



Review of the Genera of the Areolatae, Including the Status of Timema and Agathemera (Insecta, Phasmatodea) by Oliver Zompro

Author: Brock, Paul D.

Source: Journal of Orthoptera Research, 13(2) : 247

Published By: Orthopterists' Society

URL: [https://doi.org/10.1665/1082-6467\(2004\)013\[0247:ROTGOT\]2.0.CO;2](https://doi.org/10.1665/1082-6467(2004)013[0247:ROTGOT]2.0.CO;2)

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

A Book Review of:
**Review of the Genera of the Areolatae, Including the Status of *Timema* and
Agathemera (Insecta, Phasmatodea)** by Oliver Zompro

Goecke & Evers, Kelttern-Weiler, Germany. 327 p. 161 figures. 90 Euros
 ISBN 3-931374-39-4 (ISSN 0173-7491).

REVIEWED BY PAUL D. BROCK,

It is 27 years since Bradley and Galil's outdated taxonomic arrangement of the Phasmatodea, little more than an updated English version of a 1953 paper by Günther. Along with other recent publications, it is hoped that the information in this new book will help to reduce the number of repeated descriptions. There is still considerable scope for tidying the existing literature by identifying new synonyms.

Zompro's book covers part of the phasmid fauna, the suborder Areolatae, with some changes proposed. The author has provided explanations for his proposals. Priority for phylogenetic relationships is given to egg morphology. Whilst Bradley and Galil's 1977 work covered the whole of the Phasmatodea in 32 pages, Zompro's book is so lengthy because he has provided a diagnosis and list of material examined for each genus in the Areolatae, in addition to describing 14 new genera and 13 new species. Keys to adults and eggs of all genera are included. There is a useful list of all genera of the order, including their type species. It is evident that Zompro has made a considerable effort to produce a valuable reference work for phasmid enthusiasts (there are at present relatively few of these interested in taxonomy, but in recent years several amateurs have described new species).

The obvious downside of this book is that it only covers the Phasmatodea in part (many authors prefer the name Phasmida). Sampling of the entries included reveal errors and omissions that should have been avoided. Zompro is very direct in his views — one respected entomologist's arrangement is considered 'useless': there are other negative comments. Zompro disagrees with almost all recent proposals by various authors. Many authors did not fully accept Bradley and Galil and one can envisage disagreement with Zompro's arrangement, particularly with its controversial emphasis on ootaxonomy. By way of example, a new subfamily Macyniinae is proposed for a single species, although the author has seen little material, he comments that "additional material is necessary". Eggs of phasmids can vary considerably and are not available for study in the majority of species.

The text on genera is sometimes confusing and it is not clear whether Zompro disagrees with present classification or has not included existing synonymy. For example, several well-known European species are omitted from *Bacillus* and for the closely related *Clonopsis*, there is no mention of a revision by Bullini and Nascetti. The list of *Haaniella* species ignores established synonymy, although it is carefully included for some other genera. Similarly, the checklist of all Phasmatodea omits recent additions and some synonymy. *Pin-nispinus* is listed as valid on page 76, but a synonym on page 88. Is the length of *Phobaeticus kirbyi* really 340mm (page 13), or should it be 328mm as recorded elsewhere for the species known as the longest insect in the world? If (page 252) the Xylicini and Eurycathini (the latter a tribe of the Anareolatae) have a 'close relationship' as stated by Zompro, why are they in the Bacillidae? A 'new' subfamily name 'Pylaemeninae' appears on p. 35, whilst the correct name, Dataminae, is used elsewhere. The above-mentioned discrepancies and use of original names under 'species included' (but uncorrected spellings of species names in some cases) could confuse researchers, although much information is available elsewhere, such as in Otte and Brock's Phasmida Species File (2003). The basic Index includes genera, but not species. Zompro has made various changes, but finding them can be hard work. Even common names are variably treated. 'Stick Insects' and 'Walking Leaves' on the back cover (normally known as stick and leaf insects) are referred to as 'Walking Sticks' and 'Walking Leaves' in the rather short Introduction. If one did not know what Areolatae referred to, the explanation eventually appears on p. 24. Some taxonomic features are figured, such as apex of tibiae (Fig. 1) albeit without mentioning which tibiae. Sketches of other features would have been useful, such as the characteristics of Verophasmatodea, a proposed new suborder.

The illustrations should have been a highlight of this book, but the numerous black and white photographs, often but not always of type species of genera, vary in quality and are disappointing in several instances. The only color picture, that on the front cover, is out of focus.

The references section is reasonably comprehensive, but omissions include some of Kevan's work. Kevan has published detailed notes on the higher classification of orthopteroid insects, including Phasmatodea. Zompro's basic account is rather less adequate and his work omits some references. The 'Biogeography' section is useful and helps support Zompro's proposals.

Although not readily affordable, this book will hopefully find its way to many major libraries and should encourage more research on the order. There is still much uncertainty on the Phasmatodea. Indeed, Zompro concedes that "with high probability, all members of the Anareolatae [*i.e.*, 'other' Phasmatodea] could be incorporated within the Areolatae". If this is the case (I am not altogether convinced), it is a pity that phasmid researchers will have the additional expense of another book, when the whole order could have been covered in a single volume.

Paul D. Brock, 40 Thorndike Road, Slough, SL2 1SR, U.K.
 E-mail: pbrock@wexhamcourt.slough.sch.uk

Corrigenda:

***Primnoa* Fischer-Waldheim 1846, *Sharovia* Otte 1997, *Parahagla* Lin 1982, *Phyllophora erosifolia* Piza 1981 and *Archibrunnea* Otte 1997; naming issues resolved. (J. Orthoptera Res. 13(1): 161–165)**

FAY L. MAYER

Department of Biological Sciences, Texas Tech University, Lubbock, Texas 79409-3131, U.S.A. Email: f.mayer@ttu.edu

In the above paper, *Phyllophora pizaerosifolia* Mayer 2004 was provided to replace *Phyllophora erosifolia* Piza 1981. However, a replacement name was not necessary. *Phyllophora pizaerosifolia* Mayer 2004 is a new synonym of *Phyllophora erosifolia* Piza 1981.