wollaston, 1854: 616 (*Metopsia*; Type locality: Madeira: Ribeiro Frio edges of the Levada of Ribeiro Frio; Feijãa de Côte; [**Note:** See lectotype designation by Zerche, 1998]. Originally cited from Madeira: edges of the Levada of Ribeiro Frio; Feijãa de Côte).

- Wollaston, 1857: 206 (*Metopsia*; habitat; Madeira Islands).
- Wollaston, 1865: 525 (*Metopsia*; habitat; Madeira Islands).
- Fauvel, 1902b: 49 (*Metopsia*; Madeira).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; catalog).
- C. Koch, 1938: 136 (*Phloeobium*; characters in key).
- Scheerpeltz, 1960a: 66 (*Phloeobium*; characters; Madeira).
- Zerche, 1998: 35 (*Metopsia*; lectotype designation: Ribeiro Frio; characters; Madeira).

▲ **DISTRIBUTION:** Madeira.

**assingi** Zerche, 1998: 33 (*Metopsia*; Type locality: Turcia mer., Avsallar b. Incekum, 22 km W. Alanya [Antalya]. Also cited from Cyprus, Greece, Lebanon, and Israel).

- Fagel, 1968a: 189 (*Phloeobium*; [**Note:** Misidentified as *gallicum* according to Zerche, 1998]; notes).
- Assing and Wunderle, 2001: 36 (*Metopsia*; Cyprus).

▲ **DISTRIBUTION:** Turkey, Cyprus, Greece, Lebanon, Israel.

**canariensis** Zerche, 1998: 48 (*Metopsia*; Type locality: Islas Canarias: Gran Canaria: 1200 m, Pinar de Tamadaba).

▲ **DISTRIBUTION:** Canary Islands.

**cimicoides** Wollaston, 1864: 605 (*Metopsia*; Type locality: Teneriffe: mountains above Taganana).

- Wollaston, 1865: 526 (*Metopsia*; habitat; notes; Canary Islands).
- Fauvel, 1902b: 49 (*Metopsia*; Canary Islands).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; catalog).

- Scheerpeltz, 1960a: 66 (*Phloeobium*; characters; Canary Islands).
- H. Franz, 1986: 79 (*Phloeobium*; characters; Canary Islands).
- Zerche, 1998: 37 (*Metopsia*; characters; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

*fernandezii* Jarrige, 1952a: 136 (*Phloeobium*; Type locality: Aguirre, Tenerife).

- Hernández, Outerelo, and Gamarra, 1994: 193 (*Metopsia*; may belong in *Megarthus* or *Proteinus*).
- Zerche, 1998: 37 (*Metopsia*; synonym of *cimicoides*).

**clypeata** P. W. J. Müller, 1821: 204 (*Silpha*; Type locality: Odenbach).

- Heer, 1839: 172 (*Megarthus*; characters; Switzerland).
- Erichson, 1840: 907 (*Phloeobium*; [**Note:** According to Zerche, 1998: 16, some specimens were misidentified by Erichson as *clypeata* and are now named *similis*]; characters; Germany; France).
- Heer, 1841: 566 (*Phloeobium*; characters).
- Fairmaire and Laboulbène, 1856: 656 (*Phloeobium*; characters; France).
- Fauvel, 1871a: 51 [= 1872: 25] (*Phloeobium*; characters; France; Europe; Cyprus).
- Fauvel, 1873b: 109 [= 1873c: 2] (*Phloeobium*; Algeria).
- Seidlitz, 1875: 231 (*Phloeobium*; characters; Baltic region).
- Fauvel, 1878: 86 [= 1878a: 6] (*Phloeobium*; Algeria).
- Mulsant and Rey, 1878b: 256 (*Phloeobium*; characters; France).
- Fauvel, 1886: 12 [= 1886a: 4] (*Phloeobium*; Algeria).
- Fowler, 1888: 431 (*Phloeobium*; characters; Britain).
- Ganglbauer, 1895: 764 (*Phloeobium*; [**Note:** According to Zerche, 1998: 16, some specimens were misidentified by Erichson as *clypeata* and are now named *similis*]; characters; middle and southern Europe).
- Fauvel, 1902b: 49 (*Metopsia*; Algeria; Tunisia).
- Sainte-Claire Deville, 1907: 14 (*Metopsia*; [**Note:** According to Zerche, 1998: 16, some specimens were misidentified by Erichson as *clypeata* and are now named *similis*]; characters; France).
- Montandon, 1908: 77 (*Metopsia*; Romania).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; catalog).
- J. Sahlberg, 1913: 58 (*Phloeobium*; Caramania).
- Johansen, 1914: 631 (*Phloeobium*; characters; Denmark).
- Portevin, 1929: 456 (*Metopsia*; characters; France).
- Scheerpeltz, 1933: 1026 (*Phloeobium*; catalog).
- C. Koch, 1938: 138 (*Phloeobium*; characters in key; Germany; Bosnia; Italy; Sicily).
- Tottenham, 1939d: 227 (*Phloeobium*; type species of *Phloeobium*).
- Español, 1945: 90 (*Phloeobium*; Spain).
- Scheerpeltz, 1961d: 116 (*Phloeobium*; Italy).
- Scheerpeltz, 1963a: 414 (*Phloeobium*; Greece).
- Lohse, 1964: 21 (*Metopsia*; characters; central Europe).
- Coiffait, 1968c: 505 (*Metopsia*; Corsica).
- Fagel, 1968a: 189 (*Phloeobium*; notes).
- Ashworth, 1972: 214 (*Metopsia*; cited as “*clypeata* or *gallica*”; late-glacial subfossil; Britain).
- Bordoni, 1974b: 2 (*Phloeobium*; Italy).
- Legner and Moore, 1977: 175 (*Metopsia*; found under bark).
- H. Franz, 1984: 59 (*Phloeobium*, cited as *Phlaeobium*; Macedonia).
- H. Franz, 1987: 69 (*Phloeobium*; Cyprus).
- Ádám, 1987: 136 (*Metopsia*; collecting notes; Hungary).
- Lucht, 1987: 85 (*Metopsia*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; Denmark; Sweden).
- Boháč, 1993: 40 (*Metopsia*; Czech Republic; Slovakia).
- Assing, 1994a: 17 (*Metopsia*; wing length; xerothermous sites; notes; Germany).
- Zanetti, 1995: 4 (*Metopsia*; Italy).
- Dauphin, 1997: 148 (*Metopsia*; characters; notes; France; Spain; Portugal; Italy; Algeria).

- Zerche, 1998: 25 (*Metopsia*; characters; Germany; Austria; Switzerland; Sweden; Britain; France; Spain; Portugal; Italy; Algeria).
- ▲ **DISTRIBUTION:** Europe, Morocco, Algeria, Tunisia.
- flava* Stephens, 1834: 331 (*Megarthrus*; Type locality: London).
- Stephens, 1839: 423 (*Megarthrus*; variety of *retusus*; characters; England).
- G. Waterhouse, 1858: 32 (*Phloeobium*; synonym of *clypeatum*).
- Ganglbauer, 1895: 764 (*Phloeobium*; synonym of *clypeatum*).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; synonym of *clypeatum*).
- Scheerpeltz, 1960a: 65 (*Phloeobium*; synonym of *clypeatum*).
- Zerche, 1998: 25 (*Metopsia*; synonym of *clypeata*).
- retusa* Stephens, 1834: 331 (*Megarthrus*; Type locality: near London; Suffolk; [**Note:** See lectotype designation by Zerche, 1998]).
- Stephens, 1839: 423 (*Megarthrus*; characters; England).
- G. Waterhouse, 1858: 32 (*Phloeobium*; synonym of *clypeatum*).
- Ganglbauer, 1895: 764 (*Phloeobium*; synonym of *clypeatum*).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; synonym of *clypeatum*).
- Scheerpeltz, 1960a: 65 (*Phloeobium*; cited as *refusum*; synonym of *clypeatum*).
- Pope, 1977: 22 (*Metopsia*; Britain).
- Hammond, 1980: 135 (*Metopsia*; Ireland).
- Welch, 1993: 227 (*Metopsia*; ovariole number and ovary structure).
- Zanetti, 1995: 4 (*Metopsia*; cited as *refusa*; Italy).
- Zerche, 1998: 25 (*Metopsia*; lectotype designation: [**Note:** Locality not cited]; synonym of *clypeata*).
- corticalis* Lacordaire, 1835: 494 (*Phloeobium*; Type locality: Paris).
- Erichson, 1839a: 646 (*Megarthrus*; synonym of *clypeatus*).
- Heer, 1839: 172 (*Megarthrus*; synonym of *clypeatus*).
- Erichson, 1840: 907 (*Phloeobium*; synonym of *clypeatum*).
- Kraatz, 1857d: 1033 (*Phloeobium*; synonym of *clypeatum*).
- Mulsant and Rey, 1878b: 257 (*Phloeobium*; synonym of *clypeatum*).
- Ganglbauer, 1895: 764 (*Phloeobium*; synonym of *clypeatum*).
- Bernhauer and Schubert, 1910: 33 (*Phloeobium*; synonym of *clypeatum*).
- Scheerpeltz, 1960a: 65 (*Phloeobium*; synonym of *clypeatum*).
- Zerche, 1998: 25 (*Metopsia*; synonym of *clypeata*).
- gallica* C. Koch, 1938: 135 (*Phloeobium*; Type locality: Francia centrale: Indre-et-Loire: Tours; [**Note:** See lectotype designation by Zerche, 1998]. Also cited from Sardegna: Sorgono; Aritzo, Macomer, Decimo presso Cagliari, Sadali. Algeria: Bou-Berak, Constantine).
- Scheerpeltz, 1960a: 65 (*Phloeobium*; characters; France; Sardinia; Algeria; Morocco).
- Horion, 1963: 21 (*Phloeobium*; Britain; Holland; France; Spain; Algeria; Sardinia; Germany).
- Lohse, 1964: 21 (*Metopsia*; characters; central Europe).
- Kasule, 1966: 279 (*Metopsia*; larval characters).
- Pope, 1977: 22 (*Metopsia*; synonym of *retusa*).
- Tóth, 1982: 22 (*Metopsia*; characters).
- Lundberg, 1986: 149 (*Metopsia*; Sweden).
- Lucht, 1987: 85 (*Metopsia*; checklist; France; Benelux).
- Lohse and Lucht, 1989: 122 (*Metopsia*; synonym of *retusa*).
- Zanetti, 1995: 4 (*Metopsia*; synonym of *retusa*, cited as *refusa*).
- Dauphin, 1997: 148 (*Metopsia*; characters; valid species; notes; Italy; Sicily; Corsica; France).
- Zerche, 1998: 25 (*Metopsia*; lectotype designation: Indre-et-Loire, Tours; synonym of *clypeata*).
- hispanica* Scheerpeltz, 1960a: 66 (*Phloeobium*; Type locality: Spanien, Ronda; [**Note:** See lectotype designation by Zerche, 1998]. Originally cited from südlichste Randgebirge der iberischen Halbinsel, Sierra di Ronda, Sierra Alfacar).
- Zerche, 1998: 26 (*Metopsia*; lectotype designation: Spanien, Ronda; synonym of *clypeata*).



*corticalis* Lacordaire, 1835, see: *clypeata* P. W. J. Müller, 1821.

**elytrata** Zerche, 1998: 42 (*Metopsia*; Type locality: Isl. Can.: Tenerife: Anaga, NO Chinobre, 800 m).

▲ **DISTRIBUTION:** Canary Islands.

**feloï** Zerche, 1998: 44 (*Metopsia*; Type locality: Tenerife: Mte. del Agua, Los Silos).

▲ **DISTRIBUTION:** Canary Islands.

*fernandezi* Jarrige, 1952, see: *cimicoïdes* Wollaston, 1864.

*fernandezi* Last, 1957, see: *tenoensis* H. Franz, 1986.

*flava* Stephens, 1834, see: *clypeata* P. W. J. Müller, 1821.

*gallica* C. Koch, 1938, see: *clypeata* P. W. J. Müller, 1821.

**gomerensis** H. Franz, 1986: 79 (*Phloeobium*; Type locality: El Cedro auf La Gomera).

— Fauvel, 1902b: 49 (*Metopsia*; [Note: Some specimens misidentified as *cimicoïdes* according to Zerche, 1998]; Canary Islands).

— Coiffait, 1954: 162 (*Metopsia*; [Note: Misidentified as *cimicoïdes* according to Zerche, 1998]; Canary Islands).

— Zerche, 1998: 51 (*Metopsia*; characters; Canary Islands).

— Assing, 1999a: 345 (*Metopsia*; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

*hispanica* Scheerpeltz, 1960, see: *clypeata* P. W. J. Müller, 1821.

**neglecta** Zerche, 1998: 40 (*Metopsia*; Type locality: Isl. Can.: Tenerife: Cumbre Dorsal, Esperanza-Wald, 1250 m).

▲ **DISTRIBUTION:** Canary Islands.

**palmensis** H. Franz, 1986: 81 (*Phloeobium*; Type locality: O-Hang der Cumbre Nueva).

— Zerche, 1998: 49 (*Metopsia*; characters; Canary Islands).

— Assing and Wunderle, 1999: 434, 437 (*Metopsia*; collecting notes; Canary Islands).

▲ **DISTRIBUTION:** Canary Islands.

*retusa* Stephens, 1834, see: *clypeata* P. W. J. Müller, 1821.

**similis** Zerche, 1998: 16 (*Metopsia*; proposed for misidentification of *clypeata* by various work-

ers [Note: References specified by Zerche as misidentifications of *clypeata* have been moved to *similis*; some others still cited as subsequent references for *clypeata* may refer to *similis*]; Type locality: Deutschland: Brandenburg, NSG “Pimpinellenberg” bei Oderberg. Also cited from Austria, Czech Republic, Poland, Sweden, Denmark, Romania, Bulgaria, Slovenia, Croatia, Bosnia-Herzegovina, Macedonia, Greece, Italy, Switzerland, France, Ukraine, Belarus, Russia, Georgia, Azerbaijan, Turkey).

— Erichson, 1839a: 646 (*Megarthus*; [Note: Misidentified as *clypeatus* according to Zerche, 1998]; characters; Germany).

— Erichson, 1840: 907 (*Phloeobium*; [Note: Some specimens misidentified as *clypeatum* according to Zerche, 1998]; characters; Germany; France).

— Redtenbacher, 1849: 757 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; characters; Austria).

— Kraatz, 1857d: 1033 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; characters; Germany).

— Redtenbacher, 1857: 258 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; characters; Austria).

— Hochhuth, 1862: 112 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; Russia).

— Fauvel, 1871a: 51 [= 1872: 25] (*Phloeobium*; [Note: Some specimens misidentified as *clypeatum* according to Zerche, 1998]; characters; France; Europe; Cyprus).

— Redtenbacher, 1874: 283 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; characters; Austria).

— Seidlitz, 1891: 336 (*Phloeobium*; [Note: Misidentified as *clypeatum* according to Zerche, 1998]; characters; Europe).

- Seidlitz, 1891a: 359 (*Phloeobium*; [**Note:** Misidentified as *clypeatum* according to Zerche, 1998]; characters; Europe).
- Ganglbauer, 1895: 764 (*Phloeobium*; [**Note:** Some specimens misidentified as *clypeatum* according to Zerche, 1998]; characters; middle and southern Europe).
- Sainte-Claire Deville, 1906: 66 (*Metopsia*; [**Note:** Misidentified as *clypeatum* according to Zerche, 1998]; Corsica).
- Sainte-Claire Deville, 1907: 14 (*Metopsia*; [**Note:** Some specimens misidentified as *clypeata* according to Zerche, 1998]; characters; France).
- Reitter, 1909: 198 (*Metopsia*; [**Note:** Misidentified as *clypeata* according to Zerche, 1998]; characters; Germany).
- Palm, 1948: 38 (*Metopsia*; [**Note:** Misidentified as *clypeatum* according to Zerche, 1998]; characters; Sweden; Denmark).
- Scheerpeltz, 1960a: 65 (*Phloeobium*; [**Note:** Misidentified as *clypeatum* according to Zerche, 1998]; characters; Europe).
- Horion, 1963: 19 (*Phloeobium*; [**Note:** Misidentified as *clypeatum* according to Zerche, 1998]; Denmark; Sweden; Czechoslovakia; Poland; Hungary; Romania; Bosnia Hercegovina; Serbia; Croatia; Macedonia; Greece; Russia; Italy; Switzerland; Belgium; Holland; Britain; Germany; Austria).
- Tóth, 1982: 21 (*Metopsia*; [**Note:** Misidentified as *clypeata* according to Zerche, 1998]; characters; Hungary).
- Burakowski, Mroczkowski, and Stefańska, 2000: 39 (*Metopsia*; catalog; Poland).
- Assing, 2001: 75 (*Metopsia*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Europe, Russia, Georgia, Azerbaijan, Turkey.

**tenoensis** H. Franz, 1986: 80 (*Phloeobium*; Type locality: westlicher Teil des Mte. de Erjos unweit von El Palmar).

- Hernández, Outerelo, and Gamarra, 1994: 193 (*Metopsia* synonym of *fernandesi* Last).
- Zerche, 1998: 45 (*Metopsia*; characters; Canary Islands).
- ▲ **DISTRIBUTION:** Canary Islands.

*fernandesi* Last, 1957: 165 (*Metopsia*; [**preoccupied**]; Type locality: Canary Islands: Tenerife).

- Hernández, Outerelo, and Gamarra, 1994: 193 (*Metopsia*; notes; Canary Island).
- Zerche, 1998: 45 (*Metopsia*; synonym of *tenoensis*).

### Proteinus

[36 species; Neotropical, Nearctic, Palaearctic, Ethiopian, and Oriental Regions]

*Proteinus* Latreille, 1797: 9 (without included species). **TYPE SPECIES:** *Dermestes brachypterus* Fabricius, fixed by action of the Commission, Opinion 876 (ICZN, 1969).

- Latreille, 1806: 298 (characters).
- Latreille, 1810: 183, 427 (characters).
- Leach, 1815: 92 (characters).
- Samouelle, 1819: 175 (characters).
- Billberg, 1820: 15 (cited as *Protinus*; characters; list of some species).
- Latreille, 1825: 245 (cited as *Proteine*; characters).
- Latreille, 1825a: 215 (characters).
- Berthold, 1827: 332 (characters).
- Curtis, 1829: 28, 245 (cited as *Proteinnus* in column 28 and corrected on column 245; catalog; British species).
- Stephens, 1829a: 24 (catalog; Britain).
- Stephens, 1829: 295 (catalog; Britain).
- Latreille, 1829: 440 (characters).
- Mannerheim, 1830: 10, 57 (key; characters).
- Mannerheim, 1831: 424, 471 (key; characters).
- Dejean, 1833: 69 (list of species).
- Stephens, 1834: 334 (characters; habitat).

- Gistel, 1834: 9 (list of species).
- Lacordaire, 1835: 490 (characters).
- Westwood, 1838a: 18 (*Proteinus*; type species).
- Erichson, 1839a: 642 (characters).
- Heer, 1839: 170 (characters).
- Stephens, 1839: 422 (characters).
- Erichson, 1840: 902 (characters).
- Laporte, 1840: 193 (characters).
- Redtenbacher, 1849: 755 (characters).
- Schaum, 1852: 31 (list of species; Europe).
- Lacordaire, 1854: 146 (characters; notes; list of species).
- Fairmaire and Laboulbène, 1856: 653 (characters).
- Gistel, 1856: 390 (cited as *Protinus*; list of species).
- Jacquelin du Val, 1857: 78 (characters).
- Redtenbacher, 1857: 256 (characters; key to Austrian species).
- Kraatz, 1857d: 1022 (characters).
- Thomson, 1858: 38 (characters).
- G. Waterhouse, 1858: 32 (catalog of British species).
- Thomson, 1859: 52 (characters; type species: *brachypterus*).
- Schaum, 1859: 32 (catalog; European species).
- LeConte, 1861a: 71 (characters).
- Thomson, 1861: 217 (characters).
- Gredler, 1863: 127 (list of species from Tirol).
- LeConte, 1863: 26 (list of North American species).
- Wencker and Silbermann, 1866: 37 (list of species; collecting notes; France).
- Fauvel, 1867a: 49 [= 1868: 54] (characters).
- Jacquelin du Val, 1868: 82 (catalog; European species).
- Fauvel, 1871a: 55 [= 1872: 29] (cited as *Protinus*; characters; key to species).
- Sharp, 1871d: 14 (list of British species).
- Redtenbacher, 1874: 281 (characters; key to Austrian species).
- Fauvel, 1878d: 194 [= 1878e: 30] (key to North American species).
- Mulsant and Rey, 1878b: 218 (characters; key to French species).
- Heyden, 1880: 84 (cited as *Protinus*; list of species of Siberian region).
- Duvivier, 1883: 201 (catalog; cited as *Protinus*).
- Fowler, 1888: 427 (notes; key to British species).
- Seidlitz, 1891: 337 (key to some European species).
- Seidlitz, 1891a: 359 (key to some European species).
- Heyden, Reitter, and Weise, 1891: 122 (cited as *Protinus*; list of species of Europe and Caucasus).
- Heyden, 1893: 49 (cited as *Protinus*; list of species of Siberian region).
- Ganglbauer, 1895: 757 (characters; key to middle European species).
- Heyden, 1896: 37 (cited as *Protinus*; list of species of Siberian region).
- Fauvel, 1897d: 243 (catalog of species of Barbary).
- Heyden, Reitter, and Weise, 1906: 127 (list of species of Europe and Caucasus).
- Sainte-Claire Deville, 1907: 17 (key to species of Seine Basin, France).
- Reitter, 1909: 198 (characters; key to German species).
- Bernhauer and Schubert, 1910: 33 (world catalog; 14 species).
- Petri, 1912: 51 (list of species of Siebenbürgen).
- Johansen, 1914: 626 (characters; key to Danish species).
- Leng, 1920: 93 (catalog of North American species).
- Doderò, 1923: 45 (key to Italian species).
- Winkler, 1925: 325 (catalog for Palaearctic region).
- Cameron, 1925: 103 (catalog of Indian species).
- Porta, 1926: 9 (characters; key to species of Italy).
- Portevin, 1929: 457 (characters; key to French genera).
- Cameron, 1930: 123 (characters; key to British Indian species).

- Sjöberg, 1930: 188 (key to species).
- Roubal, 1930: 302 (catalog; Slovakia).
- Joy, 1932: 94 (key to British species).
- Scheerpeltz, 1933: 1026 (world catalog supplement).
- Normand, 1935: 356 (list of species of Tunisia).
- Scheerpeltz, 1937b: 186 (list of Bulgarian species).
- Blackwelder, 1944: 101 (checklist of species from Mexico, Central and South America, and the West Indies).
- Kloet and Hincks, 1945: 160 (list of British species).
- Scheerpeltz and Höfler, 1948: 151 (key to European species).
- Palm, 1948: 45 (characters; key to species of Sweden).
- Tottenham, 1949: 353, 405 (type species: *brachypterus* Fabricius; notes; list of British species).
- Blackwelder, 1952: 413 (type species: *pulicarius*).
- Tottenham, 1954: 14 (characters; key to British species).
- Hatch, 1957: 106 (characters; key to species of Pacific Northwest).
- Kocher, 1958: 92 (checklist of species; Morocco).
- Ferreira, 1962a: 9 (list of Portuguese species).
- Horion, 1963: 27 (list of central European species).
- Székessy, 1963: 11 (characters).
- Lohse, 1964: 24 (characters; key to central European species).
- Steel, 1966: 288 (larval characters).
- Kasule, 1966: 279 (larval characters).
- Jelinek and Steel, 1966 (application to Commission to designate as *Dermestes brachypterus* Fabricius as type species of genus and to place name on Official List of Generic Names in Zoology).
- Pototskaia, 1967: 19 (larval characters).
- Coiffait and Saiz, 1968: 456 (characters; Chilean species).
- Scheerpeltz, 1968a: 4 (catalog of Austrian species).
- ICZN, 1969 (*Proteinus* placed on Official List of Generic Names in Zoology; type species designation).
- Bordoni, 1973j: 655 (list of species from islands near Sicily).
- Tikhomirova, 1973a: 136 (checklist of species of USSR).
- Moore and Legner, 1974: 14 (characters; notes).
- Moore and Legner, 1975: 176 (catalog; North America north of Mexico).
- Shibata, 1976: 190 (checklist of species of Japan).
- Moore and Legner, 1976: 538 (includes seashore species; notes).
- Pope, 1977: 22 (list of British species).
- Topp, 1978: 307 (larval characters).
- Frank, 1979 (notes on habitat; generic nomenclature).
- Burakowski, Mroczkowski, and Stefańska, 1979: 13 (catalog; Poland).
- Moore and Legner, 1979: 158 (characters; notes).
- Muona, 1979: 17 (list of Scandinavian species).
- Uhlig, 1979: 242 (some species collected in Germany).
- Uhlig, Vogel, and Sieber, 1980: 240 (some species collected in Germany).
- Uhlig and Vogler, 1981: 83 (list of some species collected in Germany; habitat and collecting notes).
- Tóth, 1982: 23 (characters; habitus; key to species of Hungary).
- Frank and Thomas, 1984: 98 (notes on habitats; affinities of *peckorum*).
- Ádám, 1985: 251 (list of species from southeast Hungary).
- Frank, 1986a: 365 (checklist of species of Florida).
- Muona and Viramo, 1986: 14 (list of species of northeastern Finland).
- Segers, 1986: 17 (checklist of species; Belgium).
- Hayashi, 1988: 22 (key to species of Japan).
- M. Hansen, Kristensen, Mahler, Pedersen, 1991: 106 (list of Danish species).
- Angelini, 1991: 193 (list of species from high elevations of Calabria, Italy).
- Frank, 1991: 344 (larval characters).

- Campbell and Davies, 1991: 87 (checklist of species; Alaska and Canada).
- Silfverberg, 1992: 21 (list of species of Fennoscandia, Denmark, and the Baltic States).
- Siitonen, 1993: 230 (list of Finnish species).
- Welch, 1993: 227 (ovariole number and ovary structure).
- Boháč, 1993: 40 (list of species of Czech Republic and Slovakia).
- Newton and Thayer, 1995: 299 (Proteinini).
- M. Hansen, Liljehult, Mahler, and Pedersen, 1995: 27 (additional records to Danish list of species).
- Zanetti, 1995: 5 (list of species of Italy).
- Dauphin, 1995a: 101 (characters; habitat; notes; key to species of western Europe).
- M. Hansen, 1996: 96 (list of Danish species).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (additions to list of Danish species).
- Downie and Arnett, 1996: 429 (characters; key to species of Northeastern North America).
- Newton, Thayer, Ashe, and Chandler, 2000: 343 (10 Nearctic species; notes; characters in key).

*Macropterum* Gistel, 1834: 9 (species included: *macropterum*). **TYPE SPECIES:** *Omalium macropterum* Gravenhorst, fixed by monotypy.

- Gistel, 1856: 267, 390 (list of species).
- Blackwelder, 1952: 229 (synonym of *Megarthus*; type species: *macropterum*).

*Protinus* Gemminger and Harold, 1868: 671 (emendation of *Proteinus*). **TYPE SPECIES:** *Dermestes brachypterus* Fabricius, fixed by objective synonymy with *Proteinus*.

*Pteronius* Blackwelder, 1952: 331 (**Note:** Proposed for the species of Staphylinidae included in *Proteinus* which, before action of the Commission, had a type species that would have placed it in the Nitidulidae). **TYPE SPECIES:** *Dermestes brachypterus* Fabricius, fixed by original designation.

- Muona, 1979: 17 (synonym of *Proteinus*).
- Ádám, 1987: 137 (list of three species with collecting notes; Hungary).
- Boháč, 1993: 40 (synonym of *Proteinus*).
- Ádám, 1996: 237 (list of species collected in Bükk National Park, Hungary).

**altaicus** Reitter, 1905a: 227 (*Proteinus*; Type locality: Altai, Ostsibirien; [**Note:** See lectotype designation by Muona, 1978]).

- Poppius, 1909: 3 (*Proteinus*; Lena Valley, Siberia).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; catalog).
- Scheerpeltz, 1933: 1026 (*Proteinus*; catalog).
- Muona, 1978: 125 (*Proteinus*; lectotype designation; synonymic notes).

▲ **DISTRIBUTION:** Finland, Russia.

*apicidens* Jansson and Sjöberg, 1929: 212 (*Proteinus*; Type locality: Hamra Naturschutzgebiet in Dalarna; Abisko im nördlichen Lappland).

- Sjöberg, 1930: 181 (*Proteinus*; characters; notes).
- Scheerpeltz, 1933: 1026 (*Proteinus*; catalog).
- Palm, 1948: 48 (*Proteinus*; characters; Finland; Sweden; Norway; [**Note:** The records from Norway and Sweden many refer to *hyperboreus*]).
- Lohse, 1964: 24 (*Proteinus*; characters; Scandinavia).
- Muona, 1978: 125 (*Proteinus*; synonym of *altaicus*).
- Lohse and Lucht, 1989: 122 (*Proteinus*; synonym of *altaicus*).

**angelinii** Dauphin, 1999: 135 (*Proteinus*; Type locality: Basilicata, Accettura, bosco Montepiano).

▲ **DISTRIBUTION:** Italy.

*apicidens* Jansson and Sjöberg, 1929, see: *altaicus* Reitter, 1905.

**atomarius** Erichson, 1840: 904 (*Proteinus*; Type locality: Germany).

- Redtenbacher, 1849: 756 (*Proteinus*; characters; Austria).
- Fairmaire and Laboulbène, 1856: 654 (*Proteinus*; characters; France).
- Redtenbacher, 1857: 257 (*Proteinus*; characters; Austria).
- Kraatz, 1857d: 1025 (*Proteinus*; characters; Germany).

- Thomson, 1861: 218 (*Proteinus*; characters; Scandinavia).
- Pandellé, 1867: 169 (*Proteinus*; characters; France).
- Gemminger and Harold, 1868: 672 (*Proteinus*; synonym of *clavicornis*).
- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; [**Note:** Bernhauer and Schubert, 1910: 33 cited this use by Fauvel of *clavicornis* as a synonym of *atomarius*; Fauvel did not describe the species as new, he attributed it to Stephens. Furthermore, Fauvel cited *atomarius* as a junior synonym of *clavicornis*]; synonym of *clavicornis*).
- Fauvel, 1873b: 110 [= 1873c: 3] (*Protinus*; Austria; Sicily; Sardinia; Russia).
- Redtenbacher, 1874: 282 (*Proteinus*; characters; Austria).
- Seidlitz, 1875: 232 (*Proteinus*; characters; Baltic region).
- Fauvel, 1876a: 47 [= 1876: 232] (*Protinus*; France; Corsica; Malta).
- J. Sahlberg, 1876: 224 (*Proteinus*; synonym of *clavicornis*).
- Fauvel, 1878: 87 [= 1878a: 7] (*Proteinus*, cited as *Protinus*; Algeria).
- Fauvel, 1878d: 196 [= 1878e: 32] (*Proteinus*; characters; Lake Superior; Michigan).
- Mulsant and Rey, 1878b: 230 (*Proteinus*; characters; France).
- Fauvel, 1886: 13 [= 1886a: 4] (*Proteinus*, cited as *Protinus*; Algeria; Morocco).
- Fowler, 1888: 428 (*Proteinus*; characters; Britain).
- Ganglbauer, 1895: 760 (*Proteinus*; characters; Europe; Mediterranean region; North America).
- Fauvel, 1902b: 50 (*Proteinus*; Morocco; Algeria; Tunisia).
- Reitter, 1905a: 228 (*Proteinus*; characters; Europe; Mediterranean region; Caucasus; North America).
- Sainte-Claire Deville, 1906: 67 (*Proteinus*, cited as *Protinus*; Corsica).
- Reitter, 1909: 199 (*Proteinus*; characters; Germany).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; catalog).
- Johansen, 1914: 628 (*Proteinus*; characters; Denmark).
- Portevin, 1929: 458 (*Proteinus*; characters; France).
- Sjöberg, 1930: 184 (*Proteinus*; characters; notes).
- Scheerpeltz, 1933: 1026 (*Proteinus*; catalog).
- Scheerpeltz and Höfler, 1948: 150 (*Proteinus*; fungus inhabitant).
- Palm, 1948: 52 (*Proteinus*; characters; Sweden; Denmark; Norway; Finland).
- Tottenham, 1949: 405 (*Proteinus*; checklist; Britain).
- Hatch, 1957: 106 (*Proteinus*; characters; British Columbia).
- Kocher, 1958: 92 (*Proteinus*; Morocco).
- Ferreira, 1962: 9 (*Proteinus*; Portugal).
- Horion, 1963: 31 (*Proteinus*; Britain; Scotland; Norway; Sweden; Finland; Denmark; Portugal; Spain; Balearics; France; Corsica; Italy; Sicily; Dalmatia; Hercegovina; Greece; Germany; Austria).
- Lohse, 1964: 25 (*Proteinus*; characters; central Europe).
- Smetana, 1964d: 51 (*Proteinus*; Czechoslovakia).
- Scheerpeltz, 1968a: 5 (*Proteinus*; catalog; Austria).
- Smetana, 1970: 54 (*Proteinus*; distributional summary; Azores).
- Korge, 1971a: 5 (*Proteinus*; Turkey).
- Smetana 1975c: 154 (*Proteinus*; Mongolia).
- Coiffait, 1976b: 83 (*Proteinus*; Greece; Corfu; Rhodes).
- Pope, 1977: 22 (*Proteinus*; Britain).
- Frank, 1979: 330, 336 (*Proteinus*; notes on nomenclature and North American records; species may not be in North America).
- Muona, 1979: 17 (*Proteinus*; Finland; Russia; Sweden; Norway; Denmark; Baltic States).
- Burakowski, Mroczkowski, and Stefańska, 1979: 13 (*Proteinus*; catalog; Poland).
- Hammond, 1980: 135 (*Proteinus*; unconfirmed in Ireland).
- Tóth, 1982: 28 (*Proteinus*; characters; Hungary).
- Frank and Thomas, 1984: 99, 100 (*Proteinus*; characters; Illinois).
- Muona and Viramo, 1986: 15 (*Proteinus*; Finland).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Borges, 1990: 93 (*Proteinus*; Azores).

- Dettner and Reissenweber, 1991 (*Proteinus*; defensive secretions: chemistry and systematics).
- Angelini, 1991: 193 (*Proteinus*; Italy).
- Campbell and Davies, 1991: 87 (*Proteinus*; checklist; USA; Canada).
- Silfverberg, 1992: 21 (*Proteinus*; Finland; Russia; Sweden; Norway; Denmark; Estonia; Latvia; Lithuania).
- Boháč, 1993: 40 (*Proteinus*; Czech Republic; Slovakia).
- Sparacio, 1995: 138 (*Proteinus*; characters; summary of distribution; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 108, 118 (*Proteinus*; characters; France).
- Downie and Arnett, 1996: 429 (*Proteinus*; characters; USA).
- M. Hansen, Mahler, Palm, and Pedersen, 1996: 240 (*Proteinus*; Denmark).
- M. Hansen, 1996: 96 (*Proteinus*; checklist; Denmark).
- Telnov, Bersevskis, Savich, Kovalevsky, Berdnikov, Doronin, Cibulskis, and Ratniece, 1997: 42 (*Proteinus*; Latvia).
- Anderson, Nash, and O'Connor, 1997: 16 (*Proteinus*; Ireland).
- Ryabukhin, 1999: 11 (*Proteinus*; catalog; habitat; distribution; northeastern Russia).
- Owen, 2000: 250 (*Proteinus*; pitfall trap collections from underground at roots of trees; Britain).
- Herman, 2001: 24 (*Proteinus*; nomen protectum).
- ▲ **DISTRIBUTION:** Tunisia, Algeria, Morocco, Azores, Europe, Russia, Mongolia, Canada (?), USA (?).

*clavicornis* Stephens, 1834: 334 (*Proteinus*; [**Note:** This name is older than *atomarius*]; Type locality: London; Suffolk; Oakhampton, Somerset).

- Stephens, 1839: 424 (*Proteinus*; characters; England).
- G. Waterhouse, 1858: 32 (*Proteinus*; synonym of *atomarius*; [**Note:** Waterhouse cited the “*clavicornis*, Kirby’s coll.” as a synonym of *atomarius*; Stephens’ description of *clavicornis* cited the species as “*Pr. clavicornis*. Kirby MSS”. I assume that Waterhouse’s use of *clavicornis* also referred to that of Stephens]).
- Gemminger and Harold, 1868: 672 (*Proteinus*; valid species).
- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; [**Note:** Fauvel cited this name as the senior synonym of *atomarius*]; characters; France; Scandinavia; Britain; Germany; Algeria; North America).
- J. Sahlberg, 1876: 224 (*Proteinus*; valid species; Finland).
- Mulsant and Rey, 1878b: 231 (*Proteinus*; Fauvel cited as author; synonym of *atomarius*).
- Ganglbauer, 1895: 760 (*Proteinus*; Fauvel cited as author; synonym of *atomarius*).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; cited with Fauvel as author; synonym of *atomarius*).
- Herman, 2001: 24 (*Proteinus*; nomen oblitum).

*olivierii* Saulcy, 1866: 51 (*Proteinus*; [**Note:** The original spelling of this name was *oliverii* but the name is a patronym for the collector, M. Olivier so the correct spelling is *olivierii* as was used by Ganglbauer and others]; Type locality: Bône).

- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; synonym of *clavicornis*).
- Ganglbauer, 1895: 760 (*Proteinus*; synonym of *atomarius*).
- Fauvel, 1902b: 50 (*Proteinus*; synonym of *atomarius*).
- Reitter, 1905a: 228 (*Proteinus*; synonym of *atomarius*).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; synonym of *atomarius*).

*oblongus* Petri, 1891: 22 (*Proteinus*; variety of *atomarius*; Type locality: Umgebung Schässburg).

- Ganglbauer, 1895: 759 (*Proteinus*; synonym of *limbatus*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *limbatus*).
- Scheerpeltz, 1933: 1027 (*Proteinus*; synonym of *crenulatus*).
- Tóth, 1982: 28 (*Proteinus*; characters; variety of *atomarius*).

**basalis** Mäklin, 1852: 324 (*Proteinus*; Type locality: insula Sitkha).

- Fauvel, 1878d: 195 [= 1878e: 31] (*Proteinus*; characters; Sitka Island).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; catalog).
- Sjöberg, 1930: 186 (*Proteinus*; characters; notes).

- Scheerpeltz, 1933: 1026 (*Proteinus*; catalog).
- Hatch, 1957: 107 (*Proteinus*; characters; British Columbia; Washington; Oregon; Idaho).
- Campbell and Davies, 1991: 87 (*Proteinus*; checklist; USA; Canada).

▲ **DISTRIBUTION:** Canada, USA.

**brachypterus** Fabricius, 1792: 235 (*Dermestes*; Type locality: Germania).

- Panzer, 1795: 103 (*Dermestes*; characters).
- Panzer, 1796: 10 (*Dermestes*; characters; illustration).
- Gravenhorst, 1806: 215 (*Omalium*; synonym of *ovatus* Gravenhorst).
- Latreille, 1806: 298 (*Proteinus*; characters; France).
- Gyllenhal, 1810: 207 (*Omalium*; characters).
- Olivier, 1811: 479 (*Omalium*; synonym of *ovatus*).
- Leach, 1815: 92 (*Proteinus*; characters; France; England).
- Samouelle, 1819: 175 (*Proteinus*; characters; England; France).
- Latreille, 1825a: 215 (*Proteinus*; characters; France).
- Gyllenhal, 1827: 464 (*Omalium*).
- C. Sahlberg, 1827: 279 (*Omalium*; characters; Finland).
- Curtis, 1829: 28 (*Proteinus*; catalog; Britain).
- Mannerheim, 1830: 57 (*Proteinus*; Finland; Sweden).
- Mannerheim, 1831: 471 (*Proteinus*; Finland; Sweden).
- Stephens, 1834: 334 (*Proteinus*; characters; habitat).
- Runde, 1835: 24 (*Proteinus*; characters; Germany).
- Lacordaire, 1835: 491 (*Proteinus*; characters; France).
- Erichson, 1839a: 642 (*Proteinus*; characters; Germany).
- Heer, 1839: 170 (*Proteinus*; characters; Switzerland).
- Stephens, 1839: 424 (*Proteinus*; characters; England).
- Erichson, 1840: 903 (*Proteinus*; characters; Europe).
- Laporte, 1840: 193 (*Proteinus*; characters; France).
- Hochhuth, 1849: 205 (*Proteinus*; characters; Caucasus).
- Redtenbacher, 1849: 756 (*Proteinus*; characters; Austria).
- Hardy, 1851: 63 (*Proteinus*; notes; England).
- Fairmaire and Laboulbène, 1856: 653 (*Proteinus*; characters; France).
- Gistel, 1856: 267 (*Arpedium*).
- Redtenbacher, 1857: 257 (*Proteinus*; characters; Austria).
- Kraatz, 1857d: 1024 (*Proteinus*; characters; Germany).
- Thomson, 1859: 52 (type species of *Proteinus*).
- Thomson, 1861: 217 (*Proteinus*; characters; Scandinavia).
- Pandellé, 1867: 169 (*Proteinus*; characters; France).
- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; characters; France; Europe; Algeria).
- Fauvel, 1873b: 110 [= 1873c: 3] (*Protinus*; Caucasus).
- Redtenbacher, 1874: 282 (*Proteinus*; characters; Austria).
- Seidlitz, 1875: 232 (*Proteinus*; characters; Baltic region).
- J. Sahlberg, 1876: 224 (*Proteinus*; Finland).
- Fauvel, 1878: 87 [= 1878a: 7] (*Protinus*; Algeria).
- Mulsant and Rey, 1878b: 223 (*Proteinus*; characters; France).
- Fauvel, 1886: 13 [= 1886a: 5] (*Protinus*; Algeria; Morocco).
- Fowler, 1888: 428 (*Proteinus*; characters; Britain).
- Ganglbauer, 1895: 759 (*Proteinus*; characters; Europe; Mediterranean region).
- Fauvel, 1902b: 50 (*Proteinus*; Morocco; Algeria; Tunisia).
- Reitter, 1905a: 228 (*Proteinus*; characters; Europe; Mediterranean region; Caucasus).
- Sainte-Claire Deville, 1906: 67 (*Protinus*; Corsica).
- Poppius, 1909: 3 (*Proteinus*; Lena Valley, Siberia).
- Reitter, 1909: 199 (*Proteinus*; characters; Germany).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; catalog).
- Johansen, 1914: 627 (*Proteinus*; characters; Denmark).
- Eichelbaum, 1914: 25 (*Proteinus*; abdominal segmentation; apical segments).
- Portevin, 1929: 458 (*Proteinus*; characters; France).



- Gridelli, 1930: 61 (*Proteinus*; Libya).
- Sjöberg, 1930: 177 (*Proteinus*; characters; notes; Sweden; Finland; Russia; Germany; Transylvania; England).
- Scheerpeltz, 1933: 1026 (*Proteinus*; catalog).
- Paulian, 1941: 143 (*Proteinus*; larval characters; Gold Coast).
- Scheerpeltz and Höfler, 1948: 150 (*Proteinus*; fungus inhabitant).
- Palm, 1948: 48 (*Proteinus*; characters; Sweden; Denmark; Norway; Finland).
- Jeannel and Jarrige, 1949: 323 (*Proteinus*; cave species; Romania).
- Hatch, 1957: 106 (*Proteinus*; characters; no specimens examined from Pacific Northwest; British Columbia).
- Scheerpeltz, 1963a: 414 (*Proteinus*; Greece).
- Horion, 1963: 30 (*Proteinus*; Lapland to Mediterranean region to eastern Siberia; Germany; Austria).
- Lohse, 1964: 24 (*Proteinus*; characters; central Europe).
- Smetana, 1964d: 51 (*Proteinus*; Czechoslovakia).
- Pototskaia, 1967: 19 (*Proteinus*; larval characters).
- Szujeci, 1968a: 710 (*Proteinus*; Poland).
- Pope, 1977: 22 (*Proteinus*; Britain).
- Jelinek and Steel, 1966 (application to Commission to designate *brachypterus* as type species of *Proteinus* and to place species on Official List of Specific Names in Zoology).
- ICZN, 1969 (name placed on Official List of Specific Names in Zoology; type species of *Proteinus*).
- Frank, 1979: 330 (*Proteinus*; notes on distribution in Canada [?] and USA [?]).
- Hammond, 1980: 135 (*Proteinus*; Ireland).
- Tóth, 1982: 24 (*Proteinus*; characters; Hungary).
- Frank and Thomas, 1984: 100 (*Proteinus*; characters).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Dettner and Reissenweber, 1991 (*Proteinus*; defensive secretions: chemistry and systematics).
- Campbell and Davies, 1991: 87 (*Proteinus*; checklist; USA; Canada).
- Welch, 1993: 227 (*Proteinus*; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Proteinus*; Czech Republic; Slovakia).
- Cuccodoro, 1995: 262 (*Proteinus*; water loading behavior).
- Øland, 1995: 23 (*Proteinus*; host mushroom; Norway).
- Muona and Viramo, 1995: 9 (*Proteinus*; collected from fungus and dung of *Ursus arctos*; Finland).
- Sparacio, 1995: 138 (*Proteinus*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 106, 112, 118 (*Proteinus*; characters; France).
- Cuccodoro, 1996a: 108 (*Proteinus*; water loading behavior).
- Owen, 1999b: 61 (*Proteinus*; captured underground at roots of old trees; Britain).
- Ryabukhin, 1999: 12 (*Proteinus*; catalog; habitat; distribution; northeastern Russia).
- Kashcheev, 1999a: 57 (*Proteinus*; Kazakhstan).
- Owen, 2000: 250 (*Proteinus*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Proteinus*; collected from xerothermous site; Germany).
- ▲ **DISTRIBUTION:** Europe, Russia, Libya, Tunisia, Algeria, Morocco, Ghana, Canada (?), USA (?).

*ovatus* Gravenhorst, 1806: 215 (*Omalium*; Type locality: Not cited).

- Gyllenhal, 1810: 207 (*Omalium*; synonym of *brachypterus* Fabricius).
- Olivier, 1811: 479 (*Omalium*; characters; France; Germany; Sweden).
- Latreille, 1829: 440 (*Proteinus*; characters).
- Lacordaire, 1835: 491 (*Proteinus*; synonym of *brachypterus* Fabricius).
- Erichson, 1839a: 643 (*Proteinus*; synonym of *brachypterus*).
- Erichson, 1840: 903 (*Proteinus*; synonym of *brachypterus*).
- Redtenbacher, 1849: 756 (*Proteinus*; synonym of *brachypterus*).

- Kraatz, 1857d: 1025 (*Proteinus*; synonym of *brachypterus*).
- Mulsant and Rey, 1878b: 223 (*Proteinus*; synonym of *brachypterus*).
- Ganglbauer, 1895: 759 (*Proteinus*; synonym of *brachypterus*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *brachypterus*).
- nigricornis* Stephens, 1834: 336 (*Anthobium*; Type locality: London; Devonshire).
  - Stephens, 1839: 424 (*Anthobium*; characters; England).
  - G. Waterhouse, 1858: 32 (*Proteinus*; synonym of *brachypterus*).
  - Ganglbauer, 1895: 759 (*Proteinus*; synonym of *brachypterus*).
  - Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *brachypterus*).
- nitidus* Stephens, 1834: 337 (*Anthobium*; Type locality: London).
  - Stephens, 1839: 425 (*Anthobium*; characters; England).
  - G. Waterhouse, 1858: 32 (*Proteinus*; synonym of *brachypterus*).
  - Ganglbauer, 1895: 759 (*Proteinus*; synonym of *brachypterus*).
  - Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *brachypterus*).
- laevicollis* Heer, 1839: 180 (*Omalium*; Type locality: Zürich).
  - Ganglbauer, 1895: 759 (*Proteinus*; synonym of *brachypterus*).
  - Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *brachypterus*).
- lividipennis* Reitter, 1905a: 228 (*Proteinus*; variety of *brachypterus*; Type locality: Kaukasus, Lenkoran).
  - Bernhauer and Schubert, 1910: 34 (*Proteinus*; variety of *brachypterus*).
- brevicollis* Erichson, 1840, see: *ovalis* Stephens, 1834.
- clavicornis* Stephens, 1834, see: *atomarius* Erichson, 1840.
- collaris** Hatch, 1957: 107 (*Proteinus*; Type locality: Washington: Seattle).
  - Frank, 1979: 336 (*Proteinus*; characters).
  - Frank and Thomas, 1984: 100 (*Proteinus*; characters).
  - ▲ **DISTRIBUTION:** USA.
- crassicornis** Sharp, 1874: 100 (*Proteinus*; Type locality: Nagasaki).
  - Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
  - Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
  - Nakane, 1963a: 82 (*Proteinus*; characters; habitus photograph; Japan).
  - Yuh, Paik, Kwon, and Lee, 1985: 225 (*Proteinus*; Korea).
  - Hayashi, 1986: 107 (*Proteinus*; characters; Japan).
  - Hayashi, 1988: 22 (*Proteinus*; anatomy of mouthparts; key).
  - J. Li, 1993: 52 (*Proteinus*; characters; China).
  - Watanabe, 1996a: 8 (*Proteinus*; cave collection; Japan).
  - ▲ **DISTRIBUTION:** Japan, Korea, China.
- crenulatus** Pandellé, 1867: 169 (*Proteinus*; Type locality: H.-Pyrénées, Louron).
  - Fauvel, 1871a: 56 [= 1872: 30] (*Proteinus*; synonym of *limbatus*).
  - Fauvel, 1871a: 56 [= 1872: 30] (*Protinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; France; Italy; Corsica; Alaska [**Note:** This record refers to *crenulatus*]).
  - Mulsant and Rey, 1878b: 226 (*Proteinus*; synonym of *limbatus*).
  - Mulsant and Rey, 1878b: 225 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; France).
  - Ganglbauer, 1895: 759 (*Proteinus*; synonym of *limbatus*).
  - Ganglbauer, 1895: 759 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; France; Piemont; Corsica; Siebenbürgen; Caucasus; North America).
  - Reitter, 1905a: 227 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; Italy; France; Corsica; Siebenbürgen; North America [**Note:** This record refers to *limbatus*]).
  - Sainte-Claire Deville, 1906: 67 (*Protinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; Corsica).

- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *limbatus*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; catalog).
- Portevin, 1929: 457 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; France).
- Sjöberg, 1930: 178 (*Proteinus*; characters; valid species; notes).
- Sjöberg, 1930: 185 (*Proteinus*; cited as *limbatus*; [**Note:** Misidentification: see Bernhauer, 1912i: 678; Horion, 1963: 28; Frank, 1979: 331]; characters; notes).
- Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
- Palm, 1948: 48 (*Proteinus*; characters; Sweden; Norway).
- Smetana, 1960b: 258 (*Proteinus*; Czechoslovakia).
- Horion, 1963: 27 (*Proteinus*; Caucasus; western Siberia; Britain; Norway; Sweden; Finland; Russia; Holland; France; Portugal; Corsica; Italy; Romania; Czechoslovakia; Austria; Germany).
- Lohse, 1964: 25 (*Proteinus*; characters; central Europe).
- Pope, 1977: 22 (*Proteinus*; Britain).
- Hammond, 1980: 135 (*Proteinus*; unconfirmed in Ireland).
- Tóth, 1982: 26 (*Proteinus*; characters; Hungary).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Poland; Austria; Switzerland; France; Benelux; Sweden).
- Boháč, 1993: 40 (*Proteinus*; Czech Republic; Slovakia).
- Sparacio, 1995: 137 (*Proteinus*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 106, 110, 118 (*Proteinus*; characters; France).
- Tronquet, 1998a: 114 (*Proteinus*; collected from marmot burrow; France).
- ▲ **DISTRIBUTION:** Caucasus, Russia, Finland, Norway, Sweden, Britain, Ireland, Holland, France, Germany, Czechoslovakia, Austria, Hungary, Romania, Italy, Portugal.
- densipennis** Bernhauer, 1912i: 678 (*Proteinus*; Type locality: Kalifornien: Sugar Pine).
  - Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
  - ▲ **DISTRIBUTION:** USA.
- egregius* Redtenbacher, 1874, see: *Acrulia*.
- ezoensis** Hayashi, 1988: 17 (*Proteinus*; Type locality: Japan: Hokkaido: Mt. Kurodake, Daisetsu Mts.).
  - ▲ **DISTRIBUTION:** Japan.
- fallax* Mulsant and Rey, 1878, see: *laevigatus* Hochhuth, 1872.
- flavocaudatus** Bierig, 1940: 374 (*Proteinus*; Type locality: Costa Rica: Vara Blanca, 1800 m, entre los volcanes Barba y Poás).
  - ▲ **DISTRIBUTION:** Costa Rica.
- fuscotestaceus** Cameron, 1924b: 162 (*Proteinus*; Type locality: Dehra Dun, U.P.).
  - Cameron, 1930: 125 (*Proteinus*; characters; India).
  - Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
  - Coiffait, 1977: 244 (*Proteinus*; Nepal).
  - ▲ **DISTRIBUTION:** India, Nepal.
- gotoi** Hayashi, 1986: 111 (*Proteinus*; Type locality: Mt. Amaishi, Sasayama-Cho, Hyogo Pref.).
  - Hayashi, 1988: 23 (*Proteinus*; key).
  - ▲ **DISTRIBUTION:** Japan.
- hibernus** Gistel, 1857: 63 (*Proteinus*; [**Note:** *Nomen dubium*]; Type locality: Bavaria).
  - ▲ **DISTRIBUTION:** Germany.
- hyperboreus** Muona, 1978: 125 (*Proteinus*; Type locality: USSR: Lim: Porjeguba. Also cited from Finland, Sweden, and Norway).
  - Sjöberg, 1930: 182 (*Proteinus*; [**Note:** Misidentified as *altaicus* according to Muona, 1978: 125]; characters).

- Palm, 1948: 49 (*Proteinus*; [**Note:** Misidentified as *altaicus* according to Muona, 1978: 125]; characters; Sweden; Norway).
- Muona and Viramo, 1995: 9 (*Proteinus*; collected from dung of *Ursus arctos*; Finland).
- ▲ **DISTRIBUTION:** Russia, Finland, Norway, Sweden.

**kashmiricus** Cameron, 1941: 56 (*Proteinus*; Type locality: Kashmir: Gulmarg).

- ▲ **DISTRIBUTION:** India.

**laevigatus** Hochhuth, 1872: 174 (*Proteinus*; Type locality: Not cited, but presumably from Gouvernements Kiew and/or Volhynien).

- Reitter, 1905a: 226 (*Proteinus*; characters; Russia).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
- Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
- Gusarov, 1992a: 775 [= 1993a: 62] (*Proteinus*; synonymic notes).
- Dauphin, 1995a: 106, 108, 118 (*Proteinus*; characters; France).
- Assing, Frisch, Kahlen, et al., 1998: 121 (*Proteinus*; *macropterus* of Gyllenhal is *laevigatus*).
- ▲ **DISTRIBUTION:** Europe, Russia, Turkmenistan.

**fallax** Mulsant and Rey, 1878b: 230 (*Proteinus*; [**Note:** This name is cited as a variety of *macropterus* Gyllenhal which was a misidentification of *macropterus* Gravenhorst so I assume *fallax* refers to *laevigatus*]; Type locality: environs de Montpellier).

- Ganglbauer, 1895: 760 (*Proteinus*; variety of *macropterus* Gyllenhal).
- Scheerpeltz, 1933: 1028 (*Proteinus*; aberration of *macropterus* Gyllenhal).

**serrifer** Muona, 1977: 15 (*Proteinus*; proposed for *macropterus* Gyllenhal [**Note:** Gyllenhal did not propose a new species, he attributed it to Gravenhorst; Gyllenhal's use was a misidentification]; Type locality: Finland).

- Gyllenhal, 1810: 209 (*Omalium*; [**Note:** Misidentification: Bernhauer and Schubert, 1910: 34, and most other authors have cited *macropterus* Gyllenhal as valid species but Gyllenhal did not describe the species as new, he attributed it to Gravenhorst, 1806]; characters; Finland).
- Heer, 1839: 171 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Switzerland).
- Erichson, 1840: 903 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Germany).
- Hochhuth, 1849: 205 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Caucasus).
- Redtenbacher, 1849: 756 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Austria).
- Fairmaire and Laboulbène, 1856: 654 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; France).
- Redtenbacher, 1857: 257 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Austria).
- Kraatz, 1857d: 1025 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Germany).
- Thomson, 1861: 217 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Scandinavia).
- Pandellé, 1867: 169 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; France).
- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; cited as *macropterus* Gyllenhal; characters; France; Britain; Germany; Switzerland; Russia).
- Redtenbacher, 1874: 282 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Austria).
- Seidlitz, 1875: 232 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Baltic region).
- J. Sahlberg, 1876: 224 (*Proteinus*; cited as *macropterus* Gyllenhal; Finland).
- Mulsant and Rey, 1878b: 227 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; France).
- Fowler, 1888: 428 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Britain).
- Eppelsheim, 1892: 346 (*Proteinus*; cited as *macropterus* Gyllenhal; Turkmenia).
- Ganglbauer, 1895: 760 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; north and middle Europe).
- Reitter, 1905a: 228 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; northern and central Europe; Caucasus).
- Reitter, 1909: 199 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Germany).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; cited as *macropterus* Gyllenhal; catalog).
- Johansen, 1914: 628 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Denmark).
- Portevin, 1929: 458 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; France).
- Sjöberg, 1930: 183 (*Proteinus*; cited as *macropterus* Gyllenhal; characters).
- Scheerpeltz, 1933: 1027 (*Proteinus*; cited as *macropterus* Gyllenhal; catalog).

- Scheerpeltz and Höfler, 1948: 150 (*Proteinus*; cited as *macropterus* Gyllenhal; fungus inhabitant).
- Palm, 1948: 49 (*Proteinus*; cited as *macropterus*; characters Gyllenhal; Sweden; Denmark; Norway; Finland).
- Horion, 1963: 30 (*Proteinus*; cited as *macropterus* Gyllenhal; Siberia; Scotland; Lapland; Norway; Sweden; Finland; Portugal; Spain; Corsica; Italy; Dalmatia; Bosnia; Greece; Germany; Austria).
- Lohse, 1964: 25 (*Proteinus*; cited as *atomarius* Gyllenhal; characters; central Europe).
- Smetana, 1964d: 51 (*Proteinus*; cited as *macropterus* Gyllenhal; Czechoslovakia).
- Szujewski, 1968a: 710 (*Proteinus*; cited as *macropterus* Gyllenhal; Poland).
- Muona, 1979: 17 (*Proteinus*; synonym of *macropterus* Gyllenhal).
- Tóth, 1982: 28 (*Proteinus*; cited as *macropterus* Gyllenhal; characters; Hungary).
- H. Franz, 1984: 59 (*Proteinus*, cited as *macropterus* Gyllenhal; Macedonia).
- Dettner and Reissenweber, 1991 (*Proteinus*; cited as *macropterus* Gyllenhal; defensive secretions: chemistry and systematics).
- Gusarov, 1992a: 775 [= 1993a: 62] (*Proteinus*; *macropterus* Gyllenhal is synonym of *laevigatus*).
- Cuccodoro, 1995: 262 (*Proteinus*; cited as *macropterus* Gyllenhal; water loading behavior).
- Assing, Frisch, Kahlen, et al., 1998: 121 (*Proteinus*; synonym of *laevigatus*).

**limbatus** Mäklin, 1852: 323 (*Proteinus*; Type locality: insula Sitkha).

- Fauvel, 1871a: 56 [= 1872: 30] (*Proteinus*; characters; Alaska).
- Fauvel, 1878d: 194 [= 1878e: 30] (*Proteinus*; characters; Sitka Island).
- Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
- Notman, 1919a: 96 (*Proteinus*; Ontario).
- Hatch, 1957: 106 (*Proteinus*; characters; British Columbia; Washington; Oregon; Idaho).
- Frank, 1979: 331 (*Proteinus*; notes on nomenclature and North American records; *limbatus* is not Holarctic).
- Frank and Thomas, 1984: 100 (*Proteinus*; characters).
- Downie and Arnett, 1996: 429 (*Proteinus*; characters; USA).

▲ **DISTRIBUTION:** Canada, USA.

*maeklini* Fauvel, 1869: 494 (*Proteinus*; named for *limbatus* variety b of Mäklin; Type locality: Not cited).

- Fauvel, 1873b: 110 [= 1873c: 3] (*Proteinus*; synonym of *limbatus*).
- Fauvel, 1878d: 195 [= 1878e: 31] (*Proteinus*; synonym of *limbatus*).
- Mulsant and Rey, 1878b: 226 (*Proteinus*; synonym of *limbatus*).
- Ganglbauer, 1895: 759 (*Proteinus*; synonym of *limbatus*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *limbatus*).
- Scheerpeltz, 1933: 1027 (*Proteinus*; aberration of *limbatus*).
- Herman, 2001: 13 (*Proteinus*; spelling correct as *maeklini*).

*laevicollis* Heer, 1839, see: *brachypterus* Fabricius, 1792.

*lividipennis* Reitter, 1905, see: *brachypterus* Fabricius, 1792.

*longicollis* Gredler, 1874, see: *Acrulia*.

**longicornis** Doderò, 1923: 44 (*Proteinus*; Type locality: Monte Rosa, Macugnaga).

- Scheerpeltz, 1933: 1027 (*Proteinus*; catalog).
- Lohse, 1964: 25 (*Proteinus*; characters; central Europe).
- Focarile, 1982: 543 (*Proteinus*; valid species; characters; Italy; Switzerland; France).
- Tóth, 1982: 27 (*Proteinus*; characters).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Austria).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 106, 110, 118 (*Proteinus*; characters; France).
- Burakowski, Mroczkowski, and Stefańska, 2000: 40 (*Proteinus*; catalog; Poland).

▲ **DISTRIBUTION:** Italy, Switzerland, France.

**macropterus** Gravenhorst, 1806: 215 (*Omalium*; [Note: The authors of most of the references for “*Megarthus macropterus* (Gravenhorst)” listed the species as a junior synonym

of *Megarathrus depressus* (Paykull); citations of *M. macropterus* are found under *Megarathrus prosseni* Schatzmayr because *M. depressus* has been misidentified by all authors according to Cuccodoro and Löbl, 1997. *Proteinus macropterus* (Gravenhorst) has been cited as a valid species by several authors beginning in 1977. Cuccodoro and Löbl, 1997, cited *Megarathrus macropterus* Gravenhorst as a nomen dubium and stated that the type had been destroyed in the Second World War. However, since the name has been cited in *Proteinus* fairly recently, it is permitted to remain there for now]; Type locality: Not cited).

- Gyllenhal, 1810: 209 (*Omalium*; characters; Finland).
- Olivier, 1811: 479 (*Omalium*; characters; Germany).
- Gyllenhal, 1827: 464 (*Omalium*).
- C. Sahlberg, 1827: 280 (*Omalium*; characters; Finland).
- Laporte, 1840: 193 (*Proteinus*; characters; France).
- Pope, 1977: 22 (*Proteinus*; cited as valid species; Britain).
- Hammond, 1980: 135 (*Proteinus*; cited as valid species; Ireland).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux; Denmark; Sweden).
- Boháč, 1993: 40 (*Proteinus*; Czech Republic; Slovakia).
- Muona and Viramo, 1995: 9 (*Proteinus*; collected from fungus and dung of *Ursus arctos*; Finland).
- Sparacio, 1995: 138 (*Proteinus*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).

▲ **DISTRIBUTION:** Finland, Britain, Ireland, France, Germany.

*maeklini* Fauvel, 1869, see: *limbatus* Mäklin, 1852.

**minutus** Mannerheim, 1830: 58 (*Proteinus*; Type locality: Willnäs).

- Mannerheim, 1831: 472 (*Proteinus*; Finland).

▲ **DISTRIBUTION:** Finland.

**meuseli** Dauphin, 1995: 193 (*Proteinus*; Type locality: Kroatien: Stirovaca. Also cited from Romania).

▲ **DISTRIBUTION:** Croatia, Romania.

*nigriceps* Fauvel, 1867, see: *Alloproteinus*.

*nigricornis* Stephens, 1834, see: *brachypterus* Fabricius, 1792.

*nitidus* Stephens, 1834, see: *brachypterus* Fabricius, 1792.

*oblongus* Petri, 1891, see: *atomarius* Erichson, 1840.

*olivieri* Saulcy, 1866, see: *atomarius* Erichson, 1840.

**ovalis** Stephens, 1834: 335 (*Proteinus*; Type locality: London; Suffolk; Devonshire; Raehills).

- Curtis, 1829: 28 (*Proteinus*; nomen nudum; catalog; Britain).
- Stephens, 1839: 424 (*Proteinus*; characters; England).
- Hardy, 1851: 63 (*Proteinus*; synonym of *brachypterus*).
- Fauvel, 1871a: 56 [= 1872: 30] (*Proteinus*; characters; France; Scandinavia; Britain; Germany; Austria; Italy; Algeria).
- Fauvel, 1873b: 110 [= 1873c: 3] (*Protinus*; Sicily; Russia).
- Fauvel, 1874: 320 [= 1874b: 26] (*Protinus*; Spain).
- Fauvel, 1878: 87 [= 1878a: 7] (*Protinus*; Algeria).
- Fauvel, 1886: 13 [= 1886a: 5] (*Protinus*; Algeria).
- Fowler, 1888: 428 (*Proteinus*; characters; Britain).
- Ganglbauer, 1895: 759 (*Proteinus*; characters; middle Europe; western Mediterranean region).
- Fauvel, 1902b: 50 (*Proteinus*; Algeria; Tunisia).
- Reitter, 1905a: 227 (*Proteinus*; characters; central Europe; Mediterranean region).
- Sainte-Claire Deville, 1906: 67 (*Protinus*; Corsica).
- Reitter, 1909: 199 (*Proteinus*; characters; Germany).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
- Portevin, 1929: 458 (*Proteinus*; characters; France).

- Sjöberg, 1930: 180 (*Proteinus*; characters; notes).
- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).
- Hinton, 1945: 52 (*Proteinus*; characters).
- Scheerpeltz and Höfler, 1948: 150 (*Proteinus*; fungus inhabitant).
- Jeannel and Jarrige, 1949: 323 (*Proteinus*; cave species; Italy).
- Scheerpeltz, 1963a: 414 (*Proteinus*; Greece).
- Horion, 1963: 29 (*Proteinus*; Ireland; Britain; Holland; Belgium; France; Spain; Balearics; Corsica; Sicily; Italy; Croatia; Bosnia Hercegovina; Macedonia; Bulgaria; Romania; Slovakia; Czech Republic; Poland; Germany; Austria).
- Lohse, 1964: 24 (*Proteinus*; characters; central Europe).
- Pope, 1977: 22 (*Proteinus*; Britain).
- Coiffait, 1973a: 269 (*Proteinus*; Morocco).
- Osella and Zanetti, 1975: 83 (*Proteinus*; collected from nest of *Talpa europaea*; notes; Italy).
- Hammond, 1980: 135 (*Proteinus*; Ireland).
- Tóth, 1982: 25 (*Proteinus*; characters; Hungary).
- Lucht, 1987: 85 (*Proteinus*; checklist; Germany; Poland; Czechoslovakia; Austria; Switzerland; France; Benelux).
- Welch, 1993: 227 (*Proteinus*; ovariole number and ovary structure).
- Boháč, 1993: 40 (*Proteinus*; Czech Republic; Slovakia).
- Sparacio, 1995: 137 (*Proteinus*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 106, 110, 118 (*Proteinus*; characters; France).
- Tronquet, 1998a: 114 (*Proteinus*; collected from marmot burrow; France).
- Outerelo, Gamarra, and Salgado, 1998: 128 (*Proteinus*; collected from cave; Spain).
- Owen, 1999b: 61 (*Proteinus*; captured underground at roots of old trees; Britain).
- Owen, 2000: 251 (*Proteinus*; pitfall trap collections from underground at roots of trees; Britain).
- Assing, 2001: 75 (*Proteinus*; collected from xerothermous site; Germany).

▲ **DISTRIBUTION:** Europe, Russia.

*subsulcatus* Stephens, 1834: 336 (*Anthobium*; Type locality: London; Devonshire; Somersetshire).

- Stephens, 1839: 424 (*Anthobium*; characters; England).
- G. Waterhouse, 1858: 32 (*Proteinus*; synonym of *ovalis*).
- Ganglbauer, 1895: 759 (*Proteinus*; synonym of *ovalis*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *ovalis*).

*brevicollis* Erichson, 1840: 903 (*Proteinus*; Type locality: Italia; Lutetiae).

- Fairmaire and Laboulbène, 1856: 653 (*Proteinus*; characters; France).
- Redtenbacher, 1857: 995 (*Proteinus*; characters; Germany).
- Kraatz, 1857d: 1024 (*Proteinus*; characters; Germany).
- G. Waterhouse, 1858: 32 (*Proteinus*; synonym of *ovalis*).
- Pandellé, 1867: 168 (*Proteinus*; characters; France).
- Fauvel, 1871a: 56 [= 1872: 30] (*Proteinus*; synonym of *ovalis*).
- Redtenbacher, 1874: 282 (*Proteinus*; characters).
- Mulsant and Rey, 1878b: 220 (*Proteinus*; characters; France).
- Ganglbauer, 1895: 759 (*Proteinus*; synonym of *ovalis*).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; synonym of *ovalis*).
- Scheerpeltz, 1933: 1028 (*Proteinus*; synonym of *ovalis*).

*ovatus* Gravenhorst, 1806, see: *brachypterus* Fabricius, 1792.

**parvulus** LeConte, 1863a: 58 (*Proteinus*; Type locality: Lake Superior).

- Fauvel, 1871a: 57 [= 1872: 31] (*Proteinus*; synonym of *clavicornis*).
- Fauvel, 1878d: 196 [= 1878e: 32] (*Proteinus*; synonym of *atomarius*).
- Ganglbauer, 1895: 760 (*Proteinus*; synonym of *atomarius*).
- Reitter, 1905a: 228 (*Proteinus*; synonym of *atomarius*).
- Bernhauer and Schubert, 1910: 33 (*Proteinus*; synonym of *atomarius*).

- Frank, 1979: 331, 335 (*Proteinus*; valid species; characters).
- Frank and Thomas, 1984: 100 (*Proteinus*; characters).
- Campbell and Davies, 1991: 87 (*Proteinus*; synonym of *atomarius*; [**Note:** I assume the authors overlooked the elevation of this name]).

▲ **DISTRIBUTION:** USA.

**peckorum** Frank, 1984a: 98 (*Proteinus*; Type locality: Jamaica: Clarendon Jackson Bay Cave).

- Bordoni and Oromi, 1998: 1157 (*Proteinus*; facultative cave species; Jamaica).

▲ **DISTRIBUTION:** Jamaica.

**planicollis** Reitter, 1905: 201 (*Proteinus*; Type locality: Russisch-Armenien: Araxestal bei Ordubad).

- Reitter, 1905a: 226 (*Proteinus*; characters; Araxes Valley).
- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).

▲ **DISTRIBUTION:** Azerbaijan.

**reflexicollis** Reitter, 1905a: 226 (*Proteinus*; Type locality: Araxestal bei Ordubad, Russisch-Armenien).

- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).

▲ **DISTRIBUTION:** Azerbaijan.

**ruficollis** Cameron, 1924b: 162 (*Proteinus*; Type locality: Narkanda, 9000 feet; Fagu, 8000 feet; Theog, 7600 feet, in the Simla Hills; Mussorie, 7000 feet).

- Cameron, 1930: 124 (*Proteinus*; characters; India).
- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).
- Coiffait, 1982: 40 (*Proteinus*; India).

▲ **DISTRIBUTION:** India.

**salebrosus** Casey, 1885a: 323 (*Proteinus*; cited as *Protinus*; Type locality: California: Santa Cruz).

- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).
- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).

▲ **DISTRIBUTION:** USA.

**sawadai** Hayashi, 1988: 18 (*Proteinus*; Type locality: Japan: Nagano Pref.: Mt. Kisokoma, about 2000 m.).

▲ **DISTRIBUTION:** Japan.

*serrifer* Muona, 1977, see: *laevigatus* Hochhuth, 1872.

**shibatai** Hayashi, 1986: 109 (*Proteinus*; Type locality: Mt. Ifuri, Echizen-Ohno).

- Hayashi, 1988: 22 (*Proteinus*; key).

▲ **DISTRIBUTION:** Japan.

**siculus** Doderò, 1923: 43 (*Proteinus*; Type locality: Sicilia: Castelbuono).

- Scheerpeltz, 1933: 1028 (*Proteinus*; catalog).
- Sparacio, 1995: 137 (*Proteinus*; characters; notes; Sicily).
- Zanetti, 1995: 5 (*Proteinus*; Italy).
- Dauphin, 1995a: 104, 108 (*Proteinus*; characters).

▲ **DISTRIBUTION:** Italy.

*subsulcatus* Stephens, 1834, see: *ovalis* Stephens, 1834.

**sulcatus** Fauvel, 1878d: 195 [= 1878e: 31] (*Proteinus*; Type locality: Californie, Mariposa).

- Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).

▲ **DISTRIBUTION:** USA.

**tateoitoi** Hayashi, 1988: 20 (*Proteinus*; Type locality: Japan: Japan: Kyoto Pref.: Hanase).

▲ **DISTRIBUTION:** Japan.



**thomasi** Frank, 1979: 333 (*Proteinus*; Type locality: U.S.A.: Florida: Marion Co., Ocala. Also cited from New Jersey).

— Frank and Thomas, 1984: 100 (*Proteinus*; characters).

— Lundgren, 1998: 38 (*Proteinus*; Florida; New Jersey).

▲ **DISTRIBUTION:** USA.

**zanettii** Dauphin, 1999: 138 (*Proteinus*; cited as “*zanetti*” at head of description, but as “*zanettii*” in abstract; Type locality: Grecia: Polludroso).

▲ **DISTRIBUTION:** Greece.

### Tribe Silphotelini

Silphotelini Newton and Thayer, 1995: 247–286, 297 (description; phylogenetic relationships; includes *Silphotelus* and *Alloproteinus*; discussion).

— Klimaszewski, Newton, and Thayer, 1996: 146 (list of New Zealand genera; number of New Zealand species).

### Alloproteinus

[1 species; Neotropical Region]

*Alloproteinus* Steel, 1966: 300 (species included: *nigriceps*). **TYPE SPECIES:** *Proteinus nigriceps* Fauvel, fixed by original designation and monotypy.

— Newton and Thayer, 1995: 297 (Silphotelini).

**nigriceps** Fauvel, 1867a: 50 [= 1868: 55] (*Proteinus*; Type locality: Santiago).

— Bernhauer and Schubert, 1910: 34 (*Proteinus*; catalog).

— Steel, 1966: 302 (*Alloproteinus*; [**Note:** Although the species has remained in *Proteinus* in the works of other authors, I retain it in *Alloproteinus* because I assume that Steel’s work was overlooked and that the genera have not been synonymized]; characters; Chile).

— Coiffait and Saiz, 1968: 457 (*Proteinus*; characters; Chile).

— Scheerpeltz, 1972: 8 (*Proteinus*; Argentina).

▲ **DISTRIBUTION:** Argentina, Chile.

### Silphotelus

[2 species; Australian Region]

*Silphotelus* Broun, 1895: 83 (species included: *nitidus*). **TYPE SPECIES:** *Silphotelus nitidus* Broun, fixed by monotypy.

— Steel, 1966: 288, 303 (adult characters; larval characters, cited as *Silphotelus*; key to species).

— Newton and Thayer, 1995: 297 (Silphotelini).

— Klimaszewski, Newton, and Thayer, 1996: 146 (endemic to New Zealand and nearby islands).

**nitidus** Broun, 1895: 84 (*Silphotelus*; Type locality: Hunua Range).

— Kuschel, 1990: 25 (*Silphotelus*; endemic; winged; habitat; New Zealand).

— Steel, 1966: 304 (*Silphotelus*; characters; New Zealand).

— Klimaszewski and Watt, 1997: 170 (*Silphotelus*; characters; collecting notes; New Zealand).

▲ **DISTRIBUTION:** New Zealand.

**obliquus** Broun, 1912: 416 (*Silphotelus*; Type locality: Greymouth).

— Steel, 1966: 306 (*Silphotelus*; characters; New Zealand).

▲ **DISTRIBUTION:** New Zealand.



## PROTOPSELAPHINAE



[1 genus; 8 species; Oriental Region]

Protopselaphinae Newton and Thayer, 1995: 227, 247–286, 301 (phylogenetic relationships; characters; discussion; includes *Protopselaphus*). Type genus *Protopselaphus*, by original designation.

- Lawrence and Newton, 1995: 825 (discussion).
- M. Hansen, 1996: 35 (listed in Omaliine group of subfamilies).
- M. Hansen, 1997: 83, 176, 178 (may belong in clade with Dasycerinae and Pselaphinae; key characters; notes).

### Protopselaphus

[8 species; Oriental Region]

*Protopselaphus* Newton and Thayer, 1995: 227 (species included: *watrousi*, *burckhardti*, *frogneri*, *crowsoni*, *poringensis*, *grandis*, *loebli*, *taylori*). **TYPE SPECIES:** *Protopselaphus watrousi* Newton and Thayer, fixed by original designation.

**burckhardti** Newton and Thayer, 1995: 245 (*Protopselaphus*; Type locality: Sabah: Mt. Kinabalu, 1500–1650 m [6°05'N, 116°33'E]).

▲ **DISTRIBUTION:** Malaysia.

**crowsoni** Newton and Thayer, 1995: 244 (*Protopselaphus*; Type locality: Sabah: Mt. Kinabalu, 1750 m [6°05'N, 116°33'E]).

▲ **DISTRIBUTION:** Malaysia.

**frogneri** Newton and Thayer, 1995: 243 (*Protopselaphus*; Type locality: Mala: Sarawak, Kapit Dist., nr. Ng. Tekalit [1°38'N, 113°35'E]).

▲ **DISTRIBUTION:** Malaysia.

**grandis** Newton and Thayer, 1995: 246 (*Protopselaphus*; Type locality: W. Malaysia: Pahang, Cameron Highls., 1550 m, Gunung Jasar, trail 11 [4°36'N, 101°17'E]).

▲ **DISTRIBUTION:** Malaysia.

**loebli** Newton and Thayer, 1995: 246 (*Protopselaphus*; Type locality: Sabah: Mt. Kinabalu, 1550–1650 m [6°05'N, 116°33'E]).

▲ **DISTRIBUTION:** Malaysia.

**poringensis** Newton and Thayer, 1995: 243 (*Protopselaphus*; Type locality: Sabah: Poring Hot Springs, 500 m [6°03'N, 116°41'E]).

▲ **DISTRIBUTION:** Malaysia.


**taylori** Newton and Thayer, 1995: 245 (*Protopselaphus*; Type locality: Sarawak: Baco Pk. nr. Kuching [Bukit Bako, 1°40'N, 110°26'E]).

▲ **DISTRIBUTION:** Malaysia.

**watrousi** Newton and Thayer, 1995: 241 (*Protopselaphus*; Type locality: Malaysia: Pahang, G. Batu Berinchang [Gunong Batu Berinchang, 4°31'N, 101°23'E]).

▲ **DISTRIBUTION:** Malaysia.



 This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).