

New and little known species of Tenebrionidae (Coleoptera) from Borneo (2)

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A b s t r a c t

The following new tenebrionid species are described: *Camptobrachys sarawakensis n. sp.* (East Malaysia/Sarawak), *Gonocephalum tibiale n. sp.* (Indonesia/Kalimantan), *G. tuberipenne n. sp.* (East Malaysia/Sabah), *Promethis martinii n. sp.* (East Malaysia/Sabah), and *Zypoetes borneensis n. sp.* (East Malaysia/Sarawak). *Bremerianus baehri* Masumoto & Bečvář, 2005 and *Micropedinus inconstans* (Lea, 1917) are reported for the first time from Borneo. New records of *Catapiestus mediocris* Guérin-Ménéville, 1841, *Diphyrrhynchus latitarsus* Chūjō, 1973, and *Taiwanocryphaeus erberi* Schawaller, 2005 are given.

K e y w o r d s : Tenebrionidae, Borneo, Malaysia, Sabah, Sarawak, Lupropini, Phrenapatini, Opatrini, Cnolalonini, Stenoichiini, new species, new records.

Z u s a m m e n f a s s u n g

Die folgenden neuen Tenebrioniden-Arten werden beschrieben: *Camptobrachys sarawakensis n. sp.* (Ost-Malaysia/Sarawak), *Gonocephalum tibiale n. sp.* (Indonesia/Kalimantan), *G. tuberipenne n. sp.* (Ost-Malaysia/Sabah), *Promethis martinii n. sp.* (Ost-Malaysia/Sabah) und *Zypoetes borneensis n. sp.* (Ost-Malaysia/Sarawak). *Bremerianus baehri* Masumoto & Bečvář, 2005 und *Micropedinus inconstans* (Lea, 1917) werden erstmals für Borneo nachgewiesen. Neue Funde von *Catapiestus mediocris* Guérin-Ménéville, 1841, *Diphyrrhynchus latitarsus* Chūjō, 1973 und *Taiwanocryphaeus erberi* Schawaller, 2005 werden mitgeteilt.

C o n t e n t s

1	Introduction	249
2	The species	250
2.1	Lagriinae Latreille, 1825	250
2.2	Phrenapatinae Solier, 1834	250
2.3	Tenebrioninae Latreille, 1802	250
2.4	Stenoichiinae Kirby, 1837	254
3	References	256

1 Introduction

As already noted in the first part of “New and little known species of Tenebrionidae from Borneo” (GRIMM 2010), the species inventory of the Tenebrionidae of this island is far from complete. The present second part treats mainly material from own fieldwork, supplemented by material from fogging samples of Dr. ANDREAS FLOREN (Würzburg), from light captures of KARL MARTINI (Ingolstadt), and material deposited in SMNS. Specimens from several collections (see list below) were used for comparison.

A c k n o w l e d g e m e n t s

For the gift and/or loan of specimens I thank Drs. MICHAEL BALKE (München), ANDREAS FLOREN (Würzburg), SATOSHI KAMITANI and OSAMU TADAUCHI (Fukuoka), KARL MARTINI (Ingolstadt), OTTO MERKL (Budapest), WOLFGANG SCHAWALLER (Stuttgart), and EVA SPRECHER (Basel). JOHANNES REIBNITZ (Stutt-

gart) prepared the photographs, scanned the drawings and arranged the figures on plates. Furthermore, I am grateful to Dr. OTTO MERKL and Dr. WOLFGANG SCHAWALLER for reviewing the manuscript.

A c r o n y m s o f d e p o s i t o r i e s

CAF	Collection Dr. ANDREAS FLOREN, University of Würzburg, Germany
CRG	Collection Dr. ROLAND GRIMM, Tübingen, Germany
ELKUF	Entomological Laboratory Kyushu University, Fukuoka, Japan (Dr. SATOSHI KAMITANI, Dr. OSAMU TADAUCHI)
HNHM	Hungarian Natural History Museum, Budapest, Hungary (Dr. OTTO MERKL)
NHMB-F	Naturhistorisches Museum Basel, Collection FREY, Switzerland (Dr. EVA SPRECHER)
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany (Dr. WOLFGANG SCHAWALLER)
ZSM	Zoologische Staatssammlung, München, Germany (Dr. MICHAEL BALKE)

2 The species

2.1 Lagriinae Latreille, 1825

Lupropini Ardoin, 1958

Micropedinus inconstans (Lea, 1917)

Material studied

Borneo, Malaysia, Sabah, Sikuati-Beach, 17.V.2005, R. GRIMM leg., 2 specimens (CRG).

Distribution

Australia: Western Australia, Queensland (MATTHEWS & BOUCHARD 2008). Borneo (new record). W Malaysia, Philippines: Leyte, Indonesia: West Papua [Irian Jaya], (based on specimens in CRG, SMNS and ZSM).

2.2 Phrenapatinae Solier, 1834

Phrenapatinii Solier, 1834

Zypoetes borneensis n. sp.

(Fig. 6)

H o l o t y p e (sex not examined): Borneo, Malaysia, Sarawak, Gunung Gading Nat. Park, 100–250 m, 20.III.2008, R. GRIMM leg. (CRG).

P a r a t y p e: Same data as holotype, 1 specimen (CRG).

Etymology

Named after Borneo, where the types were collected.

Description

Oval, blackish, anterior quarter of head, margins of pronotum, a broader part behind anterior margin of pronotum, appendages, lateral margins of elytra and ventral side fulvous; apex of mandibles black; body (except eyes, antennae, maxillary and labial palps, base of femora, tibiae and tarsi) covered by greyish yellow lacquer-like layer, thus appearing pale yellowish. Body length 2.05 mm, body width 1.05 mm.

Head subrectangular; eyes small and round, not protruding beyond vault of head; lateral margins of genae subparallel, anterior margins of genae and clypeus forming common straight anterior margin of head. Clypeal suture distinct. Clypeus with fine scattered punctures; rest of head with very large, coarse, laterally partly confluent punctures. Antennae short, last three antennomeres forming a distinct club. Ventral side with deep antennal groove. Terminal maxillary palpomere parallel-sided with apex obliquely truncated. Mentum subrectangular, flat; apex of mandibles ending with acute tooth.

Pronotum transverse, width/length ratio (both measured in the middle) 1.7, widest at base; anterior and poste-

rior border finely, lateral borders sharply margined; posterior border slightly arcuate, lateral borders feebly arcuate anteriad, anterior border shallowly bisinuate; anterior angles subrectangular, somewhat protruding beyond anterior border; posterior angles weakly obtuse. Surface slightly convex, disc laterally with coarse scattered punctures, denser and sometimes confluent punctured in postero-lateral part, fronto-medially rugulose. Middle of prosternum in front of coxae convex; prosternal process flat, extending behind coxae, apex broadly rounded. Propleura microreticulate, laterally with some punctures. Metaventrite densely punctured with large, umbilicate, setigerous punctures laterally.

Elytra oval with eight rows of punctures, the seventh row hardly discernible; intervals broader than rows, feebly convex, finely scattered punctate. Lateral margin in dorsal view only visible near base. Abdominal ventrites I–IV microreticulate in middle, laterally punctured with large, umbilicate, setigerous punctures, last ventrite sparsely punctured.

Legs short; femora compressed laterally, apices not protruding beyond lateral borders of body; tibiae compressed laterally, protibiae triangular; mesotibiae and metatibiae subtriangular, metatibiae slightly curved; tarsi short.

Differential diagnosis

Zypoetes borneensis n. sp. can be separated from the New Guinean species *Z. paradoxus* Kaszab, 1977 by the less oval body shape, the elytra which are more parallel-sided in their anterior part, the denser and distinctly coarser punctuation on head and pronotum, and the lateral margins of the elytra which are only visible near base in dorsal view (in *Z. paradoxus* visible in anterior quarter).

2.3 Tenebrioninae Latreille, 1802

Toxicini Lacordaire, 1859

Taiwanocryphaeus erberi Schawaller, 2005

Material studied

Borneo, Malaysia, Sabah, Kinabalu Park, 6°5'N 116°33'E, Lowland mixed Dipterocarp Forest, B1, B2 Mix, 27.III.1998, A. FLOREN leg., 1 ♀ (CAF). – Borneo, Malaysia, Sabah, near Keningau, 20 years *Melanolepis* sp., B3, 18.II.2001, A. FLOREN leg., 1 ♀ (CRG).

Remarks

Taiwanocryphaeus erberi Schawaller, 2005 was only known by males from Sumatra (SCHAWALLER 2005) and Sarawak (GRIMM 2010). Fogging trees in Sabah by A. FLOREN (Würzburg) for the first time yielded females, which are characterized by lacking the finger-like horn on the frons and the tooth-like anterior corner of the genae.

Distribution

Sumatra, Borneo (Sabah, Sarawak).

Opatriini Brullé, 1832

Diphyrrhynchus latitarsus Chûjô, 1973

(Fig. 7)

Type material studied

Borneo, Brunei, Muara sea-shore, 29.I.1962, T. KIRA leg., holotype, 2 paratypes (ELKUF).

Additional material studied

Borneo, Malaysia, Sabah, W Kudat, Sikuati-Beach, 23.I.2010, R. GRIMM leg., 2♂♂, 3♀♀ (CRG). – Borneo, Malaysia, Sabah, Tip of Borneo vic., 22.–23.I.2010, R. GRIMM leg., 22♂♂, 9♀♀ (CRG). – Borneo, Sarawak, Kuching, Santubong, 8.–9.III.1990, A. RIEDEL leg., 6 specimens (SMNS).

Distribution

Borneo: East Malaysia (Sarawak, Sabah), Brunei. W Malaysia: Tioman Island (new record based on specimen in SMNS).

Remarks

Diphyrrhynchus latitarsus Chûjô 1973 is very similar to *D. caledonicus* Bates, 1872 and *D. semisulcatus* Gebien, 1920. As indicated by CHÛJÔ (1973), *D. latitarsus* can be separated from *D. caledonicus* by the denser punctured dorsal side and larger punctures of the striae. In these characters *D. latitarsus* coincides with the New Guinean species *D. semisulcatus*, which is distinguished by stronger dilated protarsi in males. All three species can be separated by the different shape of the apical piece of the aedeagus (compare Figs. 7–9).

Gonocephalum (Gonocephalum) tuberipenne n. sp.

(Figs. 2, 12, 18)

H o l o t y p e ♂: Borneo, Malaysia, Sabah, Tambunan, 500 m, 28.–31.III.2007, R. GRIMM leg. (CRG).

P a r a t y p e s : Same data as holotype, 9♀♀ (CRG), 1♀ (HNHM). – Same locality as holotype, 30.I.2010, R. GRIMM leg., 1♀ (CRG). – Borneo, Sabah, Kampung Takala, Kinabatangan river, 5.VI.1998, KODADA & CIAMPOR leg., 3♀♀ (SMNS). – Borneo, Sabah, Tawau Hills Park, Tawau river, 8.VI.1998, KODADA & CIAMPOR leg., 1♂ (SMNS).

Etymology

Tuber (Lat.) = hump, bump, protuberance; penna (Lat.) = feather or wing (referring to elytron in this case).

Description

Elongate-oval, black, matt with shiny granules (especially on elytra). Body length 8.1–10.6 mm, body width 3.5–4.6 mm.

Head with clypeus deeply sinuate, clypeo-genal meeting deeply notched, lateral margins of clypeus straight, fronto-clypeal suture deeply and broadly impressed. Genae broader than eyes. Surface microreticulate with irregular ridges and setigerous tubercles, eye-ruga faintly marked, frons beside eye-ruga with shallow impression. Length ratios of antennomeres as 3.75:1.50:3.88:2.25:2.00:1.88:1.50:1.50:1.50:1.50:2.25; last 4 antennomeres forming a club.

Pronotum subhexagonal, widest at base, about 1.5 times as wide as long, width/length ratio (both measured in the middle) 1.5–1.65; disc convex, with four shallow impressions, lateral parts broadly explanate; lateral margins weakly rounded in the middle and sinuate before base and apex; posterior margin bisinuate with middle part in front of scutellum straight, anterior margin broadly emarginate; anterior corners strongly protruding forward, anterior and posterior angles acute, posterior angles directed obliquely outwards. Surface strongly sculptured, covered by very fine irregular mesh forming small spaces with a granule in the centre bearing a short, broad, inclined yellowish seta as on head; surface around granules microreticulate.

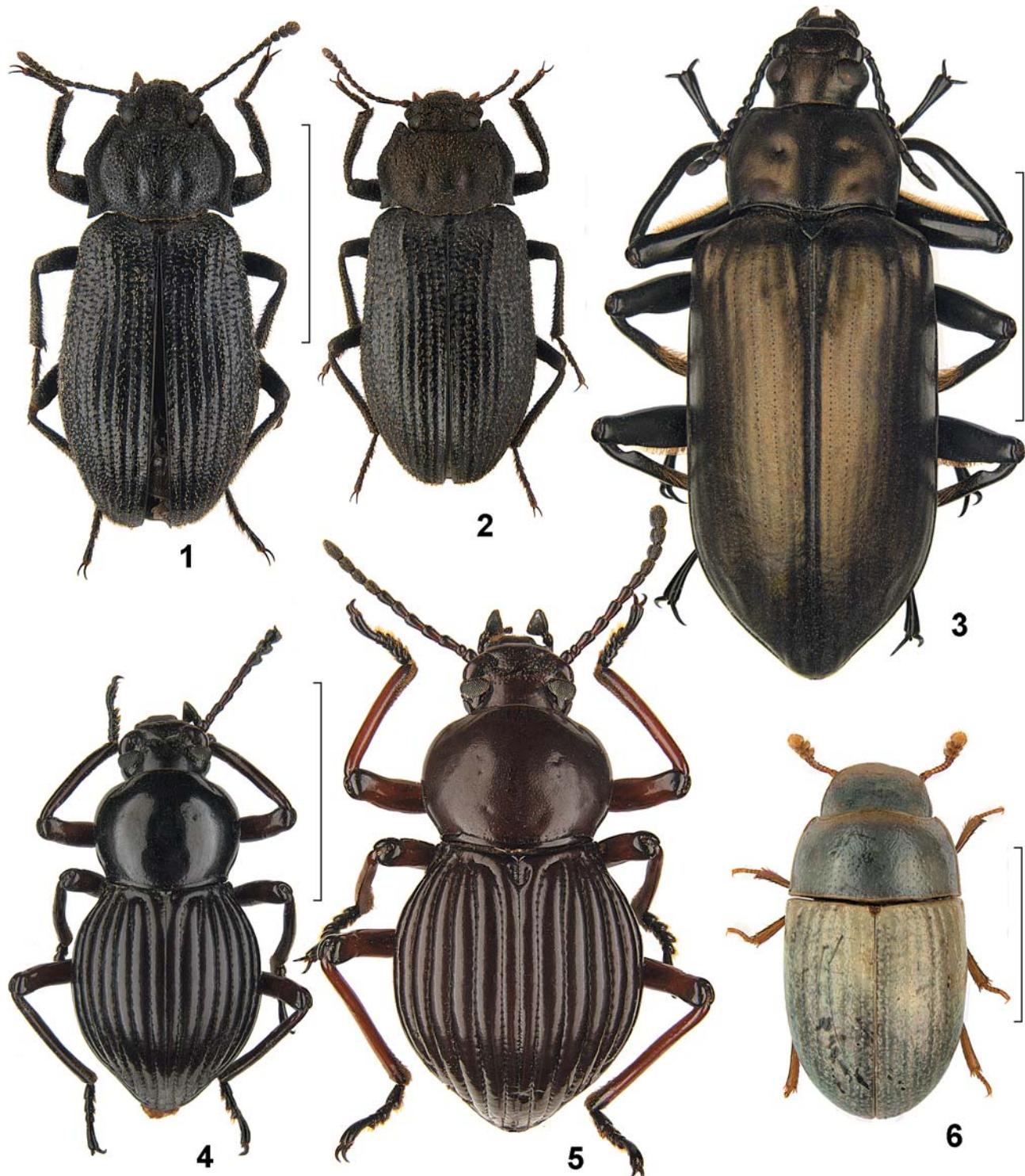
Elytra slightly dilated posteriorly, with maximum width before end of second third; humeral callus conspicuous, intervals 4 and 5 raised at base, forming a bump; posterior part of scutellum and base of elytra around scutellum raised; sutural interval somewhat raised posteriorly before and on elytral declivity. Striae with distinct punctures, connected toward apex by fine lines; intervals broader and flat or slightly convex on disc, narrower and strongly convex toward apex, with two irregular rows of granules on disc, merging into one row before apex. Lateral margin invisible in dorsal view. Base of epipleura on inner part with a protuberance, more pronounced in females than in males.

Legs. Male protibiae (Fig. 18) narrow with inner side weakly expanded in middle, underside grooved in basal two-thirds. Female protibiae without modification.

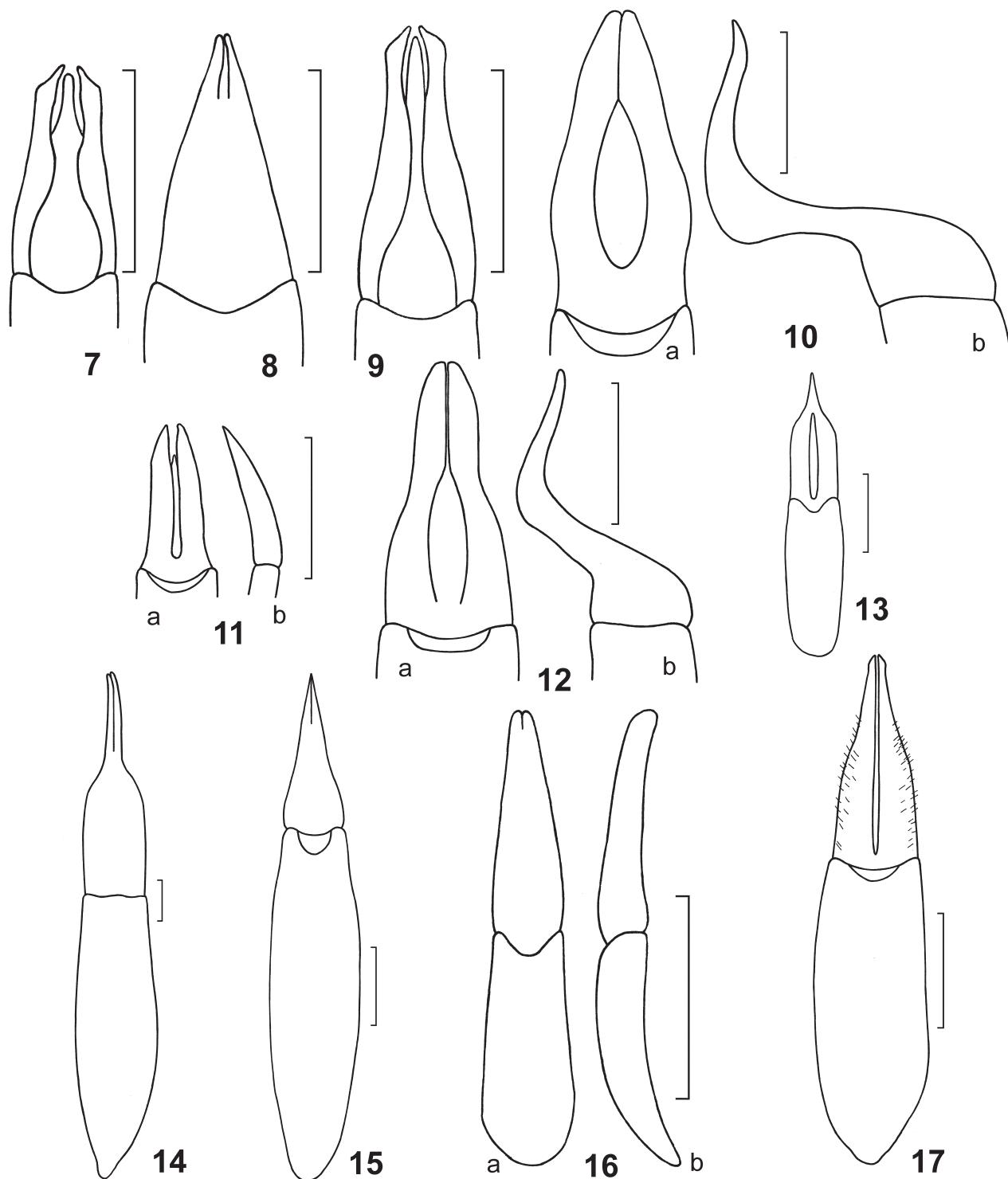
Apical piece of aedeagus see Fig. 12.

Differential diagnosis

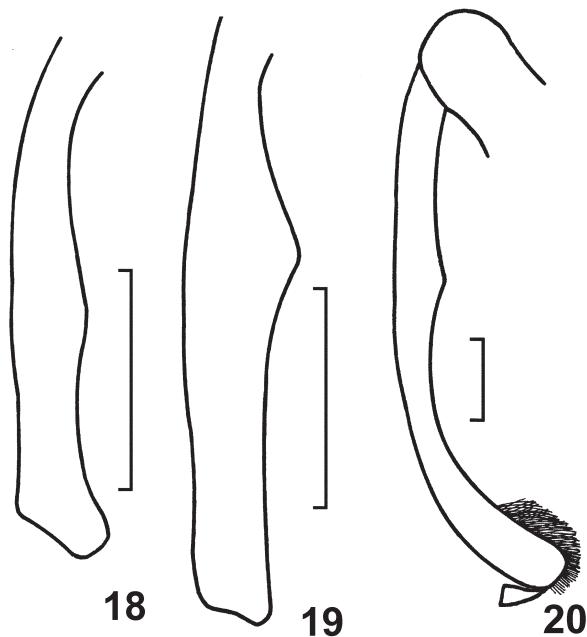
At first glance, *Gonocephalum tuberipenne* n. sp. is very similar to *G. impressiusculum* Gebien, 1920. However, it can be separated from *G. impressiusculum* by larger body size (body length of *G. tuberipenne* n. sp. 8.1–10.6 mm, of *G. impressiusculum* 7.1–7.7 mm), bumped elevation on elytral base and scutellum, raised sutural interval, protuberance on base of epipleuron, apically broadened male protibiae with inner side slightly expanded in the middle (Fig. 18) and underside excavate in basal two-thirds (tibiae cylindrical with incurved apices in *G. impressiusculum* (cf. GEBIEN 1920, KASZAB 1952), and by entirely different apical piece of the aedeagus (compare Figs. 11, 12).



Figs. 1–6. Tenebrionidae spp., dorsal view. – **1.** *Gonocephalum tibiale* n. sp. ♂ holotype (SMNS). **2.** *G. tuberipenne* n. sp. ♂ holotype (CRG). **3.** *Promethis martinii* n. sp. ♂ holotype (CRG). **4.** *Camptobrachys sarawakensis* n. sp., ♂ holotype (CRG). **5.** *Camptobrachys sarawakensis* n. sp., ♀ paratype (CRG). **6.** *Zypoetes borneensis* n. sp., holotype (CRG). – Scales: 1 mm (6), 5 mm (1, 2, 4, 5), 10 mm (3).



Figs. 7–17. Aedeagi of Tenebrionidae spp. – 7–12. *Diphyrrhynchus* and *Gonocephalum* spp., apical piece of aedeagi. 7. *Diphyrrhynchus latitarsus*, dorsal view. 8. *D. caledonicus*, dorsal view. 9. *D. semisulcatus*, dorsal view. 10. *Gonocephalum tibiale* n. sp., dorsal (a) and lateral (b) view. 11. *G. impressiusculum*, dorsal (a) and lateral (b) view. 12. *G. tuberipenne* n. sp., dorsal (a) and lateral (b) view. – 13–17. *Camptobrachys*, *Catapiestus* and *Promethis* spp., aedeagi. 13. *Camptobrachys sarawakensis* n. sp., dorsal view. 14. *C. pici*, dorsal view. 15. *C. chuatoi*, dorsal view. 16. *Catapiestus mediocris*, dorsal (a) and lateral (b) view. 17. *Promethis martinii* n. sp., dorsal view. – Scales: 0.5 mm (7–16), 1 mm (17).



Figs. 18–20. *Gonocephalum* and *Promethis* spp., male protibiae. – 18. *Gonocephalum tuberipenne* n. sp. 19. *G. tibiale* n. sp. 20. *Promethis martinii* n. sp. – Scales: 1 mm (20), 3 mm (18, 19).

Gonocephalum (Gonocephalum) tibiale n. sp. (Figs. 1, 10, 19)

H o l o t y p e ♂: [Borneo], Indonesia, Kalimantan-Timur, Apokayan, Long Ampung, 700 m, Sekundärwald [= secondary forest], 10.–25.II.1997, C. & P. ZORN leg. (SMNS).

Etymology

The species name refers to the specific form of the male protibiae.

Description

Elongate-oval, black, matt, with shiny granules (especially on elytra). Body length 9.8 mm, body width 4.1 mm.

Head with clypeus deeply sinuate, clypeo-genal meeting deeply notched, lateral margins of clypeus straight, fronto-clypeal suture deeply and broadly impressed. Genae broader than eyes. Surface microreticulate with irregular ridges in anterior part and setigerous tubercles becoming denser in posterior part, eye-ruga faintly marked, frons beside eye-ruga with shallow impression. Length ratios of antennomeres as 4.28:1.57:5.00:3.00:2.57:2.57:2.43:2.41:1.86:2.43:3.28; last 4 antennomeres forming a club.

Pronotum subhexagonal, widest at base, about 1.5 times as wide as long, width/length ratio (both measured in the middle) 1.5; disc convex, with three shallow impressions, lateral parts broadly explanate; lateral margins weakly

rounded in the middle and sinuate before base and apex; posterior margin bisinuate with middle part in front of scutellum straight, anterior margin broadly emarginate; anterior corners strongly protruding forward, anterior and posterior angles acute, posterior corners directed obliquely backwards. Surface strongly sculptured, covered by very fine irregular mesh forming small spaces, with a granule in the centre bearing a short, broad, inclined yellowish seta as on head; surface around granules microreticulate.

Elytra slightly dilated posteriorly, with maximum width in the middle, humeral callus conspicuous, intervals 3–6 raised at base, forming a bump; posterior part of scutellum and base of elytra around scutellum raised; sutural interval somewhat raised posteriorly before elytral declivity. Striae with distinct punctures, connected by fine lines; intervals broader and flat or slightly convex on disc, narrower and strongly convex toward apex, with two irregular rows of setigerous granules. Lateral margin invisible in dorsal view.

Legs. Ventral side of profemora feebly excavate in distal part. Male protibiae broad, dorsal side flat with a distinct, broadly rounded expansion before middle, underside grooved in basal quarter. Mesotibiae straight, metatibiae slightly bent in lateral view.

Apical piece of aedeagus see Fig. 10.

Differential diagnosis

G. tibiale n. sp. is similar to *G. tuberipenne* n. sp. having the conspicuous humeral callus, same basal elytral intervals, the bumped posterior part of the scutellum and the elytral area around it, and the similarly angulate shape of the aedeagus in lateral view (compare Figs. 10b, 12b). The new species differs from *G. tuberipenne* n. sp. in the posterior pronotal corners which are directed obliquely backwards (directed outwards in *G. tuberipenne* n. sp.), the entirely different shape of the male protibiae (compare Figs. 18, 19), and the lack of protuberance on the base of the epipleura.

2.4 Stenochiinae Kirby, 1837

Cnodalonini Gistel, 1856

Camptobrachys sarawakensis n. sp. (Figs. 4–5, 13)

H o l o t y p e ♂, Borneo, Malaysia, Sarawak, Santubong Peninsula, Permai Rainforest Resort, 20–200 m, 21.III.2008, R. GRIMM leg. (CRG).

P a r a t y p e s: Same data as holotype, 1 ♀ (SMNS). – Same data as holotype, but 13.–15.III.2008, 1 ♀ (CRG). – Same data as holotype, but 23.–27.III.2009, 1 ♀ (CRG). – Same data as holotype, but 4.–8.IV.2009, 2 ♀♀ (CRG). – Borneo, Malaysia, Sarawak, Gunung Gading Nat. Park, 100–

300 m, 23.–29.IX.2008, R. GRIMM leg., 2 ♀♀ (CRG). – Borneo, Malaysia, Sarawak, Gunung Gading Nat. Park, 100–300 m, 31.III.–3.IV.2009, R. GRIMM leg., 1 ♀ (CRG).

Etymology

Named after Sarawak where the type series was collected.

Description

Strongly convex, castaneous, legs paler, reddish-brown, apex of femora, tarsi and mouthparts partly black. Body length 9.0–11.4 mm, body width 4.4–5.8 mm.

Head with deep and broad ocular sulcus, weakly notched between clypeus and genae, clypeus flat with anterior border straight, finely punctured, intermingled with larger punctures in basal half and especially near clypeal sulcus. Frons flat, smooth to minutely punctured on posterior part, very coarsely punctured near clypeal sulcus; punctuation partly confluent and continuing beyond clypeal sulcus; vertex almost smooth, genae raised, punctured as clypeus. Length ratios of antennomeres 1–11 as 10.5:4:6.5:8.5:8.5:7.5:7.5:7:7.5:12.5.

Pronotum finely punctured, convex, cordate, widest before middle, width/length ratio (width measured at widest point, length along longitudinal midline) 1.14–1.26. Lateral borders arcuate anteriorly, nearly straight posteriorly; posterior border arcuate, anterior border nearly straight, lateral borders finely and sharply margined, lateral margins partially invisible in dorsal view; anterior margin interrupted in the middle, posterior border broadly margined, anterior and posterior angles obtuse, anterior angles rounded. Prosternal process bent down between coxae, extending toward rounded apex.

Elytra obovate, sometimes nearly rounded, strongly convex, with lateral intervals bent downwards; deeply striate, striae finely punctate on disc, punctures more distinct on lateral striae; intervals strongly convex, smooth. Length/width ratio 1.03–1.23. Combined base of elytra shallowly sinuate. Lateral margin in dorsal view only visible near base and apex.

Legs long, narrow, tibiae straight, subcylindrical.

Aedeagus see Fig. 13.

Differential diagnosis

Camptobrachys sarawakensis n. sp. is the third species of the genus known to occur in Borneo. According to KASZAB (1982) the black coloured *C. pici* Kaszab, 1941 from Brunei, with 16.0–16.6 mm body length, is the largest of all known congeners, and is moreover distinguished by oblong-oval elytra (length/width ratio 1.34). *C. sarawakensis* n. sp. is castaneous with paler reddish-brown legs and black apex of femora, it is smaller (body length 9.0–11.4 mm) and has short-oval elytra (length/width ratio 1.03–1.23). *C. chujoi* Kaszab, 1982 from Kalimantan is similar to *C. sarawakensis* n. sp. in the general colouration, but the apices of the femora are not black. The

pronotum of *C. chujoi* is only very weakly cordate with lateral borders less arcuate, and the anterior angles are not rounded as in *C. sarawakensis* n. sp. All three species can easily be distinguished by the different shapes of the aedeagus (compare Figs. 13–15).

Catapiestus mediocris Guérin-Ménéville, 1841

(Fig. 16)

Material studied

Borneo, Penrissan, V.[18]99, MOULTON, 2 “plesiotypes” (NHMB-F). – Borneo, F. RACZES, 1886, 1 specimen (NHMB-F). – Borneo, Malaysia, Sabah, Kudat, Pantai Bak Bak, 25.III.2007, R. GRIMM leg., 1 specimen (CRG). – Same locality, 20.–23.I.2010, R. GRIMM leg., 8 specimens (CRG), 1 specimen (SMNS). – Borneo, Malaysia, Sabah, Tambunan, 500 m, 14.–15.III.2007, R. GRIMM leg., 1 specimen (CRG). – Same locality, 16.–19.I.2010, R. GRIMM leg., 1 specimen (CRG). – Borneo, Malaysia, Sabah, Keningau, 300 m, 25.–26.I.2010, R. GRIMM leg., 1 specimen (CRG).

Distribution

Borneo: East Malaysia (Sarawak, Sabah).

Remarks

GUÉRIN MÉNEVILLE (1841) described *C. mediocris* from Borneo. GEBIEN (1913, 1914) expanded the distribution of this species to Borneo and the Philippines. LANG & REN (2009), in their review of the genus *Catapiestus* Perty, 1831, cite the distribution from GEBIEN (1913), but do not mention newly collected material. LANG & REN (2009) indicate only *C. mediocris* for Borneo, however, according to GEBIEN (1914) and corresponding specimens in NHMB-F, *C. simillimus* Fairmaire, 1893 also occurs in Borneo. This occurrence has to be confirmed.

The aedeagus of *C. mediocris* (Fig. 16) is figured in the present paper, in completion to LANG & REN (2009).

Promethis martinii n. sp.

(Figs. 3, 17, 20)

H o l o t y p e ♂: Borneo, Malaysia, Sabah, Mt. Trus Madi, 1100 m, 1.–15.IV.2005, K. MARTINI leg. (CRG).

Etymology

Named in honour of KARL MARTINI (Ingolstadt), collector of the holotype.

Description

Elongate-oval, dorsal side bronze-coloured, ventral side and appendages black. Body length 27 mm, body width 10 mm.

Head with clypeus very slightly emarginate, fronto-clypeal suture sulcate, fronto-genal suture distinct but

not sulcate; finely punctured, with punctural interspaces smooth on anterior part of clypeus and on genae, becoming more coriaceous toward posterior part of head. Mentum subhexagonal, slightly convex transversally, bicoloured, with a longer, cordate, piceous, evenly densely and coarsely punctured, pilose basal part and a shorter transversal, fulvous, smooth, laterally impressed apical part; anterior border slightly emarginate.

Pronotum transverse, widest in the middle, width/length ratio (measured along transversal and longitudinal midlines) 1.4; anterior border shallowly emarginate, lateral borders slightly rounded, posterior border slightly bisinuate, all borders distinctly marginated, margin of anterior border interrupted in the middle; surface coriaceous, intermingled with fine scattered punctures; disc with distinct midlongitudinal sulcus and two weak rounded impressions with a central fovea just before middle, and two smaller oblique impressions in posterior third. Prosternum slightly arcuate to anterior and posterior border; prosternal process flat, broad and bisulcate.

Elytra finely coriaceous with fine punctural rows, intervals flat; ventricose in lateral aspect with arcuate contours discally; lateral margin in dorsal view visible almost over entire length, only basally concealed by humeral callosity. Posterior part of mesoventrite and medial part of metaventrite impressed and pilose, first abdominal ventrite pilose between hind coxae, last ventrite strongly marginated.

Legs. Profemora densely pilose on ventral side; protibiae (Fig. 20) narrow, on inner side with tooth-like angulation near middle, strongly curved apically with yellow hair-brush on inner side. Mesotibiae in distal half on inner side pilose. Metafemora on ventral side not emarginate before apex; metatibiae basally emarginate, before emargination of inner border with a blunt tooth followed by a sharp edge running toward the middle, distal part between tooth and apex pilose.

Aedeagus see Fig. 17.

Differential diagnosis

In the key to the species of the genus *Promethis* Pascoe, 1869 of KASZAB (1988), the new species *Promethis martinii* n. sp. would run to *P. cupripennis* (Bohemian, 1858). However, *P. martinii* n. sp. can be easily separated from *P. cupripennis* by the coriaceous, bronze-coloured elytra with flat intervals (darker metallic or blackish with intervals convex in *P. cupripennis*), the elytra which are in lateral aspect ventricose with arcuate contours discally (simple with flattened disc and straight contours discally in *P. cupripennis*), the impressed mesoventrite (not impressed in *P. cupripennis*), the narrow protibiae with a single blunt tooth in the middle of the inner side (Fig. 20) (broad with a tooth in the middle and a second one between this tooth and the base of the protibiae in *P. cupripennis*, cf. KASZAB

1988: fig. 517), and the apical piece of the aedeagus more strongly narrowed distally (compare Fig. 17, KASZAB 1988: fig. 514).

Stenochiini Kirby, 1837

Bremerianus baehri Masumoto & Bečvář, 2005

Material studied

Borneo, Malaysia, Sarawak, NW Kuching, Matang Wildlife Centre, 50–100 m, 16.–17.III.2008, R. GRIMM leg., 1 specimen (CRG).

Remarks

B. baehri Masumoto & Bečvář, 2005 was described on the basis of specimens from W Malaysia and Sumatra. According to MASUMOTO & BEČVÁŘ (2005) the body length of *B. baehri* is 5.6 mm. The specimen from Matang Wildlife Centre is much smaller, with a body length of 4.0 mm.

Distribution

W Malaysia, Sumatra (MASUMOTO & BEČVÁŘ 2005), Borneo (new record).

3 References

- CHŪJŌ, M. (1973): Two new tenebrionid species from Borneo and Thailand (Col.: Tenebrionidae & Lagriidae). – Esakia **8**: 25–29.
- GEBIEN, H. (1913): Die Tenebrioniden der Philippinen. – The Philippine Journal of Sciences, Section D, **8**: 401–433.
- GEBIEN, H. (1914): Die Tenebrionidenfauna Borneos – Erster Teil. – Sarawak Museum Journal **2**(5): 1–14, pl. 1.
- GEBIEN, H. (1920): Uitkomsten der Nederlandsche Nieuw-Guinea-Expedition in 1912 en 1913 onder leiding van A. FRANSSEN HEDERSCHEE. – Tenebrionidae. – Nova Guinea, Zoologie **13**: 213–500, pls. IX–XI.
- GRIMM, R. (2010): New and little known species of Tenebrionidae (Coleoptera) from Borneo. – Stuttgarter Beiträge zur Naturkunde A, Neue Serie **3**: 257–267.
- GUÉRIN MÉNEVILLE, F. E. (1841): Description de quelques coléoptères nouveaux provenant de la Tasmanie, du port du Otago (Nouvelle Zélande), d'Esington-Bay (Australie septentrionale), de Triton-Bay (Nouvelle-Guinée), et des îles Vavao, Salomon, Ternate, Borneo, Aukland, etc. – Revue zoologique par la Société Cuvierienne **4**: 120–128.
- KASZAB, Z. (1952): Die indomalayischen und ostasiatischen Arten der Gattung *Gonocephalum* Solier (Coleoptera, Tenebrionidae). – Entomologische Arbeiten aus dem Museum G. FREY **3**: 416–688.
- KASZAB, Z. (1982): Die Gattung *Camptobrachys* Kaszab, 1941 (Coleoptera, Tenebrionidae). – Special issue in memory of retirement of emeritus Professor MICHIO CHŪJŌ: 81–85; Nagoya (Nagoya Women's University).
- KASZAB, Z. (1988): Katalog und Bestimmungstabelle der Gattung *Promethis* Pascoe, 1869 (Coleoptera, Tenebrionidae). – Acta Zoologica Academiae Scientiarum Hungaricae **34**: 67–170.

- LANG, J.-T. & REN, G. D. (2009): A review of the genus *Catapiestus* Perty, 1831 (Coleoptera: Tenebrionidae: Cnadaloniini) with descriptions of two new species from China. – Caucasian entomological Bulletin **5**: 195–423.
- MASUMOTO, K. & BEČVÁŘ, S. (2005): Two new tenebrionid species of a new genus (Coleoptera, Tenebrionidae, Strongylini) from Oriental Region. – Elytra, Tokyo **33**: 417–423.
- MATTHEWS, E. G. & BOUCHARD, P. (2008): Tenebrionid beetles of Australia – descriptions of tribes, keys to genera, catalogue of species. – Australian biological Resources Study, 398 pp.; Canberra
- SCHAWALLER, W. (2005): Three new tenebrionids (Coleoptera: Tenebrionidae) from Sumatra – new species or new genera? – Annales zoologici **55**: 565–569.

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Manuscript received: 22.X.2010, accepted: 10.XI.2010.

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Zeitschrift/Journal: [Stuttgarter Beiträge Naturkunde Serie A \[Biologie\]](#)

Jahr/Year: 2011

Band/Volume: [NS_4_A](#)

Autor(en)/Author(s): Grimm Roland

Artikel/Article: [New and little known species of Tenebrionidae \(Coleoptera\) from Borneo \(2\)](#)
[249-257](#)