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On nomenclature and taxonomy of some Carabidae and Tenebrionidae from Singapore, with descriptions of new species of the genera *Uloma* Dejean, 1821 and *Promethis* Pascoe, 1869

Loong Fah **Cheong**

Abstract. As a result of examination of type specimens and old and new materials of species that occur in Singapore, the following four nomenclatural changes for the Carabidae and Tenebrionidae are proposed: — Resurrected synonym: *Derosphaerus metallescens* (Fairmaire, 1893) [status restored] is removed from synonymy of *Derosphaerus viriditinctus* (Fairmaire, 1882). — New synonymy: *Andrewesia apicalis* (Chaudoir, 1872) = *Andrewesia obesa* (Andrewes, 1923) [new synonym] — New combination: *Actenoncus solidicornis* (Tian & Deuve, 2003) [new combination] from *Orthogonius solidicornis* Tian & Deuve, 2003. New names because of preoccupied old species name: *Uloma grimmi* [new name] = *Uloma gebieni* Schawaller, 2000 [preoccupied]. Two new species of Tenebrionidae from Singapore are described under the following names: *Uloma schawalleri*, new species, and *Promethis tuberculata*, new species

Key words. Carabidae, Tenebrionidae, *Derosphaerus*, *Uloma*, *Promethis*

INTRODUCTION

During the preparation of a book that deals with, among others, the carabid and tenebrionid fauna of Singapore, it has become necessary to incorporate certain changes in nomenclature, such as new synonymy, resurrection of names in synonymy, and new combinations. Rather than publishing these changes as a part of the book, I am presenting them in this paper.

Part of my preparatory work has also involved a careful study of types and other authentic specimens kept in various European and Japanese museums, some of which are mentioned in the next section. In the course of this study, several tenebrionid specimens in my possession were discovered to be new species and have been described in two recent papers (Ando & Cheong, 2024; Ando et al., 2024). In this paper, I describe two more new tenebrionid species, one from the genus *Promethis* Pascoe, 1869, and another from the genus *Uloma* Dejean, 1821.

The genus *Promethis* contains about 150 described species which are distributed in the Afrotropical, the eastern part of the Palaearctic, Indo-Malayan, and Papuan-Australian Regions. Kaszab (1988a, b) revised this large genus, dividing it into 34 species groups and describing 69 new species; a key was also provided. According to Kaszab (1988b), the fauna of Singapore contains 11 species, which can be readily identified by the excellent key in Kaszab (1988a). Further species of *Promethis* were described by Ba & Ren (2009) from Hainan Island (China), Chujo (1995) from Tokuno-shima [=Island] (Japan), Grimm (2011, 2013) from Borneo, Grimm (2016) from West Papua, Masumoto et al. (2005) from Taiwan, Ren & Bai (2005) from Gansu Province (China), Ren & Hua (2006) from Guizhou Province (China), and Ren & Yang (2004) from Guangxi Province (China).

The new *Promethis* species described in this paper belongs to the *Promethis excisa* group (sensu Kaszab, 1988a) which comprises species with yellow moustache on mentum pronounced and dense, last abdominal ventrite furrowed on the apical margin, among other features. This new species adds to the four extant members in this group, namely *P. plicifrons* (Gebien, 1918), *P. excisa* (Gebien, 1914), *P. rondoni* Kaszab, 1988, and *P. selangorana* Kaszab, 1988, bringing the total number of members to five. Within the group, *P. plicifrons* and *P. excisa* also occur in Singapore. The morphology of the aedeagus is characteristic for each species in this group; tibiae in males also provide distinctive secondary sexual characters. Based on these characters, it is evident that the new species is not comparable to the four extant members of the group. As none of the species described after the revision of Kaszab (1988a, b) belong to this group, we can establish that this species is indeed undescribed.

The genus *Uloma* is distributed almost worldwide with more than 200 species described. Species identification often rely

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Lee Kong Chian Natural History Museum, 2 Conservatory Drive, 117377 Singapore;
Email: loongfah@gmail.com (*corresponding author)

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on the secondary sexual characteristics of the male, including the genitalia, mentum, protibiae, sculpture of the pronotum and head, and sometimes the antennae. The females are very similar to one another and sometimes cannot be identified at all without knowledge of the male. Unfortunately, no general revision of the genus *Uloma* is available. Recent taxonomic revisions are published only for a few regions, i.e., Australia (Kaszab, 1982a), New Caledonia (Kaszab, 1982b; Soldati et al., 2014), Japan, Korea, and Taiwan (Masumoto & Nishikawa, 1986), the Himalayas (Schawaller, 1996), Borneo and Sumatra (Schawaller, 2000), Korea (Kim & Kim, 2004), Thailand (Liu & Ren, 2016a), Africa south of the Sahara (Schawaller, 2015), Sulawesi (Merkl & Ando, 2018), and Russia (Nabozhenko & Ivanov, 2024). Chinese colleagues have also described new species from time to time (Liu & Ren, 2013, 2016b), but a revision of Chinese species is absent; a national list of species is provided in Liu et al. (2011) and Liu & Ren (2016b). There have also been sporadic additions to the Bornean fauna (Ando, 2010; Grimm, 2013; Ando et al., 2017), with a checklist of *Uloma* species in Borneo given in Grimm & Schawaller (2021).

The fauna of Singapore contains three extant *Uloma* species, based on historical and recent records examined by the author (Cheong, in prep.). The key of Schawaller (2000) for Borneo and Sumatra can be used for distinguishing these three species in Singapore. The new *Uloma* species described in this paper is keyed to *U. masumotoi* Schawaller, 2000 in the key, but it has clear differences with the latter. They both belong to a species group characterised by the presence of a row of granules on the dorsal surface of the protibia in males. So far, none of the extant *Uloma* species in Singapore belong to this group.

In this work, a literature review of all the *Uloma* species collated in the aforementioned revisions and region checklists is carried out. The scattered literature (Fairmaire, 1893b; Gebien, 1912; Blair, 1930; Kaszab, 1979, 1980) that exists for regions without such a list (notably the rest of the Indian subcontinent other than the Himalayas) and some of the recent literature (Kaszab, 1986; Masumoto & Akita, 2002, 2003; Soldati et al., 2012; Akita & Masumoto, 2017) subsequent to the aforementioned revisions/checklists are also checked. Based on the preceding, the following species are identified to be members of this species group, occurring largely in the various islands of the Oriental Region: Borneo and/or Sumatra (*U. masumotoi*; *U. nyctelia* Ando in Ando et al., 2017 and *U. sarawakensis* Ando in Ando et al., 2017), Sulawesi (*U. palopoensis* Merkl & Ando, 2018 and *U. pelengensis* Merkl & Ando, 2018), Philippines (*U. visca* Schawaller, 1994), Taiwan (*U. sauteri* Kaszab, 1941), Amami-Oshima [=Island], Japan (*U. ichoi* Nakane, 1956), Bhutan and Nepal (*U. spinipes* Kaszab, 1975). These species all differ from the new *Uloma* species in the characters of mentum, antennomeres, and/or aedeagus. In particular, the structure of the mentum surface (flat or with impressions and/or excavations, lack or presence of setation) and to a lesser extent its shape are characteristic for each species. See the corresponding diagnosis section.

Both *Promethis* and *Uloma* species occur under bark and in rotting wood, mostly in more or less dense forest.

MATERIAL AND METHODS

To study specimens and prepare drawings of the adult reproductive systems, the abdomens of adults were separated and boiled in a 10% KOH solution, cleared in distilled water, and then studied and drawn using a Leica MZ16 stereomicroscope equipped with a 1.0x objective lens. Habitus photographs of specimens were taken using Nikon D800 and Nikon 105mm f/2.8G macro lens, accompanied by Nikon SB-910 Speedlight Flash.

All of the holotypes and paratypes from Singapore designated herein are housed in the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum in Singapore. The following acronyms indicate collections in which the specimens investigated are deposited: HNHM — Hungarian Natural History Museum; MNHN — Museum National d'Histoire Naturelle, Paris; NHMB — Naturhistorisches Museum, Basel, Switzerland; NHML — The Natural History Museum, London; RBINS — Royal Belgian Institute of Natural Sciences; SMNS — Staatliches Museum für Naturkunde, Stuttgart; ZSM — Zoologische Staatssammlung München. The relevant specimens were examined in the collections, except for that of HNHM which was examined through photographs. Label data for examined specimens are given verbatim below as they appeared on the labels. Individual labels are separated by a slanted bar ('/'). Additional comments and explanatory notes are given in the square brackets.

The following abbreviations have been used: BL — Body length (the midline length from the anterior margin of clypeus to the apices of elytra); BW — Body width; EL – greatest length of elytra; EW — greatest width of elytra; FW — maximum width of pronotal anterior impression; HT — holotype; IE — width of interspace between eyes; PB — width of the pronotum at base; PL — length of pronotum, measured along the median line; PT — paratype; PW — width of the widest point of pronotum; TD — transverse diameter of an eye in dorsal view.

NOMENCLATURE CHANGES

Family Carabidae Latreille, 1802

Andrewesia apicalis (Chaudoir, 1872)

Odacantha apicalis Chaudoir, 1872: 408.
Arame obesa Andrewes, 1923: 220 [new synonym].

Remarks. Both *Andrewesia apicalis* (Chaudoir, 1872) and *Andrewesia obesa* (Andrewes, 1923) were described from Singapore. Andrewes (1923) was seemingly not aware of *A. apicalis* when he described *A. obesa* from Singapore. Liebke (1938) felt that only one species might be involved:

"I have not seen the type, but from Chaudoir's very detailed description it appears that it is at least closely related to *A. obesa*, if not the same species". I have checked the type of *A. apicalis* in MNHN, and can confirm that it is the same as the type of *A. obesa* in NHML (an image of the cotype of the latter is available from the Biodiversity of Singapore archive: https://singapore.biodiversity.online/).

Actenoncus solidicornis (Tian & Deuve, 2003), new combination

Orthogonius solidicornis Tian & Deuve, 2003: 45.

Remarks. *Actenoncus* can be distinguished from other Orthogoniine genera by these characters: the eyes are very large and very prominent, the sutural angle on the elytral apex bears a small but evident denticle, and the elytral intervals are without setiferous pore (in other genera, at least the 3rd interval has setiferous pores). The absence of a median tooth on the right mandible is no longer considered a diagnostic character of this genus (Tian & Deuve, 2009). *Orthogonius solidicornis* should be transferred to *Actenoncus* according to the revised definition of the generic characters of *Actenoncus*, but this species was somehow overlooked in both the 2009 revision of *Actenoncus* (Tian & Deuve, 2009), as well as the catalogue of the Oriental Orthogonini (Tian & Deuve, 2006).

Family Tenebrionidae Latreille, 1802

Uloma grimmi, new name

Uloma gebieni Schawaller, 2000: 6 (not *Uloma gebieni* Kaszab, 1939)

Remarks. *Uloma gebieni* Schawaller, 2000 is preoccupied by *Uloma gebieni* Kaszab, 1939. The proposed replacement name for *Uloma gebieni* Schawaller, 2000 is *Uloma grimmi,* new name.

Etymology. Dedicated to the late Dr. Roland Grimm, specialist of Palaearctic, Oriental and Afrotropical Tenebrionidae.

Derosphaerus metallescens (Fairmaire, 1893), status restored
(Figs. 1A–B, 2A–C)

Encyalesthus metallescens Fairmaire, 1893: 27. Type locality: Sumatra, Singapore.
Derosphaerus viriditinctus: Schawaller, 2011: 295

Material examined. *Derosphaerus metallescens*: 1 ♀ (HT): Singapore / TYPE [red label printed] / *Encyalesthus metallescens* Fairm. 1893. Singapore / MUSEUM PARIS, Collection Léon Fairmaire) [MNHN]; 1 ♀ (PT): *Encyalesthus metallescens* n. sp., Sumatra / [NHMB, collection Frey]; 1 ♂: Sumatra, Medan / *Encyalesthus metallescens* F. / [NHMB, collection Frey].

Derosphaerus viriditinctus: 2 ♀♀: Borneo / cum typo comparatum / *Encyalesthus viriditinctus* Fairmaire / P. ARDOIN DET. 1973. / Museum Paris Coll. P. Ardoin 1978 / [MNHN]; 1 ♀: Borneo / Plesiotype! No. 291 [red label printed] / *Encyalesthus viriditinctus* Frm. / [NHMB, collection Frey].

Discussion. Fairmaire (1882) described *Encyalesthus* (= *Derosphaerus*) *viriditinctus*, based on a single specimen from Palembang, Sumatra. Sex was not mentioned but it is female. Gebien (1914) provided additional descriptive notes on *E. viriditinctus*, based on one female specimen from Borneo in his possession (labelled as "plesiotype"). Specifically, he quantified the width of the frons (not reaching the transverse diameter of an eye), noted as important diagnostic features the long legs (elongate meso- and metatarsi) and the presence of a distinct anal impression which finely inflects the apical edge of the last ventrite. Unfortunately, Fairmaire's holotype in MNHN could not be located. Instead, I have examined Gebien's specimen in the Frey's collection, labelled as "plesiotype" (Fig. 1A), and two specimens of *D. viriditinctus* from Ardoin's collection in MNHN, labelled as "cum typo comparatum" and identified as females (Fig. 1B).

Fairmaire (1893a) described *Encyalesthus metallescens* based on two specimens from Singapore (HT, MNHN) and Sumatra (PT, NHMB), without mentioning the sex. However, it seems clear that the specimens are both female as Fairmaire did not note the distinctive dilated metatibia of the male *E. metallescens* in his description. Gebien (1914) did not describe *E. metallescens* directly but remarked that *E. hauschildi* can be distinguished from *E. metallescens* by "… ungefurchtes Prosternum, einfache Hintertibien ..."; which means that *E. metallescens* has prosternum furrowed and metatibiae dilated. While Gebien did not specifically say that he had a male specimen of *E. metallescens*, the tibial dilation is clearly a male feature. I follow Gebien's concept of the male as it matches very well with the female, other than sexual differences that are typical for this genus. Gebien did not give any details of the male specimen on which he based his description. I found in Frey's collection only one male specimen from Medan, Sumatra, and assume that that was the specimen from Gebien. Figs. 2A and 2B are respectively images of the holotype and paratype (both female) of *Derosphaerus metallescens*, whereas Fig. 2C is an image of a male *D. metallescens* featured in Schawaller (2011) (in which it has been synonymised to *D. viriditinctus* and named as such).

Kaszab (1987) provided a checklist of the species in *Derosphaerus* but *D. metallescens* is missing in the species list. Schawaller (2011) regarded *Derosphaerus metallescens* as a junior synonym of *Derosphaerus viriditinctus*. I note that Schawaller (2011) could not reexamine the types of both taxa, so this synonymy would be open to doubt with some justification. I propose to resurrect the former as a good species based on examination of the type materials and by returning to the descriptions of Fairmaire and Gebien.

Fig. 1. A–B, *Derosphaerus viriditinctus* (Fairmaire, 1882). A, a female specimen labelled as "plesiotype" from NHMB; B, a female specimen labelled as "cum typo comparatum" from MNHN.

The view that *D. metallescens* and *D. viriditinctus* are unlikely to be synonymous is supported by the following reasons: For *D. metallescens* and *D. viriditinctus* to be synonymous, one has to disregard quite significant differences in the female holotypes of these two species. These differences include the more obvious ones like the frons width (difference in IE/TD between the two species more than two times), leg length (specifically meso- and metatarsi), and presence/absence of anal impression in the last ventrite. Subtler differences include longitudinal impression on pronotum, shape of pronotum, and convexity of elytral interval. For instance, compared to *D. viriditinctus*, *D. metallescens* typically has a bulkier pronotum relative to elytra (e.g., see PB/EW in Table 1). Admittedly, there is quite a bit of pronotal shape variation across the wide distribution range of *D. metallescens*. As a result of examining the types mentioned above, it is believed that the derived characters possessed by these two species are not common and that they are not homologous.

One also has to consider what was regarded by Gebien as the male *D. metallescens*; this seems to be a very reasonable male choice for the female holotype, based chiefly on the pronotum shape, its longitudinal impression, IE/TD, etc. If, however, *D. metallescens* and *D. viriditinctus* were to be considered synonymous, this would result in the following rather atypical sexual dimorphism for a coleopteran: the frons of the male (IE/TD: 1.5 in the male *D. metallescens*) is much broader than that in the female (IE/TD: 0.6–0.7 in the female *D. viriditinctus*).

Table 1 summarises some of the salient measurements that reflect the difference between the two species *D. viriditinctus* and *D. metallescens*.

Remarks. Additional materials of *Derosphaerus metallescens* were also studied in MNHN and NHMB. There is considerable variation in the body size, pronotum shape, degree of shine on dorsum. While the body length shows a considerable variation of almost up to 30%, most of the pronotum and elytra measurements conform to those in Table 1. However, there are a small number of specimens in which the pronotum is less bulky (PB/EW as low as 0.60) and also

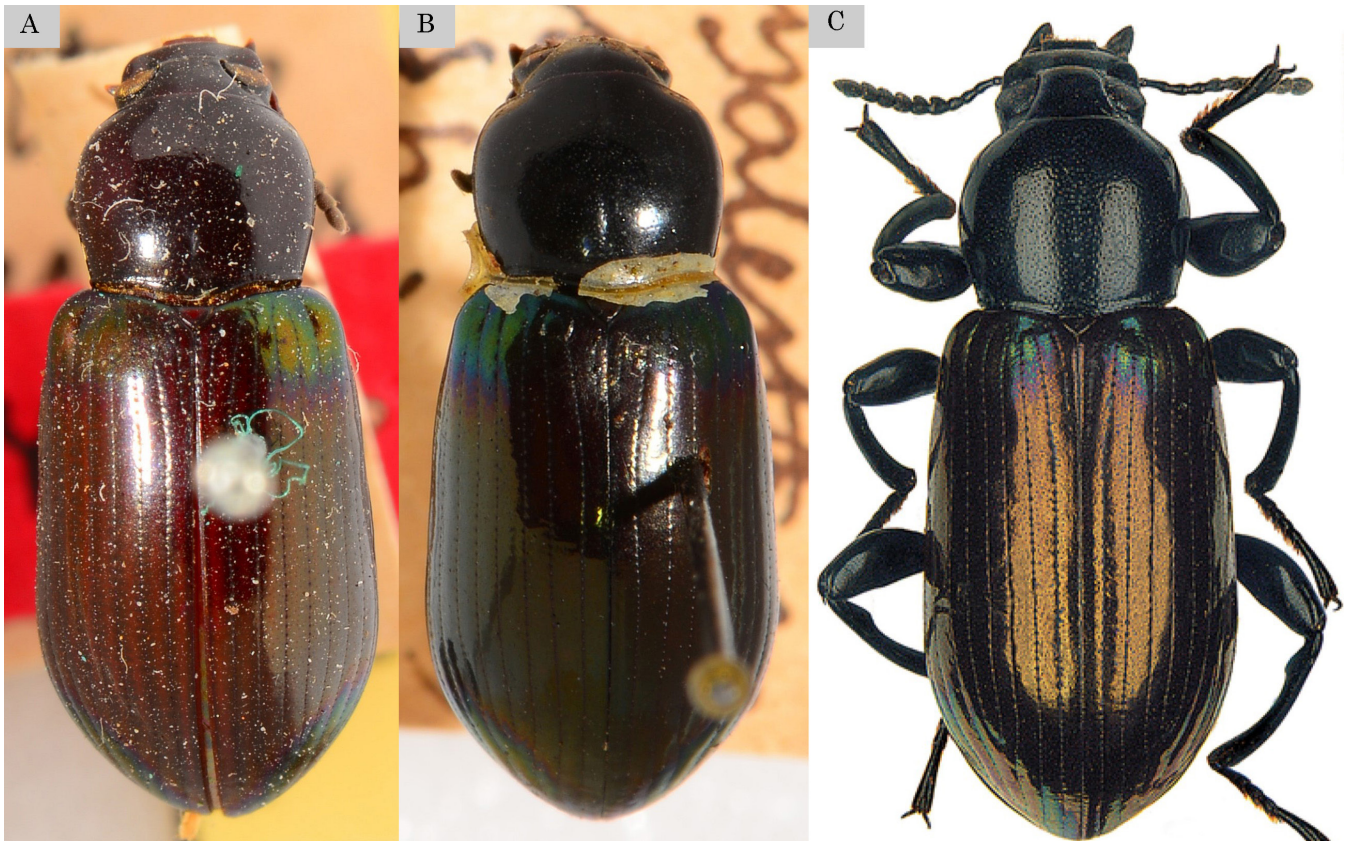

Fig. 2. A–C, *Derosphaerus metallescens* (Fairmaire, 1893). A, holotype, female, from MNHN; B, paratype, female, from NHMB; C, photograph of a male from Schawaller (2011)'s paper (in which it has been synonymised to *D. viriditinctus* and named as such), Photo copyright: W. Schawaller.

Table 1. Measurements of the two species *Derosphaerus viriditinctus* and *D. metallescens*.

Measurements	*D. viriditinctus*, n=3	*D. metallescens*, n=3
BL (mm)	9.5–12.0	12.0–12.4
PB/EW	0.59–0.61	0.63
PW/EW	0.65–0.68	0.72–0.74
PW/PL	1.02–1.12	1.16–1.18
IE/TD	0.56–0.70	1.50–1.62

more transverse (PW/PL as high as 1.22). I am not sure if the whole series is conspecific or not, although it is difficult to separate them into different morphospecies.

NEW SPECIES DESCRIPTION

Family Tenebrionidae Latreille, 1802

Uloma schawalleri, new species
(Figs. 3A–E)

Type specimen. Holotype: Male, Singapore: MacRitchie, Jelutong tower, coll. L. F. Cheong, 27 November 2019.

Measurements. Male (n = 1): BL: 9.6 mm; BW: 3.7 mm; IE/TD: 2.23; PW/PL: 1.39; PW/FW 1.84; EL/EW: 1.52.

Description. Colour dark reddish brown; for body shape see Fig. 3A. Head: Clypeus without an elevated transverse ridge and without horns, truncate at apex, minutely punctate; frontoclypeal suture finely incised and distinct laterally, obscure in middle; frons with a broad Y-shaped depression in middle, surface with large and irregular punctures; genae produced laterad. Antennae (Fig. 3B) reaching before middle of pronotum; middle antennomeres not produced medially nor pointed medially on distal margin, the latter sharp; antennomeres V to X gradually widening; VII to X extremely transverse; XI semicircular. Mentum (Fig. 3C) rounded at apex, with basolateral excavations 0.5 times the length of mentum and separated at base, bearing a weak medial impression, and with long arcuate stretch of pubescence on both sides of the median impression. Ligula with a few sparse setae. Pronotum roundly quadrate, convex, widest at middle, as wide as elytra at base; anterior impression broad and deep, with a pair of low protuberances on posterior margin of impression; surface with small and dense punctures, punctation slightly coarser and denser in the anterior impression, surface between punctures with microscopic punctures; anterior margin emarginate, narrowly beaded; lateral margin arcuate, narrowly beaded, with a distinct sulcus along the margin; basal margin unbeaded. Prosternum longitudinally and strongly elevated in middle, coarsely punctate at both sides of the elevation which is

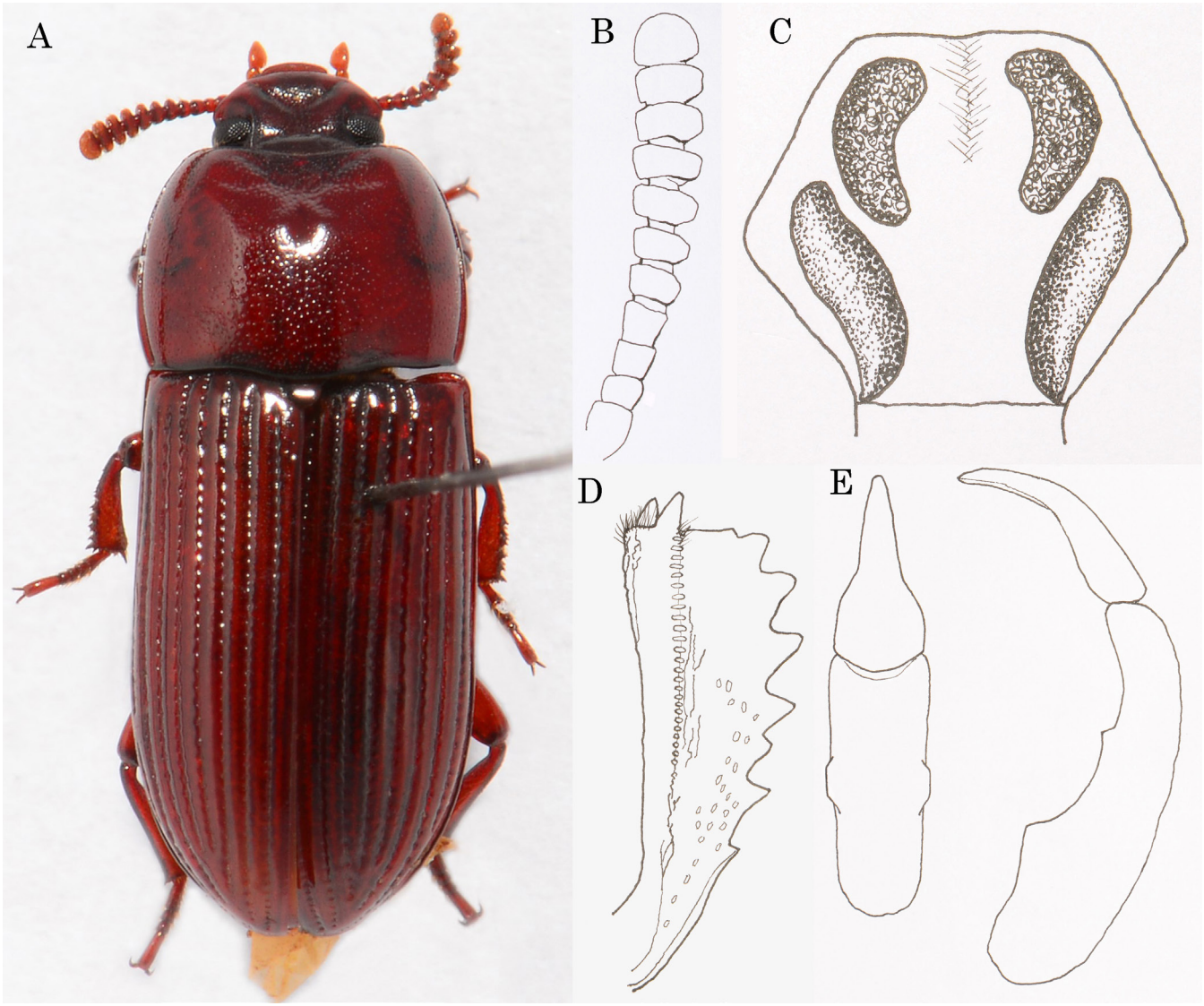

Fig. 3. A–E, *Uloma schawalleri*, new species, holotype, male. A, habitus dorsal; B, right antenna; C, mentum; D, right protibia; E, aedeagi, dorsal (left) and lateral (right) views.

finely punctate; prosternal process gradually dilated posteriad, adunc in apical half, distinctly sulcate along lateral margins, moderately punctate. Scutellum subtriangular, with minute punctures in basal half. Elytra subparallel-sided, widest at apical third; striate-punctate, punctures small but somewhat broader than the corresponding striae; elytral intervals convex, with microscopic punctures. Mesoventrite coarsely and densely punctate, with V-shaped ridge nearly vertical. Metaventrite convex, flattened and microscopically punctate in middle, coarsely punctate laterally. Last abdominal ventrite unbeaded. Protibia with a distinct longitudinal row of granules on dorsal side (Fig. 3D). Aedeagus (Fig. 3E) with parameres strongly convergent in middle, narrow and beak-shaped at apices.

Female unknown.

Distribution. Singapore.

Diagnosis. Among the group of species with a distinct longitudinal row of granules on the dorsal side of protibia in males, *Uloma schawalleri*, new species, is most similar to *U. nyctelia* Ando in Ando et al., 2017 from Borneo and *U. spinipes* Kaszab, 1975 from Bhutan and Nepal, with their mentums all having distinct basolateral impressions and arcuate fields of pubescence on the surface. *U. nyctelia* differs from *U. schawalleri*, new species, as follows: (1) male mentum sharply truncate at apex, with basolateral excavations connected at base; (2) aedeagus with parameres less strongly convergent in middle, apices less slender; (3) distal five protibial teeth equally large. *U. spinipes* differs from *U. schawalleri*, new species, as follows: (1) male mentum more rounded in shape, with a very long and narrow field of pubescence placed just within the lateral margin; (2) parameres with a long narrow tip.

Remarks. Other *Uloma* species in this group can be readily separated by the shape and structure of the mentum in males. Specifically, with respect to the surface of mentum in males, *U. masumotoi* Schawaller, 2000 (Sumatra, Borneo), *U. ichoi* Nakane, 1956 (Japan), and *U. sauteri* Kaszab, 1941 (Taiwan) are without distinct basolateral excavations; *U. palopoensis*

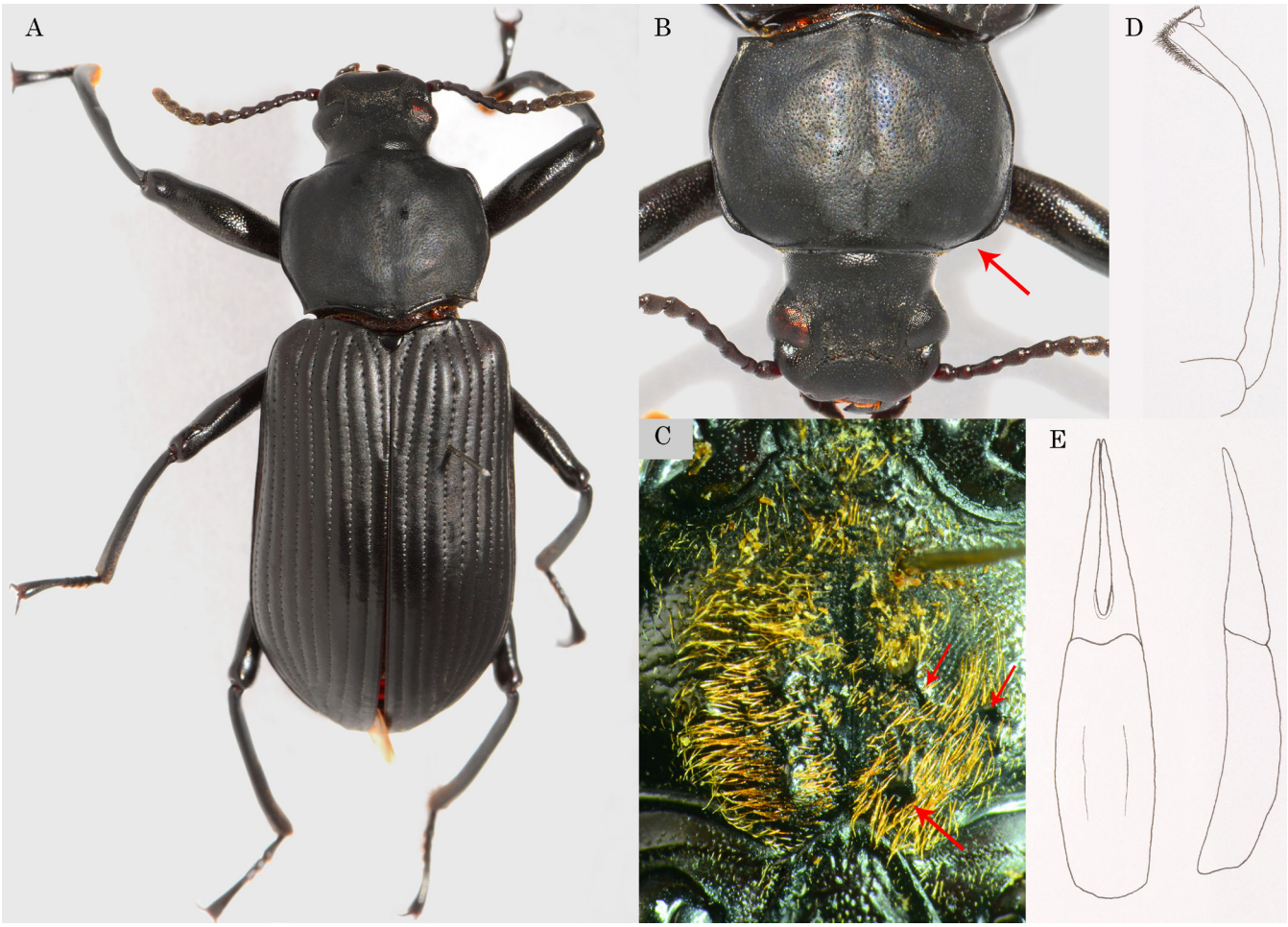

Fig. 4. A–E, *Promethis tuberculata*, new species, holotype, male. A, habitus dorsal; B, lateral margin of pronotum strongly narrowed before anterior corner (arrow); C, metaventrite with three clusters of granules (arrows); D, right protibia; E, aedeagi, dorsal (left) and lateral (right) views.

Merkl & Ando, 2018 (Sulawesi), *U. pelengensis* Merkl & Ando, 2018 (Sulawesi), and *U. visca* Schawaller, 1994 (Philippines) are without arcuate fields of pubescence. *U. sarawakensis* Ando in Ando et al., 2017 (Borneo) has the male mentum distinctly raised in T-shape and sinuate at apex. Differences in the shapes of the middle antennomeres and aedeagus can be used to further aid separating *U. schawalleri*, new species, from these species. For instance, *U. masumotoi* and *U. palopoensis* have some of the middle antennomeres pointed medially on the distal margin. *U. ichoi*, *U. sauteri* and *U. visca* have the tip of parameres truncate.

Like various other species in this group (e.g. *U. nyctelia*, *U. palopoensis*, and *U. sarawakensis*), the female of *U. schawalleri*, new species, is unknown. Based on other *Uloma* species in which the females are known, the anterior impression on pronotum and the row of granules on protibia should be absent in the females of *U. schawalleri*, new species. The presence of dense pubescence on mentum might also be a male-specific character.

The diagnosis above is partly based upon my examination of the rich type materials of Sumatran and Bornean *Uloma* species in SMNS, upon which the revision of Schawaller (2000) is based.

Collecting circumstances. Recorded at light traps.

Etymology. The specific name is dedicated to Dr. Wolfgang Schawaller, well-known specialist in Tenebrionidae.

***Promethis tuberculata*, new species**

(Figs. 4A–E)

Type specimens. Holotype: Male, Singapore: Chestnut, coll. L. F. Cheong & Y. W. Cheong, 13 May 2014. Paratypes: 1 male, Singapore: Bt. Timah Main Road, coll. L. F. Cheong, 21 September 2021. 1 male, Singapore: Chestnut, coll. L. F. Cheong, 30 November 2020; 1 female, ditto. 1 female, ditto, 11 November 2019.

Measurements. Male (n = 3): BL: 19.5–22.6 mm; BW: 7.4–9.1 mm; PW/PL: 1.22–1.29; EL/EW: 1.56–1.68. Female (n = 2): BL: 19.2–19.5 mm; BW: 7.2–7.4 mm; PW/PL: 1.25–1.29; EL/EW: 1.72–1.76.

Description. Male. Elongate, black, matt. Head with punctures fine, coarser near frontoclypeal suture; clypeus shallowly emarginate at anterior margin; frontoclypeal suture finely incised but not forming deep groove; ocular ridges distinctly elevated, reaching more or less the rear edges of eyes. Antennae short, reaching middle of pronotum.

Mentum obtrapezoidal, with pronounced, dense, erect, yellow moustache. Pronotum widest at middle; lateral margins reflexed, slightly sinuate before base, with beads gradually becoming narrow to very narrow forward until just before anterior corners, thence the margins weakly emarginate (Fig. 4B); all margins distinctly beaded; apical margin interrupted in middle; disk densely and finely punctate, with basally keeled median line, interspaces between punctures weakly microreticulate. Propleura nearly smooth, shallowly rugulose; prosternal process broad, flat, bisulcate, basal portion with moderately dense golden hairs, elsewhere with sparsely scattered short golden hairs. Elytra striate-punctate; intervals convex, slightly shagreened, with microscopic punctures. Metaventrite nearly smooth, with fine punctures or microgranules each of which bears very short hair; disc covered by dense golden pubescence in the middle, with three clusters of elongate granules on each side of midline in posterior half (Fig. 4C). Abdominal ventrites with fine minute punctures or microgranules each of which bears very short hair; 5th ventrite furrowed apically. Protibia strongly bent at apical fourth, densely pubescent in apical sixth (Fig. 4D), with a blunt broadening in the basal region. Aedeagus (Fig. 4E) slightly curved; parameres gradually narrowed apicad from base, 0.75 times as long as basal piece.

Female. Pubescence on prosternal process and metaventrite shorter than male; metaventrite without clusters of elongate granules; protibia not strongly bent at apex, with pubescence there shorter and less dense than male.

Distribution. Singapore.

Diagnosis. The widely distributed *Promethis excisa* (Gebien, 1914) (recorded from Malaysia, Singapore, Sumatra, Borneo, Sulawesi, Philippines) shares with *P. tuberculata*, new species, the trait of having their broadly beaded lateral margins of pronotum becoming very finely beaded before the anterior corners so that a shallow emargination is observed on the lateral margins. *P. excisa* differs from *P. tuberculata*, new species, as follows: (1) anterior corners of pronotum more distinctly emarginate; (2) frontoclypeal suture with a deep groove; (3) male protibia sharply edged on outer margin near apex, with two blunt broadenings basally; (4) male mesotibia suddenly widened just before apex; (5) metaventrite glabrous in females (not described for males); (6) aedeagus more strongly curved; parameres almost parallel-sided at base, only narrowing in apical third.

Remarks. *P. tuberculata*, new species, belongs to the *P. excisa* group (sensu Kaszab, 1988a) on account of its mentum with pronounced, dense, yellow moustache, and 5th abdominal ventrite furrowed apically, among other characters. Among the extant four species of this group, *P. plicifrons* (Gebien, 1918) from Malaysia and Singapore is most readily identified by its strikingly short antennae, the presence of a granule on the metaventrite between the mesocoxae in males, and the strikingly flattened mesotibiae in males. The remaining species in this group, together with the new species *P. tuberculata*, new species, all reach couplet 254 in the key of Kaszab (1988a) due to the absence of the aforementioned characters of *P. plicifrons*. *P. tuberculata*, new species, and *P. excisa* are then separated from the rest by the distinctive emargination on the lateral margins of pronotum just before the anterior corners. In other words, *P. tuberculata*, new species, would be inserted into the key at couplet 254, which has to be altered as follows:

254 (255) Lateral margins of pronotum with bead narrowed to very narrowed forward and interrupted far before the anterior corners, before which the margins are more or less distinctly emarginate.

254a (254b) Frontoclypeal suture bearing a deep groove; male protibia strongly curved at about apical third, with two blunt broadenings basally and a sharp edge at the outer margin near apex; male mesotibia suddenly widened just before apex; metaventrite glabrous in females ..... ***P. excisa*** (Gebien, 1914)

254b (254a) Frontoclypeal suture finely incised but without deep groove; male protibia strongly bent at apical fourth, with a blunt broadening basally; male mesotibiae not suddenly widened near apical portion; metaventrite with golden pubescence, males with three clusters of elongate granules on each side of midline in posterior half ..... ***P. tuberculata***, new species

255 (254) Lateral margin of pronotum with bead not interrupted at the anterior corner, beading continuously into that of anterior margin.

The comparative diagnosis above is partly based upon my examination of the type material of *P. excisa* in NHMB. The holotype of *P. plicifrons* cannot be located; I have instead studied the photographs of a HNHM specimen identified by Kaszab as *P. plicifrons* (photographs kindly provided to me by György Makranczy of HNHM).

Collecting circumstances. Encountered in rotting wood.

Etymology. The specific name refers to the coarse granules that occur on the metaventrite of the males.

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