

New Clytini from Indonesia (Coleoptera: Cerambycidae: Cerambycinae)

Petr VIKTORA

Třebišovská 605, CZ-28401 Kutná Hora, Czech Republic
e-mail: viktora_print@centrum.cz

Taxonomy, new species, new combination, Coleoptera, Cerambycidae, Clytini, *Chlorophorus*, *Demonax*, *Rhaphuma*, Indonesia

Abstract. *Chlorophorus monachus* sp. nov. from Indonesia (West Kalimantan), *Chlorophorus savuensis* sp. nov. from Indonesia (East Nusa Tenggara: Savu Island), *Chlorophorus yamdenaensis* sp. nov. from Indonesia (Maluku Province: Yamdena Island), *Demonax detestatus* sp. nov. from Indonesia (West Papua: Batanta Island), *Demonax miles* sp. nov. from Indonesia (West Sumatra), and *Rhaphuma sumbawana* sp. nov. from Indonesia (West Nusa Tenggara: Sumbawa Island) are described. All the habitus and male genitalia are illustrated. *Chlorophorus pileatus* (Jordan, 1894) is transferred to the genus *Rhaphuma* Pascoe, 1858.

INTRODUCTION

Tribus Clytini Mulsant, 1839 is one of the most numerous - in terms of species - tribus of Cerambycidae. Species of tribus Clytini are known from all biogeographic zones of the Earth except the Antarctic Region. Tribus Clytini is currently divided into approximately 70 genera. From the Palaearctic, Oriental and Australian biogeographic regions about 1400 species have been described so far. Within these regions, the most numerous genera are *Demonax* J. Thomson, 1861, *Chlorophorus* Chevrolat, 1863, *Xylotrechus* Chevrolat, 1860, and *Rhaphuma* Pascoe, 1858.

In the present paper, I describe new species of the genera *Chlorophorus*, *Demonax* and *Rhaphuma* from materials, which were recently collected in Indonesia. Descriptions of six new Clytini species are given as follows: *Chlorophorus monachus* sp. nov. from Indonesia (West Kalimantan), *Chlorophorus savuensis* sp. nov. from Indonesia (East Nusa Tenggara: Savu Island), *Chlorophorus yamdenaensis* sp. nov. from Indonesia (Maluku Province: Yamdena Island), *Demonax detestatus* sp. nov. from Indonesia (West Papua: Batanta Island), *Demonax miles* sp. nov. from Indonesia (West Sumatra), and *Rhaphuma sumbawana* sp. nov. from Indonesia (West Nusa Tenggara: Sumbawa Island). All the habitus and male genitalia are illustrated. The new species are compared to the congeners (*Chlorophorus latus* Dauber, 2010, *Chlorophorus perornatus* (Jordan, 1894), *Demonax jimmiensis* Gressitt, 1959, *Demonax viridinotatus* Dauber, 2006 and *Rhaphuma floresica* Viktora, 2014), which are also illustrated in some cases.

Based on the study of the type material, new combination is proposed: *Chlorophorus pileatus* (Jordan, 1894) is transferred from the genus *Chlorophorus* Chevrolat, 1863 to the genus *Rhaphuma* Pascoe, 1858 as *Rhaphuma pileata* (Jordan, 1894).

MATERIAL AND METHODS

Observation and photography. The habitus of all specimens were taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Composite images were created using the software Image Stacking Software Combine ZP. Microstructures of dissected parts were observed under the DNT DigiMicro Profi USB microscope. The genitalia photographs were taken with a Canon MP-E 65mm/2.8 1–5× Macrolens on bellows attached to a Canon EOS 550D camera. Each photograph was taken as several partially focused images and afterwards composed in the Helicon Focus 3.20.2 Pro software. The photographs were modified using Adobe Photoshop CC.

Specimens examined including type materials are deposited in the following collections: CPV Petr Viktora, private collection, Kutná Hora, Czech Republic; MNHN Muséum National d'histoire Naturelle, Paris, France.

Slash (/) separates data in different lines on locality and determination labels.

TAXONOMY

Tribe Clytini Mulsant, 1839

Genus *Chlorophorus* Chevrolat, 1863

Type species. *Callidium annulare* Fabricius, 1787.

Chlorophorus monachus sp. nov. (Fig. 1)

Type locality. Indonesia, West Kalimantan, Singkawang region, Mt. Bawang, Madi vill. env.

Type material. Holotype (♂): 'INDONESIA, Kalimantan Barat pr.' / 'SW Kalimantan, 1000 - 1500 m alt.' / 'Singkawang region, vii. 2018' / 'MT. BAWANG, Madi vill. env.' / 'local collector leg.', (CPV).

The type is provided with a printed red label: 'Chlorophorus monachus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 1a. Body from blackish brown to black, robust, punctate, with pubescence. Body length from head to elytral apex 7.0 mm, widest in humeral part of elytra (2.14 mm), 3.27 times longer than wide.

Head black, narrow, widest through the eyes, distinctly narrower than pronotum at widest point, with distinct, relatively coarse dense punctation in basal part and sparser shallow punctation in anterior part, between eyes with coarse distinct longitudinal furrow. Head covered by short sparse yellowish pubescence (at base narrowly without pubescence), anterior margin with a few erect colourless setae. Eyes goldenish, emarginate. Clypeus and labrum pale brown, shiny, with a few yellowish setae. Mandibles black, shiny, with pale pubescence and yellowish setation in edges.

Maxillary palpus pale brown, palpomeres short. Ultimate palpomere longest, widened apically (axe-shaped with rounded apex), covered by very short indistinct setation.

Antennae short (reaching one third elytral length), filiform, antennomeres wide, from dark brown to blackish brown (ultimate antennomeres slightly paler). Antennomeres widened apically, without spines. Antennomeres with distinct punctation, scape covered by long pale pubescence, antennomeres 2-7 and 10-11 covered by dark shiny pubescence, antennomeres 8-9 covered by denser greyish pubescence. Antennomeres with dense yellowish setation in inner side. Antennomere 2 shortest, antennomere 1 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.39 : 0.54 : 1.00 : 1.10 : 1.06 : 1.05 : 0.95 : 0.80 : 0.72 : 0.70 : 0.85.

Pronotum black, wide, transverse, punctured by distinct dense reticulate punctation, punctures with microgranulation inside. Pronotum covered by short black and longer yellowish pubescence in margins (as in Fig. 1a). Yellowish pubescence denser in basal angles and in lateral margins from ventral side of pronotum (invisible in dorsal view). Pronotal disc with erect setation in basal half. Lateral margins distinctly arcuate. Pronotum narrowest in anterior margin, 1.23 times longer than wide at base and as long as wide at widest point (middle of pronotum). Pronotum slightly narrower than elytra at humeri.

Scutellum wide, heart-shaped, black, punctured by dense punctation, partly covered by dense yellowish pubescence.

Elytra 4.39 mm long and 2.14 mm wide (2.05 times longer than wide); black, very wide, slightly narrowing apically, completely punctured by dense small-sized punctation, covered by black shiny pubescence except stripes of pale yellowish pubescence (as in Fig. 1a). Elytral apex cut (indistinctly undulate), sutural angle with short indistinct spine, lateral angle with longer distinct spine. Apical margin covered by long yellowish setation.

Legs from blackish brown to black, punctured by shallow large-sized punctation, partly covered by yellowish pubescence, meso- and metafemora with long pale setation, tibiae completely covered by yellowish setation. Tarsi brown, punctured by dense punctation, covered by long yellowish setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.15 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured. Mesepisternum covered by dense recumbent white pubescence in apical third, metepisternum almost completely covered by very dense recumbent white pubescence, metasternum completely covered by white pubescence (pubescence denser than in metepisternum), ventrites 1-2 completely covered by dense white pubescence, ventrites 3-5 covered by denser white pubescence and long pale setation. Elytral epipleura black, distinctly undulate, completely covered by black pubescence.

Genitalia as in Fig. 1b.

Female. Unknown.

Differential diagnosis. The most similar species is *Chlorophorus latus* Dauber, 2010 (Fig. 2), described from Borneo and West Malaysia.

Chlorophorus monachus sp. nov. differs from the similar species *C. latus* mainly by less transverse pronotum, by reticulation of pronotum more irregular and punctures smaller than in *C. latus*, by wider scutellum, by different shape of stripe of pale pubescence in basal third

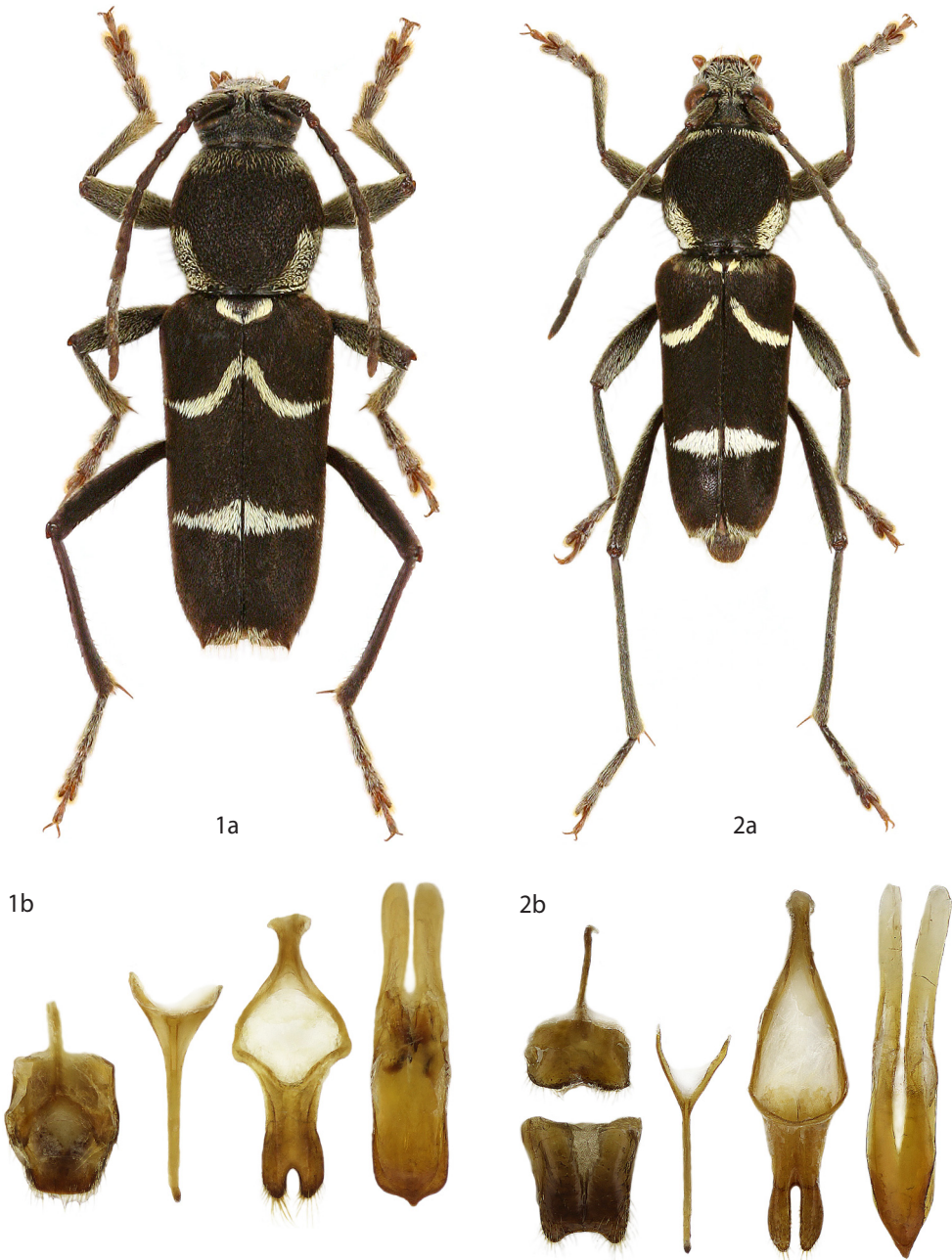


Fig. 1. *Chlorophorus monachus* sp. nov.: a- male holotype; b- male genitalia.

Fig. 2. *Chlorophorus latus* Dauber, 2010: a- male from West Malaysia (Perak), (CPV); b- male genitalia.

of each elytron which reaches elytral suture, by longer spines in lateral angles of elytral apex, by distinctly shorter antennae and by distinctly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 1b and 2b).

Etymology. From Latin *monachus* (it means "monk").

Distribution. Indonesia (West Kalimantan).

***Chlorophorus savuensis* sp. nov.**

(Fig. 3)

Type locality. Indonesia, East Nusa Tenggara, Savu Island, Desa Raenalulu, Raka Forest, 10°54.68'S 121°81.68'E.

Type material. Holotype (♀): 'INDONESIA, LESSER SUNDA' / 'SAVU Is., DESA RAENALULU' / 'RAKA FOREST, 190m' / '10°54.68'S 121°81.68'E' / 'J. Horák leg., 18. xi. - 2. xii. 2016', (CPV).

The type is provided with a printed red label: 'Chlorophorus savuensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2020'.

Description. Habitus of female holotype as in Fig. 3. Body from blackish brown to black, elongate, punctate, with pubescence. Body length from head to elytral apex 10.77 mm, widest in humeral part of elytra (2.74 mm), 3.93 times longer than wide.

Head black (blackish brown near anterior margin), narrow, distinctly narrower than pronotum, widest through the eyes. Head with coarse irregular punctation near base, rest of head with small-sized shallow punctation, between eyes with narrow longitudinal furrow. Head covered by yellowish, relatively long recumbent pubescence, anterior part of head with a few long pale erect setae. Eyes goldenish brown, strongly excised. Clypeus and labrum pale ochre yellow, shiny. Mandibles blackish brown, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus pale brown, matte (except ultimate palpomere), with long pale setation. Palpomeres short. Ultimate palpomere longest, widened apically, apex cut. Ultimate palpomere with distinct longitudinal elliptical depression near outer margin.

Antennae from blackish brown to black, reaching almost two fifths elytral length. Antennomeres widened apically with rounded apex, punctured by small-sized punctation (punctation denser in antennomeres 6-11). Antennomeres 1-4 covered by sparse pale pubescence, antennomeres 5-11 covered by dense and short pale pubescence. Antennomeres 2-5 with indistinct pale setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomeres 1 and 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.00 : 0.31 : 1.00 : 0.77 : 0.64 : 0.54 : 0.64 : 0.61 : 0.59 : 0.52 : 0.64.

Pronotum black, semicircular with distinctly arcuate lateral margins, anterior margin indistinctly arcuate, base almost straight. Pronotum slightly narrower than elytra at humeri, 1.43 times longer than wide at base and 1.07 times longer than wide at widest point (near middle of pronotum). Dorsal surface with distinct dense granulate punctation, partly covered by dense recumbent orange yellow pubescence, partly by short sparse black pubescence (as in Fig. 3). Basal half of pronotum with long pale erect setation.

Scutellum black, wide, semielliptical, covered by dense recumbent orange yellow pubescence.

Elytra 6.94 mm long and 2.74 mm wide (2.53 times longer than wide); only slightly narrowing apically, black with brown apex, covered by dense orange yellow and sparser black pubescence (as in Fig. 3). Elytra completely punctured by dense small-sized punctation. Elytral apex cut, each elytron with long thorn in lateral and sutural angle. Apical margin with long yellowish setation.

Pygidium brown, punctured by shallow punctation, covered by sparse yellowish pubescence and yellowish setation in apex. Apex rounded.

Legs relatively long, from dark brown to black, punctured by dense shallow small-sized punctation, partly covered by pale yellowish pubescence and long pale setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi with dense punctation, covered by pale yellowish setation. Metatarsomere 1 1.28 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured by distinct irregular punctation. Mesepisternum covered by dense orange yellow pubescence in apical third, metepisternum almost completely covered by dense recumbent yellowish pubescence, metasternum almost completely covered by sparse whitish pubescence, ventrites covered by yellowish pubescence except small places in base. Ventral side with long pale erect setae. Elytral epipleura black, covered by dark pubescence.

Male. Unknown.

Differential diagnosis. The most similar species are *Chlorophorus perornatus* (Jordan, 1894) (Fig. 5) from Indonesia (Timor Island) and *Chlorophorus yamdenaensis* sp. nov. (Fig. 4) from Indonesia (Yamdena Island).

Chlorophorus savuensis sp. nov. differs from the similar species *C. perornatus* by smaller body (body length mostly from 13 to 15 mm in *C. perornatus*), by distinctly narrower body, by narrower pronotum (pronotum 1.07 times longer than wide at widest point in *C. savuensis*; while as long as wide at widest point in *C. perornatus*), by narrower scutellum, by more distinct granulate punctation of pronotum, by different shape of dark spots on pronotum and by different colour of



Fig. 3. *Chlorophorus savuensis* sp. nov.: female holotype.

pale pubescence on pronotum and elytra (orange yellow pubescence in *C. savuensis* against yellow pubescence in *C. perornatus*).

Chlorophorus savuensis sp. nov. differs from the similar species *C. yamdенаensis* by more elongate body (body 3.93 times longer than wide in *C. savuensis* (while 3.64 times longer than wide in *C. yamdенаensis*), by distinctly more elongate elytra, by scutellum longer in height, by different shape of spots on pronotum and elytra, by different colour of pale pubescence on pronotum and elytra (orange yellow pubescence in *C. savuensis* against yellow pubescence in *C. yamdенаensis*), and by distinctly longer thorns in lateral angles of elytral apex.

Etymology. Named after the type locality, Savu Island.

Distribution. Indonesia (East Nusa Tenggara: Savu Island).

***Chlorophorus yamdенаensis* sp. nov.**

(Fig. 4)

Type locality. Indonesia, Maluku Province, Tanimbar Islands, Yamdena Island, 20 km NE of Saumlaki.

Type material. Holotype (♀): 'INDONESIA Tanimbar is. / 'YAMDENA ISL. 20km NE' / 'of Saumlaki, 150m' / '1.-30. i. 2007 M. Obořil lgt.', (CPV); Paratypes: (6 ♀♀): same data as holotype, (CPV).

The types are provided with a printed red label: 'Chlorophorus yamdенаensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.

Description. Habitus of female holotype as in Fig. 4. Body from brown to black, widely elongate, punctate, with pubescence. Body length from head to elytral apex 8.9 mm (female paratypes from 8.95 to 10.1 mm), widest in humeral part of elytra (2.44 mm), 3.64 times longer than wide.

Head black (blackish brown near anterior margin), narrow, distinctly narrower than pronotum, widest through the eyes. Head with coarse irregular punctation near base, rest of head with small-sized punctation. Head covered by yellowish recumbent pubescence (in base narrowly with darker yellow pubescence), anterior part of head with a few long pale erect setae. Eyes goldenish brown, strongly excised. Clypeus and labrum pale ochre yellow, shiny. Mandibles blackish brown with yellowish pubescence and setation in edges.

Maxillary palpus pale brown, matte (ultimate palpomere with shiny apical third), with short indistinct pale setation. Palpomerites short. Ultimate palpomere longest, widened apically, apex almost cut (with indistinctly rounded apical angles). Ultimate palpomere with longitudinal depression in basal two thirds.

Antennae blackish brown, short, reaching one third elytral length. Antennomeres wide, punctured by small-sized punctation, slightly widened apically. Antennomeres 1-8 relatively shiny, antennomeres 9-11 matte. Antennomeres 1-5 covered by sparse pale pubescence, antennomeres 6-11 covered by dense and short pale pubescence. Antennomeres 1-8 with pale setation in inner side. Antennomeres without spines. Antennomere 2 shortest, antennomeres 1 and 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.00 : 0.28 : 1.00 : 0.64 : 0.51 : 0.53 : 0.52 : 0.44 : 0.44 : 0.39 : 0.47.

Pronotum from dark brown to blackish brown, wide; with arcuate lateral margins, anterior margin indistinctly arcuate, base almost straight. Pronotum only finely narrower than elytra at humeri, 1.36 times longer than wide at base and as long as wide at widest point (near middle of pronotum). Pronotum narrowest in anterior margin. Dorsal surface with dense small-sized granulate punctation, partly covered by longer yellow recumbent pubescence, partly by sparser and shorter black pubescence transversally in middle of pronotal disc (as in Fig. 4). Basal half of pronotum with a few pale erect setae.

Scutellum black, very wide, with rounded apex, covered by dense recumbent yellow pubescence.

Elytra 5.57 mm long and 2.44 mm wide (2.28 times longer than wide); slightly narrowing apically, black with blackish brown suture, covered by dense yellow and sparser black pubescence (as in Fig. 4). Elytra completely punctured by dense small-sized punctation. Elytral apex undulate, each elytron with short thorn in lateral and sutural angle. Apical margin covered by dense long yellowish setation.

Pygidium brown, punctured by shallow punctation, covered by sparse yellowish pubescence and yellowish setation in apex. Apex rounded.

Legs relatively long, from reddish brown to dark brown, punctured by dense shallow small-sized punctation, partly covered by white pubescence and long pale setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi with dense punctation, covered by pale yellowish setation. Metatarsomere 1 1.38 times longer than metatarsomeres 2 and 3 together.

Ventral side of body brown (ventrites blackish), punctured by distinct irregular punctation. Mesepisternum covered by dense pale yellow pubescence in apical two thirds, metepisternum and metasternum almost completely covered by dense recumbent yellowish pubescence, ventrites covered by dense recumbent yellowish pubescence except basal quarters. Ventrites with long pale erect setae. Elytral epipleura distinctly undulate, brown, covered by black sparse pubescence.

Male. Unknown.

Differential diagnosis. The most similar species are *Chlorophorus perornatus* (Jordan, 1894) (Fig. 5) from Indonesia (Timor Island) and *Chlorophorus savuensis* sp. nov. (Fig. 3) from Indonesia (Savu Island).

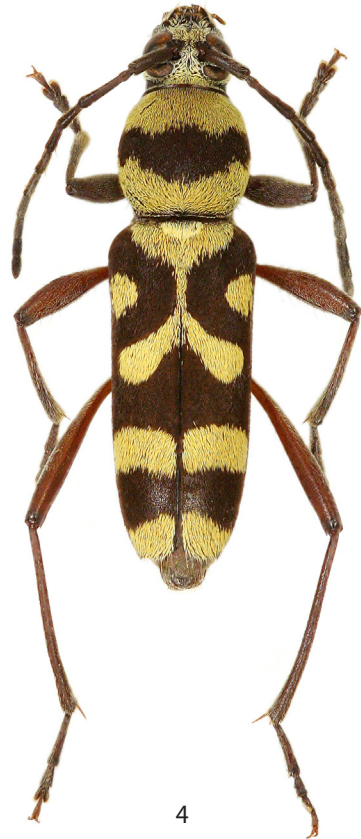


Fig. 4. *Chlorophorus yamdanaensis* sp. nov.: female holotype.



Chlorophorus yamdenaensis sp. nov. differs from the similar species *C. perornatus* by smaller body (body length from 8.9 to 10.1 mm in *C. yamdenaensis*; while body length mostly from 13 to 15 mm in *C. perornatus*), by femora reddish brown (almost black in *C. perornatus*), by distinctly shorter antennomeres, by different shape of spots on elytra, and mainly by distinctly shorter and narrower tarsi (as in Figs. 4 and 5).

Chlorophorus yamdenaensis sp. nov. differs from the similar species *C. savuensis* by less elongate body (body 3.64 times longer than wide in *C. yamdenaensis*; while 3.93 times longer than wide in *C. savuensis*), by distinctly less elongate elytra, by scutellum shorter in height, by different shape of spots on pronotum and elytra, by different colour of pale pubescence on pronotum and elytra (yellow pubescence in *C. yamdenaensis* against orange yellow pubescence in *C. savuensis*), and by distinctly shorter thorns in lateral angles of elytral apex.

Etymology. Named after the type locality, Yamdena Island.

Distribution. Indonesia (Maluku Province: Yamdena Island).

Fig. 5. *Chlorophorus perornatus* (Jordan, 1894): female from Indonesia (West Timor), (CPV).

Genus *Demonax* Thomson, 1861

Type species. *Demonax nigrofasciatus* J. Thomson, 1861.

Demonax detestatus sp. nov.

(Fig. 6)

Type locality. Indonesia, West Papua, Batanta Island, 0°45.17'S 130°48.06'E.

Type material. Holotype (♂): 'W-PAPUA Raja Ampat Pr.' / 'Waywesar/Batanta, 2km' / 'E 45°17'S, 130°48'06'E' / '18. i. 2004 leg. A. Weigel', (CPV).

The type is provided with a printed red label: 'Demonax detestatus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 6a. Body from brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 6.37 mm, widest in humeral part of elytra (1.46 mm), 4.36 times longer than wide.

Head black (blackish brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with dense granulate punctation in basal part and dense small-sized punctation in anterior part, covered by relatively sparse recumbent grey pubescence. Eyes blackish brown, strongly emarginate. Clypeus and labrum pale ochre yellow, shiny, with pale yellowish setation. Mandibles blackish brown, shiny, with pale yellowish grey pubescence and setae in edges.

Maxillary palpus pale ochre yellow, palpomeres short. Ultimate palpomere longest (long and narrow), widened apically with rounded apex, apical third paler than basal two thirds. Palpomeres with indistinct punctation, covered by indistinct pale yellowish setation.

Antennae reaching almost four fifths elytral length, narrow, filiform. Antennomeres brown, antennomeres 7-11 paler than antennomeres 1-6. Antennomeres slightly widened apically, antennomeres 3-4 prolonged to very long spines on inner side of apex (spines not sharp), antennomere 5 with very short spine in inner side of apex. Antennomeres with dense small-sized punctation, antennomeres 1-5 covered by long and relatively sparse greyish pubescence, antennomeres 6-11 covered by shorter and denser greyish pubescence. Antennomeres with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.63 : 0.29 : 1.00 : 0.91 : 1.03 : 1.17 : 0.84 : 0.81 : 0.68 : 0.59 : 0.78.

Pronotum blackish brown, slightly elongate, relatively robust, shape of pronotum as in Fig. 6a. Pronotum 1.63 times longer than wide at base and 1.15 times longer than wide at widest point (middle of pronotum). Pronotum as wide as elytra at humeri. Lateral margins slightly arcuate, anterior margin indistinctly arcuate, base almost straight. Dorsal surface with irregular granulate punctation (punctures larger in middle of pronotal disc), punctures with microgranulation inside. Pronotum covered by relatively short greyish recumbent pubescence (pubescence sparser in middle of pronotal disc (as in Fig. 6a)). Basal part with a few erect pale setae.

Scutellum blackish, small, roundly triangular, covered by sparse greyish pubescence.

Elytra 4.02 mm long and 1.46 mm wide (2.75 times longer than wide); almost parallel (shortly narrowing apically), from brown to blackish brown, completely punctured by dense punctation (punctures very small), covered by grey and black shiny pubescence (as in Fig. 6a). Elytral apex undulate, lateral angle terminated to long wide spine, sutural angle with short indistinct spine. Apical margin with long yellowish setation.

Legs long and narrow, reddish brown with darker femora, punctured by dense shallow punctation, partly covered by long greyish pubescence and yellowish setation. Protibial spur long, narrow, sharp. Tarsi brown, long, narrow, punctured by dense small-sized punctation, covered by pale pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.5 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, punctured by small-sized punctation. Mesepisternum covered by dense recumbent white pubescence except spot in base, metepisternum and metasternum covered by dense white pubescence except small spots in base and apex, ventrites 1-2 almost completely covered by dense recumbent white pubescence, ventrites 3-5 covered by very sparse pale pubescence and longer yellowish setation. Elytral epipleura brown, covered by sparse dark pubescence.

Genitalia as in Fig. 6b.

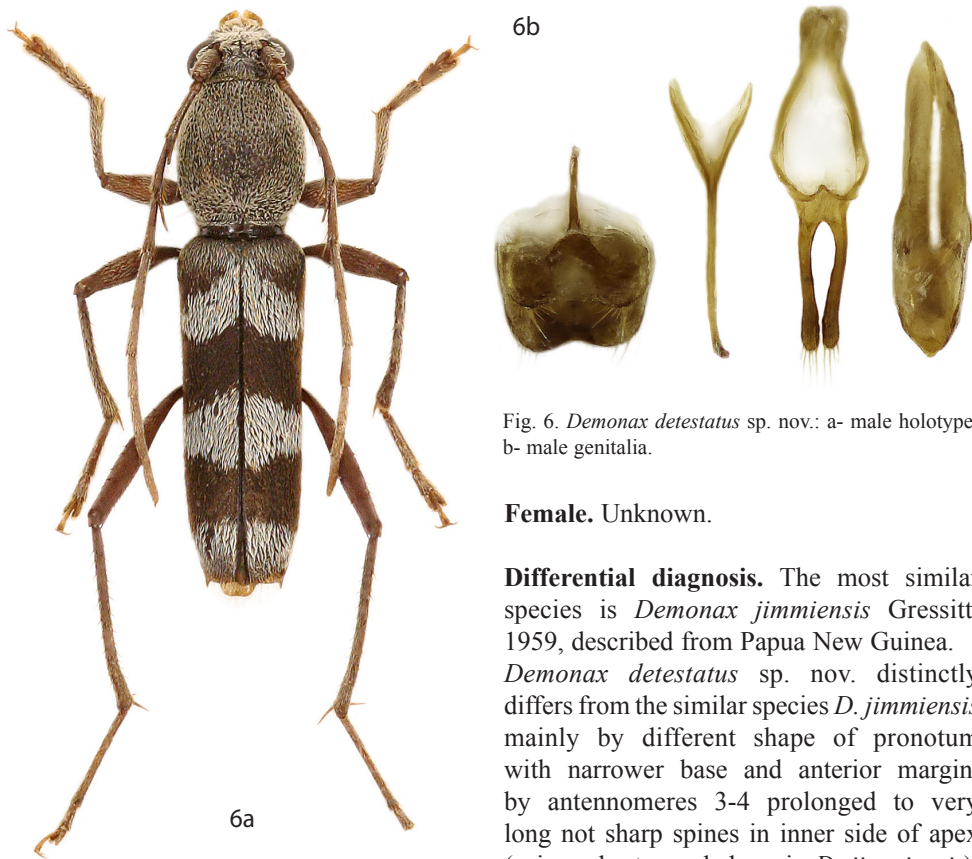


Fig. 6. *Demonax detestatus* sp. nov.: a- male holotype; b- male genitalia.

Female. Unknown.

Differential diagnosis. The most similar species is *Demonax jimmiensis* Gressitt, 1959, described from Papua New Guinea.

Demonax detestatus sp. nov. distinctly differs from the similar species *D. jimmiensis* mainly by different shape of pronotum with narrower base and anterior margin, by antennomeres 3-4 prolonged to very long not sharp spines in inner side of apex (spines shorter and sharp in *D. jimmiensis*),

by different shape of pale pubescent spots on elytra (mainly in basal part), and by distinctly shorter antennae (antennae almost reaching elytral apex in *D. jimmiensis*).

Etymology. From Latin *detestatus* (it means "cursed").

Distribution. Indonesia (West Papua: Batanta Island).

***Demonax miles* sp. nov.**

(Fig. 7)

Type locality. Indonesia, West Sumatra, Landai village env., Mt. Sanggul.

Type material. Holotype (♀): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250 m alt.' / 'Landai vill. env., iv. 2012' / 'St. Jakl lgt.', (CPV).

The type is provided with a printed red label: 'Demonax miles sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2020'.

Description. Habitus of female holotype as in Fig. 7. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex

Fig. 7. *Demonax miles* sp. nov.: female holotype.

9.3 mm, widest in humeral part of elytra (2.07 mm), 4.5 times longer than wide.

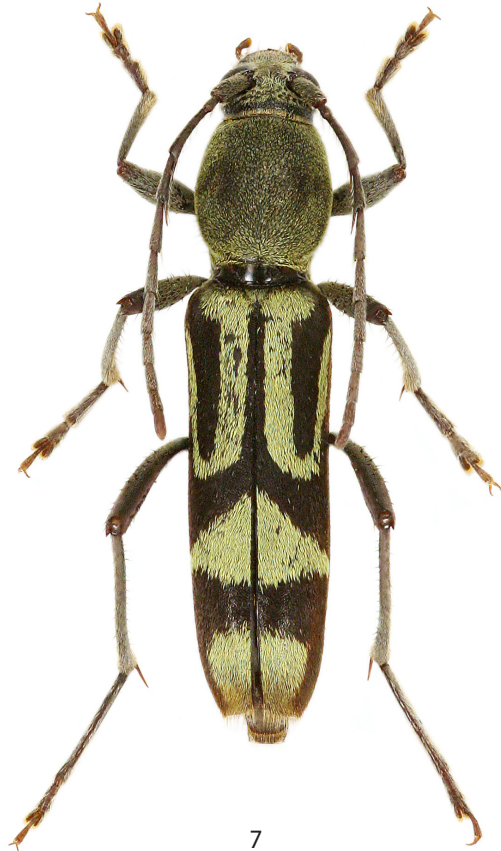
Head black, widest through the eyes, narrower than pronotum at widest point, with granulate punctation in basal part and dense small-sized punctation in anterior part, covered by yellowish green, relatively sparse recumbent pubescence and long pale erect setae in anterior part. Eyes blackish brown, strongly emarginate. Clypeus and labrum pale brown, shiny, with long yellowish setation. Mandibles black, shiny, with pale yellowish pubescence and long setae in edges.

Maxillary palpus brown, ultimate palpomere with paler apex. Palpomeres short. Ultimate palpomere longest, widened apically, drop-shaped with rounded apex. Palpomeres with indistinct punctation, covered by pale yellowish setation.

Antennae relatively short (reaching more than two fifths elytral length), narrow, filiform. Antennomeres blackish brown, antennomeres 7-11 slightly paler. Antennomeres widened apically, antennomeres 3-4 prolonged to very long sharp spine in inner side of apex, antennomere 5 with sharp apical margin in inner side. Antennomeres with dense small-sized punctation, antennomeres 1-4 covered by longer sparse pale pubescence, antennomeres 5-11 covered by shorter and denser grey pubescence. Antennomeres with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.70 : 0.33 : 1.00 : 0.82 : 0.94 : 0.75 : 0.77 : 0.55 : 0.47 : 0.37 : 0.56.

Pronotum black, slightly elongate, relatively robust, shape of pronotum as in Fig. 7. Pronotum 1.55 times longer than wide at base and 1.12 times longer than wide at widest point (before middle of pronotum from base to apex). Pronotum slightly narrower than elytra at humeri. Lateral margins arcuate, anterior margin and base almost straight. Dorsal surface with dense granulate punctation, punctures with microgranulation inside. Pronotum covered by short yellowish green recumbent pubescence, pubescence denser in margins (as in Fig. 7). Basal part with a few long erect pale setae.

Scutellum black, small, roundly triangular, covered by short, relatively sparse yellowish green pubescence.



Elytra 6.13 mm long and 2.07 mm wide (2.96 times longer than wide); almost parallel (shortly narrowing apically), black, completely punctured by dense punctation (punctures very small), covered by yellowish green and black pubescence (as in Fig. 7). Elytral apex cut (apical margin indistinctly undulate), each elytron distinctly shorter in sutural angle. Lateral angle with short indistinct spine. Apical margin with long yellowish setation.

Legs long and narrow, blackish brown, punctured by dense shallow punctation, partly covered by short yellowish pubescence and longer yellowish setation. Tarsi long and narrow, punctured by dense small-sized punctation, covered by pale pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.41 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured by small-sized punctation. Mesepisternum covered by dense yellowish green pubescence in apical half, metepisternum, metasternum and ventrites covered by dense yellowish green pubescence. Ventrites with long erect colorless setae. Elytral epipleura black, covered by blackish pubescence.

Male. Unknown.

Differential diagnosis. The most similar species is *Demonax viridinotatus* Dauber, 2006, described from Borneo.

Demonax miles sp. nov. differs from the similar species *D. viridinotatus* mainly by pronotum without distinct dark spots (pronotum with black square-shaped pubescent spots with the tips pointing laterally in *D. viridinotatus*), by larger spot of pale pubescence in elytral apex which reaching apical margin (smaller spot which not reaching apical margin in *D. viridinotatus*), by significantly longer dark longitudinal stripes in basal elytral part and mainly by blackish brown metatarsi (pale yellowish brown metatarsi in *D. viridinotatus*).

Etymology. From Latin *miles* (it means "soldier").

Distribution. Indonesia (West Sumatra).

Genus *Rhaphuma* Pascoe, 1858

Type species. *Clytus quadricolor* Castelnau & Gory, 1841.

Rhaphuma pileata (Jordan, 1894) comb. nov.

Clytanthus pileatus Jordan, 1894: 115.

Chlorophorus pileatus: Aurivillius, 1912: 405.

Type locality. Timor.

Type material. Holotype: label 1: 'TYPE'; label 2: 'Clytanthus' / 'pileatus' / 'Type! Jordan'; label 3: 'Timor'; label 4: 'Figured' / 'Nov.Zool.1.94.'; label 5: 'Ex-Musaeo' / 'W.ROTHSCHILD' / '1899', (MNHN).

Remark. Based on the present study of holotype photo of *Chlorophorus pileatus* (Jordan, 1894) (type in Muséum national d'histoire naturelle, Paris, France), it is clear, that this

is a representative of the genus *Rhaphuma* Pascoe, 1858. Main features are antennomere 3 distinctly longer than antennal scape, shape of pronotum and overall characters corresponding with the genus *Rhaphuma* Pascoe, 1858. *Chlorophorus pileatus* (Jordan, 1894) does not belong to the genus *Chlorophorus* and is transferred to the genus *Rhaphuma*.

***Rhaphuma sumbawana* sp. nov.**

(Fig. 8)

Type locality. Indonesia, West Nusa Tenggara, Sumbawa Island.

Type material. Holotype (♂): 'INDONESIA or.' / 'Sumbawa iv. 2007' / 'local collector', (CPV).

The type is provided with a printed red label: 'Rhaphuma sumbawana sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 8a. Body from brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 12.0 mm, widest in humeral part of elytra (2.61 mm), 4.59 times longer than wide.

Head black at base and blackish brown in anterior part, narrow, widest through the eyes, narrower than pronotum at widest point, punctured by very dense small-sized granulate punctation, between eyes with narrow longitudinal furrow. Head covered by dense yellow pubescence and a few long pale erect setae in anterior margin. Eyes goldenish, emarginate. Clypeus and labrum pale ochre yellow, shiny. Mandibles brown, shiny with matte black tip, with yellowish pubescence and long setae in edges.

Maxillary palpus from pale ochre yellow to pale brown, palpomeres short (except ultimate palpomere). Ultimate palpomere longest, widened apically (axe-shaped with rounded apex). Palpomeres punctured by dense small-sized punctation, covered by relatively dense yellowish setation.

Antennae relatively long (reaching two thirds elytral length), brown (scape blackish brown), filiform (antennomeres 2-5 relatively wide, scape distinctly wide). Antennomeres widened apically, antennomeres 4-5 extended in inner side of apex, antennomeres without spines. Scape partly covered by longer yellowish pubescence, antennomeres 2-11 covered by denser indistinct pale pubescence, antennomeres 2-7 with yellowish setation in inner side. Antennomere 2 shortest, antennomeres 3 and 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.69 : 0.29 : 1.00 : 0.81 : 1.02 : 0.96 : 0.82 : 0.77 : 0.69 : 0.60 : 0.64.

Pronotum semicircular, distinctly rounded, 1.55 times longer than wide at base and 1.12 times longer than wide at widest point (near middle of pronotum), black, punctured by coarse irregular punctation, pronotal disc in middle with elevated, wide inverted U-shaped place with coarse granulate punctation (punctures with microgranulation). Pronotum indistinctly narrower than elytra at humeri. Pronotum partly covered by short sparse dark pubescence, partly by dense recumbent yellow pubescence (as in Fig. 8a). Pronotum with a few erect setae near base.

Scutellum small, triangular with rounded apex, completely covered by dense yellow pubescence.

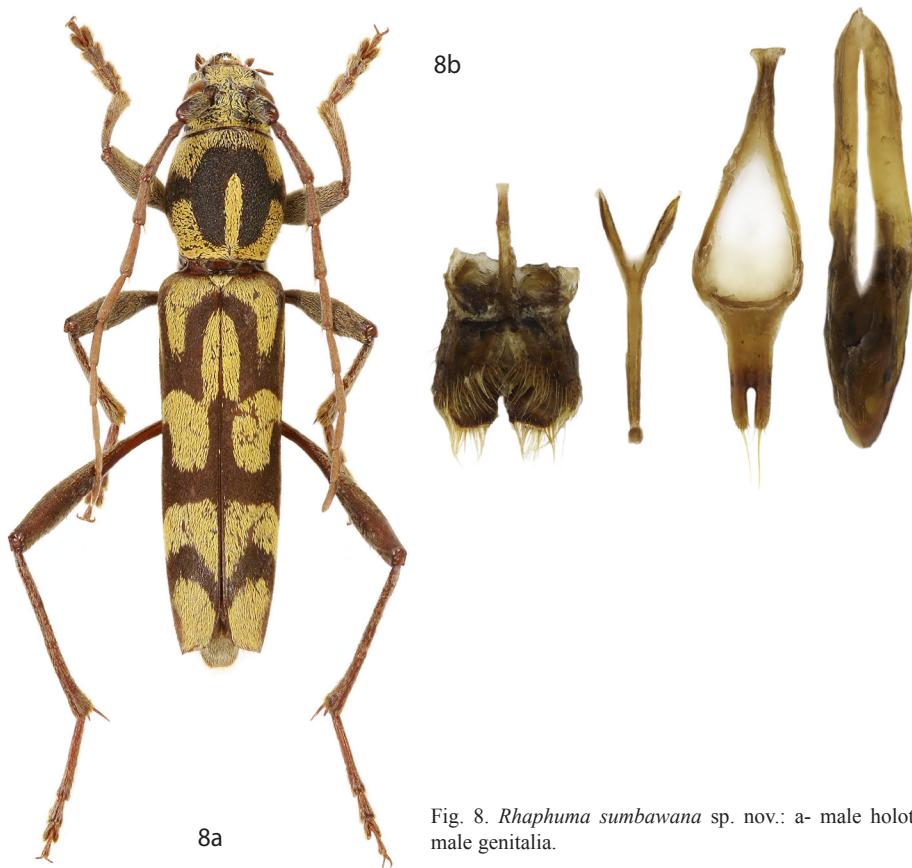


Fig. 8. *Rhaphuma sumbawana* sp. nov.: a- male holotype; b- male genitalia.

Elytra 7.89 mm long and 2.61 mm wide (3.02 times longer than wide); brown, narrowing apically, completely punctured by dense small-sized punctation, covered by black and denser yellow pubescence (as in Fig. 8a). Elytral apex cut (each elytron distinctly shorter in sutural side), sutural and lateral angle sharp with indistinct, very short spine. Apical margin covered by long yellowish setation.

Legs long and narrow, brown (femora darker), punctured by dense shallow punctation, partly covered by yellowish pubescence and longer pale setation (mainly in tibiae). Tarsi punctured by dense small-sized punctation, covered by long yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.65 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured. Mesepisternum with irregular different-sized punctation and distinct wide furrow near base on upper side. Mesepisternum covered by dense yellow pubescence in apical two thirds. Metepisternum almost completely covered by dense yellow pubescence, metasternum with sparse long pale pubescence and setation in middle and dense yellow pubescence in margins. Ventrites

Fig. 9. *Rhaphuma floresica* Viktora, 2014: female holotype from Indonesia (Flores I.), (CPV).

1-4 covered by dense yellow pubescence except spots in base, which are covered by pale setation, ventrite 5 completely covered by dense long pale setation. Elytral epipleura brown, punctured, covered by blackish pubescence.

Genitalia as in Fig. 8b.

Female. Unknown.

Differential diagnosis. The most similar species is *Rhaphuma floresica* Viktora, 2014 (Fig. 9), described from Indonesia (Flores Island).

Rhaphuma sumbawana sp. nov. differs from similar species *R. floresica* mainly by significantly larger and more robust body, by wider legs and antennae (antennomeres distinctly wider and shorter than in *R. floresica*), by antennal scape significantly enlarged in width (antennal scape with the usual ratio in *R. floresica*), by antennomeres 4-5 distinctly extended in inner side of apex (antennomeres 4-5 not extended in *R. floresica*), by elytra narrowing apically with wider base (elytra almost parallel in *R. floresica*), and by distinctly shorter and wider metatarsi (as in Figs. 8 and 9).



Etymology. Named after the type locality, Sumbawa Island.

Distribution. Indonesia (West Nusa Tenggara: Sumbawa Island).

ACKNOWLEDGEMENTS. My sincere thanks are due to Andreas Weigel (Wernburg, Germany), Jan Horák (Praha, Czech Republic), Martin Obořil (Olbramovice, Czech Republic) and Stanislav Jákl (Praha, Czech Republic) for providing me with material from their collections, and Richard Sehnal (Czech University of Life Sciences Prague, FAPPZ, Praha, Czech Republic) for help with taking pictures of genitalia.

REFERENCES

- AURIVILLIUS C. 1912: Cerambycidae: Cerambycinae. Pars 39. In: SCHENKLING S. (ed.): *Coleopterorum Catalogus. Volumen 22. Cerambycidae I*. Berlin: Junk, 108 + 574 pp.
- CHEVROLAT L. A. A. 1863: Clytides d'Asie et d'Océanie. *Mémoires de la Société Royale des Sciences de Liège* 18: 253-350.
- DAUBER D. 2006: Sechszundzwanzig neue Clytini aus Malaysia vornehmlich Borneo und Sumatra (Coleoptera, Cerambycidae, Cerambycinae). *Linzer Biologische Beiträge* 38 (1): 423-453.

- DAUBER D. 2010: Zehn neue Clytini aus Malaysia und Neuguinea (Coleoptera, Cerambycidae, Cerambycinae). *Linzer Biologische Beiträge* 42(1): 565-580.
- GRESSITT J. L. 1959: Longicorn Beetles from New Guinea, I (Coleoptera). *Pacific Insects* 7: 59-171.
- JORDAN K. 1894: New species of Coleoptera from the Indo- and Austro-Malayan Region, collected by William Doherty. *Novitates Zoologicae* 1(1): 104-122, pl. VIII.
- PASCOE F. P. 1858: On new genera and species of longicorn Coleoptera. Part III. *The Transactions of the Entomological Society of London* (2)4 [1856-1858]: 236-266. [note: pp. 1236-256, part vi, January 1858; pp. 257-266 part vii, April 1858].
- TAVAKILIAN G. (Author) & CHEVILLOTTE H. (Software) 2020: Titan: base de données internationales sur les Cerambycidae ou Longicornes. [<http://titan.gbif.fr/>]
- VIKTORA P. 2014: Contribution to knowledge of the Clytini Mulsant, 1839 and Anaglyptini Lacordaire, 1869 (Coleoptera: Cerambycidae: Cerambycinae) from the Oriental and Australian Regions. *Studies and Reports, Taxonomical Series* 10(1): 205-226.

Received: 14.6.2020

Accepted: 20.7.2020

Printed: 5.10.2020

