New and little known species of Tenebrionidae (Coleoptera) from Borneo (8)

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New and little known species of Tenebrionidae (Coleoptera) from Borneo (8)

Roland Grimm

Abstract

The following new species from Borneo are described: *Amarygmus aequalis* **n. sp.**, *A. concolor* **n. sp.**, *A. muscivorum* **n. sp.**, and *Derosphaerus borneensis* **n. sp.** For additional 27 species of the genus *Amarygmus* of which up to now no faunistic data were available for Borneo or only a few type specimens were known, relevant data are given, sometimes with supplementary morphological notes.

Keywords: Tenebrionidae, Borneo, Malaysia, Sabah, Sarawak, new species, new records.

Zusammenfassung

Folgende Arten von Borneo werden beschrieben: *Amarygmus aequalis* **n. sp.,** *A. concolor* **n. sp.**, *A. muscivorum* **n. sp.** und *Derosphaerus borneensis* **n. sp.** Für weitere 27 Arten der Gattung *Amarygmus*, für die bislang keine Funddaten von Borneo vorlagen oder nur wenige Typenexemplare bekannt waren, werden entsprechende Daten für Borneo mitgeteilt und teils durch morphologische Anmerkungen ergänzt.

Contents

1 Introduction

In the present eighth part of the series concerning new and little known species of Tenebrionidae from Borneo three *Amarygmus* Dalman, 1823 new for science are described. While making the diagnoses it was conspicuous, that of species reported for Borneo by Bremer (2010a) and in the World Catalogue of Amarygmini (Bremer & Lillig 2014) so far no collecting data of corresponding material were published. According to Bremer (pers. com.) if the authors had information about occurrence of a species in Borneo Bremer (2010a) and Bremer & Lillig (2014) mentioned the island among the data to the distribution, even if no data of voucher material were published so far. Collecting activities in Borneo in the last years yielded many species of *Amarygmus*. Bremer (2010b, 2011, 2012) described 100 new species and subspecies from the collected materials. However, faunistic reports on recently collected species described earlier, including first records for Borneo or its subregions (Sabah, Sarawak, Kalimantan) are mostly lacking. Therfore, in this paper data of 27 species mostly collected by the author in northern Borneo (Sabah, Sarawak) between 2005 and 2017, partly supplemented by so far unpublished material from other collections, are published, with supplementary morphological notes in two cases. Furthermore a new species of the genus *Derosphaerus* C. G. Thomson, 1858 is described.

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Acronyms of depositories

CRG	Collection Dr. Roland Grimm, Neuenbürg, Germany
MZB	Museum Zoologi Bogor, Indonesia; obtained by Royal Ontario Museum (ROM), Toronto, Canada (Dr. D. Chris Darling)
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany (Dr. Wolfgang Schawaller)
ZSM	Zoologische Staatssammlung Munich, Germany (Dr. Michael Balke)

2 The species

2.1 Tenebrioninae Latreille, 1802
Amarygmini Gistel, 1856

Amarygmus (*Amarygmus*) *aequalis* **n. sp.**
(Figs.1, 1a)

Holotype ♀: Borneo, Malaysia, Sarawak, Santubong Peninsula, Permai Rainforest Resort. 10–150 m, 29.III.–3.IV. 2016, R. Grimm leg. (CRG).

Paratypes: Same data as holotype (2 ♀♀ CRG, 1 ♀ SMNS, 1 ♀ ZSM). – Borneo, Malaysia, Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 24.–26.II.2012, R. Grimm leg., 2 ♀♀ (CRG).

Etymology

Aequalis (Lat.) = equal.

Description

Obovate, feebly shining; bronzy, head and pronotum somewhat darker than elytra, elytra with coppery or brassy tinge; antennae blackish, tarsi reddish to blackish brown, ventral surface blackish brown; body length 5.4–6.0 mm, width 3.0–3.2 mm. Head with fairly dense setigerous punctures, interspaces shagreened; anterior margin of clypeus nearly straight; fronto-clypeal suture straight and finely sulcate; apical part of frons behind fronto-clypeal suture almost as long as clypeus (Fig. 1a); frons between eyes narrow, equal to three to four ocelli. Ratio of length of antennomeres 1–11: 12.5 / 3.5/ 14 / 10 / 10.5 / 10 / 11 / 10.5 / 10 / 9.5 / 10. Pronotum widest at base, width/length ratio 2.0–2.1; finely beaded, basal bead interrupted in the middle; disc nearly flat in middle, steeply inclined laterally, rather densly scattered with small punctures, interspaces finely shagreened; apex shallowly emarginate, base and sides widely rounded; anterior coners rectangular, posterior corners obtuse. Prosternum with weakly upturned apical margin, somewhat emarginate in the middle. Propleura with coarse and scattered punctures, interspaces distinctly shagreened. Prosternal process wide, parallel-sided, laterally somewhat raised near procoxae, somewhat protruded behind coxae, apically broadly arcuate. Scutellum triangular, sparsely scattered with minute punctures. Elytra obovate, widest near posterior quarter; punctate-striate, punctures larger than punctures of intervals; intervals flat to feebly convex, rather densely scattered with small punctures. Mesoventrite without modifications. Metaventrite with apophysis between mesocoxae weakly broadly rounded, nearly straight and distinctly bordered; apically with coarse punctures, basally somewhat finer, interspaces distinctly shagreened; longitudinal midline only feebly marked. Abdominal ventrites more or less distinctly longitudinally rugulose and shagreened, interspersed with scattered fine punctures. Apophysis of basal ventrite triangular, last ventrite laterally shallowly impressed. Legs (so far only females are known): pro- and mesotibiae straight, metatibiae widely bent.

Differential diagnosis

Amarygmus (*A.*) *aequalis* n. sp. is most similar to *A.* (*A.*) *powanus* Masumoto & Makihara, 1997 but in the latter species the hind body is somewhat stouter and more convex, the pronotum is somewhat less densely punctured, the frons between the eyes is narrower and conforms about one to two ocelli, and the apex of frons behind the clypeus (Fig. 2) is much shorter than the clypeus and forms only a narrow crosswise bar.

Amarygmus (*Amarygmus*) *becvarsenioris* Bremer, 2003

Material

Sarawak, Kuching, Reservoir Park, 50 m, 4.–5.III.2008, R. Grimm leg., 4 ex. (CRG), 3 ex. (ZSM). – Same locality, but 22.III.2008, R. Grimm leg., 9 ex. (CRG), 2 ex. (ZSM). – Same locality, but 9.–10.IX.2008, R. Grimm leg., 7 ex. (CRG), 3 ex. (ZSM). – Same locality, but 29.IX.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 21.–22.III.2009, R. Grimm leg., 2 ex. (CRG). – Same locality, but 8.IV.2009, R. Grimm leg., 5 ex. (CRG), 2 ex. (ZSM). – Same locality, but 27.II.2012, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, HQ, 160–300 m, 15.–17.II.2012, R. Grimm leg., 1 ex. (CRG), 1 ex. (ZSM). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50 –100 m, 18.–19.II.2012, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 12.–14.II.2012, R. Grimm leg., 2 ex. (CRG).

Remarks

Amarygmus (*A.*) *becvarsenioris* was described from W. Malaysia (Bremer 2003b) and is mentioned to occur in Borneo by Bremer 2010a and Bremer & Lillig (2014) but up to now no exact data were published.

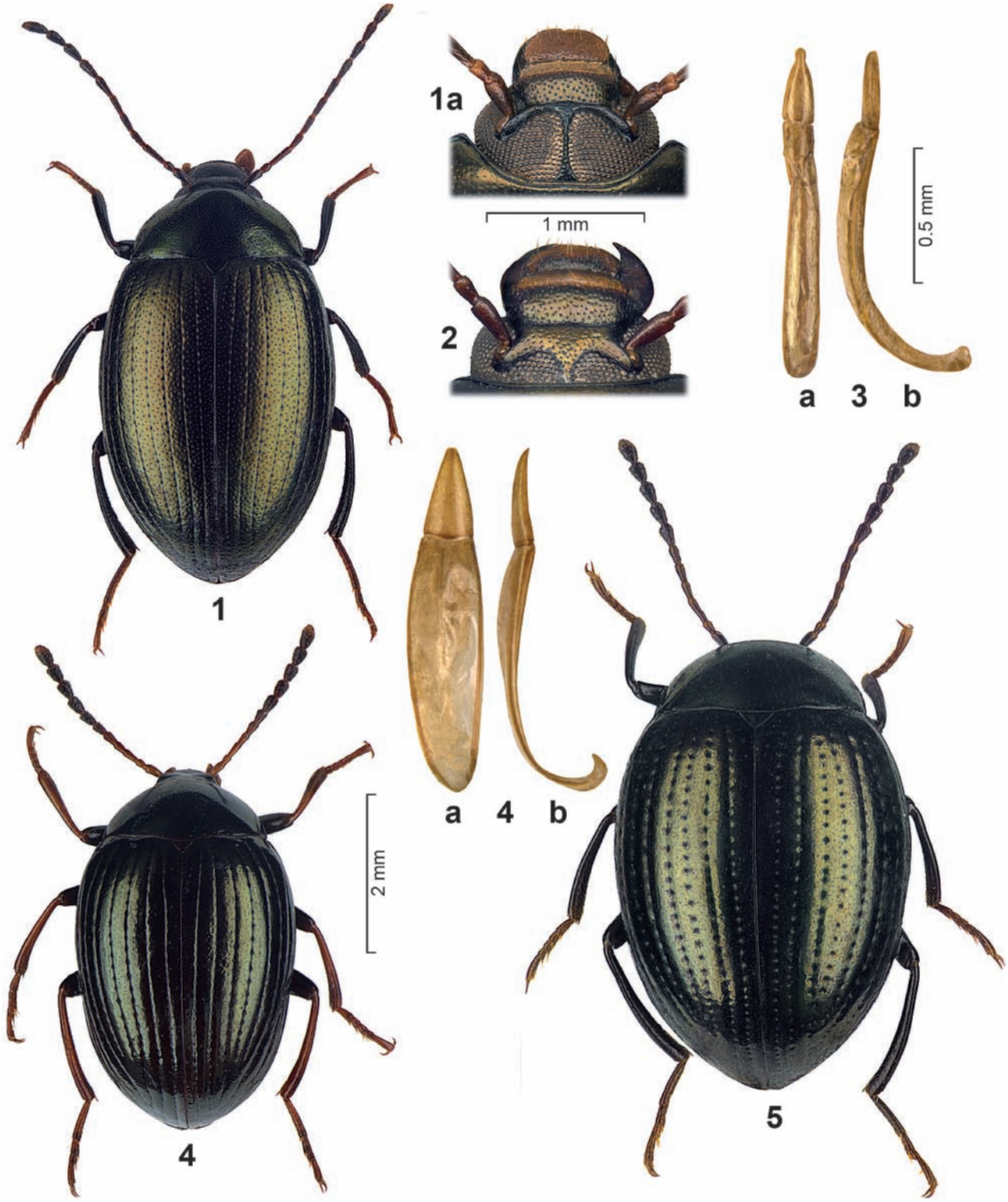
Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *borneensis* (Gebien, 1920)

Material

Sabah, Crocker Mts., Gunung Emas, 500–1900 m, 6.–21.V.1985, I. Jeniš leg., 4 ex. (ZSM). – Sabah, Apin Apin, 350–380 m, 6.II.2006, H. J. Bremer & R. Grimm leg., 1 ex. (CRG). – Sabah, Keningau, 10.II.2006, R. Grimm leg., 1 ex. (CRG). – Same locality, but 24.–27.XI.2006, R. Grimm leg., 1 ex. (CRG). – Sabah, N Keningau, Bingkor, 20.–22.III.2007, R. Grimm leg., 22 ex. (CRG), 3 ex. (SMNS). – Same locality, but 20.–21. III.2007, W. Schawaller leg, 1 ex. (SMNS). – Same locality, but 22.III.2013, R. Grimm leg., 1 ex. (CRG). – Sabah W., Crocker Range W., Route Keningau – Papar, II.2000, M. S1,ä(. leg., 1 ex. (ZSM). – Sabah, 15 km S Tenom, 450 m, 11.V.2005, R. Grimm leg., 1 ex. (CRG). – Sabah, Kudat, 14.–16.II.2006, R. Grimm leg., 3 ex. (CRG). – Sabah, Kudat, Pantai Bak Bak, 20.–23.X.2010, R. Grimm leg., 1 ex. (CRG).



Figs. 1–5. Tenebrionidae spp., dorsal views (1, 4, 5), dorsal views of heads (1a, 2), aedeagi, dorsal (3a and 4a) and lateral (3b and 4b). – **1, 1a.** *Amarygmus* (*Amarygmus*) *aequalis* n. sp. **2.** *A.* (*A.*) *powanus* Masumoto & Makihara. – **3a,b.** *A.* (*A.*) *miser* Bremer. – **4, 4a,b.** *A.* (*A.*) *muscivorus* n. sp. **5.** *A.* (*A.*) *concolor* n. sp.

Remarks

Bremer (2002c) for the redescription of *Amarygmus* (*A.*) *borneensis* had from Borneo only the type and one specimen from Sarawak.

Distribution

Thailand, W. Malaysia, Borneo, Java (Bremer 2002c, 2010a). Indonesia: Sumatra (based on specimens in ZSM).

Amarygmus (*Amarygmus*) *concolor* **n. sp.**
(Fig. 5)

Holotype ♀: Borneo, Malaysia, Sabah, Danum Valley Conservation Area, Borneo Rainforest Lodge area, 1.–3. IV.2013, R. Grimm leg. (CRG).

Etymology

Concolor (Lat.) = same colour.

Description

Obovate, feebly shining; head, pronotum and elytra bronze; ventral surface, legs and antennae black, but basal 6 antennomeres reddish brown apically; body length 5.6 mm, width 3.6 mm. Head with fairly dense punctures; clypeus longitudinally and transversely feebly gibbose, anterior margin straight; fronto-clypeal suture in the middle distinctly impressed and incised; frons between eyes broad, about as broad as length of third antennomere. Ratio of length of antennomeres 1–11: 10 / 7/ 12.5 / 10 / 10 / 9 / 10 / 10 / 10 / 9 / 12. Pronotum widest at base, width/length ratio 2.16; punctured as on head; apex shallowly excavated, though almost straight in the middle; base arcuate, only feebly sinuate on each side; lateral margins shallowly arcuate; apex and lateral margins finely bordered; anterior corners almost rectangular with rounded apex, posterior corners obtuse. Prosternum with narrow curved up apical margin. Propleura rugulose, interspersed with scattered fine punctures. Prosternal process rather wide; basal part before procoxae longitudinally, apical part roundly impressed; margins near procoxae widened and raised, between them with moderately deep but wide groove; behind coxae lateral margins apically broadly tapered off to a point, margins forming a blunt angle. Scutellum triangular, sparsely scattered with minute punctures. Elytra obovate, widest near basal one third; with rows of punctures; intervals feebly convex, with scattered minute punctures. Mesoventrite with basal part weakly incised, without remarkable modifications. Metaventrite with apophysis between mesocoxae weakly broadly rounded, nearly straight and distinctly beaded; apophysis and apical part with large punctures, basal part virtually impunctate; longitudinal midline distinct basally. Abdominal ventrites shagreened, only finely scattered, increasingly punctured distally. Apophysis of basal ventrite between metacoxae with bluntly angulate tip; broadly bordered apically. Legs without modifications (so far only the female is known). Tibiae weakly arched, protibiae apically slightly thickened.

Differential diagnosis

Amarygmus (*A.*) *concolor* n. sp. is similar to *A.* (*A.*) *sumatraselatanus* Masumoto & Makihara, 1997. However, the latter is more shinier, and head and pronotum are with colour (blue) different than elytra (coppery with brassy tinge and coloured reflections). The prosternal process behind the procoxae is slightly rounded constricted and the groove between the lateral margins is narrower.

Amarygmus (*Amarygmus*) *cornunotatus* Bremer, 2006

Material

Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Permai Rainforest Resort, 30–210 m, 30.XI.–5.XII.2010, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *cornunotatus* was described by Bremer (2006b) from W. Malaysia and is mentioned to occur in Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *ertli* Bremer, 2005

Material

Sabah, Tambunan, 500 m, 14.–15.III.2007, R. Grimm leg., 1 ex. (CRG). – Same locality, but 28.–31.III.2007, R. Grimm leg., 1 ex. (CRG), 1 ex. (ZSM). – Same locality, but 14.–17.III.2013, R. Grimm leg., 1 ex. (CRG). – Same locality, but 13.IV.2013, R. Grimm leg., 1 ex. (CRG).

Remarks

So far only the holotype from Sintang (West Kalimantan) was known (Bremer 2005a).

Distribution

Borneo (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *filiolus* Bremer, 2002

Material

Sarawak, Kubah Nat. Park, HQ, 50 m, 13.–14.XII.2010, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 24.–26.II.2012, R. Grimm leg., 1 ex. (CRG). – Sabah, Tambunan, 300 m, 14.–15.III.2007, R. Grimm leg., 1 ex. (CRG). – Sabah, Keningau, 10.II.2006, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, *A. lagenocarpa* 7, 14.IX.2006, A. Floren leg., 1 ex. (ZSM).

Distribution

Thailand, W. Malaysia, E. Malaysia/Sabah (Bremer & Lillig 2014); E. Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *katoi* Masumoto, 1985

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–150 m, 21.III.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 29.III.–3.IV.2016, R. Grimm leg., 7 ex. (CRG). – Sabah, near Keningau, 20 yrs. *Melanolepis* sp., B5, 18.II.2001, A. Floren leg., 1 ex. (ZSM). – Sabah, Tenom, 300 m, 18.–19. III.2007, R. Grimm leg., 1 ex. (CRG). – Sabah, NW Danum Valley Conservation Centre Area, Kuamut, 14.III.2017, S. Bosuang leg., 1 ex. (CRG). – E. Kalimantan, Bukitbang Kirai, near Balikpapan, 5.X.1999, H. Makihara leg., 1 ex. (ZSM). – Same locality, but 3.VIII.1999, H. Makihara leg., 1 ex. (ZSM).

Remarks

Amarygmus (*A.*) *katoi* was described from Sumatra (Masumoto 1985). Bremer (2004a) described the species once again under *A.* (*A.*) *maiusculus* Bremer, 2004 from Thailand and W. Malaysia and Bremer (2005a) synonymized *A.* (*A.*) *maiusculus* with *A.* (*A.*) *katoi*. This species is reported also from Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

Thailand, W. Malaysia, E. Malaysia/Sabah, Indonesia: Sumatra (Bremer & Lillig 2014); Indonesia: E. Kalimantan (new record).

Amarygmus (*Amarygmus*) *maculosus* Bremer, 2002

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–150 m, 10.–14.II.2012, R. Grimm leg., 1 ex. (CRG). – Same locality, but 24.–26.II.2012, R. Grimm leg., 3 ex. (CRG). – Sarawak, Kubah Nat. Park, HQ, 160–300 m, 13.–14.XII.2010, R. Grimm leg., 5 ex. (CRG), 2 ex. (SMNS), 1 ex. (ZSM). – Same locality, but 15.–17.II.2012, R. Grimm leg., 19 ex. (CRG), 2 ex. (SMNS). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, 2 ex. (CRG). – Same locality, but 19.–22.IX.2008, R. Grimm leg., 2 ex. (CRG). – Sabah, Crocker Range Park, 1000–1200 m, 23.–24.II.2014, R. Grimm leg., 3 ex. (CRG).

Distribution

Thailand, W. Malaysia, E. Malaysia/Sabah, Indonesia: W. Kalimantan (Bremer 2002b, 2010b, Bremer & Lillig 2014); E. Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *mesotibialis* Bremer, 2003

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–150 m, 23.–27.III.2009, R. Grimm leg., 1 ex. (CRG). – Same locality, but 27.–28.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 24.III–3.IV.2016, R. Grimm leg., 1 ex. (CRG). – Same locality, but11.–14.IX.2008, R. Grimm leg., 1 ex. (ZSM).

Remarks

Amarygmus (*A.*) *mesotibialis* was described by Bremer (2003b) from W. Malaysia and is reported also from Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014). Indonesia: Mentawei Is. (based on specimen in ZSM).

Amarygmus (*Amarygmus*) *miser* Bremer, 2011
(Fig. 3a, b)

Material

Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 24.–26.II.2012, R. Grimm leg., 3 ex. (CRG), 1 ex. (SMNS).

Remarks

Amarygmus (*A.*) *miser* was described by Bremer (2011) on the basis of two females. Thus, in addition to Bremer (2011) the aedeagus is figured (Fig. 3a, b).

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *muscivorus* **n. sp.**
(Fig. 4, 4a, b)

Holotype ♂: Borneo, Malaysia, Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 19.–22.IX.2008, R. Grimm leg. (CRG).

Singled together with *A.* (*A.*) *persimilis* Bremer, 2004 at night from tree trunk, feeding on mosses.

Etymology

Muscivorus (Lat.) = feeding on mosses.

Description

Obovate, shining coppery, head and pronotum somewhat darker than elytra, blackish; basal half of antennae (antennomeres 1–6), femora basally, tibiae, tarsi, and ventral surface reddish brown (probably teneral specimen); body length 5.4–6.0 mm, width 3.0–3.2 mm. Head with finely scattered punctures, interspaces shagreened; anterior margin of clypeus straight; fronto-clypeal suture in the middle deeply incised, only feebly indicated laterally; frons between eyes approximately half of eye width. Terminal antennomeres apically rounded. Ratio of length of antennomeres 1–11: 9 / 4.5 / 7.5 / 6 / 6 / 6 / 7.5 / 7.5 / 7.5 / 7.5/ 10.5. Pronotum widest near base, width/length ratio

2.05; apical margin emarginate, finely beaded like lateral margins; lateral margins apically invisible in dorsal view; disc widely convex, finely punctured; anterior and posterior corners rounded. Scutellum triangular, sparsely scattered with punctures as on pronotum. Prosternum with weakly upturned apical margin. Sides of prosternal process is widened in the middle and upturned, forming a deep median furrow; without apically protruding cone. Propleura smooth. Elytra obovate, widest near posterior quarter; punctate-striate; intervals convex, scattered with minute punctures. Mesoventrite in the middle between mesocoxae coarsely, confluently punctured. Metaventrite apically in the middle with coarsely scattered punctures, becoming finer laterally, then disappearing. Anterior process of basal ventrite between metacoxae triangular; anterior transversal furrows behind metacoxae punctured; anterior margin of second ventrite coarsely punctured; otherwise the ventrites are smooth and partly finely shagreened; last ventrite without structural peculiarities. Legs: femora feebly clavate; back of meso- and metafemora with some short hairs; tibiae nearly straight; protibiae apically somewhat widened; tibiae in apical half of inner side with sparse, erect, short hairs. Protarsomeres not dilated. Aedeagus as in Fig. 4a ,b.

Differential diagnosis

Amarygmus (*Amarygmus*) *muscivorus* n. sp. is similar to *A.* (*A.*) *persimilis* Bremer, 2004 and *A.* (*A.*) *weberi* Bremer, 2004, However, in the two latter species the frons between the eyes is three times as wide as in *A.* (*A.*) *muscivorus* n. sp., the anterior margin of basal ventrite between metacoxae is broadly arched, and the three species are distinguished by the shape of aedeagus (compare Fig. 4a, b with Bremer 2004b, Figs. 4 H and 6 H). Moreover, *A.* (*A.*) *persimilis* is distinguished by the apically median protruding conus of the prosternal process.

Amarygmus (*Amarygmus*) *nigromaculatus* Pic, 1915

Material

Sarawak, Kubah Nat. Park, HQ, 250 m, 6.–8.III.2008, R. Grimm leg., 1 ex. (CRG), 1 ex. (ZSM). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50 m, 16.–17.III.2008, 1 ex. (CRG). – Same locality, but 11.–12.XII.2010, R. Grimm leg., 4 ex. (CRG), 1 ex. (ZSM). – Sarawak, Gunung Gading Nat. Park, 50–300 m, 9.–12.III.2008, R. Grimm leg., 1 ex. (CRG), 1 ex. (ZSM). – Same locality, but 31.III.–3.IV.2009, R. Grimm leg., 2 ex. (CRG), 1 ex. (ZSM). – Same locality, but 20.–23.II.2012, R. Grimm leg., 4 ex. (CRG). – Sarawak, Kapit dist., Sebong, Baleh riv., 9.–21.III.1994, J. Horák leg., 4 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 525 m, 18.–21.II.2009, R. Grimm leg., 2 ex. (CRG). – Sabah W., Crocker Range W., route Keningau – Papar, V.1999, Z. S0 5ă leg. 1 ex. (ZSM).

Remarks

Amarygmus (*A.*) *nigromaculatus* was described by Pic (1915) based on a specimen which according to the locality label comes from Zanzibar. Redescriptions and diagnoses were given by Ardoin (1967) and Bremer (2005b) who doubt the occurrence of the species on Zanzibar definitely with good reason. Is reported by Bremer (2010a) also for Borneo but up to now no exacting data were published.

Distribution

W. Malaysia, Zanzibar? (Ardoin 1967, Bremer 2005b, 2010a, Bremer & Lillig 2014), Borneo (Bremer 2010a).

Amarygmus (*Amarygmus*) *padangus* Gebien, 1927

Material: Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–150 m, 15.–16.X.2010, R. Grimm leg., 1ex. (CRG). – Same locality, but 15.–16.X.2010, R. Grimm leg., 1 ex. (CRG). – Same locality, but 29.III.–3.IV.2016, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *padangus* is reported also for E. Malaysia/Sarawak by Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak, Indonesia: Java, Sumatra (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *persimilis* Bremer, 2004

Material

Sarawak, Kubah Nat. Park, HQ, 50 m, 27.–28.III.2009, R. Grimm leg., 10 ex. (CRG), 1 ex. (ZSM). – Same locality, but 15.–17.II.2012, R. Grimm leg., 1 ex. (CRG). – Same locality, but 13.–14.X.2012, R. Grimm leg., 4 ex. (CRG). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 19.–22.IX.2008, R. Grimm leg., 10 ex. (CRG), 3 ex. (ZSM). – Same locality, but 28.–31.III.2009, R. Grimm leg., 7 ex. (CRG), 2 ex. (ZSM). – Sarawak, Bako Nat. Park, 6.–7.XII.2010, R. Grimm leg., 3 ex. (CRG).

Remarks

Amarygmus (*A.*) *persimilis* was described by Bremer (2004b) from W. Malaysia and is reported also from Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *plagiatus* Bremer, 2003

Material

Sarawak, Kuching, Reservoir Park, 50 m, 4.–5.III.2008, R. Grimm leg., 7 ex. (CRG), 4 ex. (ZSM). – Same locality, but 22.III.2008, R. Grimm leg., 8 ex. (CRG), 4 ex. (ZSM). – Same

locality, but 9.–10.IX.2008, R. Grimm leg., 6 ex. (CRG). – Same locality, but 9.–10.IX.2008, R. Grimm leg., 6 ex. (CRG). – Same locality, but 29.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 21.–22.III.2009, R. Grimm leg., 8 ex. (CRG), 2 ex. (ZSM). – Same locality, but 8.IV.2009, R. Grimm leg., 3 ex. (CRG). – Same locality, but 27.II.2012, R. Grimm leg., 7 ex. (CRG). – Sarawak, Kubah Nat. Park, HQ, 50 m, 13.–14.XII.2011, R. Grimm leg., 3 ex. (CRG). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–200 m, 27.–28.IX.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 29.III.–3.IV.2016, R. Grimm leg., 6 ex. (CRG). – Sarawak, Gunung Gading Nat. Park, 100–300 m, 31.III.–4.IV.2009, R. Grimm leg., 2 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, 6°3'N/116°55'E, *Ficus* spec. 98, 14.IX.2006, A. Floren leg., 4 ex. (ZSM). – Sabah, Tawau Hills Park, Tawau river, 8.VII.1998, J. Kodada & T. Čiampor leg., 2 ex. (SMNS).

Remarks

Amarygmus (*A.*) *plagiatus* was described from Sumatra and W. Malaysia (Bremer 2003b) and is reported by Bremer (2010a) and Bremer & Lillig (2014) also from E. Malaysia/Sarawak but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak, Indonesia: Sumatra (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *powanpowanus* Masumoto & Makihara, 1997

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–200 m, 11.–14.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but, 4.–8.IV.2009, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, HQ, 50 m, 27.–28.III.2009, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 15.–17.III.2008, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, 6°5'/116°33'E, Sorinsim III, 40 yrs., Bergil I, 5.III.1997, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Meliaceae sp., Lower Montane Mixed Dipterocarp,, MFI 1, 18.III.1996, A. Floren leg., 2 ex. (ZSM). – Sabah, Sepilok, 50 m, 13.–15.I.2010, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *powanpowanus* was described from Sumatra (Masumoto & Makihara 1997). Bremer (2006a) described the species once again under *A.* (*A.*) *nemestrinus* Bremer, 2006 from Sumatra and W. Malaysia, and Bremer (2009) synonymised *A.* (*A.*) *nemestrinus* with *A.* (*A.*) *powanpowanus*. The species is reported also from E. Malaysia/Sarawak by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *powanus* Masumoto & Makihara, 1997

Material

Sabah, Tambunan, 300 m, 14.–15.III.2007, R. Grimm leg., 1 ex. (CRG). – Same locality, but 16.–19.I.2010, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, Sorinsim III, 40 yr., Bergil 10, 8.III.1997, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, *A. langenocarpa* 7, 14.IX.2006, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 380 m, 9.–11.III.2007, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, Lower Montane, Mixed Dipterocarp, A9/F3, 21.II.1996, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Serinsim, SW II 15 yrs, Bergil 4, 20.II.1997, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33E, *Aporusa* 38 spec., 23.IX.2006, A. Floren leg., 1 ex. (ZSM). – Sabah, Tawau Hills Park, 4°24.187'N/17°53.551'E, *Aglaja* sp. 54, 6.IX.2009, A. Floren leg., 1 ex. (ZSM). – Sabah, near Keningau, 50 yrs. *Melanolopis* sp., B3, 12.II.2001, A. Floren leg., 1 ex. (ZSM). – Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–200 m, 11.–14.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 23.–27.III.2009, R. Grimm leg., 3 ex. (CRG). – Same locality, but, 4.–8.IV.2009, R. Grimm leg., 1 ex. (CRG). – Same locality, but 15.–16.XII.2010, R. Grimm leg., 1 ex. (CRG). – Same locality, but 29.III.–3.IV.2016, R. Grimm leg., 1 ex. (CRG). – Same locality, but 24.–27.II.2012, R. Grimm leg., 8 ex. (CRG). – Same locality, but 15.–21.IV.2016, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 31.III.–2.IV.2016, R. Grimm leg., 1 ex. (CRG). – Sarawak, Bako Nat. Park, 6.II.2010, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, HQ area, 50 m, 13.–14.XII.2010, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 28.–31.III.2009, R. Grimm leg., 1 ex. (CRG), 1 ex. (ZSM). – Sarawak, Gunung Gading Nat. Park, 50–200 m, 8.–10.XII.2010, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *powanus* was described from Sumatra (Masumoto & Makihara 1997). Bremer (2002a) described the species once again under *A.* (*A.*) *malayanus* Bremer, 2002 from W. Malaysia, completed the description (Bremer 2006a), and finally synonymised (Bremer 2009) *A.* (*A.*) *malayanus* with *A.* (*A.*) *powanus*. *A.* (*A.*) *powanus* is reported also from Borneo by Bremer (2009, 2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, Borneo, Indonesia: Sumatra (Bremer 2009, Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *pulchridorsis* Fairmaire, 1803

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–150 m, 21.III.2008, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 380 m, 9.–11.III.2007, R. Grimm leg., 2 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park,

Lowland Mixed Diptercarp Forest, B1/B2 mix, 27.III.1998, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, Lower Montane Mixed Dipterocarp, MF 2, 19.III.1996, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, Sorinsim III, 40 yrs., Bergil 10, 8.III.1997, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Sorinsim, SW I, 5 yrs., Topou 6, 21.II.1997, A. Floren leg., 1 ex. (ZSM). – Sabah, near Keningau, 10 yrs., *Clerodendron* sp., B4, 19.II.2001, A. Floren leg., 2 ex. (ZSM). – Sabah, Keningau, 300 m, 26.–28.I.2010, R. Grimm leg., 1 ex. (CRG). – Sabah, S Keningau, 350 m, 20.–22.III.2007, W. Schawaller leg., 2 ex. (SMNS). – Sabah, Crocker Mt., Gunung Emas, 15.–27.IV.1993, I. Jeniš & M. Štrba leg., 1 ex. (ZSM).

Remarks

Amarygmus (*A.*) *pulchridorsis* was redescribed by Bremer (2007) based on material from W. Malaysia and Sumatra. The holotype which comes from Borneo could not be found (Bremer 2007).

Distribution

W. Malaysia, Borneo, Indonesia: Sumatra (Bremer 2010a, Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *sarawakensis* Bremer, 2010

Material

Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, *Xanthophyllum flavescens* 57, 3.X.2006, A. Floren leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Monggis, 6°13'N/116°44'E, *Lithocarpus* sp. 128, 23.IX.2006, A. Floren leg., 1 ex. (ZSM). – Sabah, Tawau Hills Park, 360 m, 3.–6.IV.2015, R. Grimm leg., 1 ex. (CRG).

Distribution

W. Malaysia, E. Malaysia/Sarawak (Bremer 2010a); E. Malaysia/Sabah (new record).

Amarygmus (*Amarygmus*) *selatanus* (Masumoto & Makihara, 1997)

Material

Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, Sorinsim III, 40 yrs., Bergil 4, 6.III.1997, A. Floren leg., 2 ex. (ZSM). – Sabah, Tambunan, 500 m, 28.–31.III.2007, R. Grimm leg., 1 ex. (CRG). – Sabah, Keningau, 300 m, 24.–27.IX.2006, R. Grimm leg., 1 ex. (CRG). – Same locality, but 26.–28.I.2010, R. Grimm leg., 1 ex. (CRG). – Sabah, Tenom, 19.–20.III.2013, R. Grimm leg., 1 ex. (CRG). – Sabah, Pula Gaya, 6°0.895'N/16.°01.170', *Elaeocarpus pendiculatus* 27, 22.VIII.2009, A. Floren leg., 2 ex. (ZSM).

Remarks

Amarygmus (*A.*) *selatanus* was described from Sumatra (Masumoto & Makihara 1997, Bremer 2003a under *A. bellulus diehli*), Thailand (Bremer 2003a under *A. bellulus*), and W. Malaysia and is reported also from Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no corresponding data were published.

Distribution

Thailand, W Malaysia/Sabah, Indonesia: Sumatra (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *seminolus* Bremer, 2012

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 30–150 m, 10.–14.II.2012, R. Grimm leg., 1 ex. (CRG).

Distribution

E Malaysia/Sabah (Bremer & Lillig 2014); E Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *seponens* Bremer, 2011

Material

Sarawak, Santubong Peninsula, Permai Rainforest Resort, 10–200 m, 23.–27.III.2009, R. Grimm leg., 1 ♀ (CRG). – Same locality, but 29.III.–3.IV.2016, R. Grimm leg., 1 ♀ (CRG).

Remarks

Until now only the male holotype from Kalimantan was known (Bremer 2011). The sharp edge of mesotibiae which terminates in a sharp corner on inner side (Bremer 2011, Fig. 33A) is absent in the female.

Distribution

Indonesia: Kalimantan (Bremer 2011, Bremer & Lillig 2014), E Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *silvester* Bremer, 2004

Material

Sarawak, Gunung Gading Nat. Park, 100–300 m, 4.–7.IV.2016, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 380 m, 9.–11.III.2007, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *silvester* was described by Bremer (2004c) from W. Malaysia and is reported also from E. Malaysia/Sabah by Bremer (2010a) but up to now no exacting data were published.

Distribution

W. Malaysia, Indonesia: Sumatra (Bremer & Lillig 2014); E. Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *snizeki* Bremer, 2002

Material

Sabah, Sepilok, 29.–30.XI.2006, R. Grimm leg., 6 ex. (CRG), 2ex. (ZSM).

Remarks

Until now only the holotype was known (Bremer 2002a).

Distribution

E. Malaysia/Sabah (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *sobrinus* Bremer, 2002

Material

Sabah, Mt. Kinabalu Nat. Park, 6°5'N/116°33'E, Sorinsim III, 40 yrs., Bergil 6, 7.III.1997, A. Floren leg., 3 ex. (ZSM). – Sarawak, Gunung Gading Nat. Park, 100–300 m, 18.V.2005, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*A.*) *sobrinus* was described by Bremer (2002) on the basis of specimens from Thailand and W. Malaysia, and is reported also from Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

India, Thailand, W. Malaysia, E. Malaysia/Sabah (Bremer & Lillig 2014); E. Malaysia/Sarawak (new record).

Amarygmus (*Amarygmus*) *tricolor* Fairmaire, 1888

Material

Sarawak, Kubah Nat. Park, HQ, 100 m, 27.–28.III.2008, R. Grimm leg., 1 ex. (CRG). – Sarawak, Santubong Peninsula, Permai Rainforest Resort, 30–150 m, 11.–14.IX.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 27.–28.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 15.–16.XII.2010, R. Grimm leg., 3 ex. (CRG). – Same locality, but 30.XI.–5.XII.2010, R. Grimm leg., 2 ex. (CRG). – Same locality, but 10.–14.II.2012, R. Grimm leg., 2 ex. (CRG). – Same locality, but 24.–26.II.2012, R. Grimm leg., 2 ex. (CRG). – Sarawak, Santubong Peninsula, Gunung Santubong, 80–300 m, 12.–14.II.2012, R. Grimm leg., 2 ex. (CRG). – Same locality, but 24.–26.II.2012, R. Grimm leg., 1 ex. (CRG). – Sabah, Crocker Range, W Apin Apin, V.1999, M. S[illegible] leg., 1 ex. (CRG). – Sabah, Keningau Crocker Range Park, 950 m, 21.III.2013, R. Grimm leg., 1 ex. (CRG). – Sabah W., Crocker Range W., Route Keningau – Papar, II.2000, M. S[illegible] leg., 1 ex. (ZSM). – Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 380 m, 9.–11.III.2007, R. Grimm leg., 6 ex. (CRG).

Remarks

Amarygmus (*A.*) *tricolor* was described from Sumatra (Fairmaire 1888) and Bremer (2005a) gave a redescription based on material from Sumatra and W. Malaysia. Masumoto & Makihara (1997) described the species once again under *A.* (*A.*) *yukae*, and Bremer (2009) synonymised *A.* (*A.*) *yukae* with *A.* (*A.*) *tricolor*. The species is mentioned to occur in Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, Borneo, Indonesia: Sumatra (Bremer & Lillig 2014).

Amarygmus (*Amarygmus*) *weberi* Bremer, 2004

Material

Sabah, Tawau Hills Nat. Park, 4°24.145'E/117°53.538', *Syzygium* sp. 53, 5.IX.2009, A. Floren leg., 2 ex. ZSM).

Remarks

Amarygmus (*A.*) *weberi* was described based on specimens from Sumatra (Bremer 2004b), and is mentioned to occur in E. Malaysia/Sabah by Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

E. Malaysia/Sabah, Indonesia: Sumatra (Bremer & Lillig 2014).

Amarygmus (*Podamarygmus*) *ignotus* Bremer, 2006

Material

Sarawak, Kuching, Reservoir Park, 50 m, 4.–5.III.2008, R. Grimm leg., 5 ex. (CRG). – Same locality, but 22.III.2006, R. Grimm leg., 3 ex. (CRG). – Same locality, but 22.III.2008, R. Grimm leg., 2 ex. (CRG). – Same locality, but 9.–10.IX.2008, R. Grimm leg., 5 ex. (CRG). – Same locality, but 15.–18.IX.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 21.–22.III.2009, R. Grimm leg., 1 ex. (CRG). – Same locality, but 8.IV.2009, R. Grimm leg., 3 ex. (CRG). – Same locality, but 27.II.2012, R. Grimm leg., 10 ex. (CRG). – Sabah, Kota Kinabalu, Jalan Istana, 19.VI.2006, R. Grimm leg., 8 ex. (CRG). – Sabah, Kota Belud, 24.III.2007, R. Grimm leg., 3 ex. (CRG). – Sabah, Kudad, Pantai Bak Bak, 14.–16.II.2006, R. Grimm leg., 1 ex. (CRG). – Same locality, but 25.III.2007, R. Grimm leg., 2 ex. (CRG). – Sabah, Keningau, 300 m, 6.–7.II.2006, R. Grimm leg., 1 ex. (CRG). – Same locality, but 17.–19.II.2006, R. Grimm leg., 1 ex. (CRG).

Remarks

Amarygmus (*P.*) *ignotus* was described based on specimens from W. Malaysia (Bremer 2006c), and is mentioned to occur in Borneo by Bremer (2010a) and Bremer & Lillig (2014) but up to now no exact data were published.

Distribution

W. Malaysia, Borneo (Bremer & Lillig 2014).

Amarygmus (*Podamarygmus*) *viridipes* Gebien, 1927

Material

Sarawak, Kubah Nat. Park, HQ, 100–300 m, 27.–28.III.2009, R. Grimm leg., 1 ex. (CRG). – Sarawak, Kubah Nat. Park, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, R. Grimm leg., 1 ex. (CRG). – Same locality, but 28.–31.III.2009, R. Grimm leg., 1 ex. (CRG). – Sabah, Tenom, 300 m, 8.–9.II.2006, R. Grimm leg., 2 ex. (CRG). – Sabah, near Keningau, 50 yrs., *Melanolepis* sp., B7, 21.II.2001, A. Floren leg., 1 ex. (ZSM). – Sabah, Keningau, 300 m, 24.–27.XI.2006, R. Grimm leg., 1 ex. (CRG). – Sabah, NW Keningau, Keningau – Kimanis, 900 m, 7.II.2006, R. Grimm leg., 1 ex. (ZSM). – Sabah, N Keningau, N Apin Apin, 500 m, 25.–27.XI.2006, R. Grimm leg., 1 ex. (CRG). – Same locality, but 21.III.2007, R. Grimm leg., 1 ex. (CRG). – Same

locality, but 28.I.2010, R. Grimm leg., 1 ex. (CRG). – Sabah, Tambunan, 500 m, 14.–21.III.2013, R. Grimm leg., 1 ex. (CRG). – Sabah, Kudat, Pantai Bak Bak, 20.–23.I.2010, R. Grimm leg., 1 ex. (CRG). – Sabah, Sepilok, 50 m, 12.–13.III.2007, R. Grimm leg., 2 ex. (CRG). – Same locality, but 13.–15.I.2010, R. Grimm leg., 2 ex. (CRG). – Same locality, but 29.–30.III.2013, R. Grimm leg., 1 ex. (CRG). – Sabah, Mt. Kinabalu Nat. Park, Lower Montane Mixed Dipterocarp, Meliaceae, 9.II.1997, A. Floren leg., 1 ex. (ZSM).

Remarks

Amarygmus (*P.*) *viridipes* was multidescribed (cf. Bremer & Lillig 2014) from W. Malaysia (Carter 1928) and Sumatra (Gebien 1927, Masumoto & Makihari 1997) and is also known from Thailand (Bremer 2010a). Bremer (2010a) cited for the distribution also Sabah and Sarawak from where up to now no exact data were published.

Distribution

Thailand, W. Malaysia, E. Malaysia/Sarawak/Sabah, Indonesia: Sumatra (Bremer 2006c, 2010a, Bremer & Lillig 2014).

2.2 Stenochiinae Kirby, 1837
Cnodalonini Gistel, 1856

Derosphaerus borneensis **n. sp.**
(Figs. 6, 6°, 6b)

Holotype ♂: Indonesia, E. Kalimantan, Kac. Punjungan, Kayan-Mentarang Nat. Reserve, July 1993, per D. C. Darling & U. Rosichon, IIS 930513, lowland diptero. forest, WWF station, Lalut Birai Base camp, Kebun, 355 m, 2°52'N/115°49E, Malaise trap (head). Tenebrionidae ROMEnt 148995 (MZB).

Etymology

The new species is named after Borneo where the holotype has been collected.

Description

Elongate, black, shining, body length 22.5 mm, width 8.3 mm. Head widest across middle of eyes, with fine and nearly equal, only in front of eyes somewhat denser punctation; genae slightly elevated, fronto-clypeal suture distinct but not deepened; eyes constricted by genal canthus; distance between eyes on frons narrower than anterior margin of clypeus, the latter nearly straight; frons without impressions or other modifications; supraorbital furrow deep; shape of antennomeres see Fig. 6, last 6 antennomeres broader, pubescent and with stellate sensoria, but not forming a distinctly separated club. Mentum subcordate, with broad middle section narrowing in straight line towards the truncate apical margin and alongside the lateral margins deeply furrowed, especially basally, with disc of middle section here distinctly convex transversely. Pronotum convex, somewhat broader than long, width/length ratio 1.25, widest somewhat behind middle; apex shallowly emarginate, lateral sides shallowly rounded, and base shallowly bisinuate; all margins beaded, bead only interrupted in the middle of apex; apical corners broadly rounded, basal corners obtuse, with dentiform protruding basal margin; surface finely but somewhat less dense punctured than head; propleura smooth without punctation; prosternal apophysis not prominent. Elytra elongate, subparallel sided, somewhat widened posteriorly, surface with 9 striae and scutellary striola; punctures of striae somewhat larger than those on pronotum; elytral intervals flat to weakly convex apically, with minute punctation; epipleura complete, continuously narrowing to tip. Metaventrite with mid-longitudinal furrow, surface finely shallowly rugulose with interspersed fine punctures. Abdominal ventrites finely, densely punctured; last ventrite broadly beaded apically. Legs with femora clavate and tibiae of weakly winding form; protibiae with inner part of underside from first quarter to tip densely hirsute, outer part scattered with dentiform tubercles and with straggling long hairs; underside of mesotibiae with apical two thirds and underside of metatibiae nearly from base to tip hirsute. Basal 3 tarsomeres of pro- and meso-

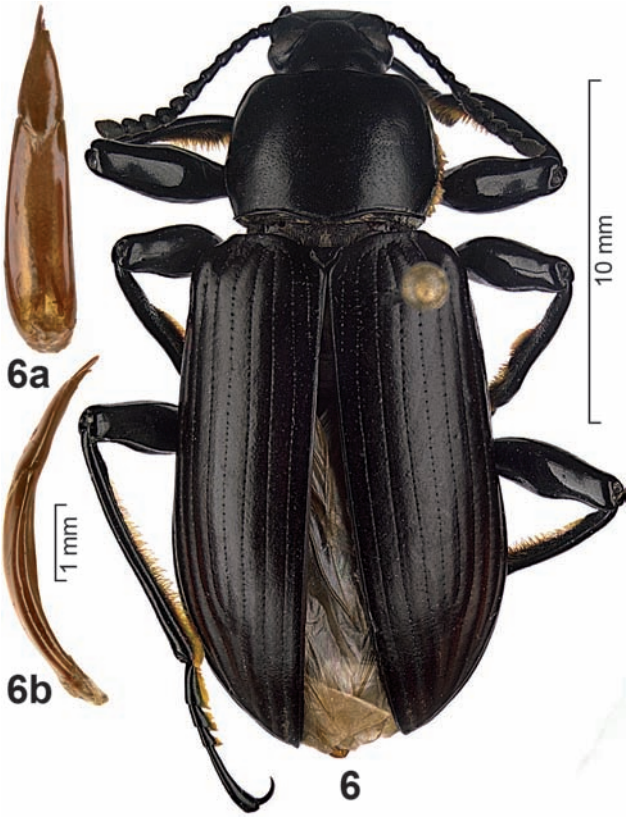


Fig. 6. *Derospherus borneensis* n. sp. – **6.** Dorsal view, **6a.** Aedeagus dorsal and **6b** lateral.

tarsi dilated; plantar surfaces of basal 4 tarsomeres of pro- and mesotarsi, and basal 3 tarsomeres of metatarsi bearing dense fine setae. Last tarsomere of all tarsi on plantar surface with two basally confluent stripes of setae; tarsomere 5 of protarsus somewhat longer than tarsomeres 1–4 combined, tarsomere 4 of metatarsus about as long as tarsomeres 1–3 combined. Adeagus as in Fig. 6a, 6b. Right paramere broken apically.

Differential diagnosis

Derosphaerus borneensis n. sp. is most similar to the two similarly black species *D. fuscatus* (Fairmaire, 1893) and *D. morio* (Gebien, 1914) both of which also occur in Borneo (Schawaller 2011). However, in males of *D. fuscatus* the pro- and mesotarsi are not dilated, the underside of protibiae is not differing in an outer and inner part but completely hirsute from about first quarter to tip; the undersides of meso- and metatibiae are hirsute in about apical half, the clypeal suture is deeply incised, and the last abdominal ventrite is apically not beaded and smooth. In males of *D. morio* the tarsi are also not dilated, the tibiae are only apically with setation, the anterior margin of clypeus is distinctly emarginate, and the last abdominal ventrite is apically not beaded but furnished with several longer hairs. Furthermore the three species are distinguished by the different shapes of aedeagi (compare Fig. 6a, 6b with Schawaller 2011: Figs. 11, 17).

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