New and little known species of Tenebrionidae (Coleoptera) from Borneo (6)

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New and little known species of Tenebrionidae (Coleoptera) from Borneo (6)

Roland Grimm

Abstract

The following new species from Malaysia/Borneo are described: *Palorus borneensis* **n. sp.**, *Platydema orientaloides* **n. sp.**, and *Promethis bosuangi* **n. sp.** *Palorus cerylonoides* (Pascoe, 1836) and *Platydema saundersi* Schawaller, 2012 are recorded for the first time from Borneo. New faunistic data of eight further species are added.

Keywords: Tenebrionidae, Cnodalonini, Diaperini, Palorini, new species, new records; Borneo, Brunei, Malaysia, Sabah, Sarawak.

Zusammenfassung

Folgende neue Arten werden beschrieben: *Palorus borneensis* **n. sp.**, *Platydema orientaloides* **n. sp.** und *Promethis bosuangi* **n. sp.** Neunachweise für Borneo: *Palorus cerylonoides* (Pascoe, 1836) und *Platydema saundersi* Schawaller, 2012. Neue Funde von acht weiteren Arten werden mitgeteilt.

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1 Introduction

In the present sixth contribution to the Tenebrionidae of Borneo a new species of the genus *Palorus* Mulsant, 1854 is described and new faunistic data concerning several other species of the tribe Palorini Matthews, 2003 are dealt with. Furthermore, one new species each of the genera *Platydema* Laporte & Brullé, 1831 and *Promethis* Pascoe, 1869 are described. New faunistic data of eight further species are added.

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Acronyms of depositories

CRG	Collection Dr. Roland Grimm, Neuenbürg, Germany
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany (Dr. Wolfgang Schawaller)
ZSM	Zoologische Staatssammlung, München, Germany (Dr. Michael Balke)

2 The species

2.1 Tenebrioninae Latreille, 1802
Palorini Matthews, 2003

Palorinus opticus Halstead, 1967

Material examined

Borneo, Malaysia, Sabah, Poring Hot Springs, *Apurosa* sp., lower mountain mixed dipterocarp forest, > 650 m, fog A 51/F 4, 26.I.1993, A. Floren leg., 1 ex. (CRG).

Remarks

Until now only the holotype was known (Grimm 2003, Halstead 1967).

Distribution

Borneo (Grimm 2003, Halstead 1967).

Palorus andrewesi Blair, 1930

Material examined

Borneo, Malaysia, Sabah, E Keningau, Bingkor, 20.–22.III.2007, R. Grimm leg., 2 ex. (CRG).

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Distribution

Borneo (E Malaysia/Sabah), India, Singapore (Halstead 1967). Indonesia (Bali, Sumatra), Laos, Thailand, W Malaysia (new records based on specimens in CRG, SMNS, and ZSM).

Palorus austrinus Champion, 1896

Material examined

Borneo, Malaysia, Sabah, 23 km NE Kota Belud, 80 m, 16.II.2006, R. Grimm leg., 1 ex. (CRG). – Borneo, Malaysia, Sabah, E Keningau, Bingkor, 20.–22.III.2007, R. Grimm leg., 2 ex. (CRG). – Borneo, Malaysia, Sabah, Keningau, 17.–19.II.2006, R. Grimm leg., 1 ex. (CRG). – Borneo, Malaysia, Sabah, 10 km W Keningau, 24.XI.2006, R. Grimm leg., 2 ex. (CRG). – Borneo, Malaysia, Sabah, 10 miles point from Keningau, 8.III.1993, T. Ueno leg., 1 ex. (ZSM). – Borneo, Malaysia, Sabah, S Tenom, Tomani, 23.XI.2006, R. Grimm leg., 2 ex. (CRG). – Borneo, Malaysia, Sabah, Tamang Bunsit, near Keningau, 13.–14.III.1993, T. Ueno leg., 1 ex. (ZSM). – Borneo, Malaysia, Sabah, 23 km NE Tenom, 10.V.2005, R. Grimm leg., 2 ex. (CRG).

Distribution

Australia, Borneo (Brunei, E Malaysia/Sabah), Philippines (Halstead 1967). Indonesia: Bali (new record based on specimens in CRG).

Palorus borneensis **n. sp.**
(Figs. 3, 3a, 3b)

Holotype ♂: Borneo, [Malaysia], Sabah, Crocker Mts., Gunung Emas env., 15.–27.IV.1993, I. Jeniš & M. Štrba leg. (CRG). / *Palorus* sp. n. aff. *carinicollis* (Gebien), R. Grimm det. 2004. / *Palorus* sp. n., D. G. H. Halstead det. 2004.

Etymology

The species name refers to Borneo where the holotype was collected.

Description

Body oblong, length 3.3 mm, width 1.2 mm, ferruginous; micro-reticulation shallow, more distinct on pronotum than on elytra.

Head with genae produced into subtriangular, foliate horns with truncate apex; with distinct depression on each side next to eyes; eyes large.

Pronotum transverse, width/length ratio 1.29, with distinct lateral longitudinal depressions; disc slightly convex between depressions, then steeply declivous towards explanate lateral margin. Apical margin shallowly bisinuate, basal margin and lateral margins nearly straight; all margins bordered, border of apical margin interrupted in the middle. Surface coarsely and densely punctured; distances between punctures smaller than diameters of punctures.

Elytra with striae of punctures, intervals only with minute punctures arranged in one row.

Aedeagus see Fig. 3a.

Differential diagnosis

From the Oriental Region so far no *Palorus* with genal horns were known. *Palorus borneensis* n. sp. is similar to the Ethiopian *P. carinicollis* (Gebien, 1907). However, in males of *P. carinicollis* usually the apical pronotal margin is produced horizontally in the midline (Halstead 1967: fig. 5). The pronotum of *P. carinicollis* is somewhat finer and less densely punctured; the distances between punctures are equal to or larger than diameters of punctures. The intervals of the elytra are with larger punctures and the species differ in the shape of the aedeagus (Figs. 3a, 4).

Palorus cerylonoides (Pascoe, 1836)

Material examined

Borneo, Malaysia, Sabah, Poring Hot Springs, 450–600 m, 9.–11.III.2007, W. Schawaller leg., 1 ex. (SMNS).

Distribution

Probably of Indo-Malayan origin (Halstead 1967). Widespread in the Oriental and Ethiopian Regions, and also found in the Palaearctic Region: Fiji, "French West Africa", Great Britain, India, Iran, Japan, Madagascar, Mariana Is., Marquesas Is., Myanmar, New Guinea, Philippines, Samoan Is., Seychelles, Solomon Is., Vietnam (Halstead 1967: map 2, p. 109). Borneo (new record), Indonesia (Java), Laos, Thailand, Vietnam (new records based on specimens in CRG, SMNS, and ZSM).

Platycotylus nitidulus (Macleay, 1872)

Material examined

Borneo, Malaysia, Sabah, 23 km NE Tenom, 10.V.2005, R. Grimm leg., 6 ex. (CRG). – Borneo, Malaysia, Sabah, Tambunan, 16.–19.I.2010, R. Grimm leg., 1 ex. (CRG). – Borneo, Malaysia, Sabah, Mt. Kinabalu Nat. Park, HQ area, 1500–1650 m, 23.–26.III.2015, R. Grimm leg., 1 ex. (CRG). – Borneo, Malaysia, Sabah, Kampung Takala, Kinabatangan river, 5.VI.1989, J. Kodada & F. Ciampor leg., 1 ex. (SMNS). – Borneo, Malaysia, Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 600 m, 6°03′N/116°42′E, D. Bartsch & C. Häuser leg., 1 ex. (SMNS). – Borneo, Malaysia, Sarawak, Belaga, Long Linau, 17.–21.III.1990, A. Riedel leg., 1 ex. (SMNS).

Distribution

Australia (Queensland), Borneo (E Malaysia/Sabah), India incl. Andaman Is., Indonesia (Ceram, West Papua), Key Is., Laos, Nepal, New Guinea, Thailand, Vietnam (Gebien 1940, Kaszab 1965, 1973, 1980 [all under *Doliema* Pascoe, 1860], Merkl 1992). Indonesia (Sumatra), W Malaysia (new records based on specimens in SMNS and ZSM).

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Platycotylus parvicollis (Pic, 1923)

Material examined

Borneo, Brunei, Muara, Bandar Seri Begawan, 10.V.1995, E. Heiss leg., 1 ex. (CRG). – Borneo, Malaysia, Sabah, Tambunan, 16.–19.I.2010, R. Grimm leg., 2 ex. (CRG).

Distribution

Borneo, Philippines, Indonesia (Sumatra), Thailand, Vietnam (Gebien 1940 under *Doliema* Pascoe, 1860, Merkl 1992). India, W Malaysia (new records based on specimens in SMNS).

Ulomina carinata Baudi di Selve, 1876

Material examined

Borneo, Malaysia, Sabah, E Keningau, Bingkor, 20.–22.III.2007, R. Grimm leg., 3 ex. (CRG). – Borneo, Malaysia, Sabah, NW Keningau, Keningau–Kimanis, 600 m, 7.II.2006, R. Grimm leg., 4 ex. (CRG).

Distribution

According to Halstead (1967) [under *Coelopalorus foveicollis* (Blair, 1930)] it is of Oriental origin and widely distributed with stored products. Borneo (E Malaysia/Sabah/Sarawak); Cocos Keeling Is., Great Britain, Guam Is., Guyana, Hawaiian Is. (Hawaii, Oahu), India incl. Andaman Is., Indonesia (Java, Sulawesi, Sumatra), Kenya, Laos, Myanmar, Nepal, Philippines (Luzon, Mindanao), Sri Lanka, Taiwan, Thailand, Tanzania, Trinidad, U.S.A., Vietnam, W Malaysia (Grimm 2004, Halstead 1967). Italy (Scupola 2002).

Ulomina martinae Scupola, 2002

Material examined

Borneo, Malaysia, Sabah, 10 miles point from Keningau, 8.III.1993, T. Ueno leg., 1 ex. (ZSM).

Distribution

Borneo (Sabah), China (Hainan), Hawaiian Is. (Oahu), India, Indonesia (Java), Laos, Sri Lanka, Thailand, Vietnam, W Malaysia (Grimm 2004, Halstead 1967) [Halstead's records under *Coelopalorus carinatus* (Blair, 1930)]. Indonesia (Sulawesi) (new record based on specimen in ZSM).

2.2 Diaperinae Latreille, 1802
Diaperini Latreille, 1802

Neomida tricornis (Gebien, 1925)

Material examined

Borneo, Malaysia, Sarawak, Santubong Peninsula, Permai Rainforest Resort, 20–150 m, 13.–15.III.2008, R. Grimm leg., 1 ex. (CRG). – Same data, but 23.–27.III.2009, R. Grimm leg. 1 ex. (CRG). – Same data, but 14.–26.II.2012, R. Grimm leg., 8 ex. (CRG). – Borneo, Malaysia, Sarawak, Kubah Nat. Park, HQ area, 160–300 m, 25.–27.II.2012, R. Grimm leg., 31 ex. (CRG).

Distribution

Borneo (E Malaysia/Sabah, Indonesia/Kalimantan), Indonesia (Sulawesi, Sumatra) (Schawaller 2002). Borneo (E Malaysia/Sarawak) (new record).

Platydema orientaloides **n. sp.**
(Figs. 2, 2a)

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

Etymology

Orientaloides = orientalis-like.

Description

Body oblong, subcylindrical, ferruginous, shining, length 3.6 mm, width 1.75 mm.

Head with distinct punctation. Frons with two symmetrical, short and broad horns, without setation. Clypeus with minute antero-clypeal tubercle. Length/width ratio of antennomeres 1 to 11 as 5:3 / 1:1 / 4:2.5 / 3:3.5 / 2:3 / 1:2 / 1:2 / 1:2 / 1:2 / 1:2 / 1:1; antennomere 3 long.

Pronotum transverse, broadest near base, transversely convex, punctured as on head. Basal margin shallowly bisinuate; lateral margins nearly straight in basal half, weakly rounded towards apex; apical margin finely bordered; border of lateral margins distinctly stronger; basal margin only finely bordered in the sinuosity besides middle. Anterior and posterior angels broadly rounded. Propleura wrinkled with long setation.

Elytra convex transversely, subparallel-sided, length/width ratio = 1.43; besides scutellar striole with 8 rows of punctures, third row with 48 punctures; intervals flat, with 2–3 irregular rows of punctures distinctly finer as on pronotum; lateral margins in dorsal view visible throughout nearly entire length, concealed only near apex.

Legs without modifications.

Aedeagus see Fig. 2a.

Differential diagnosis

Platydema orientaloides n. sp. has a subcylindrical body shape similar to *P. orientalis* Gebien, 1911, known from Myanmar, Thailand and Vietnam (Schawaller 2004), but the latter species is distinctly larger (body length 5.5–6.7 mm), its body is castaneous to piceous, and it differs conspicuously in the shape of the aedeagus (compare Fig. 2a with fig. 126 of Schawaller 2004).

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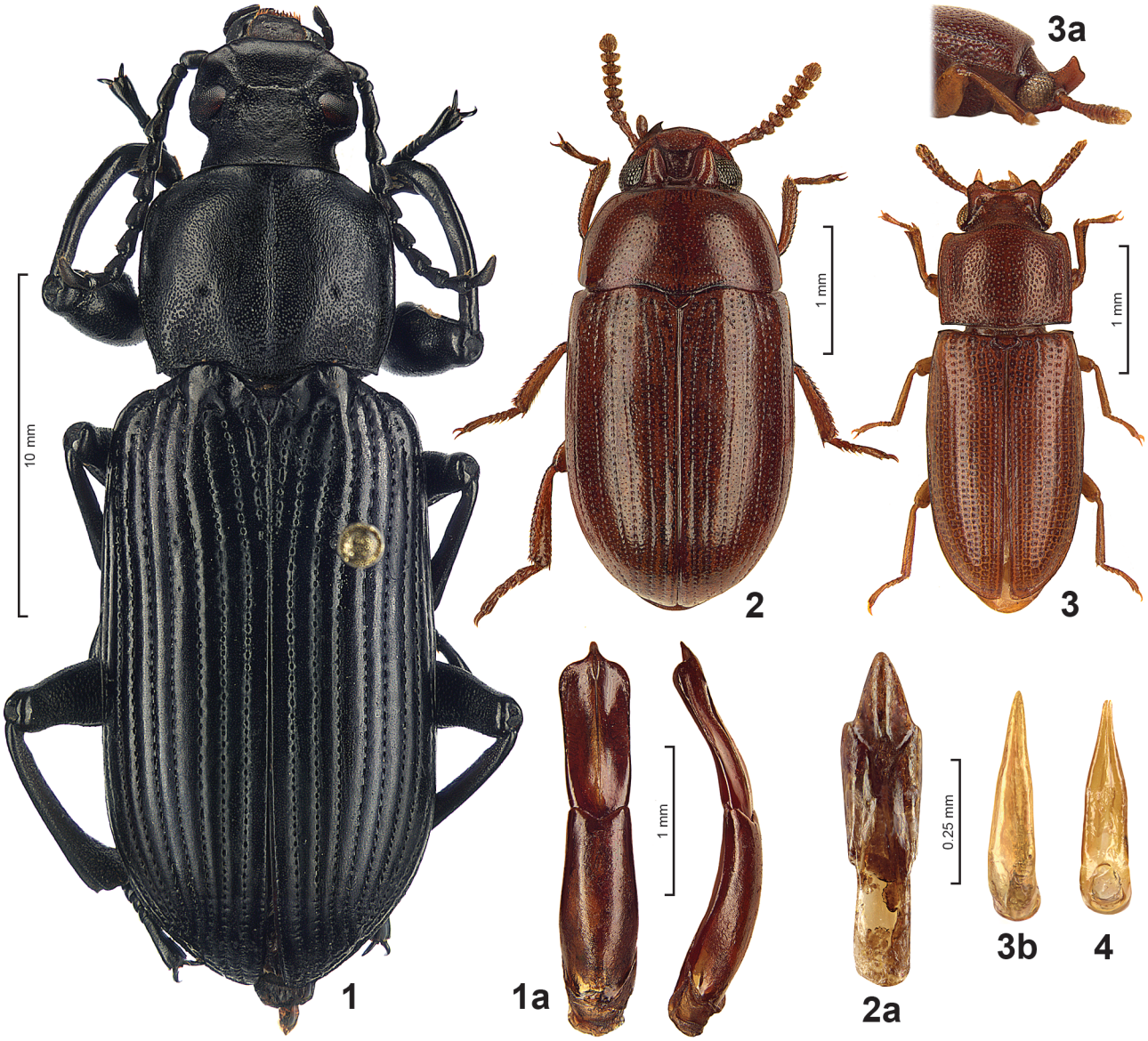

Figs. 1–4. Tenebrionidae spp., dorsal views (1, 2, 3), lateral view of head (3a), aedeagi, dorsal (1a left, 2a, 3b, 4) and lateral (1a right) views. – **1**, **1a**. *Promethis bosuangi* n. sp. ♂ holotype. **2**, **2a**. *Platydema orientaloides* n. sp. ♂ holotype. **3**, **3a**, **3b**. *Palorus borneensis* n. sp. ♂ holotype. **4**. *Palorus carinicollis* (Gebien).

Platydema saundersi Schawaller, 2012

Material examined

Borneo, Malaysia, Sabah, Mt. Kinabalu Nat. Park, Poring Hot Springs, 525 m, 12.–13.IV.2015, R. Grimm leg., 1 ♀ (CRG).

Distribution

Singapore, Sulawesi (Schawaller 2012), Borneo (E Malaysia/Sabah) (new record).

2.3 Stenochiinae Kirby, 1837
Cnodalonini Gistel, 1856

Promethis bosuangi **n. sp.**
(Figs. 1, 1a)

Holotype ♂: Borneo, Malaysia, Sabah, NW Danum Valley Conservation Area, Kuamut, 700 m, 22.I.2015, S. Bosuang leg. (CRG).

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Etymology

This species is named in honour of Dr. STEVEN BOSUANG (Kota Kinabalu), the collector of the holotype.

Description

Elongate, robust, black, body length 28 mm, body width 10 mm.

Head widest across middle of eyes; labrum in the middle weakly transversely keeled; anterior border of clypeus shallowly emarginate, laterally straight towards clypeogenal meeting; fronto-clypeal suture strongly, clypeogenal suture finer, but well incised. Clypeus lower than genae and frons, genae raised. Temples strong, embracing hind border of eyes. Frons next to eyes with elevation and close beside it deeply, longitudinally impressed. Genae and clypeus finely punctured apically, punctures becoming coarser towards clypeo-frontal suture and here transversely rugose; elevations next to eyes and adjacent impressions very coarsely punctured. Antennae long, almost reaching base of pronotum; antennomeres 4–10 on inner side densely, coarsely punctured, apically with some long hairs; terminal antennomere distinctly ciliated apically on inner side. Mentum subcordiform, with apical border shallowly emarginate and basal border straight; surface densely rugosely punctured and hirsute.

Pronotum transversely convex, widest in the middle, subquadrate, width/length ratio 0.86 (measured along transversal and longitudinal midlines). Anterior margin straight; lateral margins anteriorly broadly arcuate towards apex, posteriorly slightly converging towards base, base bisinuate; posterior angles acute, dentiform. All margins distinctly bordered; border of apical and basal margins laterally fine, broadening towards middle; broad part in the middle of apical border obliterated. Surface densely punctured, punctation coarsely confluent at places, particularly basally; with shallow mid-longitudinal impression and with a small, round, shallow impression in posterior third between midline and lateral margin. Propleura coarsely to rugosely punctured. Prosternal process broad, arcuate towards apex; shallowly, coarsely transversely corrugate bisulcate; between sulci and inner borders of procoxae raised and embracing basal inner part of coxae.

Elytra striate-punctate; intervals convex, with scattered minute punctures, nearly smooth; lateral margins in dorsal view visible along entire length; pseudopleura in anterior half smooth, in posterior half transversely rugose; basal margins in inner half besides scutellum with broad, horizontal, nearly semicircular protuberance, overlapping partly base of pronotum (Fig. 1). Scutellum elongate triangular. Metaventrite nearly smooth in the middle, with punctures becoming more distinct laterally; basally with transversely rugose impression in the middle. Abdominal ventrites densely, finely punctured; ventrite 5 bordered.

Legs. Profemora short, with inner side basally deeply emarginate, forming a clinched club with short handle; behind emargination with small tumefaction. Protibiae apically widened and strongly curved inwards, beyond the attachment of protarsi tooth-like extended and here dorsally excavated and externally pilose. Mesotibia and metatibia apically dilated, and here ventrally fringed.

Aedeagus see Fig. 1a. Apicale abruptly constricted before apex, acuminate tip without barbed hooks.

Differential diagnosis

Promethis bosuangi n. sp. is characterized by the elytral protuberance, clavate profemora, shape of apex of protibiae, characters of antennomeres, and shape of apicale of aedeagus and can thus be easily separated from all known congeners.

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