

New Clytini from Palaearctic, Oriental and Australian Regions (Coleoptera: Cerambycidae: Cerambycinae)

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Abstract. *Clytus chiangmaiensis* sp. nov. from Thailand (Chiang Mai), *Demonax culex* sp. nov. and *Rhaphuma heres* sp. nov. from Vietnam (Dak Lak), *Demonax mondulkiriensis* sp. nov. from Cambodia (Mondulkiri), *Demonax sumbaensis* sp. nov. from Indonesia (Sumba), *Demonax vitreus* sp. nov. from Indonesia (South Sulawesi), *Psilomerus ineptus* sp. nov., *Psilomerus pulex* sp. nov. and *Rhaphuma skalei* sp. nov. from Malaysia (Sabah), *Rhaphuma anima* sp. nov., *Rhaphuma cantilena* sp. nov. and *Rhaphuma eminentia* sp. nov. from Indonesia (Sumatra), *Rhaphuma lacrima* sp. nov. from China (Yunnan), *Rhaphuma ducissa* sp. nov. from Vietnam (Lam Dong), *Rhaphuma gemma* sp. nov. from Laos (Hua Phan), *Rhaphuma gloria* sp. nov. from Malaysia (Pahang, Perak), *Rhaphuma harmonia* sp. nov. from Malaysia (Pahang), *Rhaphuma puella* sp. nov. from China (Sichuan), *Demonax dactylogramma* sp. nov., *Demonax fraudator* sp. nov., *Demonax honoratus* sp. nov., *Xylotrechus amissus* sp. nov., and *Xylotrechus animosus* sp. nov. from Vietnam (Kon Tum) are described. All the habitus and male genitalia are illustrated. *Perissus chapaanus* Pic, 1930 is transferred to the genus *Demonax* Thomson, 1861. *Rhaphuma asellaria* Holzschuh, 2017 is firstly recorded from Laos.

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 1350 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 genus *Clytus*, *Demonax*, *Psilomerus*, *Rhaphuma* and *Xylotrechus* from materials which were recently collected in Cambodia, China, Indonesia, Laos, Malaysia, Thailand and Vietnam. Descriptions of twenty-three new Clytini species are given as follows: *Clytus chiangmaiensis* sp. nov. from Thailand (Chiang Mai), *Demonax culex* sp. nov. and *Rhaphuma heres* sp. nov. from Vietnam (Dak Lak), *Demonax mondulkiriensis* sp. nov. from Cambodia (Mondulkiri), *Demonax sumbaensis* sp. nov. from Indonesia (Sumba), *Demonax vitreus* sp. nov. from Indonesia (South Sulawesi), *Psilomerus ineptus* sp. nov., *Psilomerus pulex* sp. nov. and *Rhaphuma skalei* sp. nov. from Malaysia (Sabah), *Rhaphuma anima* sp. nov., *Rhaphuma cantilena* sp. nov. and *Rhaphuma eminentia* sp. nov. from Indonesia (Sumatra), *Rhaphuma lacrima* sp. nov. from China (Yunnan), *Rhaphuma ducissa* sp. nov. from Vietnam (Lam Dong), *Rhaphuma gemma* sp. nov. from Laos (Hua Phan), *Rhaphuma gloria* sp. nov. from Malaysia (Pahang, Perak), *Rhaphuma harmonia* sp. nov. from Malaysia (Pahang), *Rhaphuma puella* sp. nov. from China (Sichuan), *Demonax dactylogramma* sp. nov., *Demonax fraudator* sp. nov., *Demonax honoratus* sp. nov., *Xylotrechus amissus* sp. nov., and *Xylotrechus animosus* sp. nov. from Vietnam (Kon Tum). The new species are compared to appropriate congeners (*Clytus depilis* Holzschuh, 2019, *Demonax albinotus* Holzschuh, 2016, *Demonax andamanicus* Gahan, 1906, *Demonax chapaanus* (Pic, 1930) comb. nov., *Demonax conspurcatus* Holzschuh, 2009, *Demonax contrarius* Holzschuh, 1991, *Demonax fallax* Heller,

1935, *Demonax honzai* Viktora, 2019, *Demonax involutus* Viktora, 2018, *Demonax jimmiensis* Gressitt, 1959, *Demonax matyasi* Viktora, 2016, *Demonax nebulosus* Gressitt & Rondon, 1970, *Demonax niisatoi* Viktora & Tichý, 2017, *Demonax niveofasciatus* Viktora, 2014, *Demonax testaceus* (Hope, 1831), *Demonax tryznai* Viktora, 2015, *Perissus filipes* Holzschuh, 2016, *Perissus latepubens* Pic, 1950, *Psilomerus albifrons* Aurivillius, 1924, *Psilomerus danieli* Dauber, 2010, *Psilomerus kishimotoi* Hayashi, 1975, *Psilomerus sarawakensis* Dauber, 2010, *Rhaphuma asellaria* Holzschuh, 2017, *Rhaphuma baibarae* Matsushita, 1931, *Rhaphuma bivittata* Aurivillius, 1916, *Rhaphuma brevivittata* (Aurivillius, 1922), *Rhaphuma duplex* Holzschuh, 1991, *Rhaphuma familiaris* Holzschuh, 2017, *Rhaphuma indifferens* Holzschuh, 1992, *Rhaphuma insignaticollis* Pic, 1937, *Rhaphuma luteopubens* Pic, 1937, *Rhaphuma maculicollis* Gressitt & Rondon, 1970, *Rhaphuma manipurensis* Gahan, 1906, *Rhaphuma pacholatkoii* Viktora, 2014, *Rhaphuma pseudobinhensis* Gressitt & Rondon, 1970, *Rhaphuma quercus* Gardner, 1940, *Rhaphuma rassei* Dauber, 2002, *Rhaphuma sabahensis* Dauber, 2006, *Rhaphuma testaceiceps* Pic, 1915, *Rhaphuma testaceicolor* Pic, 1920, *Rhaphuma timorica* Viktora, 2014, *Rhaphuma virens* Matsushita, 1931, *Xylotrechus asteius* Holzschuh, 2009, *Xylotrechus reconditus* Holzschuh, 2009, *Xylotrechus retractus* Holzschuh, 1998, *Xylotrechus rufonotatus* Gressitt, 1936, *Xylotrechus subcarinatus* Gardner, 1939, and *Xylotrechus vinnulus* Holzschuh, 1993.

Based on the study of the type material, a new combination is also published: *Perissus chapaanus* Pic, 1930 is transferred to the genus *Demonax* Thomson, 1861.

Rhaphuma asellaria Holzschuh, 2017 is firstly recorded from Laos.

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. 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:

- CCH Collection of Carolus Holzschuh, Villach, Austria;
- CDH Collection of Daniel J. Heffern, Houston, USA;
- CPK Collection of Petr Kabátek, Praha, Czech Republic;
- CPV Collection of Petr Viktora, 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 *Clytus* Laicharting, 1784

Type species. *Leptura arietis* Linnaeus, 1758.

Clytus chiangmaiensis sp. nov.

(Fig. 1)

Type locality. Thailand, Chiang Mai prov., Ban Sanpakia vill.

Type material. Holotype (♀): 'THAI-N. 1.-19.v.1998' / 'Chiang Mai prov.,' / 'BAN SANPAKIA, 1400 m' / 'Ivo Martinů leg.', (CPV). The type is provided with a printed red label: 'Clytus chiangmaiensis sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.

Description. Habitus of female holotype as in Fig. 1. Body from brown to black, elongate, relatively short, parallel, punctate, with pubescence. Body length from head to elytral apex 9.83 mm, widest in humeral part and preapical (five sevenths elytral length from base to apex) part of elytra (2.64 mm), 3.72 times longer than wide.

Head black (blackish brown near anterior margin), short, widest through the eyes, finely narrower than pronotum. Head punctured by coarse large-sized punctuation in posterior part, frons and place between antennal insertions with coarse irregular granulation. Head covered by yellow recumbent pubescence (pubescence distinctly sparser on frons), and a few pale setae. Eyes goldenish, emarginate. Clypeus pale brown, shiny, with long yellow setae. Mandibles black, shiny, with long yellowish setation in edges.

Maxillary palpus pale brown, shiny, with pale setation. Palpomeres short, ultimate palpomere only finely widened apically, brown with pale brown apex, apex arcuate.

Antennae dark brown (scape blackish brown), reaching one half elytral length. Antennomeres wide, short, widened apically. Antennomeres 1-4 shiny (punctured by sparse large-sized punctuation), antennomeres 5-11 matte (punctured by dense small-sized punctuation). Antennomeres without spines. Antennomere 2 shortest, antennomere 11 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.22 : 0.55 : 1.00 : 0.91 : 1.28 : 1.33 : 1.28 : 1.22 : 1.19 : 1.10 : 1.70.

Pronotum black, convex, wide, shape of pronotum as in Fig. 1. Pronotum narrower than elytra, 1.18 times longer than wide at base and as long as wide at widest point (before middle of pronotum from base to apex). Anterior and posterior margin indistinctly undulate. Dorsal surface with coarse irregular granulated punctuation, disc in middle near base with small place without pubescence with sparse coarse punctuation. Pronotum covered by long recumbent yellow pubescence and sparse dark shiny pubescence (as in Fig. 1). Pronotum with long erect pale setation.

Scutellum wide, shield-shaped with rounded apex, completely covered by dense recumbent yellow and yellowish pubescence.

Elytra 6.66 mm long and 2.64 mm wide (2.52 times longer than wide); from pale brown to black (paler in places with yellow pubescence), almost parallel, covered by yellow and black pubescence (as in Fig. 1). Elytra punctured by dense small-sized punctuation. Elytral apex rounded, lateral and sutural angles without distinct spines, apical margin with long yellowish setation.

Pygidium wide, pale brown, shiny, punctured by shallow dense punctuation, covered by yellowish setation, apex rounded, with yellowish setation.

Legs blackish brown (tarsi brown), with large-sized shallow punctuation, covered by long yellowish pubescence (metafemora without pubescence in inner side). Tibiae with long ochre setation (setation denser in apical part). Tarsi short and wide, punctured, covered by long yellowish setation. Meso- and metatibiae slightly curved, distinctly widened apically. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.42 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, covered by stripes of dense pale yellow pubescence. Mesepisternum and metepisternum almost completely covered by dense pale yellow pubescence. Ventrites 1 and 5 almost completely and ventrites 3-4 in apical half covered by yellowish pubescence. Ventral side of body with long erect pale setation. Elytral epipleura pale brown, covered by blackish pubescence.

Male. Unknown.

Differential diagnosis. *Clytus chiangmaiensis* sp. nov. is the first known representative of the genus *Clytus* from the territory of Thailand. Relatively the most similar species is *Clytus depilis* Holzschuh, 2019, described from China (Shaanxi). *C. chiangmaiensis* distinctly differs from similar species *C. depilis* mainly by wider body, by distinctly wider pronotum with different dark spots, by distinctly wider antennae, by shorter metatarsomere 1 and by different shape of colour spots on elytra.

Etymology. Named after the type locality, Chiang Mai province.

Distribution. Thailand (Chiang Mai).

Genus *Demonax* Thomson, 1861

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

Demonax chapaanus (Pic, 1930) comb. nov.

(Fig. 32)

Perissus chapaanus Pic, 1930: 17.

Type material. Type specimen from Vietnam in MNHN: label 1: 'chapaanus Pic' / '(Tonkin)', label 2: 'Chapa'.

Additional material. (1 ♀): 'Laos-NE, Houa Phan pr.' / 'Ban Saluei v – Mt. Phou Pane' / 'Laos-NE, Houa Phan pr.' / '1920-1450m 10-21.vi.2010' / 'St. Jákł et local collectors lgt'; (1 ♂, 3 ♀♀): 'NE LAOS: Huaphane prov.' / 'Ban Saluei vill. env.' / 'MT. PHU PANE, 1200-1900m' / '26.iv. - 10.v. 2013' / 'St. Jákł et local coll. lgt.'; (2 ♀♀): 'NE LAOS, Hua Phan Prov.' / 'MT. PHU PANE' / '1200-1600m, 10.-22.v.2011' / '20,12N 103,59E' / 'St. Jákł and Lao collectors lgt.'; (1 ♀): 'NE LAOS, Hua Phan Prov.' / 'MT. PHU PANE' / '1200-1600m, 1.-10.vi.2011' / '20,12N 103,59E' / 'Lao collectors lgt'; (1 ♀): 'NE LAOS: Hua Phan prov.' / 'Ban Saluei env.' / 'MT. PHU PANE' / '1200-1600m, 6.-20.v.2014' / 'P. Viktora et local coll. lgt', (all specimens CPV).

Remarks. Based on the studies of the type specimen of *Perissus chapaanus* Pic, 1930 (MNHN) and additional material from Laos, it is clear, that this is a representative of the genus *Demonax* Thomson, 1861. Main features are narrow interspace between antennal insertions and sharp spines on inner sides of antennomeres 3-7 apices. These are typical characters of *Demonax* species. *P. chapaanus* Pic, 1930 does not belong to the genus *Perissus* Chevrolat, 1863 and is thus transferred here to the genus *Demonax* Thomson, 1861.

Demonax chapaanus (Pic, 1930) belongs to the group of *Demonax* species with similar shape of body, semicircular pronotum and with pronotum and legs covered by long erect setation (for example *Demonax bicinctus* (Hope, 1831), *Demonax breveluteobasalis* Pic, 1943, *Demonax conspurcatus* Holzschuh, 2009 and *Demonax jeanvoinei* Pic, 1927). All species from this group occur at higher altitudes over 1000 meters and they are not known to me from the lowlands.

Distribution. Laos, Vietnam.

***Demonax culex* sp. nov.**

(Fig. 2)

Type locality. Vietnam, Dak Lak province.**Type material.** Holotype (♀): 'Vietnam' / 'Dak Lak' / 'iv. 2019', (CPV). The type is provided with a printed red label: 'Demonax culex sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.**Description.** Habitus of female holotype as in Fig. 2. Body from pale reddish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 8.46 mm, widest in humeral part of elytra (1.74 mm), 4.86 times longer than wide.

Head pale reddish brown, widest through the eyes, indistinctly narrower than pronotum, punctured by small-sized punctuation (punctuation partly granulated), punctures larger near base and very small in anterior part of head. Head with narrow longitudinal furrow between eyes. Head partly covered by yellow recumbent pubescence, in basal part with long pale erect setae. Eyes goldenish brown, longitudinally emarginate. Clypeus ochre yellow, shiny. Mandibles ochre yellow with black margins in tip, shiny, covered by yellowish setation in edges.

Maxillary palpus ochre yellow, punctured by indistinct punctuation, covered by sparse yellowish setation. Ultimate palpomere longest, widened apically, apex rounded.

Antennae ochre yellow (ultimate antennomeres slightly darker), long, narrow, filiform, punctured by indistinct punctuation, antennomeres 1-5 with sparse longer yellowish pubescence, antennomeres 6-11 with dense short pale pubescence. Antennomeres 2-7 with long yellowish setation on inner side. Antennomere 3 with distinct sharp spine in inner side of apex, antennomere 4 with short indistinct sharp spine on inner side of apex. Antennae reaching six sevenths elytral length. Antennomere 2 shortest, antennomeres 3 and 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.42 : 0.17 : 1.00 : 0.79 : 1.00 : 0.77 : 0.69 : 0.56 : 0.52 : 0.37 : 0.42.

Pronotum pale reddish brown with darker – blackish brown places (mostly in margins and from ventral side), elongate, narrow, shape of pronotum as in Fig. 2. Pronotum only slightly narrower than elytra, 1.59 times longer than wide at base and 1.39 times longer than wide at widest point (before middle from base to apex). Dorsal surface with dense punctuation, covered by stripes of yellow pubescence and indistinct long sparse recumbent yellow pubescence in basal half of pronotal disc (as in Fig. 2). Pubescence denser in basal angles. Pronotum with long pale erect setation. Lateral margins arcuate, anterior margin slightly arcuate, base slightly excised.

Scutellum brown, small, covered by dense yellow pubescence.

Elytra 5.58 mm long and 1.74 mm wide (3.2 times longer than wide); pale reddish brown, parallel, elongate, punctured by distinct punctuation (punctures in basal part larger than those in apical part), covered by spots of dense yellow pubescence, rest of elytra covered by very sparse yellowish pubescence (as in Fig. 2). Elytral apex rounded, without spines. Apical margin with long yellowish setation.

Pygidium pale reddish brown, with shallow punctuation, covered by sparse indistinct yellowish pubescence, apex rounded, covered by dense yellowish setation.

Legs very long and very narrow, pale reddish brown (protibiae, meso- and metafemora and ultimate tarsomeres slightly darker), punctured by dense shallow punctuation, partly with indistinct sparse yellowish pubescence and darker pubescence on meso- and metafemora. Legs with long yellowish setation. Tarsi punctured, covered by yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.9 times longer than metatarsomeres 2 and 3 together.

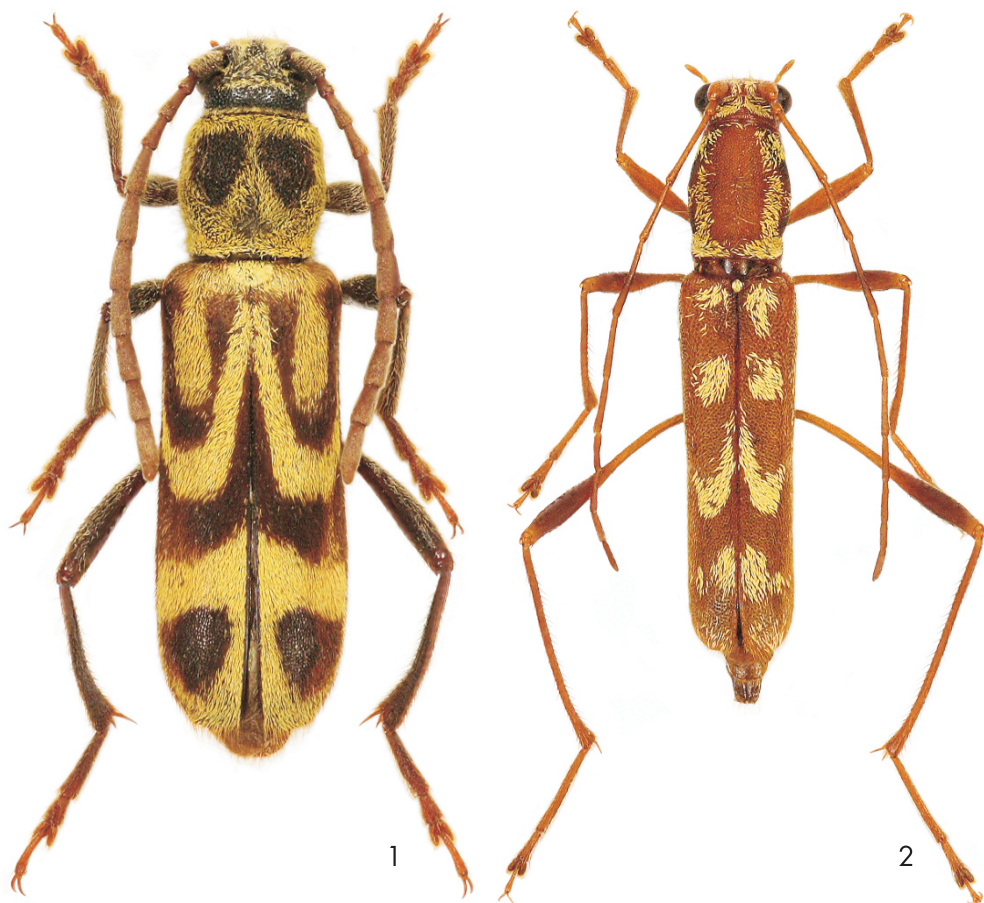


Fig. 1. *Clytus Chiangmaiensis* sp. nov.: female holotype.

Fig. 2. *Demonax culex* sp. nov.: female holotype.

Ventral side of body from pale reddish brown to black, punctured, partly covered by dense yellow pubescence, partly by very sparse indistinct pale pubescence. Metasternum and metepisternum black, partly covered by dense recumbent yellow pubescence. Ventrites blackish brown, ventrite 1 almost completely covered by dense yellow pubescence, ventrites 2-5 covered by dense yellow pubescence except triangular places without dense pubescence in base. Ventral side of body with erect pale setation. Elytral epipleura pale reddish brown, punctured.

Male. Unknown.

Differential diagnosis. The most similar species based on morphological similarity are *Demonax contrarius* Holzschuh, 1991, described from Northern Thailand, *Demonax tryznai* Viktora, 2015, described from Northern India and *Demonax testaceus* (Hope, 1831), described from Nepal.

Demonax culex sp. nov. distinctly differs from *D. contrarius* and *D. tryznai* by different body colour and different shape of spots of pubescence on elytra and pronotum. *D. culex* has colour of

pubescence on elytra and pronotum yellow; while *D. contrarius* and *D. tryznai* have colour of pubescence white.

D. culex distinctly differs from similar species *D. testaceus* mainly by different shape of spots of pubescence on elytra, which are larger and yellow and by pronotum with distinct stripes of yellow pubescence; while *D. testaceus* has elytra with indistinct spots of white pubescence and pronotum with vague spots of white pubescence only in basal angles and in margins.

Other similar species based on colour similarity is *Demonax matyasi* Viktora, 2016, described from Yunnan province of China.

D. culex distinctly differs from a similar species *D. matyasi* mainly by narrower body, by more elongate pronotum, by pronotal disc longitudinally without pubescence and by different shape of colour spots on elytra; while *D. matyasi* has pronotum almost completely covered by dense pubescence.

Etymology. From Latin *culex* (it means „mosquito“).

Distribution. Vietnam (Dak Lak).

***Demonax dactylogramma* sp. nov.**

(Fig. 3)

Type locality. Vietnam, Kon Tum province, Ngoc Linh Mt.

Type material. Holotype (♀): ‘VIETNAM, Kon Tum prov.’ / ‘NGOC LINH mt.’ / ‘1900m, v. 2019’ / ‘local collector leg.’, (CPV); Paratype: (1 ♀): same data as holotype, (CPV). The types are provided with a printed red label: ‘*Demonax dactylogramma* sp. nov.’ / ‘HOLOTYPE [respective PARATYPE]’ / ‘P. Viktora det., 2019’.

Description. Habitus of female holotype as in Fig. 3. Body from dark brown to black, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 8.13 mm (female paratype 8.73 mm), widest in humeral part of elytra (1.88 mm), 4.32 times longer than wide.

Head black, short, widest through the eyes, narrower than pronotum. Head punctured by coarser large-sized punctuation in posterior part, frons and anterior part punctured by shallow small-sized punctuation. Head with narrow longitudinal furrow between antennal insertions. Head partly covered by long recumbent whitish green pubescence and sparse long erect pale setation. Eyes dark brown, distinctly emarginate. Clypeus brown, shiny. Mandibles from dark brown to black, shiny, with long whitish setation in edges.

Maxillary palpus brown with darker lateral margins, palpomeres short, with yellowish setation. Ultimate palpomere longest, widened apically, punctured by indistinct punctuation, apex narrowly pale brown and shiny.

Antennae from dark brown to blackish brown, filiform, reaching almost three fifths elytral length, punctured by indistinct punctuation. Antennomeres 1-5 covered by sparse longer whitish green pubescence, antennomeres 6-11 covered by dense short shiny pubescence. Antennomeres without distinct spines, antennomeres 3 and 4 only with sharp apex on inner side. Antennomere 2 shortest, antennomere 3 distinctly longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.52 : 0.22 : 1.00 : 0.71 : 0.76 : 0.69 : 0.63 : 0.54 : 0.46 : 0.44 : 0.53.

Pronotum black, convex, elongate, with distinctly arcuate lateral margins, 1.61 times longer than wide at base and 1.21 times longer than wide at widest point (near middle of pronotum). Anterior margin almost straight, base slightly excised. Dorsal surface punctured by dense



Fig. 3. *Demonax dactylogramma* sp. nov.: female holotype.

punctuation, covered by whitish green recumbent pubescence, pubescence denser near anterior and posterior margin (as in Fig. 3). Pronotum with long erect pale setation.

Scutellum roundly triangular, completely covered by dense whitish green recumbent pubescence.

Elytra 5.3 mm long and 1.88 mm wide (2.81 times longer than wide); black, almost parallel, shortly narrowing apically, covered by whitish green and black pubescence (as in Fig. 3). Elytra matte with sparse small-sized punctuation in basal quarter, rest of elytra shiny with denser small-sized punctuation. Elytral apex undulate, sutural angle with indistinct spine, lateral angle with longer distinct spine. Apical margin with long pale setation.

Pygidium narrow, blackish brown, shiny, with distinct punctuation, covered by long sparse whitish green pubescence, apex rounded with long yellowish setation.

Legs long and narrow, blackish brown, with large-sized shallow punctuation, covered by long whitish green pubescence (meso- and partly metafemora without pubescence in inner side). Meso- and metatibiae and meso- and metafemora with distinct pale setation. Tarsi punctured by

dense punctuation, covered by whitish pubescence and dense pale setation in edges. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.23 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, covered by stripes of dense whitish green pubescence. Metepisternum almost completely covered by dense whitish green pubescence, ventrites 1 and 2 with triangular spots of dense pubescence, ventrite 3 with dense pubescence only near apical margin. Ventrites 4 and 5 with sparse pubescence. Ventral side of body with long erect pale setation. Elytral epipleura black, covered by whitish green pubescence.

Male. Unknown.

Differential diagnosis. *Demonax dactylogramma* sp. nov. belongs to the group of *Demonax* species with similar shape of body, semicircular pronotum and with pronotum and legs covered by long erect setation (for example *Demonax chapaanus* (Pic, 1930), *Demonax bicinctus* (Hope, 1831), *Demonax breveluteobasalis* Pic, 1943, *Demonax conspurcatus* Holzschuh, 2009, and *Demonax jeanvoinei* Pic, 1927). The most similar species are *Demonax conspurcatus* Holzschuh, 2009 (Fig. 33), described from Laos and *Demonax chapaanus* (Pic, 1930) (Fig. 32), described from Vietnam.

D. dactylogramma distinctly differs from similar species *D. conspurcatus* mainly by more elongate body, by slightly narrower pronotum with less arcuate lateral margins, by narrower scutellum, by pronotal disc with dark spots with distinctly sparse pubescence and by each elytron with three large black spots (spot in middle vague); while *D. conspurcatus* has shorter and more robust body, wider pronotum with more arcuate lateral margins, pronotum and elytra completely covered by dense yellowish green pubescence (elytra sometimes with vague preapical black spot).

D. dactylogramma distinctly differs from similar species *D. chapaanus* mainly by narrower body, by different shape of colour spots on elytra, by distinctly narrower legs and antennae and by distinctly longer metatarsomere 1.

Etymology. From Latin *dactylogramma* (it means „finger-mark“).

Distribution. Vietnam (Kon Tum).

***Demonax fraudator* sp. nov.**

(Figs. 4-5)

Type locality. Vietnam, Kon Tum province, Ngoc Linh Mt.

Type material. Holotype (♂): 'VIETNAM, Kon Tum prov.' / 'NGOC LINH mt.' / '1400m, iv. 2019' / 'local collector leg.', (CPV); Paratypes: (5 ♂♂, 1 ♀): same data as holotype, (CPV); (2 ♀♀): 'VIETNAM, Kon Tum prov.' / 'NGOC LINH mt.' / '1900m, v. 2019' / 'local collector leg.', (CPV). The types are provided with a printed red label: '*Demonax fraudator* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 4a. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 10.44 mm (male paratypes from 9.52 to 11.23 mm), widest in humeral part of elytra (2.18 mm), 4.78 times longer than wide.

Head black (blackish brown near anterior margin), widest through the eyes, distinctly narrower than pronotum at widest point, posterior part punctured by coarse irregular punctuation, frons and anterior part punctured by dense small-sized punctuation. Head covered by recumbent pale

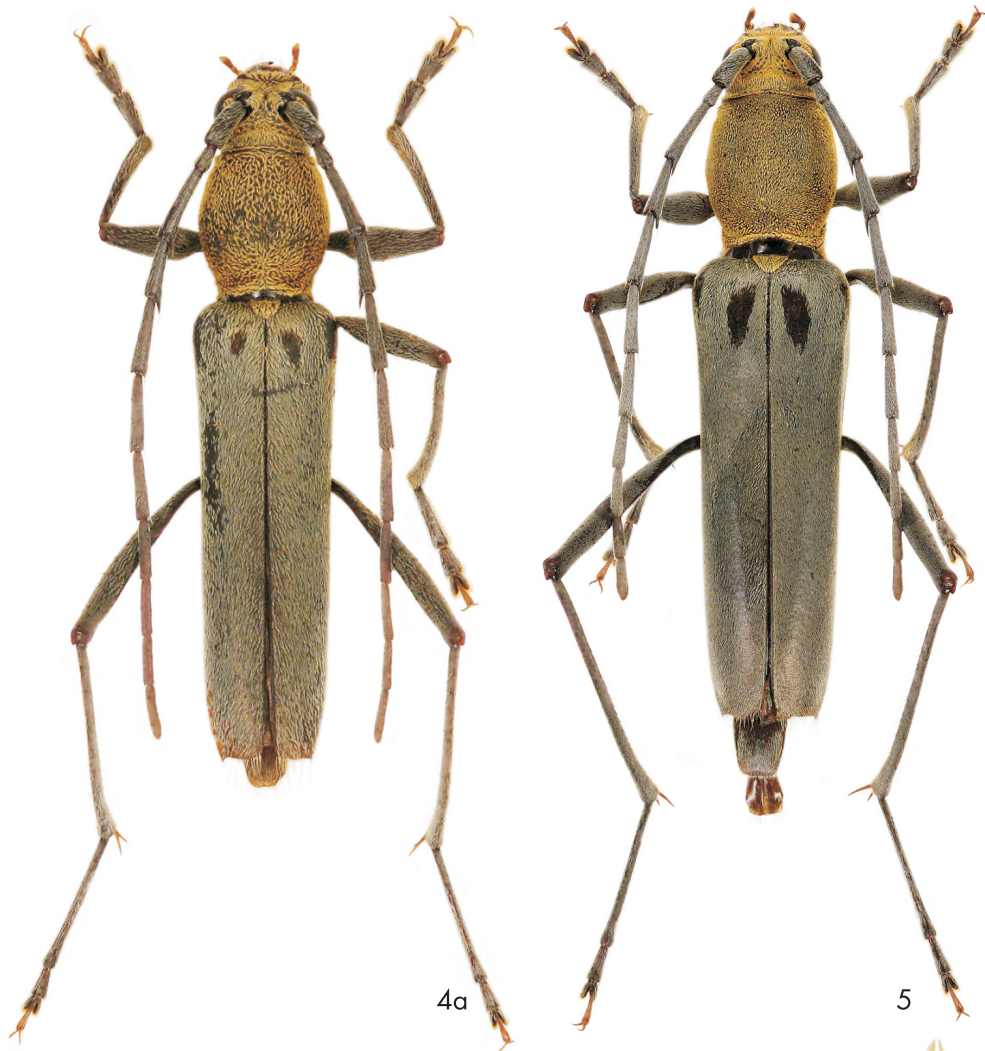


Fig. 4. *Demonax fraudator* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 5. *Demonax fraudator* sp. nov.:
female paratype.



orange pubescence. Eyes blackish brown, distinctly emarginate. Clypeus and labrum pale ochre yellow, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, with indistinct punctuation, with yellowish pubescence and long pale setation in edges.

Maxillary palpus from pale ochre yellow to pale brown, punctured, covered by pale setation. Ultimate palpomere widened apically, subtriangular.

Antennae long, reaching elytral apex, punctured by dense punctuation. Antennomeres widened apically, antennomeres 5-8 serrate on outer side of apex. Antennae blackish brown, covered by pale yellowish pubescence. Antennomeres 3 and 4 prolonged into long distinct sharp spine on inner side of apex, spine in antennomere 4 distinctly longer (approximately twice longer) than in antennomere 3. Antennomere 5 only with sharp apex on inner side. Antennomeres with yellowish setation in apex. Antennomere 2 shortest, antennomeres 5 and 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.68 : 0.34 : 1.00 : 0.82 : 1.05 : 1.05 : 0.99 : 0.83 : 0.78 : 0.67 : 0.74.

Pronotum black, narrower than elytra at humeri, punctured by coarse dense granulated punctuation, covered by pale orange recumbent pubescence (as in Fig. 4a). Pronotum 1.61 times longer than wide at base and 1.15 times longer than wide at widest point (near middle of pronotum). Lateral margins distinctly arcuate, anterior margin and base almost straight.

Scutellum wide, shield-shaped with rounded apex, covered by pale orange pubescence.

Elytra 6.96 mm long and 2.18 mm wide (3.19 times longer than wide); indistinctly narrowing apically, black with dark brown apex, punctured by dense small-sized punctuation, covered by yellowish pubescence, each elytron with black spot with black pubescence in middle near base (as in Fig. 4a). Suture black, distinct, without pubescence. Elytral apex undulate, each elytron with short indistinct thorn in sutural angle and distinct sharp thorn in lateral angle. Elytral apex with long yellowish setation.

Pygidium dark brown, punctured, covered by yellowish setation.

Legs very long and narrow, blackish brown (claws paler - brown), punctured by dense punctuation, covered by yellowish pubescence. Tibiae with dense long yellowish setation in apical part, meso- and metafemora with sparse pale setation. Tarsi narrow, distinctly punctured by dense punctuation, covered by yellowish pubescence and longer yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.97 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, partly covered by pale orange pubescence, partly by pale yellowish pubescence. Mesepisternum, metepisternum and ventrites covered by pale orange pubescence, metasternum and coxae covered by pale yellowish pubescence. Elytral epipleura black, punctured, covered by the same pubescence as in dorsal surface of elytra.

Genitalia as in Fig. 4b.

Female. Habitus of female paratype as in Fig. 5. Body length from head to elytral apex (female paratypes) from 11.34 to 14.03 mm. Colour of female similar to male. Female without distinct differences, antennae shorter than in male.

Differential diagnosis. The most similar species are *Demonax honoratus* sp. nov., *Demonax niisatoi* Viktora & Tichý, 2017, described from Vietnam and *Rhaphuma baibarae* Matsushita, 1931 from Taiwan.

D. fraudator distinctly differs from similar species *D. honoratus* (Fig. 6a) mainly by antennomeres 3 and 4 prolonged into long distinct sharp spine on inner side of apex, by scutellum with pubescence of the same color as in pronotum and by different shape of male genitalia (as in Figs. 4b and 6b); while *D. honoratus* has antennomeres 3 and 4 without spines (only with sharp apex

on inner side) and scutellum completely covered by dense pale yellowish pubescence (pronotum covered by pale orange pubescence).

D. fraudator distinctly differs from similar species *D. niisatoi*, described from same locality, mainly by distinctly shorter pronotum, covered by pale orange pubescence (distinctly longer cylindrical pronotum without pale orange pubescence in *D. niisatoi*) and by distinctly shorter antennae reaching elytral apex; while *D. niisatoi* has antennae distinctly longer than body length.

D. fraudator distinctly differs from similar species *Rhaphuma baibarae* Matsushita, 1931 (Fig. 36) mainly by shorter pronotum and antennae, by antennomeres 3 and 4 prolonged into long distinct sharp spine on inner side of apex and by scutellum with pubescence of the same color as in pronotum and by different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 4b and 36b); while *R. baibarae* has antennomeres 3 and 4 without spines and scutellum completely covered by dense whitish pubescence (pronotum covered by pale orange pubescence).

Etymology. From Latin *fraudator* (it means „swindler“).

Distribution. Vietnam (Kon Tum).

***Demonax honoratus* sp. nov.**
(Figs. 6-7)

Type locality. Vietnam, Kon Tum province, Ngoc Linh Mt.

Type material. Holotype (♂): 'VIETNAM, Kon Tum prov.' / 'NGOC LINH mt.' / '1400m, iv. 2019' / 'local collector leg.', (CPV); Paratypes: {3 ♀♀}: same data as holotype, (CPV); {1 ♀}: 'VIETNAM, Kon Tum prov.' / 'NGOC LINH mt.' / 'iv. 2018' / 'local collector leg.', (CPV). The types are provided with printed red labels: '*Demonax honoratus* sp. nov.' / 'HOLOTYPE' [respective PARATYPE] / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 6a. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 11.29 mm, widest in humeral part of elytra (2.49 mm), 4.53 times longer than wide.

Head reddish brown (dark brown in anterior margin), widest through the eyes, narrower than pronotum at widest point, posterior part punctured by coarse irregular punctuation, frons and anterior part punctured by dense small-sized punctuation. Head with narrow longitudinal furrow between antennal insertions. Head covered by relatively dense recumbent pale orange pubescence and long pale erect setation. Eyes blackish brown, distinctly emarginate. Clypeus and labrum pale yellow, shiny, with yellowish setation. Mandibles brown with blackish margins and black tip, shiny, with yellow pubescence and a few long pale erect setae in edges.

Maxillary palpus pale yellow, punctured by indistinct punctuation, palpomeres widened apically, covered by pale setation. Ultimate palpomere longest, distinctly widened apically, apex rounded.

Antennae long, narrow, reaching elytral apex, punctured by relatively dense punctuation, antennomeres widened apically. Antennomeres 6-10 serrate on outer side of apex. Antennae blackish brown, covered by relatively sparse yellowish pubescence. Antennomeres without distinct spines, antennomeres 3-5 only with sharp apex on inner side. Antennomeres 2-7 with long erect yellowish setation on inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.57 : 0.22 : 1.00 : 0.69 : 0.94 : 0.94 : 0.94 : 0.85 : 0.85 : 0.80 : antennomere 11 missing.

Pronotum reddish brown (blackish in margins), elongate, narrow, narrower than elytra at

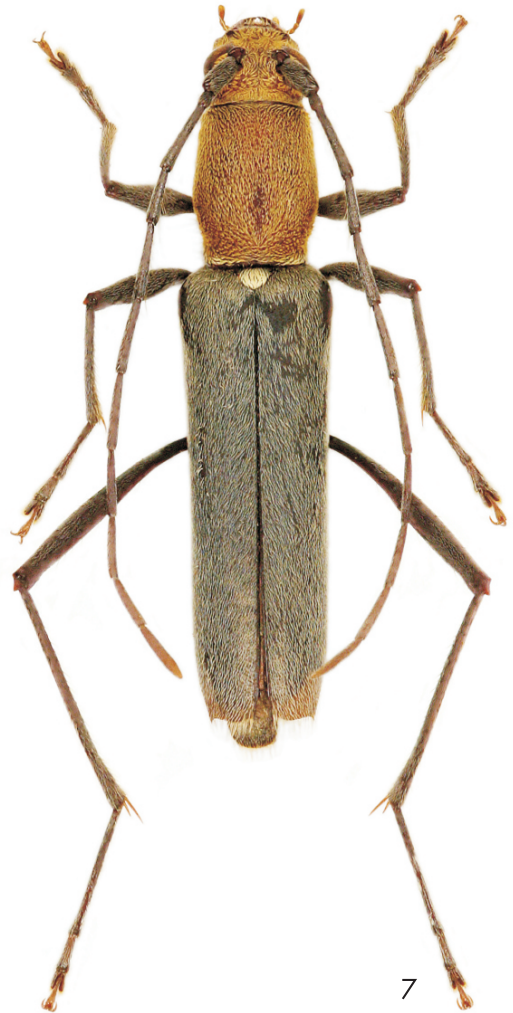


Fig. 6. *Demonax honoratus* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 7. *Demonax honoratus* sp. nov.:
female paratype.

humeri, granulated by dense granulation, covered by pale orange pubescence and narrowly by dense pale yellowish pubescence at base (as in Fig. 6a). Pronotum 1.56 times longer than wide at base and 1.24 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins slightly arcuate, anterior margin and base almost straight. Pronotum with erect pale setae in basal part.

Scutellum wide, shield-shaped with rounded apex, completely covered by dense pale yellowish pubescence.

Elytra 7.43 mm long and 2.49 mm wide (2.98 times longer than wide); indistinctly narrowing apically, black with blackish brown apex, punctured by dense small-sized punctuation, (punctuation sparser in basal part), covered by yellowish pubescence (as in Fig. 6a). Suture black, distinct, without pubescence. Elytral apex distinctly undulate, each elytron with short indistinct thorn in sutural angle and distinct sharp thorn in lateral angle. Elytral apex with long yellowish setation.

Pygidium dark brown, punctured, covered by yellowish setation, apex rounded.

Legs very long and narrow, blackish brown (claws paler - brown), punctured by dense punctuation, covered by yellowish pubescence. Tibiae with dense long yellowish setation in apical part, meso- and metafemora with pale erect setation (setation denser from ventral side). Tarsi narrow, distinctly punctured by dense punctuation, covered by yellowish pubescence and longer yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.12 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to black (mesepisternum and coxae brown). Mesepisternum in apical half and metepisternum completely covered by dense recumbent pale yellowish pubescence. Metasternum completely covered by pale yellowish pubescence (pubescence distinctly sparser than in metepisternum). Ventrites completely covered by pale yellowish pubescence and long erect pale setae. Elytral epipleura black, punctured, covered by pale pubescence.

Genitalia as in Fig. 6b.

Female. Habitus of female paratype as in Fig. 7. Body length from head to elytral apex (female paratypes) from 9.93 to 10.77 mm. Colour of female similar to male. Female without distinct differences, tarsi narrower than in male.

Differential diagnosis. The most similar species are *Demonax albinotus* Holzschuh, 2016, described from Laos, *Demonax fraudator* sp. nov., *Demonax niisatoi* Viktora & Tichý, 2017 and *Rhaphuma baibarae* Matsushita, 1931.

Demonax honoratus sp. nov. distinctly differs from similar species *D. albinotus* mainly by head and pronotum covered by pale orange pubescence; while *D. albinotus* has head and pronotum covered by yellowish gray pubescence.

D. honoratus distinctly differs from similar species *D. fraudator* (Fig. 4a) mainly by antennomeres without spines, by scutellum completely covered by dense pale yellowish pubescence (pronotum covered by pale orange pubescence) and by different shape of male genitalia (as in Figs. 4b and 6b); while *D. fraudator* has antennomeres 3 and 4 prolonged into long distinct sharp spine on inner side of apex and by scutellum with pubescence of the same color as in pronotum.

D. honoratus distinctly differs from similar species *D. niisatoi*, described from same locality, mainly by distinctly shorter pronotum, covered by pale orange pubescence (distinctly longer cylindrical pronotum without pale orange pubescence in *D. niisatoi*) and by antennomeres without spines in apex; while *D. niisatoi* has antennomeres 3 and 4 with distinct spines on inner side of apex.

D. honoratus distinctly differs from similar species *R. baibarae* (Fig. 36) mainly by head covered by pale orange pubescence and different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 6b and 36b); while *R. baibarae* has head covered by pale gray pubescence.

Etymology. From Latin *honoratus* (it means „dignified”).

Distribution. Vietnam (Kon Tum).

***Demonax mondulkiriensis* sp. nov.**

(Figs. 8-9)

Type locality. E Cambodia, Monduliri Province, 13 km N of Sen Monorom, 12°31.17117'N 107°15.2345'E.

Type material. Holotype (♂): 'E Cambodia' / '13 km N of Sen Monorom' / 'N 12°31.17117' E 107°15.2345'' / '600 m, 22. - 24. v. 2019' / 'P. Viktora lgt.', (CPV); Paratypes: (4 ♂♂, 1 ♀): same data as holotype, (CPV); (2 ♂♂, 3 ♀♀): 'E Cambodia' / '13 km N of Sen Monorom' / 'N 12°31.17117' E 107°15.23450'' / '600 m, 22. - 24. v. 2019' / 'P. Kabátek lgt.', (CPK). The types are provided with a printed red label: '*Demonax mondulkiriensis* sp. nov.' / 'HOLOTYPE' [respective PARATYPE] / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 8a. Body from brown to black, elongate, punctate, with pubescence. Body length 10.7 mm (male paratypes from 9.6 to 11.4 mm), widest in humeral part of elytra (2.6 mm), 4.1 times longer than wide.

Head blackish brown in anterior part, black in posterior part, widest through the eyes, narrower than pronotum at widest place, with dense punctuation, covered by whitish pubescence in anterior part and by yellowish pubescence in posterior part. Frons in middle with narrow longitudinal furrow. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum from pale brown to brown, shiny, with sparse punctuation and yellowish setation. Mandibles blackish brown with black tip, shiny, with yellowish setation and whitish pubescence in edges.

Maxillary palpus pale brown, with indistinct punctuation and short pale setation. Ultimate palpomere longest, widened apically with rounded apex.

Antennae relatively long, not reaching elytral apex (as in Fig. 8a), filiform, blackish brown, with dense punctuation. Antennomeres 1-10 distinctly widened apically, antennomeres 7-10 serrate in outer side. Antennomeres 1-7 shiny, covered by longer whitish pubescence, antennomeres 8-11 matte, covered by shorter dark pubescence. Antennomeres 3-6 with long yellowish setation on inner side. Antennomeres without distinct spines, antennomeres 3-6 only with sharp apex on inner side. Antennomere 2 shortest, antennomere 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.71 : 0.30 : 1.00 : 0.91 : 1.08 : 1.23 : 1.16 : 1.08 : 0.89 : 0.80 : 0.85.

Pronotum black, slightly narrower than elytra at base, only slightly elongate, 1.36 times longer than wide at base and 1.06 times longer than wide at widest point (before middle from base to apex). Lateral margins distinctly arcuate, anterior margin and base indistinctly undulate. Dorsal surface with granulation, covered by yellowish and black pubescence (as in Fig. 8a). Yellowish pubescence denser and paler in basal angles and in basal margin from ventral side. Pronotum in basal part with a few long pale setae.

Scutellum black, wide, semielliptical, almost completely covered by dense yellowish pubescence.

Elytra 6.9 mm long and 2.6 mm wide (2.65 times longer than wide); black (in places with yellow pubescence brown), narrowing apically, with dense small-sized punctuation. Elytra covered by yellow and black pubescence (as in Fig. 8a). Elytral apex cut, slightly undulate, in sutural angles with short indistinct thorns, lateral angles terminated by long distinct thorns. Apical

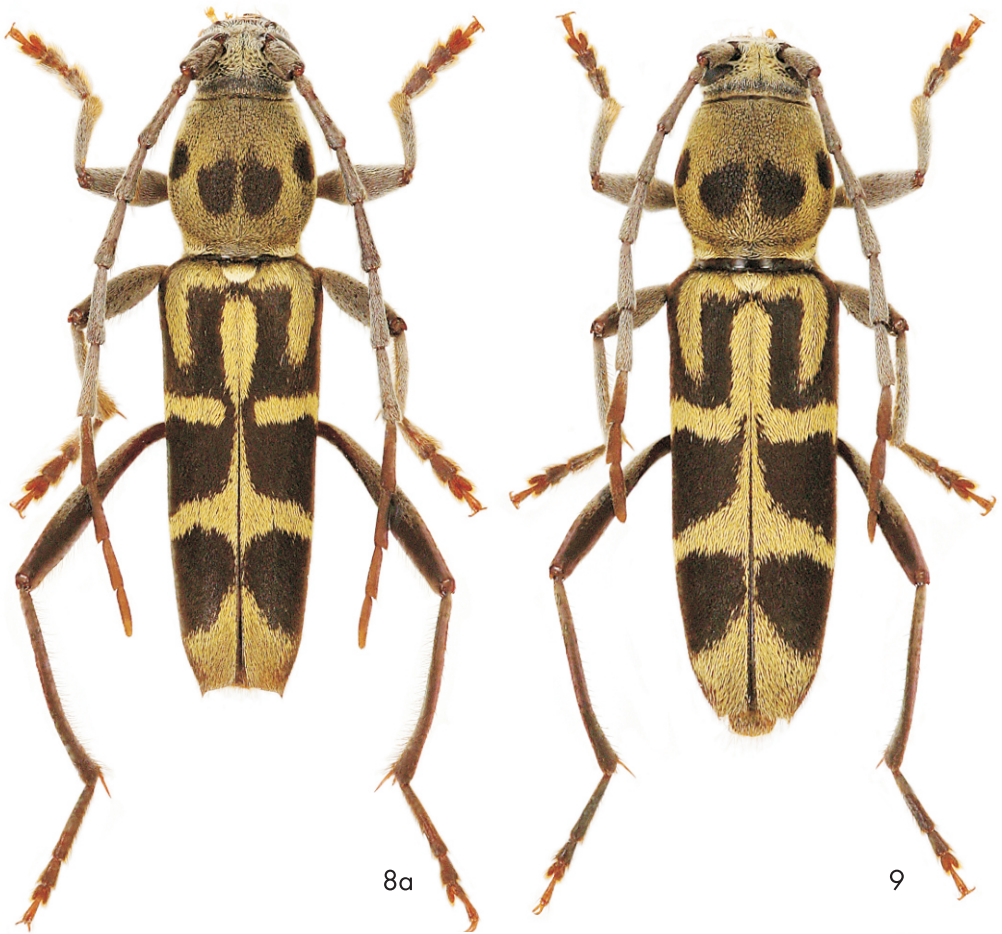


Fig. 8. *Demonax mondulkiriensis* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 9. *Demonax mondulkiriensis* sp. nov.:
female paratype.



margin with long yellowish setation.

Pygidium pale brown, with dense punctuation, covered by long pale pubescence and long yellowish setation in apical margin, apex rounded.

Legs long and narrow, from blackish brown to black (tarsi and claws paler than femora and tibiae). Legs punctured by dense punctuation, covered by whitish pubescence and long yellowish setation in inner side. Tarsi with dense punctuation, covered by long whitish pubescence and long yellowish setation in lateral margins. 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 black, punctured by dense punctuation. Mesepisternum covered by dense recumbent whitish pubescence in apical two thirds, metepisternum almost completely covered by dense recumbent whitish pubescence (except margins), metasternum almost completely covered by whitish pubescence (pubescence sparser than in metepisternum). Ventrites 1-3 almost completely covered by dense whitish pubescence, ventrites 4-5 partly covered by whitish pubescence. Ventrites with very long and dense pale setation. Elytral epipleura blackish brown, punctured, covered by short dark pubescence.

Genitalia as in Fig. 8b.

Female. Habitus of female paratype as in Fig. 9. Body length (female paratypes) from 9.5 to 11.0 mm. Colour of females similar to males. Female with less elongate elytra and pronotum than in male, antennae distinctly shorter than in male (reaching three fifths elytral length from base to apex), pro- and mesotarsi distinctly narrower than in male.

Differential diagnosis. The most similar species is *Demonax nebulosus* Gressitt & Rondon, 1970 (Fig. 34), described from Laos.

Demonax mondulkiriensis sp. nov. distinctly differs from similar species *D. nebulosus* mainly by antennomeres without spines, by shorter pronotum with four black spots and by different shape of male genitalia (as in Figs. 8b and 34b); while *D. nebulosus* has antennomeres 3-5 with spines in inner side of apex and pronotum with three black spots.

Etymology. Named after the type locality, Mondulkiri Province.

Distribution. Cambodia (Mondulkiri).

***Demonax sumbaensis* sp. nov.**

(Fig. 10)

Type locality. Indonesia, Sumba Island, S of Lewa vill., Langarillu vill. env.

Type material. Holotype (♀): 'Indonesia' / 'E Sumba, xi. 2018' / 'S of Lewa' / 'Langarillu vill. env.' / 'ca 400m, local collector', (CPV). The type is provided with a printed red label: 'Demonax sumbaensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2019'.

Description. Habitus of female holotype as in Fig. 10. Body black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 9.23 mm, widest in humeral part of elytra (2.12 mm), 4.35 times longer than wide.

Head black, widest through the eyes, distinctly narrower than pronotum, punctured by dense punctuation. Head covered by white pubescence (pubescence denser and longer in frons). Eyes

goldenish brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny, punctured, covered by yellowish setation. Mandibles black, shiny, with white pubescence and pale setation in edges.

Maxillary palpus pale brown, punctured by indistinct punctuation, covered by short pale setation. Ultimate palpomere longest, widened apically, apex rounded.

Antennae blackish brown (basal antennomeres darker), narrow, filiform, punctured by dense punctuation, covered by pale pubescence (antennomeres 1-4 with distinctly longer pubescence than in antennomeres 5-11). Antennomeres 3-6 with yellowish setation on inner side. Antennomeres 3 and 4 prolonged into very long sharp spines on inner side of apex. Antennomere 2 shortest, antennomere 5 longest. Antennae reaching two thirds elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.72 : 0.23 : 1.00 : 1.04 : 1.16 : 1.03 : 0.92 : 0.76 : 0.70 : 0.59 : 0.75.

Pronotum black, wide, shape of pronotum as in Fig. 10. Pronotum fractionally narrower than elytra in widest point, 1.66 times longer than wide at base and 1.19 times longer than wide at widest point (before middle from base to apex). Dorsal surface with dense small-sized punctuation, covered by white and dark shiny pubescence (as in Fig. 10). White pubescence dense near base, in basal angles and near anterior margin. Pronotum with long pale erect setae in basal half. Lateral margins arcuate, anterior margin undulate, base almost straight.

Scutellum black, heart-shaped, indistinctly punctured, covered by sparse whitish pubescence.

Elytra 5.76 mm long and 2.12 mm wide (2.71 times longer than wide); black with brown apex, almost parallel, elongate, matte (in apex shiny), punctured by dense small-sized punctuation, covered by white and black shiny pubescence (as in Fig. 10). Elytral apex cut, slightly undulate, each elytron with short thorn in sutural and lateral angle. Apical margin with long yellowish setation.

Legs long and narrow, blackish brown, punctured by dense punctuation, covered by whitish pubescence. Tibiae with dense yellowish setation in apical part. Meso- and metatibiae and meso- and metafemora with yellowish erect setae. Tarsi punctured, covered by whitish pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 3.4 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, punctured. Metepisternum covered by very sparse pale pubescence in basal two thirds and denser white pubescence in apical third. Metepisternum and metasternum almost completely covered by dense recumbent white pubescence. Ventrite 1 covered by sparse pale pubescence in basal half and dense white pubescence in apical part, ventrite 2 completely covered by dense recumbent white pubescence, ventrites 3-5 only with sparse goldenish pubescence. Ventrites with long erect pale setation. Elytral epipleura black, punctured, covered by dark shiny pubescence.

Male. Unknown.

Differential diagnosis. The most similar species are *Demonax andamanicus* Gahan, 1906, described from Andaman Islands, *Demonax fallax* Heller, 1935, described from Solomon Islands, *Demonax honzai* Viktora, 2019, described from Solomon Islands (Malaita), *Demonax involutus* Viktora, 2018, described from Indonesia (Sumba), and *Demonax jimmiensis* Gressitt, 1959, described from New Guinea.

Demonax sumbaensis sp. nov. differs from similar species *D. andamanicus* mainly by less elongate pronotum (distinctly narrower and longer in *D. andamanicus*), and by shorter antennae (antennae longer than body in *D. andamanicus*).

D. sumbaensis differs from similar species *D. fallax* mainly by narrow filiform antennae (antennae

distinctly wider and serrate in *D. fallax*).

D. sumbaensis differs from similar species *D. honzai* mainly by distinctly shorter protarsi, by different shape of stripes of pale pubescence on elytra and pronotum and by unicolored blackish brown antennae (antennomeres 10 and 11 pale yellow in *D. honzai*).

D. sumbaensis differs from similar species *D. jimmiensis* mainly by different shape of pronotum, by different shape of stripes of pale pubescence on elytra, especially by dark basal margin of elytra in *D. sumbaensis* (basal margin with stripe of gray pubescence in *D. jimmiensis*).

D. sumbaensis differs from similar species *D. involutus* mainly by unicolored blackish brown antennae (antennomeres 8 and 9 pale yellow in *D. involutus*).

Etymology. Named after the type locality, Sumba Island.

Distribution. Indonesia (Sumba).

***Demonax vitreus* sp. nov.**

(Fig. 11)

Type locality. Indonesia, South Sulawesi prov., Seko.

Type material. Holotype (♀): 'Sulawesi' / 'Seko' / 'xi. 2017', (CPV). The type is provided with a printed red label: '*Demonax vitreus* sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.

Description. Habitus of female holotype as in Fig. 11. Body black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 7.46 mm, widest in humeral part of elytra (1.54 mm), 4.84 times longer than wide.

Head black, widest through the eyes, narrower than pronotum, punctured by dense punctuation. Head with narrow longitudinal furrow between eyes. Head covered by white pubescence (pubescence denser in frons). Clypeus and labrum ochre yellow, shiny, punctured, covered by yellowish setation. Mandibles blackish brown, shiny, with white pubescence and pale setation in edges.

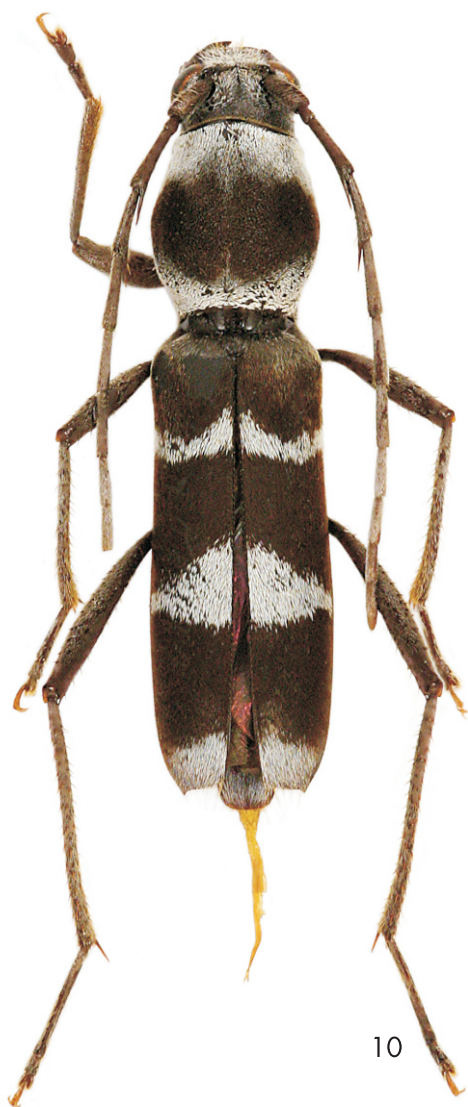
Maxillary palpus pale brown, punctured by indistinct punctuation, covered by short pale setation. Ultimate palpomere longest, widened apically, apex rounded.

Antennae brown, narrow, filiform, punctured by dense punctuation, covered by short pale pubescence. Apex of antennomeres 3-7 with long pale setae on inner side. Antennomeres 3 and 4 prolonged into very long spines on inner side of apex. Antennomere 2 shortest, antennomere 3 longest. Antennae reaching two thirds elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.59 : 0.24 : 1.00 : 0.70 : 0.89 : 0.74 : 0.66 : 0.54 : 0.53 : 0.46 : 0.55.

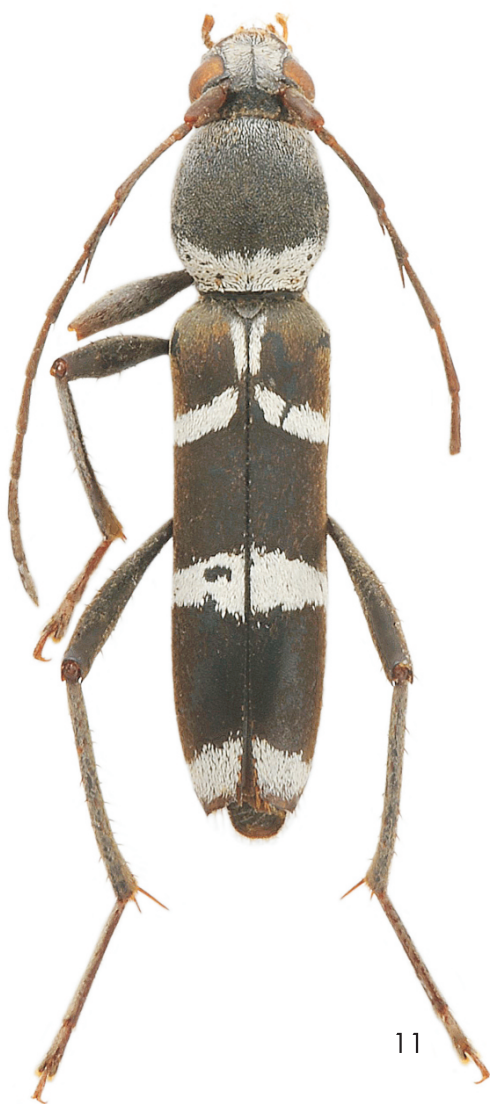
Pronotum black, wide, roundly elongate, shape of pronotum as in Fig. 11. Pronotum fractionally narrower than elytra at widest point, 1.72 times longer than wide at base and 1.14 times longer than wide at widest point (near middle of pronotum). Dorsal surface with dense small-sized granulation, covered by white and dark shiny pubescence (as in Fig. 11). White pubescence at base dense. Lateral margins and anterior margin slightly arcuate, base almost straight.

Scutellum black, triangular with rounded apex, punctured, covered by sparse whitish pubescence.

Elytra 4.96 mm long and 1.54 mm wide (3.22 times longer than wide); black with brown apex, almost parallel, elongate, matte (shiny in apex), punctured by dense small-sized punctuation, covered by white and black shiny pubescence (as in Fig. 11). Elytral apex cut, slightly undulate, each elytron with short thorn in sutural and lateral angle. Apical margin with long yellowish setation.



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Fig. 10. *Demonax sumbaensis* sp. nov.: female holotype.

11

Fig. 11. *Demonax vitreus* sp. nov.: female holotype.

Legs long and narrow, blackish brown, punctured by dense punctuation, covered by sparse whitish pubescence (pubescence indistinct in femora), tibiae with long yellowish setation. Meso- and metafemora with a few yellowish setae. Tarsi punctured, covered by whitish pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.48 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured. Mesepisternum covered by dense recumbent white pubescence in apical half. Metepisternum completely covered by dense white pubescence, metasternum covered by dense white pubescence in apical part and edges. Ventrite 1 covered by

dense recumbent white pubescence only in apical half, ventrite 2 covered by dense white pubescence in apical two thirds, ventrites 3-5 only with sparse goldenish pubescence. Elytral epipleura black, punctured, covered by sparse pale pubescence.

Male. Unknown.

Differential diagnosis. The most similar species are *Demonax imperceptus* Viktora, 2018, described from Indonesia (Flores Island), *Demonax niveofasciatus* Viktora, 2014, described from Western Malaysia and *Demonax palikei* Viktora, 2018, described from Indonesia (Savu Island). *Demonax vitreus* sp. nov. differs from similar species *D. imperceptus* mainly by distinctly wider pronotum (pronotum of different shape) and by wider femora and tibiae.

D. vitreus differs from similar species *D. niveofasciatus* mainly by more elongate pronotum and by dorsal surface of pronotum with dense small-sized granulation; while *D. niveofasciatus* has transverse pronotum with small-sized reticulation.

D. vitreus differs from similar species *D. palikei* mainly by distinctly wider pronotum (pronotum of different shape) and by pronotum covered by dense white pubescence only near base; while *D. palikei* has pronotum widely covered by dense white pubescence near base and as well in anterior part.

Etymology. From Latin *vitreus* (it means „fragile“).

Distribution. Indonesia (South Sulawesi).

Genus *Psilomerus* Chevrolat, 1863

Type species. *Psilomerus angustus* Chevrolat, 1863.

Psilomerus ineptus sp. nov.

(Figs. 12-13)

Type locality. Malaysia, Sabah, Crocker Range, Kipandi Park.

Type material. Holotype (♂): 'Malaysia, Sabah' / 'Crocker Range 700m' / 'Kipandi Pk. iv-10-' / '2012 local coll', (CPV); Paratype: {1 ♀}: 'Malaysia, Sabah' / 'Crocker Range' / 'vi-6-2012' / 'local coll', (CDH). The types are provided with a printed red label: '*Psilomerus ineptus* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 12a. Body from ochre yellow to black, elongate, parallel, punctuate, with pubescence. Body length from head to elytral apex 5.86 mm, widest in humeral part of elytra (1.43 mm), 4.09 times longer than wide.

Head black, short, relatively broad, widest through the eyes, with distinct irregular granulated punctuation (with irregular small-sized punctuation in anterior part), covered by long sparse whitish pubescence and pale setae in edges. Head through the eyes wider than pronotum. Eyes goldenish, distinctly emarginate. Clypeus pale brown, with yellowish setation. Mandibles blackish brown, with yellowish setation in edges.

Maxillary palpus pale brown, short, punctured, with yellowish setation. Ultimate palpomere longest, widened apically, axe-shaped with rounded apex.

Antennae narrow, filiform, antennomeres 1-6 shiny, antennomeres 7-11 matte. Antennae reaching elytral apex. Scape dark brown with paler apex, antennomeres 1-6 brown with pale

brown apical part, antennomeres 7-9 ochre yellow, antennomeres 10-11 brown. Scape with indistinct punctuation, rest of antennomeres punctured by shallow punctuation. Antennae covered by pale pubescence (in antennomeres 1-5 pubescence sparser and longer). Antennomeres 2-7 with long yellowish setation on inner side. Antennomere 3 with very long spine directed backwards on inner side of apex, end of spine with extension. Antennomere 2 shortest, antennomere 4 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.51 : 0.51 : 1.00 : 2.93 : 2.50 : 2.01 : 1.76 : 1.25 : 1.35 : 1.09 : 1.39.

Pronotum elongate, black, with dense punctuation (punctures with microgranulation), disc in middle in basal part with longitudinal stripe without punctures. Pronotum partly covered by white pubescence, pubescence denser in margins (as in Fig. 12a). Pronotum narrowing apically, shape of pronotum as in Fig. 12a. Dorsal surface with long erect pale setae in basal part. Lateral margins only slightly arcuate, base and anterior margin almost straight. Pronotum 1.23 times longer than wide at base and at widest point (near middle).

Scutellum black, roundly triangular, punctured, with sparse whitish pubescence.

Elytra 3.68 mm long and 1.43 mm wide (2.57 times longer than wide); black, punctured by sparse relatively large-sized distinct punctuation, matte (apex shiny). Elytra partly covered by long sparse white pubescence, partly by sparse pale shiny pubescence (as in Fig. 12a). Elytra with wider humera and apex. Suture in apical four fifths distinctly elevated. Apex rounded, sutural and lateral angle sharp. Elytral apex covered by yellowish setation.

Legs long and narrow, dark brown (tarsomeres ochre yellow with brown apex). Legs punctured by dense shallow punctuation, partly covered by whitish pubescence and long darker yellowish setation. Tibiae with dense long yellowish setation (mainly in apical part). Tarsi punctured, covered by yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.82 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, covered by stripes of recumbent white pubescence and long erect pale setation. Elytral epipleura black, matte, narrow, punctured, with short shiny pubescence.

Genitalia as in Fig. 12b.

Female. Habitus of female paratype as in Fig. 13. Body length from head to elytral apex 6.28 mm. Colour of female the same as in male. Female without distinct differences, protarsomeres shorter than in male, antennae shorter, pronotum slightly longer and narrower.

Differential diagnosis. The most similar species are *Psilomerus danieli* Dauber, 2010 and *Psilomerus sarawakensis* Dauber, 2010, both described from Borneo.

Psilomerus ineptus sp. nov. distinctly differs from similar species *P. danieli* mainly by smaller body (male holotype 5.86 mm, female paratype 6.28 mm), by distinctly narrower and shorter antennae (not reaching elytral apex in female), by antennomeres 1-6 pale brown with paler apex, by antennomere 4 without spine in apex, by distinctly different shape of spots of pale pubescence on elytra and by distinctly shorter metatarsomere 1; while *P. danieli* has larger body (female holotype 7.8 mm, male paratypes 8.5 and 6.3 mm), wider and longer antennae (reaching elytral apex in female), antennomeres 1-6 blackish brown, antennomere 4 with distinct spine in inner side of apex.

P. ineptus distinctly differs from similar species *P. sarawakensis* by scutellum covered by sparse whitish pubescence and by distinctly different shape of spots of pale pubescence on elytra, especially in basal part (transverse pale wide stripe in basal margin of elytra in *P. ineptus* sp. nov.); while *P. sarawakensis* has scutellum completely covered by dense white pubescence and



12a

13

Fig. 12. *Psilomerus ineptus* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 13. *Psilomerus ineptus* sp. nov.:
female paratype.



12b

semielliptical oblique spot of pale pubescence in basal part of elytra, located far from the basal margin of elytra.

Etymology. From Latin *ineptus* (it means „tiny“).

Distribution. Malaysia (Sabah).

***Psilomerus pulex* sp. nov.**

(Fig. 14)

Type locality. Malaysia, Sabah, Crocker Range, Kipandi Park.

Type material. Holotype (♂): 'Malaysia, Sabah' / 'Crocker Range 700m' / 'Kipandi Pk. iv-10-' / '2012 local coll', (CPV); Paratypes: (1 ♀): same data as holotype, (CDH); (1 ♂): 'Malaysia, Sabah' / 'Crocker Range' / 'iv-6-1999' / 'local coll', (CDH). The types are provided with a printed red label: '*Psilomerus pulex* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 14a. Body from ochre yellow to black, elongate, parallel, punctuate, with pubescence. Body length from head to elytral apex 5.64 mm (male paratype 5.9 mm), widest in humeral part of elytra (1.17 mm), 4.82 times longer than wide.

Head black, short, relatively broad, widest through the eyes, with irregular granulated punctuation, partly covered by dense white pubescence and pale setation. Head through the eyes wider than pronotum. Eyes goldenish, distinctly emarginate. Clypeus ochre yellow, with yellowish setation. Mandibles brown with black basal part, shiny, with yellowish setation in edges.

Maxillary palpus pale brown, short, punctured, with yellowish setation. Ultimate palpomere longest, widened apically with slightly rounded apex.

Antennae narrow, long, filiform, antennomeres 1-5 shiny, antennomeres 6-11 matte. Antennae distinctly longer than body length (as in Fig. 14a). Scape dark brown with paler apex, antennomeres 2-4 pale ochre yellow, antennomeres 5-11 brown with paler basal part. Antennomeres 1-3 with indistinct punctuation, antennomeres 4-11 punctured by small-sized denser punctuation. Antennomeres 1-3 with very sparse indistinct pale pubescence, antennomeres 4-11 covered by denser short pale pubescence. Antennomeres 2-6 with long yellowish setation on inner side. Antennomere 3 with long spine on inner side of apex, end of spine with extension. Antennomere 2 shortest, antennomeres 5 and 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.06 : 0.42 : 1.00 : 2.41 : 2.79 : 2.73 : 2.52 : 2.32 : 2.17 : 2.14 : 2.44.

Pronotum elongate, narrow, black, with dense small-sized granulation, partly covered by white pubescence, pubescence denser in margins and narrowly in middle (as in Fig. 14a). Pronotum cylindrical, shape of pronotum as in Fig. 14a. Dorsal surface with long erect pale setae in basal part. Lateral margins indistinctly arcuate, base and anterior margin almost straight. Pronotum 1.47 times longer than wide at base (base is also the widest point of pronotum).

Scutellum black, long, narrow, shield-shaped, completely covered by dense recumbent white pubescence.

Elytra 3.74 mm long and 1.17 mm wide (3.19 times longer than wide); black, punctured by dense small-sized punctuation, matte, partly covered by white and partly by pale shiny pubescence (as in Fig. 14a). Suture in apical three quarters elevated. Apex rounded, sutural and lateral angle sharp.

Legs very long and narrow, tibiae and profemora brown, meso- and metafemora dark brown with pale ochre yellow basal part. Tarsi long and narrow, tarsomeres ochre yellow with darker

apex. Femora partly covered by sparse short whitish and short darker pubescence, tibiae with dense yellowish setation. Tarsi punctured, covered by yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 twice longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, covered by stripes of dense white recumbent pubescence. Elytral epipleura dark brown, matte, punctured, covered by short pubescence.

Genitalia as in Fig. 14b.

Female. Female paratype 6 mm long, colour almost the same as in male. Female without distinct differences, pronotum slightly wider than in male.

Differential diagnosis. The most similar species are *Psilomerus albifrons* Aurivillius, 1924 and *Psilomerus kishimotoi* Hayashi, 1975, both described from Borneo.

Psilomerus pulex sp. nov. differs from similar species *P. albifrons* mainly by distinctly different shape of spots of white pubescence on elytra (first wide transverse stripe in basal third, second wide longitudinal semielliptical spot near suture in two thirds elytral length and third wide spot in elytral apex, which covered whole apex); while *P. albifrons* has first narrow undulated transverse stripe in basal third, second small narrow transverse stripe near suture in four fifths elytral length and small spot in elytral apex, only near sutural angle.

P. pulex differs from similar species *P. kishimotoi* mainly by more narrower body, by unicolored black elytra (elytra blackish brown with more or less brown elytra in basal third in *P. kishimotoi*), by different shape of pronotum - narrowly cylindrical in *P. pulex* (distinctly wider in one third pronotal length from base to apex in *P. kishimotoi*), by differently covered pronotum by white pubescence, which is denser at margins and narrowly in middle with a relatively large percentage of coverage (pronotum black with spots of white pubescence only in anterior and posterior angles in *P. kishimotoi*), and by completely covered elytral apex by white pubescence (vague spot of pubescence, which not reaching margins in *P. kishimotoi*).

Etymology. From Latin *pulex* (it means „flea“).

Distribution. Malaysia (Sabah).

Genus *Rhaphuma* Pascoe, 1858

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

Rhaphuma anima sp. nov.

(Fig. 15)

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

Type material. Holotype (♂): 'Indonesia, West Sumatra' / 'MT. SANGGUL, 1250 m alt.' / 'Landai vill. env., vi. 2013' / 'St. Ják Igt.', (CPV); Paratypes: (3 ♂♂): same data as holotype, (CPV). The types are provided with a printed red label: 'Rhaphuma anima sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 15a. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 9.75 mm (male paratypes from 9.35 to 9.45 mm), widest in humeral part of elytra (2.05 mm), 4.75 times longer than wide.

Head black (blackish brown near anterior margin), widest through the eyes, narrow, only slightly narrower than pronotum. Dorsal surface with coarse punctuation, frons with large longitudinal rhombus-shaped place without punctuation, only with longitudinal furrow between eyes. Head covered by yellowish green pubescence and a few pale erect setae near anterior margin. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum brown, shiny, with punctuation and yellowish setation. Mandibles blackish brown, shiny, with dense yellowish setation in edges.

Maxillary palpus brown, palpomeres widened apically, with dense indistinct punctuation and pale yellow setation. Ultimate palpomere distinctly longest, widened apically with rounded apex.

Antennae blackish brown, filiform, with punctuation. Antennomeres 1-5 with longer and sparser yellowish green pubescence, antennomeres 6-11 with short and dense whitish pubescence. Antennomeres with long yellowish setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 7 longest. Antennae reaching four fifths elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73 : 0.31 : 1.00 : 0.91 : 0.97 : 1.14 : 1.33 : 1.25 : 1.01 : 1.00 : 0.96.

Pronotum black, elongate, narrow, punctured by coarse granulated punctuation, partly covered by longer yellowish green pubescence, partly by short black pubescence (as in Fig. 15a). Pronotum 1.48 times longer than wide at base and 1.3 times longer than wide at widest point (middle of pronotum). Dorsal surface with long erect pale setae in posterior part and in lateral margins. Lateral margins only slightly arcuate, anterior margin and base straight.

Scutellum black, wide, semielliptical, completely covered by yellowish green pubescence.

Elytra 6.28 mm long and 2.05 mm wide (3.06 times longer than wide); narrow, elongate, slightly narrowing apically, black, punctured by dense small-sized punctuation, covered by yellowish green and black shiny pubescence (as in Fig. 15a). Apex of each elytron cut, indistinctly undulate, with short thorn in sutural angle, lateral angle sharp. Apical margin with long yellowish setation.

Pygidium brown, punctured by small-sized punctuation, covered by sparse recumbent yellowish green pubescence.

Legs long and narrow, blackish brown, punctured by dense punctuation. Pro- and mesofemora almost completely covered by yellowish green pubescence, metafemora partly covered by yellowish green pubescence. Tibiae covered by yellowish pubescence, each apical half of tibia and tarsus with longer and denser yellowish setation. Tarsi wide, punctured by very dense small-sized punctuation. 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 black, punctured, almost completely covered by dense recumbent yellowish green pubescence and longer pale setation, ventrites completely covered by dense recumbent yellowish green pubescence. Elytral epipleura black, punctured, covered by dark pubescence.

Genitalia as in Fig. 15b.

Female. Unknown.

Differential diagnosis. The most similar species are *Rhaphuma harmonia* sp. nov. (Fig. 24) and *Rhaphuma pacholatko* Viktora, 2014, described from Western Malaysia.

Rhaphuma anima sp. nov. distinctly differs from similar species *R. harmonia* mainly by narrower body, by pygidium with almost straight apex with rounded angles only (apex of pygidium rounded in full length in *R. harmonia*) and different shape of black stripes on elytra in apical third (shorter, more curved, connected to suture stripes in *R. anima*); while *R. harmonia* has longer



14a



14b



15a



15b

Fig. 14. *Psilomerus pulex* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 15. *Rhaphuma anima* sp. nov.:
a- male holotype; b- male genitalia.

black stripes in apical third of elytra, almost parallel with suture).

R. anima distinctly differs from similar species *R. pacholatko* mainly by wider pronotum with two black longitudinal stripes and by different shape of black stripes on elytra in apical third; while *R. pacholatko* has narrower pronotum, completely covered by yellow pubescence without black stripes.

Etymology. From Latin *anima* (it means „soul“).

Distribution. Indonesia (Sumatra).

***Rhaphuma asellaria* Holzschuh, 2017**

(Fig. 35)

Rhaphuma asellaria Holzschuh, 2017: 116, Fig. 27.

Type locality. China, Yunnan, Lijiang, Yulongshan, Bai Shui.

Type material. Holotype (♂): China, Yunnan, Lijiang, Yulongshan, Bai Shui, 2900-3300 m, 7.-18.VII.1994, leg. C. Holzschuh, (CCH).

Material examined. (1 ♂): 'LAOS, Huaphanne prov.,' / 'Mt. Phu Pane, 1200-1900m,' / 'Ban Saluei v. env., 21.-30.iv.2017,' / '20°12'N 103°59'E' / 'A. & R. Hergovits leg. + Lao collector', (CPV). **New record for Laos.**

Distribution. China (Yunnan), Laos (Hua Phan).

***Rhaphuma cantilena* sp. nov.**

(Figs. 16-17)

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

Type material. Holotype (♂): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250m alt.' / 'Landai vill. env., v.-vi.2012' / 'St. Jákl lgt.', (CPV); Paratypes: (2 ♂♂): same data as holotype, (CPV); (1 ♀): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250m alt.' / 'Landai vill. env., iv. 2012' / 'St. Jákl lgt.', (CPV); (2 ♂♂, 2 ♀♀): 'Indonesia, West Sumatra' / 'MT. SANGGUL, 1250 m alt.' / 'Landai vill. env., vi. 2013' / 'St. Jákl lgt.', (CPV). The types are provided with a printed red label: '*Rhaphuma cantilena* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 16a. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 13.57 mm (male paratypes from 11.9 to 12.95 mm), widest in humeral part of elytra (2.93 mm), 4.63 times longer than wide.

Head black, widest through the eyes, narrow, narrower than pronotum. Dorsal surface with coarse punctuation, with longitudinal narrow furrow between antennal insertions, frons with relatively large subtriangular place with sparse irregular punctuation and sparse pubescence. Head covered by yellowish green pubescence, in anterior margin with a few pale setae. Eyes goldenish brown, distinctly emarginate. Clypeus ochre yellow, labrum dark brown, shiny. Labrum with punctuation and yellowish setation. Mandibles black, shiny, with yellowish setation and pubescence in edges.

Maxillary palpus brown with blackish margins, punctured, covered by sparse pale setation. Ultimate palpomere distinctly longest, widened apically with rounded apex.

Antennae blackish brown (ultimate palpomeres slightly paler), narrow, filiform, punctured by dense punctuation. Antennomeres 1-4 with longer and sparser yellowish green pubescence,

antennomeres 5-11 covered by short and dense grayish pubescence. Antennomeres 1 and 3-5 with long yellowish setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 5 longest. Antennae reaching six sevenths elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.69 : 0.27 : 1.00 : 0.93 : 1.04 : 0.99 : 0.94 : 0.98 : 1.00 : 0.86 : 0.89.

Pronotum black, elongate, punctured by coarse granulated punctuation, partly covered by yellowish green pubescence (denser in basal angles), partly by sparse short black pubescence (as in Fig. 16a). Pronotum 1.52 times longer than wide at base and 1.23 times longer than wide at widest point (near middle of pronotum). Dorsal surface with a few long pale erect setae in basal part. Lateral margins arcuate, anterior margin and base almost straight.

Scutellum black, wide, semielliptical, punctured by dense small-sized punctuation, covered by dense yellowish green pubescence.

Elytra 8.79 mm long and 2.93 mm wide (3 times longer than wide); elongate, narrowing apically, black with brown apex, punctured by dense small-sized punctuation, covered by yellowish green and black shiny pubescence (as in Fig. 16a). Apex of each elytron cut, excised, with sharp thorn in sutural and lateral angle. Apical margin with long yellowish setation.

Legs long and narrow, blackish brown, punctured by dense punctuation. Pro- and mesofemora almost completely covered by yellowish green pubescence, metafemora partly covered by short indistinct yellowish green pubescence. Tibiae covered by yellowish pubescence, each apical half of tibiae and tarsi with longer and denser yellowish setation. Meso- and metatibiae with long yellowish erect setae. Pro- and mesotarsi wide, punctured by very dense small-sized punctuation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.8 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, almost completely covered by dense recumbent yellowish pubescence and long erect pale setation, ventrites completely covered by yellowish pubescence. Elytral epipleura black, punctured, covered by black pubescence.

Genitalia as in Fig. 16b.

Female. Habitus of female paratype as in Fig. 17. Body length from head to elytral apex (female paratypes) from 12.9 to 13.5 mm. Colour of female the same as in male. Female without distinct differences, tarsi narrower than in male, antennae shorter than in male (reaching five sevenths elytral length).

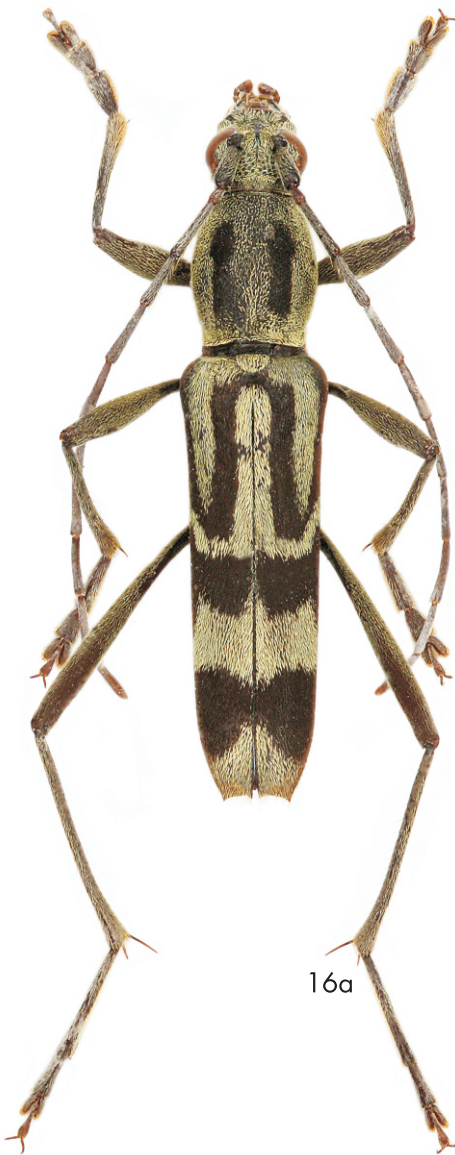
Differential diagnosis. The most similar species are *Rhaphuma bivittata* Aurivillius, 1916, described from Borneo and *Rhaphuma eminentia* sp. nov.

Rhaphuma cantilena sp. nov. differs from similar species *R. bivittata* (Fig. 37) mainly by different shape of black spots on pronotum and elytra, by longer antennae and tarsi, by antennomeres blackish brown with dark brown ultimate antennomeres and by distinctly different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 16b and 37b); while *R. bivittata* has antennomeres 1-7 and 10-11 dark brown, antennomeres 8-9 pale ochre yellow.

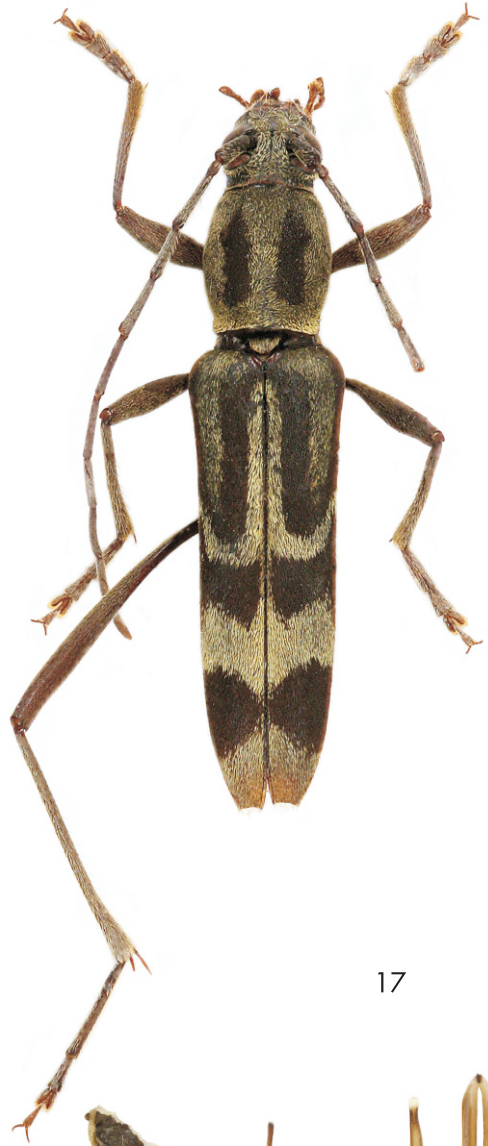
R. cantilena differs from similar species *R. eminentia* (Figs. 19-20) mainly by different shape of black spots on elytra, especially black spot in elytral apex, which not reaching elytral apical margin (black spot in elytral apex reaching elytral apical margin in *R. eminentia*) and by distinctly different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 16b and 19b).

Etymology. From Latin *cantilena* (it means „song“).

Distribution. Indonesia (Sumatra).



16a



17



16b

Fig. 16. *Rhaphuma cantilena* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 17. *Rhaphuma cantilena* sp. nov.:
female paratype.

***Rhaphuma ducissa* sp. nov.**

(Fig. 18)

Type locality. Vietnam, Lam Dong province, Bao Loc.**Type material.** Holotype (♀): 'Vietnam' / 'Lam Dong' / 'Bao Loc' / 'iv. 2019', (CPV). The type is provided with a printed red label: 'Rhaphuma ducissa sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.**Description.** Habitus of female holotype as in Fig. 18. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 10.64 mm, widest in humeral part of elytra (2.36 mm), 4.5 times longer than wide.

Head black, narrow, widest through the eyes, narrower than pronotum. Dorsal surface punctured by dense irregular small-sized punctuation (near posterior margin punctures larger), frons with narrow longitudinal furrow in middle. Head covered by grayish pubescence, in lateral margins and anterior part with erect pale setae. Eyes dark brown, excised. Clypeus and labrum brown, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, with yellowish setation in edges.

Maxillary palpus pale brown, with indistinct punctuation and sparse short pale setation. Ultimate palpomere longest, distinctly widened apically with rounded apex.

Antennae from blackish brown to black, narrow, filiform, reaching two thirds elytral length, antennomeres slightly widened apically. Antennae punctured by indistinct small-sized punctuation. Antennae covered by pale pubescence, pubescence distinctly longer in scape. Antennomeres with erect pale setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.54 : 0.20 : 1.00 : 0.80 : 0.93 : 0.89 : 0.87 : 0.68 : 0.66 : 0.51 : 0.55.

Pronotum black, elongate, reticulated with microgranulation, covered by short black and longer white pubescence (as in Fig. 18). Pronotal margins with stripe of dense white pubescence (invisible in lateral margins from dorsal view), pronotal disc with longitudinal stripe of dense white pubescence in middle of basal part. Pronotum with long pale setation (setation denser in basal half). Lateral margins arcuate, anterior margin finely arcuate, base indistinctly undulate. Pronotum 1.58 times longer than wide at base and 1.26 times longer than wide at widest point (near middle of pronotum).

Scutellum shield-shaped with rounded apex, black, covered by yellowish white pubescence.

Elytra 7.00 mm long and 2.36 mm wide (2.96 times longer than wide); slightly narrowing apically, black, punctured (punctures small and denser in apical half), covered by white, yellowish and black shiny pubescence (as in Fig. 18). Each elytron with cut apex, apex with short thorn in sutural angle and longer thorn in lateral angle. Elytral apex covered by long yellowish setation.

Pygidium brown with rounded apex, punctured by coarse punctuation, covered by long sparse pale pubescence and yellowish setation.

Legs long and narrow, from blackish brown to black (claws brown), punctured by dense punctuation, covered by whitish pubescence and yellowish setation (yellowish setation denser and longer in apical parts of tibiae). Tarsi with dense punctuation, covered by whitish pubescence and long yellowish setation in margins. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.29 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, partly covered by white pubescence. Mesepisternum with stripe of dense white pubescence in apical margin, rest of mesepisternum with very sparse white pubescence. Metepisternum covered by dense white pubescence except narrow base and

narrow apex. Metasternum covered by white pubescence, pubescence denser in apical fifth. Ventrites partly covered by triangular places of very dense white pubescence, rest of ventrites covered by sparser white pubescence. Elytral epipleura black, punctured, covered by blackish pubescence.

Male. Unknown.

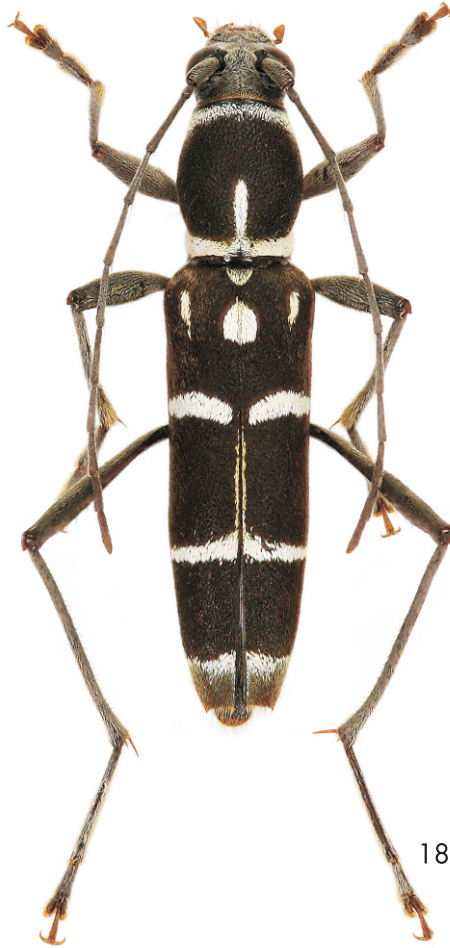


Fig. 18. *Rhaphuma ducissa* sp. nov.: female holotype.

Differential diagnosis. The most similar species are *Rhaphuma brevivittata* (Aurivillius, 1922), described from Western Malaysia, *Rhaphuma maculicollis* Gressitt & Rondon, 1970 and *Rhaphuma pseudobinhensis* Gressitt & Rondon, 1970, described from Laos and *Rhaphuma timorica* Viktora, 2014, described from Indonesia (Timor Island).

Rhaphuma ducissa sp. nov. differs from similar species *R. brevivittata* mainly by distinctly longer hind legs, by distinctly longer tarsi, by different shape of spots of pale pubescence on elytra, especially in base and apex, and by pronotal disc with longitudinal stripe of dense white pubescence in middle of basal part (missing in *R. brevivittata*).

R. ducissa has relatively similar shape of spots and stripes of pale pubescence on elytra to *R. maculicollis*, but distinctly differs from *R. maculicollis* by narrower antennae and by distinctly

narrower black pronotum with narrow stripes of white pubescence in anterior margin and base and longitudinal stripe of dense white pubescence in middle of basal part and by dorsal surface of pronotum reticulated with microgranulation; while *R. maculicollis* has pronotum almost completely covered by pale pubescence except two black dots in middle, dorsal surface of pronotum granulated.

R. ducissa differs from similar species *R. pseudobinhensis* mainly by distinctly longer hind legs, by distinctly longer tarsi, by different shape of spots and stripes of pale pubescence on pronotum and elytra, which are narrow, predominantly white in *R. ducissa* (wide yellow spots and stripes in *R. pseudobinhensis*).

R. ducissa distinctly differs from similar species *R. timorica* mainly by larger body, by distinctly longer hind legs, by distinctly longer tarsi, by different shape and colour of spots and stripes of pale pubescence on pronotum and elytra (narrow white stripes in *R. ducissa*, compared to that wide yellow spots in *R. timorica*), and by antennomeres unicolored (antennomeres annulated with paler base in *R. timorica*).

Etymology. From Latin *ducissa* (it means „duchess“).

Distribution. Vietnam (Lam Dong).

***Rhaphuma eminentia* sp. nov.**

(Figs. 19-20)

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

Type material. Holotype (♂): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250m alt.' / 'Landai vill. env., v.-vi.2012' / 'St. Jákl lgt.', (CPV); Paratypes: (1 ♂, 2 ♀♀): same data as holotype, (CPV); (1 ♀): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250m alt.' / 'Landai vill. env., iv. 2012' / 'St. Jákl lgt.', (CPV). The types are provided with a printed red label: '*Rhaphuma eminentia* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 19a. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 11.45 mm (male paratype 11.85 mm), widest in humeral part of elytra (2.46 mm), 4.65 times longer than wide.

Head black (blackish brown in anterior margin, widest through the eyes, narrow, narrower than pronotum. Dorsal surface with coarse punctuation, with longitudinal narrow furrow between antennal insertions, frons with small subtriangular place with sparse irregular small-sized punctuation without pubescence. Head covered by yellowish green pubescence, in anterior margin with a few pale setae. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny. Labrum with punctuation and yellowish setation. Mandibles black, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus ochre yellow with dark brown margins, punctured by indistinct punctuation, covered by sparse pale setation. Ultimate palpomere distinctly longest, distinctly widened apically, axe-shaped with rounded apex.

Antennae blackish brown (ultimate palpomeres slightly paler), narrow, filiform, punctured by dense punctuation. Antennomeres 1-4 with longer and sparser yellowish green pubescence, antennomeres 5-11 covered by short grayish pubescence. Antennomeres 1-5 with long yellowish setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 6 longest. Antennae reaching four fifths elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.80 : 0.36 : 1.00 : 0.84 : 1.03 : 1.21 : 0.95 : 0.98 : 0.89 : 0.75 : 0.85.

Pronotum black, elongate, punctured by coarse granulated punctuation, partly covered by

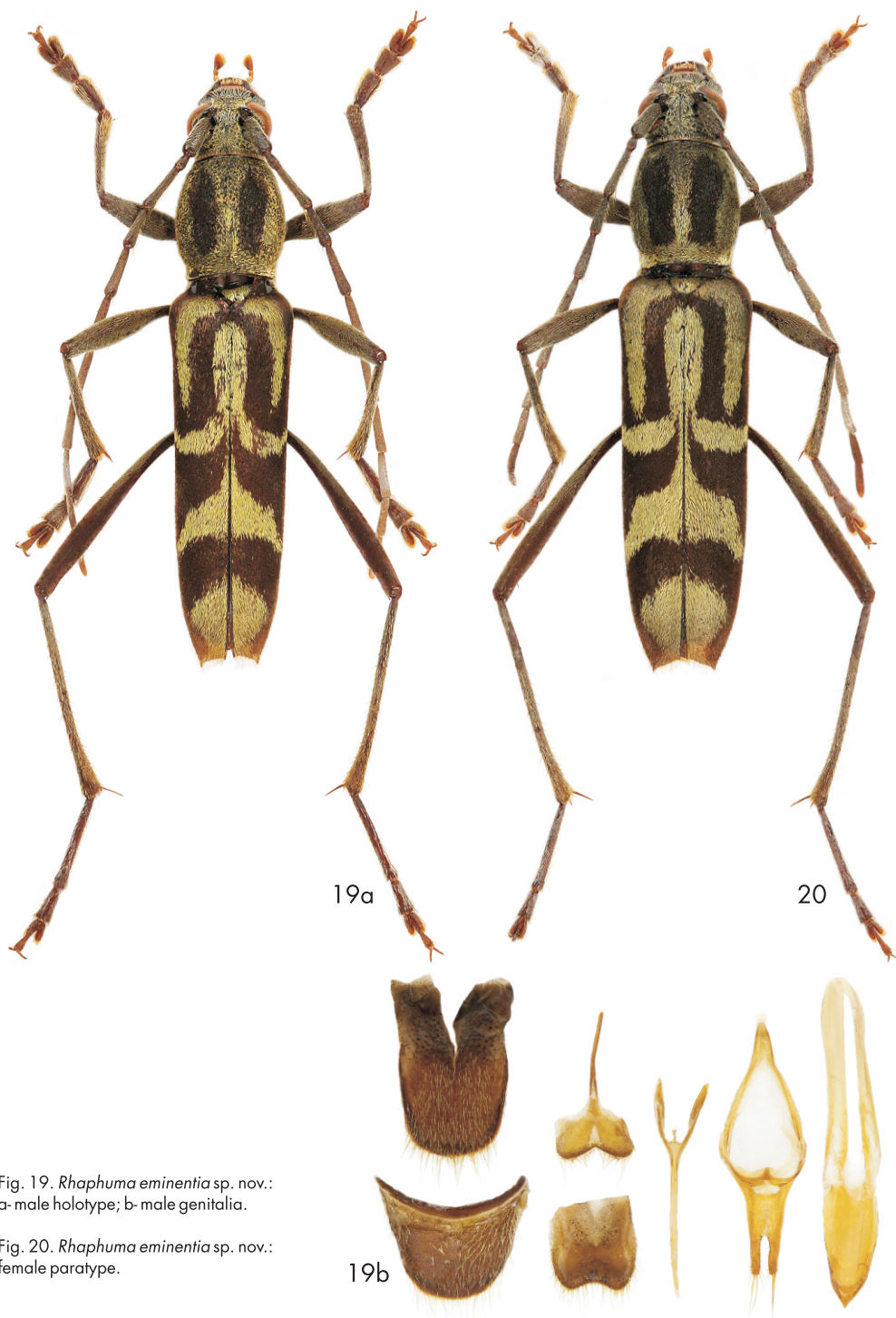


Fig. 19. *Rhaphuma eminentia* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 20. *Rhaphuma eminentia* sp. nov.:
female paratype.

yellowish green pubescence (denser in basal angles), partly by sparse short black pubescence (as in Fig. 19a). Pronotum 1.41 times longer than wide at base and 1.14 times longer than wide at widest point (near middle of pronotum). Dorsal surface with a few long pale erect setae in basal part. Lateral margins arcuate, anterior margin and base almost straight.

Scutellum black, wide, semielliptical, punctured by dense small-sized punctuation, covered by dense yellowish green pubescence.

Elytra 7.42 mm long and 2.46 mm wide (3.0 times longer than wide); elongate, narrowing apically, black with brown apex, punctured by dense small-sized punctuation, covered by yellowish green and black shiny pubescence (as in Fig. 19a). Apex of each elytron cut, excised, with sharp thorn in sutural and lateral angle. Apical margin with long yellowish setation.

Legs long and narrow, blackish brown (tarsi slightly paler), punctured by dense punctuation. Pro- and mesofemora almost completely covered by yellowish green pubescence, metafemora with indistinct stripes of very short pale pubescence. Tibiae covered by yellowish pubescence, each apical half of tibia and tarsus with longer and denser yellowish setation. Meso- and metatibiae with long yellowish erect setae. Pro- and mesotarsi wide, punctured by very dense small-sized punctuation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.6 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, ventrites covered by yellowish pubescence (pubescence distinctly sparser in basal quarters of ventrites). Elytral epipleura dark brown, punctured, covered by black pubescence.

Genitalia as in Fig. 19b.

Female. Habitus of female paratype as in Fig. 20. Body length from head to elytral apex (female paratypes) from 12.05 to 15.2 mm. Colour of female the same as in male. Female without distinct differences, tarsi narrower than in male, antennae shorter than in male (reaching four sevenths elytral length).

Differential diagnosis. The most similar species are *Rhaphuma bivittata* Aurivillius, 1916 and *Rhaphuma cantilena* sp. nov.

Rhaphuma eminentia sp. nov. differs from similar species *R. bivittata* (Fig. 37) mainly by different shape of black spots on pronotum and elytra, by longer antennae, by antennomeres blackish brown with dark brown ultimate antennomeres and by distinctly different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 19b and 37b); while *R. bivittata* has antennomeres 1-7 and 10-11 dark brown, antennomeres 8-9 pale ochre yellow.

R. eminentia differs from similar species *R. cantilena* (Figs. 16-17) mainly by different shape of black spots on elytra, especially black spot in elytral apex, which reaching elytral apical margin (black spot in elytral apex not reaching elytral apical margin in *R. cantilena*) and by distinctly different shape of tergite 8 and sternite 8, tegmen and median lobe (as in Figs. 16b and 19b).

Etymology. From Latin *eminentia* (it means „magnificence“).

Distribution. Indonesia (Sumatra).

***Rhaphuma gemma* sp. nov.**
(Figs. 21-22)

Type locality. Laos, Hua Phan prov., Ban Saluei vill. env., Mt. Phu Pane.

Type material. Holotype (♂): 'NE LAOS, Hua Phan Prov.,' / 'MT. PHU PANE' / '1200-1600m, 10.-22.v.2011' / '20, 12N 103, 59E' / 'St. Jákl and Lao collectors lgt.', (CPV); Paratype: (1 ♂): 'NE LAOS: Hua Phan prov.' / 'Ban Saluei env.' / 'MT. PHU PANE' / '1200-1600m, 6.-20.v.2014' / 'P. Viktora et local coll. lgt.', (CPV). The types are provided with a printed red label: 'Rhaphuma gemma sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 21a. Body from pale brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 14.41 mm (male paratype 12.5 mm), widest in humeral part of elytra (3.00 mm), 4.8 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, narrower than pronotum. Dorsal surface punctured by coarse dense punctuation, frons between eyes with narrow longitudinal furrow and small longitudinal place without pubescence with indistinct punctuation. Head covered by relatively dense yellow pubescence, in lateral margins near base with long erect pale setae. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, indistinctly punctured, with yellow pubescence and yellowish setation in edges.

Maxillary palpus pale brown (palpomeres with narrowly darker lateral margins), with indistinct punctuation and sparse pale setation. Ultimate palpomere longest, wide, distinctly widened apically, triangular with rounded apex.

Antennae long, narrow, filiform, reaching nine tenths elytral length, antennomeres slightly widened apically. Antennomeres 1 and 8-11 dark brown, antennomeres 2-4 pale reddish brown, antennomeres 5-7 brown. Antennae punctured by indistinct shallow punctuation. Scape covered by long yellow recumbent pubescence, antennomeres 2-8 covered by short sparse yellowish pubescence, antennomeres 9-11 with very short and dense indistinct pubescence. Antennomeres 3 and 4 with long yellowish setation on inner side. Antennomeres without spines. Antennomeres 8-10 serrate on outer side of apex. Antennomere 2 shortest, antennomere 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73 : 0.26 : 1.00 : 0.88 : 1.25 : 1.30 : 1.41 : 1.31 : 1.19 : 1.05 : 1.10.

Pronotum black, elongate, narrow, punctured by coarse granulated punctuation, covered by yellow recumbent pubescence except two small spots (as in Fig. 21a). Basal third with long pale erect setae. Shape of pronotum as in Fig. 21a. Anterior margin distinctly narrower than base. Pronotum 1.4 times longer than wide at base and 1.25 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, base excised, anterior margin almost straight.

Scutellum wide, shield-shaped, black, punctured, completely covered by dense recumbent yellow pubescence.

Elytra 9.67 mm long and 3.00 mm wide (3.22 times longer than wide); distinctly narrowing apically, black (blackish brown in apex), punctured by dense small-sized punctuation, covered by yellow recumbent pubescence except vague spots in apical third (as in Fig. 21a). Each elytron with excised apex, sutural and lateral angle sharp. Apical margin with long yellowish setation.

Pygidium reddish brown, punctured, covered by yellow pubescence and yellowish setation, apex rounded.

Legs long and narrow, tibiae and tarsi reddish brown, femora blackish brown with reddish brown apex. Legs punctured by dense punctuation. Pro-, meso- and partly metafemora covered by yellow recumbent pubescence. Tibiae covered by sparse yellow pubescence and dense longer yellowish setation. Tarsi very long, punctured, covered by yellowish pubescence and long yellowish setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.84 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, completely covered by dense recumbent yellow pubescence (pubescence denser and paler than in dorsal side) and by long pale erect setae.

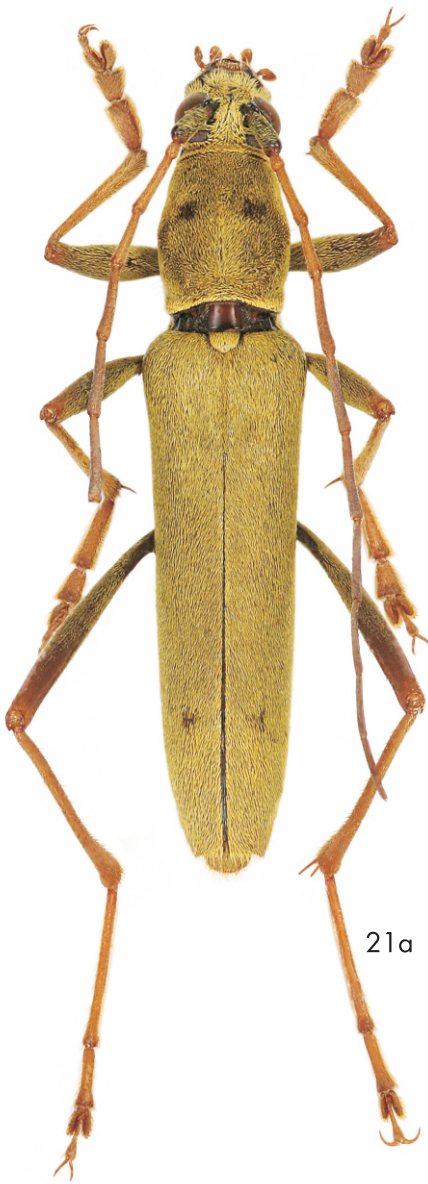


Fig. 21. *Rhaphuma gemma* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 22. *Rhaphuma gemma* sp. nov.:
male paratype.



Elytral epipleura brown, covered by yellow pubescence.

Genitalia as in Fig. 21b.

Female. Unknown.

Variability. Male paratype without visible vague black spots on pronotal disc and in elytral apical third (as in Fig. 22).

Differential diagnosis. *Rhaphuma gemma* sp. nov. differs from similar species *Rhaphuma duplex* Holzschuh, 1991, *Rhaphuma indifferens* Holzschuh, 1992, *Rhaphuma insignaticollis* Pic, 1937, *Rhaphuma luteopubens* Pic, 1937, *Rhaphuma quercus* Gardner, 1940, and *Rhaphuma virens* Matsushita, 1931 (Fig. 41) by different shape of pronotum (distinctly narrowed forward - anterior margin distinctly narrower than base), by colour of legs and antennae (reddish brown), by more elongate body and by distinctly different shape of male genitalia.

The most similar species is *Rhaphuma manipurensis* Gahan, 1906, described from Northern India. *R. gemma* distinctly differs from similar species *R. manipurensis* mainly by distinctly longer antennae and by antennomeres unicolored; while *R. manipurensis* has antennae distinctly shorter with antennomeres bicolour, annulated.

Etymology. From Latin *gemma* (it means „bud“).

Distribution. Laos (Hua Phan).

***Rhaphuma gloria* sp. nov.**

(Fig. 23)

Type locality. Malaysia, Perak, road Tapah – Ringlet, 19. miles to Ringlet.

Type material. Holotype (♂): ‘W Malaysia’ / ‘Cameron Highlands’ / ‘19. miles to Ringlet’ / ‘iii.-v. 2007’ / ‘local collector’, (CPV); Paratypes: (1 ♂, 1 ♀): ‘W Malaysia’ / ‘19. miles’ / ‘S Ringlet’ / ‘2010’ / ‘local collector’, (CPV); (3 ♂♂): ‘Malaysia - Pahang’ / ‘Cameron Highlands’ / ‘Ringlet’ / ‘9. iv. - 16. iv. 2014’ / ‘P. Viktora lgt.’, (CPV). The types are provided with a printed red label: ‘*Rhaphuma gloria* sp. nov.’ / ‘HOLOTYPUS [respective PARATYPUS]’ / ‘P. Viktora det., 2019’.

Description. Habitus of male holotype as in Fig. 23a. Body from brown to black, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 11.45 mm (male paratypes from 9.05 to 11.4 mm), widest in humeral part of elytra (2.4 mm), 4.77 times longer than wide.

Head black (blackish brown in anterior part), widest through the eyes, narrow, only slightly narrower than pronotum. Dorsal surface punctured by coarse punctuation, head with narrow longitudinal furrow between eyes. Head covered by yellowish pubescence (pubescence in anterior part paler than in posterior part). Head with pale erect setae in anterior part. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum pale ochre yellow, shiny, with pale setation. Mandibles black, shiny, punctured in basal part, with pale yellowish pubescence and longer pale setation in edges.

Maxillary palpus ochre yellow, punctured by indistinct punctuation, covered by yellowish setation. Ultimate palpomere longest, widened apically, axe-shaped with rounded apex.

Antennae long, narrow, filiform, reaching seven eighths elytral length, antennomeres 2-8 distinctly widened apically. Antennae brown, punctured. Antennomeres 1-4 covered by yellowish

pubescence, antennomeres 5-11 covered by whitish pubescence (pubescence in antennomere 11 sparser than in antennomeres 5-10). Antennomeres 3-7 with yellowish setation on inner side of apex. Antennomeres without spines. Antennomere 2 shortest, antennomere 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.76 : 0.27 : 1.00 : 0.82 : 0.97 : 1.00 : 1.05 : 0.94 : 0.84 : 0.77 : 0.88.

Pronotum black, elongate, narrow, punctured by coarse granulated punctuation, partly covered by yellow pubescence, partly by shorter black pubescence (as in Fig. 23a). Pronotum 1.46 times longer than wide at base and 1.27 times longer than wide at widest point (one third pronotal length from base to apex). Pronotum with a few pale setae near base. Lateral margins only slightly arcuate, anterior margin almost straight, base slightly undulate.

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

Elytra 7.35 mm long and 2.4 mm wide (3.06 times longer than wide); slightly narrowing apically, black with dark brown apex, punctured by dense punctuation (granulated punctuation in basal half), covered by yellow and black shiny pubescence (as in Fig. 23a). Apex of each elytron slightly undulate, with short spine in sutural and lateral angle. Apical margin with long pale setation.

Legs very long and narrow, from dark brown to blackish brown, punctured by dense punctuation. Pro- and mesotibiae and pro- and mesofemora almost completely covered by yellowish pubescence, tibiae and metafemora with yellowish pubescence only in basal part (rest with indistinct short pubescence). Metafemora with long erect pale setae in ventral side, tibiae with dense ochre setation in apical part. Tarsi long, punctured by dense punctuation, covered by yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.7 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black (ventrites blackish brown), punctured, almost completely covered by dense recumbent yellowish pubescence and pale setation (pubescence paler than in elytra). Elytral epipleura blackish brown, punctured, covered by dark pubescence.

Genitalia as in Fig. 23b.

Female. Body length from head to elytral apex (female paratype) 12.2 mm. Colour of female similar to male. Female without distinct differences, antennae shorter and protarsi narrower than in male.

Differential diagnosis. The most similar species are *Rhaphuma rassei* Dauber, 2002, described from Western Malaysia and *Rhaphuma sabahensis* Dauber, 2006 (Figs. 39-40), described from Borneo.

Rhaphuma gloria sp. nov. differs from similar species *R. rassei* mainly by distinctly narrower pronotum, by different shape of black spots on pronotum and elytra, by distinctly narrower scutellum, by longer antennae, by distinctly narrower tarsi, by distinctly narrower tergite 8 and by different shape of tegmen and median lobe.

R. gloria differs from similar species *R. sabahensis* mainly by longer antennae, by different shape of black spots on pronotum and elytra, by longer metatarsomere 1 and by distinctly different shape of tegmen and median lobe (as in Figs. 23b and 39b).

Etymology. From Latin *gloria* (it means „renown“).

Distribution. Malaysia (Pahang, Perak).

***Rhaphuma harmonia* sp. nov.**

(Fig. 24)

Type locality. Malaysia, Pahang, Cameron Highlands, Tanah Rata.**Type material.** Holotype (♀): 'W MALAYSIA' / 'Cameron Highlands' / 'Tanah Rata' / 'ii. 2014' / 'local collector lgt.', (CPV); Paratype: (1 ♀): 'W Malaysia' / 'Cameron Highlands' / 'Tanah Rata – Mt. Gunung Jasar' / 'i. 2013' / 'local collector', (CPV). The types are provided with a printed red label: '*Rhaphuma harmonia* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora det., 2019'.**Description.** Habitus of female holotype as in Fig. 24. Body from dark brown to black, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 11.44 mm (female paratype 10.53 mm), widest in humeral part of elytra (2.46 mm), 4.65 times longer than wide.

Head black (blackish brown in anterior part), widest through the eyes, narrow, only slightly narrower than pronotum. Dorsal surface punctured by coarse punctuation, between antennal insertions with longitudinal furrow in middle. Head covered by yellowish green pubescence, near anterior margin with a few long pale erect setae. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles black, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus brown, palpomeres short, with indistinct punctuation and sparse yellowish setation. Ultimate palpomere longest, widened apically, axe-shaped with rounded apex.

Antennae long, narrow, filiform, reaching two thirds elytral length, antennomeres slightly widened apically. Antennomeres blackish brown, punctured (punctures shallow). Antennomeres 1-5 covered by yellowish green pubescence, antennomeres 6-11 covered by whitish pubescence. Antennomeres 3-6 with erect yellowish green setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.77 : 0.27 : 1.00 : 0.74 : 0.88 : 0.88 : 0.89 : 0.78 : 0.66 : 0.56 : 0.56.

Pronotum black, elongate, narrow, punctured by coarse granulated punctuation, partly covered by longer yellowish green pubescence, partly by short black pubescence (as in Fig. 24). Pronotum 1.42 times longer than wide at base and 1.22 times longer than wide at widest point (before middle of pronotum from base to apex). Pronotum with long erect pale setae in basal half. Lateral margins only slightly arcuate, anterior margin and base almost straight.

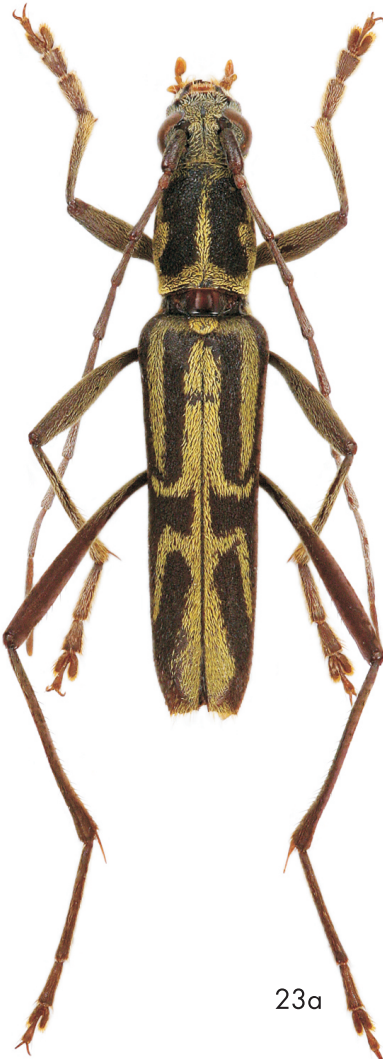
Scutellum black, wide, semicircular, punctured, covered by sparse yellowish green pubescence.

Elytra 7.69 mm long and 2.46 mm wide (3.12 times longer than wide); almost parallel (narrowing in apex), black (blackish brown in apical quarter), punctured by dense small-sized punctuation, covered by yellowish green and black pubescence (as in Fig. 24). Apex of each elytron cut, with short thorn in lateral and sutural angle. Apical margin with long yellowish setation.

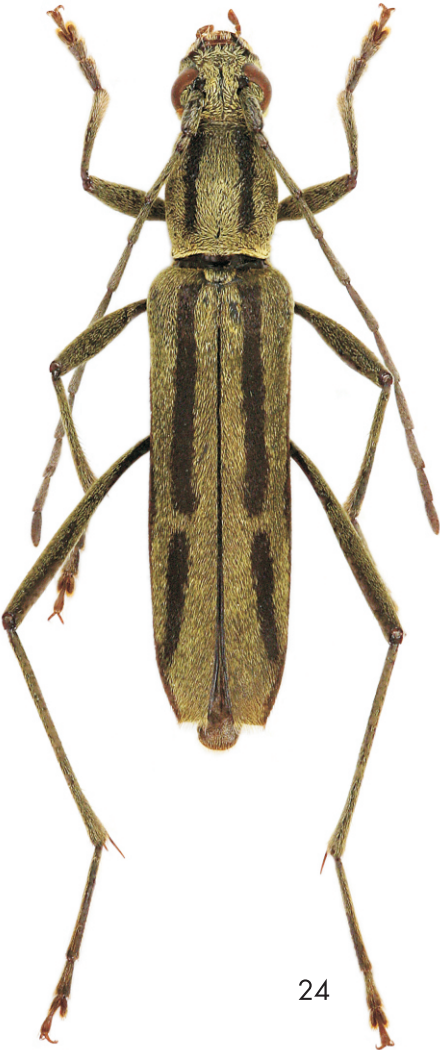
Pygidium brown, punctured, covered by yellowish green pubescence.

Legs very long and narrow, blackish brown, punctured by shallow punctuation. Legs almost completely covered by relatively sparse yellowish green pubescence. Meso- and metafemora and meso- and metatibiae with pale erect setae. Tibiae with dense setation in apical part. Tarsi punctured, covered by yellowish green pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.1 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, almost completely covered by recumbent



23a



24



23b

Fig. 23. *Rhaphuma gloria* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 24. *Rhaphuma harmonia* sp. nov.:
female holotype.

yellowish green pubescence and pale setation, pubescence in metepisternum denser than in rest of ventral side. Elytral epipleura narrow, punctured, covered by black pubescence in basal third and by yellowish green pubescence in apical two thirds.

Male. Unknown.

Differential diagnosis. The most similar species are *Rhaphuma anima* sp. nov. (Fig. 15) and *Rhaphuma rassei* Dauber, 2002.

Rhaphuma harmonia sp. nov. distinctly differs from similar species *R. anima* mainly by wider body, by apex of pygidium rounded in full length (apex of pygidium almost straight with rounded angles only in *R. anima*) and by different shape of black stripes on elytra in apical third (longer black stripes, almost parallel with suture); while *R. anima* has black stripes in apical third of elytra shorter, more curved, connected to suture).

R. harmonia distinctly differs from similar species *R. rassei* mainly by yellow green colour of pubescence on elytra and pronotum (yellow pubescence in *R. rassei*), by narrower black stripes on elytra and pronotum, by longitudinal black narrow stripes in basal two thirds of elytra (longer than in *R. rassei*), which not connected to lateral margins and suture (stripe connected to lateral margin and suture in *R. rassei*), and by distinctly different shape of sternite 8 in females (twice longer sternite 8 in *R. rassei*).

Etymology. From Latin *harmonia* (it means „harmony“).

Distribution. Malaysia (Pahang).

***Rhaphuma heres* sp. nov.**

(Fig. 25)

Type locality. Vietnam, Dak Lak province.

Type material. Holotype (♀): ‘Vietnam’ / ‘Dak Lak’ / ‘iv. 2019’, (CPV). The type is provided with a printed red label: ‘*Rhaphuma heres* sp. nov.’ / ‘HOLOTYPUS’ / ‘P. Viktora det., 2019’.

Description. Habitus of female holotype as in Fig. 25. Body from pale reddish brown to blackish brown, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 7.72 mm, widest in humeral part of elytra (1.54 mm), 5 times longer than wide.

Head pale reddish brown, narrow, widest through the eyes, indistinctly narrower than pronotum at widest point. Dorsal surface punctured by dense irregular small-sized punctuation, frons with indistinct short longitudinal furrow in middle. Head covered by long recumbent, relatively sparse whitish pubescence, in margins with pale erect setation. Eyes blackish brown, distinctly emarginate. Clypeus and labrum pale ochre yellow, shiny, with pale setation. Mandibles ochre yellow, with pale setation in edges.

Maxillary palpus pale ochre yellow, with indistinct punctuation and sparse pale setation. Ultimate palpomere longest, widened apically.

Antennae ochre yellow (some antennomeres with darker apical part), narrow, filiform, reaching elytral apex, antennomeres slightly widened apically. Antennae punctured by shallow punctuation, covered by sparse pale pubescence (pubescence in antennomeres 7-11 denser). Antennomeres shiny, with erect pale setation on inner side. Antennomeres without spines. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11

equal to: 0.48 : 0.24 : 1.00 : 0.97 : 1.35 : 1.14 : 0.94 : 0.72 : 0.57 : 0.41 : 0.38.

Pronotum pale reddish brown with darker margins, elongate, very narrow, shape of pronotum as in Fig. 25. Pronotum punctured by dense punctuation, partly covered by sparse recumbent whitish pubescence, pubescence denser in lateral margins (invisible from dorsal view) and basal angles, in basal part with short pale erect setation. Pronotum 1.51 times longer than wide at base and 1.35 times longer than wide at widest point (two fifths pronotal length from base to apex). Anterior margin and base almost straight.



Fig. 25. *Rhaphuma heres* sp. nov.: female holotype.

Scutellum small, shield-shaped, blackish, covered by whitish pubescence.

Elytra 5.0 mm long and 1.54 mm wide (3.24 times longer than wide); indistinctly narrowing apically, pale reddish brown with darker places, punctured by dense distinct punctuation, covered by sparse long yellowish white pubescence (as in Fig. 25). Elytral apex rounded with

angles in lateral margins, covered by dense yellowish setation.

Pygidium pale reddish brown, matte with shiny rounded apex, punctured, covered by very sparse pale setation.

Legs very long and very narrow, punctured by shallow punctuation, covered by sparse whitish pubescence and yellowish setation. Profemora pale reddish brown with pale ochre yellow basal part, meso- and metafemora brown with pale ochre yellow basal parts, protibiae brown, meso- and metatibiae dark brown. Tarsi very long, brown, punctured, covered by yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.23 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to black, punctured, almost completely covered by white recumbent pubescence and pale erect setae. Mesepisternum covered by white pubescence in apical part, metepisternum, metasternum and ventrites completely covered by white pubescence. Elytral epipleura pale reddish brown, punctured, covered by pale pubescence.

Male. Unknown.

Differential diagnosis. The most similar species are *Rhaphuma testaceiceps* Pic, 1915, described from Taiwan and *Rhaphuma testaceicolor* Pic, 1920, described from Yunnan province of China.

Rhaphuma heres sp. nov. distinctly differs from similar species *R. testaceiceps* mainly by wider, less elongate pronotum, by pronotum punctured by dense punctuation and by elytra without spots of white pubescence; while *R. testaceiceps* has narrower, more elongate pronotum, pronotum punctured by sparse punctuation and elytra with preapical vague spot of white pubescence.

R. heres distinctly differs from similar species *R. testaceicolor* mainly by longer legs, by longer tarsi, by longer antennae, which reaching elytral apex and by elytra without spots of pale pubescence; while *R. testaceicolor* has distinctly shorter antennae (reaching two thirds elytral length) and elytra with preapical vague spot of pale pubescence.

Etymology. From Latin *heres* (it means „heiress“).

Distribution. Vietnam (Dak Lak).

***Rhaphuma lacrima* sp. nov.**

(Figs. 26-27)

Type locality. China, Yunnan, Gaoligong Mts., Gongshan County, Galabo vill.

Type material. Holotype (♂): 'CHINA, Yunnan prov.' / 'Mt. GaoliGong, Galabo village' / 'GongShan County, 1971 m' / '8. vi. 2017, flower' / '27°43'30.92"N 98°44'38.07"E' / 'Yinghui Li coll.', (CPV); Paratypes: (1 ♀): same data as holotype, (CPV); (2 ♀♀): 'CHINA, Yunnan prov.' / 'Mt. GaoliGong, Galabo village' / 'GongShan County, 1971 m' / '4. vi. 2017, flower' / '27°43'30.92"N 98°44'38.07"E' / 'Yinghui Li coll.', (CPV); (1 ♀): 'CHINA, Yunnan prov.' / 'Mt. GaoliGong, Galabo village' / 'GongShan County, 2597 m' / '5. vi. 2017, flower' / '27°45'9.66"N 98°47'13.30"E' / 'Yinghui Li coll.', (CPV); (1 ♀): 'CHINA, Yunnan prov.' / 'Mt. GaoliGong, Galabo village' / 'GongShan County, 1567 m' / '23. vi. 2017, flower' / '27°45'24.91"N 98°39'34.56"E' / 'Yinghui Li coll.', (CPV). The types are provided with a printed red label: '*Rhaphuma lacrima* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 26a. Body from brown to black, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 14.26 mm, widest in humeral part of elytra (2.87 mm), 4.96 times longer than wide.

Head black (blackish brown in anterior part), widest through the eyes, slightly narrower than

pronotum. Dorsal surface with coarse punctuation, covered by yellowish pubescence. Head with long erect pale setae near anterior margin. Eyes blackish brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny, partly covered by yellowish setation. Mandibles blackish brown with black tip, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus brown (palpomerites with ochre yellow apex), punctured, with very sparse pale setation. Ultimate palpomere distinctly longest, slightly widened apically, apex rounded.

Antennae blackish brown, narrow, filiform, punctured by dense punctuation, covered by grayish pubescence. Antennomeres widened apically. Antennomeres without spines. Antennomeres 3-6 with long erect yellowish setation on inner side. Antennae almost reaching elytral apex. Antennomere 2 shortest, antennomere 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73 : 0.26 : 1.00 : 1.04 : 1.28 : 1.42 : 1.44 : 1.32 : 1.29 : 1.04 : 1.19.

Pronotum black, elongate, narrowest in anterior margin, 1.52 times longer than wide at base and 1.27 times longer than wide at widest point (two fifths pronotal length from base to apex). Lateral margins slightly arcuate, anterior margin and base almost straight. Dorsal surface punctured by dense irregular granulated punctuation, covered by yellowish gray recumbent pubescence except two vague black dots (as in Fig. 26a). Dorsal surface with long pale erect setae in basal part.

Scutellum black, wide, semielliptical, completely covered by dense recumbent yellowish pubescence (pubescence paler than those in elytra).

Elytra 9.82 mm long and 2.87 mm wide (3.42 times longer than wide); elongate, narrow, parallel, black with brown apex, punctured by dense small-sized punctuation, covered by yellowish gray and black pubescence (as in Fig. 26a). Elytral apex cut, sutural angle with distinct thorn. Apical margin with long yellowish setation.

Legs long and narrow, from blackish brown to black, densely punctured, covered by yellowish recumbent pubescence. Meso- and metatibiae and metafemora with long erect setae from inner side. Tarsi with dense punctuation, covered by grayish pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.53 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, almost completely covered by dense recumbent pale yellowish pubescence and long erect pale setation. Ventrites 1-2 completely covered by dense pubescence, ventrites 3-5 covered by dense pubescence except basal fifths. Elytral epipleura covered by yellowish pubescence.

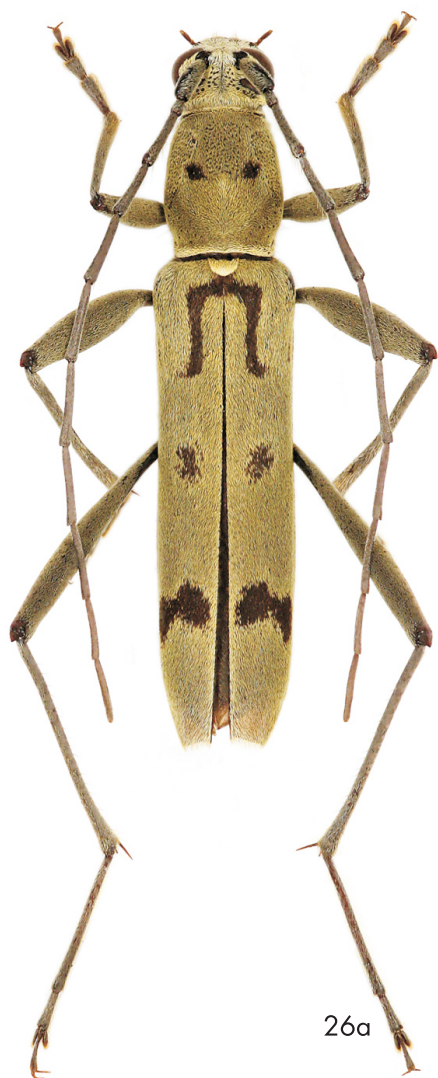
Genitalia as in Fig. 26b.

Female. Habitus of female paratype as in Fig. 27. Body length from head to elytral apex (female paratypes) from 10.65 to 14.9 mm. Colour of female similar to male. Female without distinct differences, antennae shorter than in male (reaching almost three quarters elytral length).

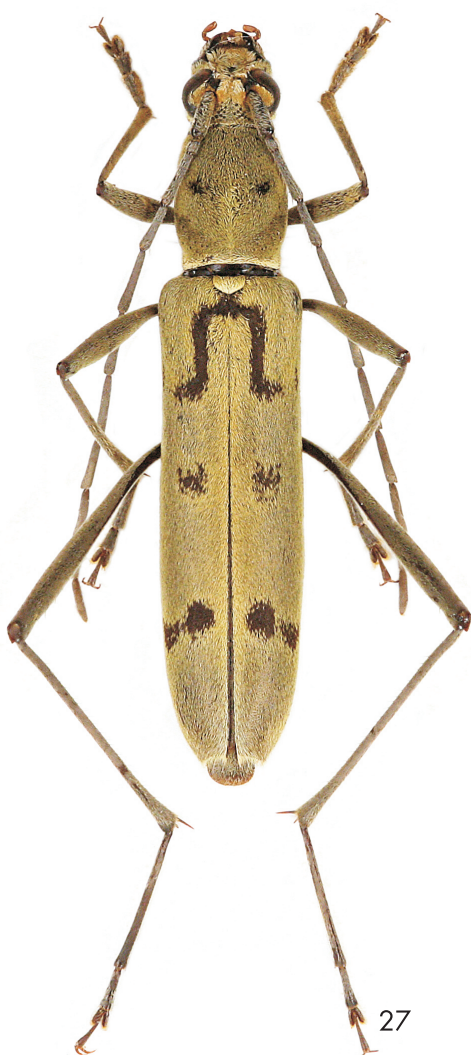
Variability. Some paratype specimens have pronotum without black dots.

Differential diagnosis. The most similar species are *Rhaphuma asellaria* Holzschuh, 2017 (Fig. 35), described from Yunnan province of China and *Rhaphuma familiaris* Holzschuh, 2017 (Fig. 38) from China (Shaanxi, Sichuan).

Rhaphuma lacrima sp. nov. is very similar in most characters to *R. asellaria*, it can be distinguished mainly by distinctly different (expressive) shape of tergite 8 and by different shape of tegmen and median lobe (as in Figs. 26b and 35b). Other character is narrower and longer protarsomere 2 in *R. lacrima*.



26a



27

Fig. 26. *Rhaphuma lacrima* sp. nov.:
a- male holotype; b- male genitalia.

Fig. 27. *Rhaphuma lacrima* sp. nov.:
female paratype.

26b



R. lacrima differs from similar species *R. familiaris* by longer metatarsomere 1, by pronotum with two black dots (four black dots in *R. familiaris*) and mainly by distinctly different (expressive) shape of tergite 8 and by different shape of tegmen and median lobe (as in Figs. 26b and 38b).

Etymology. From Latin *lacrima* (it means „teardrop“).

Distribution. China (Yunnan).

***Rhaphuma puella* sp. nov.**

(Fig. 28)

Type locality. China, Sichuan, Liangshan Yi Autonomous Prefecture, Xichang.

Type material. Holotype (♂): ‘China, Sichuan prov.’ / ‘Xichang, Liangshan’ / ‘1888m alt., 13. vi. 2016’ / ‘27°49’55.67”N, 102°15’53.20”E’ / ‘Bin Liu lgt.’, (CPV). The type is provided with a printed red label: ‘*Rhaphuma puella* sp. nov.’ / ‘HOLOTYPE’ / ‘P. Viktora det., 2019’.

Description. Habitus of male holotype as in Fig. 28a. Body from reddish brown to black, elongate, narrow, parallel, punctuate, with pubescence. Body length from head to elytral apex 12.21 mm, widest in humeral part of elytra (2.8 mm), 4.36 times longer than wide.

Head black, widest through the eyes, fractionally narrower than pronotum. Dorsal surface with coarse punctuation, covered by dense and long recumbent yellowish pubescence. Frons with narrow longitudinal furrow in middle. Head with long erect pale setae near anterior margin. Eyes blackish brown, distinctly emarginate. Clypeus and labrum blackish brown, shiny, partly covered by yellowish setation. Mandibles black, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus pale brown, punctured, covered by sparse pale pubescence.

Antennae pale reddish brown (antennomeres 6-11 distinctly darker), narrow, filiform, punctured by shallow small-sized indistinct punctuation, antennomeres 1-10 widened apically. Antennomeres without spines. Antennomeres 3-4 with long yellowish erect setation on inner side. Antennae reaching two thirds elytral length. Antennomere 2 shortest, antennomere 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.71 : 0.27 : 1.00 : 0.90 : 1.00 : 1.07 : 1.02 : 0.95 : 0.92 : 0.79 : 0.85.

Pronotum black, elongate, cylindrical, punctured by coarse granulated punctuation, covered by longer yellowish and short black pubescence (as in Fig. 28a). Pronotum almost parallel, 1.42 times longer than wide at base and 1.16 times longer than wide at widest point (near middle of pronotum). Lateral margins slightly arcuate, anterior margin and base almost straight. Dorsal surface with long pale erect setae in basal part and in lateral margins.

Scutellum black, semicircular, completely covered by dense recumbent yellowish pubescence.

Elytra 8.27 mm long and 2.8 mm wide (2.95 times longer than wide); elongate, narrow, slightly narrowing apically, black with brown apex, punctured by dense small-sized punctuation, covered by yellowish and black pubescence (as in Fig. 28a). Elytral apex finely rounded, lateral angle arcuate, sutural angle sharp. Apical margin with long yellowish setation.

Pygidium brown, punctured, covered by sparse recumbent yellowish pubescence, rounded apex with long yellowish setation.

Legs long and narrow, reddish brown with blackish brown femora, densely punctured, covered by yellowish pubescence. Meso- and metatibiae and meso- and metafemora with long erect setae from inner side. Tarsi with dense punctuation, covered by pale pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.74 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, completely covered by dense yellowish recumbent pubescence and long pale erect setation. Elytral epipleura covered by dark pubescence.

Genitalia as in Fig. 28b.

Female. Unknown.

Differential diagnosis. *Rhaphuma puella* sp. nov. differs from similar species *Rhaphuma duplex* Holzschuh, 1991, *Rhaphuma indifferens* Holzschuh, 1992, *Rhaphuma insigniticollis* Pic, 1937, *Rhaphuma luteopubens* Pic, 1937 and *Rhaphuma quercus* Gardner, 1940 by different shape of pronotum (distinctly cylindrical), by distinctly shorter antennae and by distinctly different shape of male genitalia.

The most similar species is *Rhaphuma virens* Matsushita, 1931 (Fig. 41). *R. puella* distinctly differs from similar species *R. virens* mainly by shorter antennae, by shorter protarsi, by preapical black spot on elytra strongly curved (different spot with rounded margins in *R. virens*), and by distinctly different shape of tergite 8, tegmen and median lobe (as in Figs. 28b and 41b).

Etymology. From Latin *puella* (it means „girl“).

Distribution. China (Sichuan).

***Rhaphuma skalei* sp. nov.**

(Fig. 29)

Type locality. Malaysia, Sabah, Trus Madi Mt.

Type material. Holotype (♂): 'MALAYSIA, Borneo' / 'N-Sabah, Trus Madi' / '1500m, May - June' / '2011, loc. Collector', (CPV). The type is provided with a printed red label: 'Rhaphuma skalei sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 29a. Body from brown to black, elongate, narrow, punctuate, with pubescence. Body length from head to elytral apex 10.32 mm, widest in humeral part of elytra (2.25 mm), approx 4.6 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, narrower than pronotum. Dorsal surface punctured by coarse dense punctuation, between antennal insertions with narrow longitudinal furrow in middle. Head covered by gray pubescence, lateral margins with long pale erect setae. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny, with yellowish setation. Mandibles black, indistinctly punctured, shiny, with whitish pubescence and pale setation in edges.

Maxillary palpus brown, with indistinct punctuation and sparse short pale setation. Ultimate palpomere longest, distinctly widened apically with rounded apex.

Antennae long, narrow, filiform, reaching six sevenths elytral length, antennomeres slightly widened apically. Antennomeres dark brown (antennomeres 8-11 indistinctly paler), punctured by indistinct shallow punctuation. Antennomeres covered by gray pubescence (pubescence longer in antennomeres 1-4). Antennomeres 1-5 with long yellowish setation on inner side. Antennomeres without spines. Antennomeres 7-10 serrate on outer side of apex. Antennomere 2 shortest, antennomere 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.78 : 0.27 : 1.00 : 0.84 : 1.07 : 1.14 : 1.12 : 0.98 : 0.90 : 0.77 : 0.90.

Pronotum black, elongate, punctured by coarse granulated punctuation, almost completely



28a



29a



28b



29b

Fig. 28. *Rhaphuma puella* sp. nov.: a- male holotype; b- male genitalia.
Fig. 29. *Rhaphuma skalei* sp. nov.: a- male holotype; b- male genitalia.

covered by gray pubescence except two small spots (as in Fig. 29a). Lateral margins with long pale erect setae. Pronotum 1.4 times longer than wide at base and 1.15 times longer than wide at widest point (near middle of pronotum). Lateral margins arcuate, anterior margin indistinctly arcuate, base almost straight.

Scutellum wide, shield-shaped, black, punctured, completely covered by gray recumbent pubescence.

Elytra 6.7 mm long and 2.25 mm wide (2.97 times longer than wide); narrowing apically, black (brown in apex), punctured by dense small-sized punctuation, covered by gray and black shiny pubescence (as in Fig. 29a). Each elytron with cut apex, indistinctly undulate, sutural and lateral angle with very short indistinct thorn. Apical margin with long yellowish setation.

Legs long and narrow, blackish brown (tarsi dark brown), punctured by shallow punctuation. Pro- and mesofemora and tibiae almost completely covered by gray pubescence, metafemora with indistinct longitudinal stripe of gray pubescence from dorsal side. Meso- and metafemora and tibiae with yellowish erect setation. Tarsi very long, punctured, covered by long gray pubescence and yellowish setation in margins. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.61 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, almost completely covered by dense recumbent pale gray pubescence (pubescence in metasternum sparser than in metepisternum). Ventrites completely covered by dense pale gray pubescence. Elytral epipleura black, punctured, covered by dark shiny pubescence.

Genitalia as in Fig. 29b.

Female. Unknown.

Differential diagnosis. The most similar species is *Rhaphuma sabahensis* Dauber, 2006 (Figs. 39-40). *Rhaphuma skalei* sp. nov. distinctly differs from similar species *R. sabahensis* mainly by narrower and longer scutellum, by different colour of pubescence (gray pubescence in *R. skalei*, against green pubescence in *R. sabahensis*), by pronotum with two vague black dots (pronotum with two wide longitudinal stripes in *R. sabahensis*), by different shape of sternite 8 and tergite 8 and by longer tegmen (as in Figs. 29b and 39b).

Etymology. This new species is dedicated to Andre Skale (Hof, Germany), my friend and a specialist in Callichromatini.

Distribution. Malaysia (Sabah).

Genus *Xylotrechus* Chevrolat, 1860

Type species. *Clytus sartorii* Chevrolat, 1860.

Xylotrechus amissus sp. nov.

(Fig. 30)

Type locality. Vietnam, Kon Tum province, Ngoc Linh Mt.

Type material. Holotype (♂): 'Ngoc Linh Mt.' / 'Kon Tum prov.' / 'Vietnam' / '1900m, v. 2017', (CPV). The type is provided with a printed red label: 'Xylotrechus amissus sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 30a. Body from brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 12.76 mm, widest in humeral part of elytra (3.07 mm), 4.15 times longer than wide.

Head black, short, widest through the eyes, distinctly narrower than pronotum, punctured by dense punctuation (punctuation large-sized in basal part and small-sized in anterior part), covered by dense yellow pubescence, head in base narrowly without pubescence. Eyes goldenish brown, distinctly longitudinally emarginate. Dorsal surface with relatively wide longitudinal glabrous stripe with a few small punctures in middle from apical part of eyes to apex of anterior part of head, basal part of stripe with distinct narrow furrow in middle. Head with narrow longitudinal keel from antennal insertions to apex of eyes from both sides close eyes. Clypeus brown, shiny, with yellowish setation. Mandibles black, with yellow pubescence and yellowish setation in edges.

Maxillary palpus pale brown, punctured, with pale setation. Palpomeres short, ultimate palpomere cylindrical with rounded apex.

Antennae blackish brown, short, reaching humera. Antennomeres widened apically and shortened. Antennomere 2 shortest, antennomere 3 longest. Antennae with small-sized shallow punctuation and yellowish green pubescence, pubescence in antennomeres 1-5 longer. Antennomeres 2-5 with very long yellowish setation on inner side. Antennomeres without spines. Ratios of relative lengths of antennomeres 1-11 equal to: 0.95 : 0.33 : 1.00 : 0.77 : 0.75 : 0.58 : 0.52 : 0.44 : 0.44 : 0.39 : 0.63.

Pronotum large, black, convex, covered by yellowish green pubescence (as in Fig. 30a), with dense granulation, in middle in one third of length from base to apex with small raised place with coarse granulation. Lateral margins rounded, anterior margin rounded, posterior margin slightly excised. Pronotum 1.56 times longer than wide at base and 1.1 times longer than wide at widest point (one third pronotal length from base to apex).

Scutellum black, wide, semielliptical, punctured, covered by dense recumbent yellowish pubescence.

Elytra 8.34 mm long and 3.07 mm wide (2.71 times longer than wide); black, covered by yellowish green pubescence (as in Fig. 30a). Elytra punctured by dense granulated punctuation, each elytron with elevation near scutellum and in humeri. Elytral apex rounded with indistinct thorns in angles. Apex covered by long yellowish setation.

Pygidium dark brown, punctured by dense shallow punctuation, covered by sparse yellowish green pubescence, apex rounded, covered by yellowish setation.

Legs long and narrow, blackish brown (tarsi paler), punctured by shallow punctuation, partly covered by long sparse yellowish green pubescence and pale setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi brown with distinct punctuation, covered by yellowish pubescence and setation. Metatarsomere 1 2.73 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured, almost completely covered by dense recumbent yellowish pubescence and pale erect setation. Elytral epipleura black, punctured, covered by yellowish green pubescence.

Genitalia as in Fig. 30b.

Female. Unknown.

Differential diagnosis. The most similar species are *Perissus filipes* Holzschuh, 2016, described from Laos, *Perissus latepubens* Pic, 1950, described from China and *Xylotrechus rufonotatus* Gressitt, 1936, described from Taiwan.

Xylotrechus amissus sp. nov. distinctly differs from similar species *P. filipes* mainly by dorsal surface of head with relatively wide longitudinal glabrous stripe with a few small punctures in middle from apical part of eyes to apex of anterior part of head, basal part of stripe with distinct narrow furrow in middle (indistinct short narrow glabrous longitudinal stripe on frons in *P. filipes*), by head covered by denser yellow pubescence than in *P. filipes*, by pronotum with more arcuate lateral margins and more convex, by blackish brown unicolored antennae (antennomeres 8-11 pale ochre yellow in *P. filipes*), by distinctly wider femora and by longer metatarsomere 1.

X. amissus distinctly differs from similar species *P. latepubens* mainly by dorsal surface of head with relatively wide longitudinal glabrous stripe with a few small punctures in middle from apical part of eyes to apex of anterior part of head, basal part of stripe with distinct narrow furrow in middle (irregular punctuation on frons in *P. latepubens*), by head covered by denser and longer yellow pubescence than in *P. latepubens*, by pronotum with more arcuate lateral margins and more convex, by wide transverse scutellum (elongate scutellum in *P. latepubens*).

X. amissus distinctly differs from similar species *X. rufonotatus* mainly by more elongate body, by head covered by denser and longer yellow pubescence than in *X. rufonotatus*, by pronotum unicolored black (pronotal disc with large reddish spot in *X. rufonotatus*), and by longer metatarsomere 1.

Etymology. From Latin *amissus* (it means „lost“).

Distribution. Vietnam (Kon Tum).

***Xylotrechus animosus* sp. nov.**

(Fig. 31)

Type locality. Vietnam, Kon Tum province, Ngoc Linh Mt.

Type material. Holotype (♂): ‘Ngoc Linh Mt.’ / ‘Kon Tum prov.’ / ‘Vietnam’ / ‘1900m, v. 2017’, (CPV). The type is provided with a printed red label: ‘*Xylotrechus animosus* sp. nov.’ / ‘HOLOTYPE’ / ‘P. Viktora det., 2019’.

Description. Habitus of male holotype as in Fig. 31a. Body from brown to black, elongate, parallel, punctuate, with pubescence. Body length from head to elytral apex 11.5 mm, widest in humeral part of elytra (2.86 mm), 4 times longer than wide.

Head black, short, widest through the eyes, distinctly narrower than pronotum, punctured by irregular granulated punctuation (in anterior part punctured by small-sized punctuation), covered by yellow pubescence. Eyes goldenish brown, distinctly longitudinally emarginate. Head with a few long erect pale setae near anterior margin. Dorsal surface with narrow glabrous longitudinal stripe in middle with distinct narrow longitudinal furrow beginning almost from base of head, ending in apex of eyes. Head with narrow longitudinal keel from antennal insertions to apex of eyes on both sides close to eyes. Clypeus pale brown, shiny, with yellowish setation. Mandibles black, shiny, with yellow pubescence and yellowish setation in edges.

Maxillary palpus pale brown, punctured, covered by yellowish setation. Palpomeres short, ultimate palpomere cylindrical with large impression and almost straight apex.

Antennae dark brown, short, reaching humeri. Antennomeres widened apically and shortened. Antennomere 2 shortest, antennomere 1 longest. Antennae with small-sized shallow punctuation and long yellow pubescence in antennomeres 1-5, antennomeres 6-11 with very short dense pale pubescence. Antennomeres 2-5 with very long yellowish setation on inner side. Antennomeres without spines. Ratios of relative lengths of antennomeres 1-11 equal to: 1.10 : 0.41 : 1.00 : 0.83

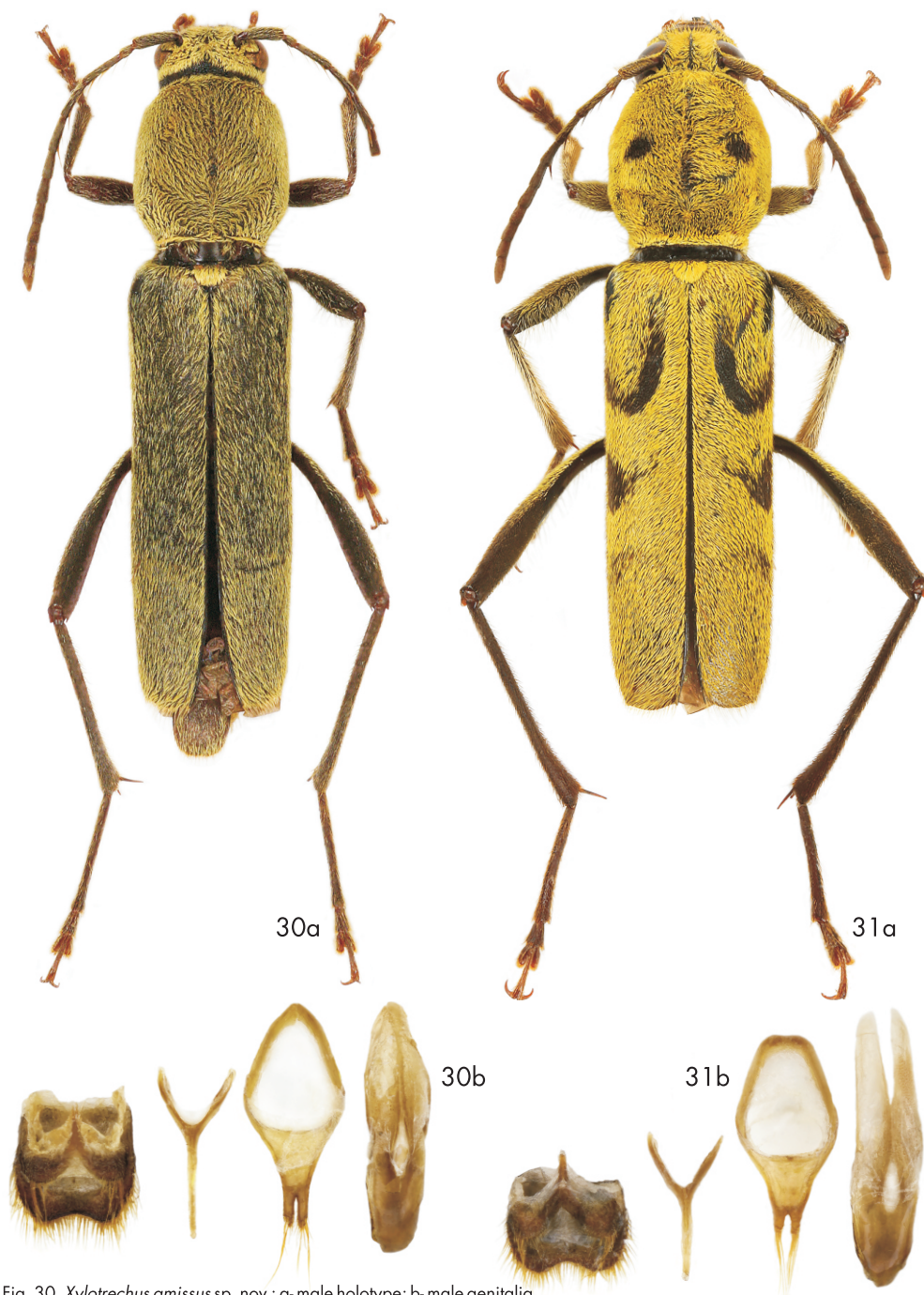


Fig. 30. *Xylotrechus amissus* sp. nov.: a-male holotype; b-male genitalia.

Fig. 31. *Xylotrechus animosus* sp. nov.: a-male holotype; b-male genitalia.

: 0.66 : 0.66 : 0.57 : 0.48 : 0.45 : 0.43 : 0.71.

Pronotum large, black, convex, covered by yellow and black pubescence (as in Fig. 31a). Pronotum with pale erect setation in basal part. Dorsal surface with dense granulation, in middle with two glabrous granulated places (first in one third of length from base to apex, second near apex). Disc with two subcircular shallow impressions from both sides in middle, covered by black pubescence (as in Fig. 31a). Lateral margins rounded, anterior margin and base almost straight. Pronotum 1.48 times longer than wide at base and 1.1 times longer than wide at widest point (near middle).

Scutellum semicircular, covered by dense recumbent yellow pubescence.

Elytra 7.62 mm long and 2.86 mm wide (2.66 times longer than wide); black with brown places near base and apex, covered by yellow and black pubescence (as in Fig. 31a). Elytra punctured by dense punctuation, each elytron with elevation near scutellum and in humera. Elytral apex undulate, with short thorns in lateral and sutural angle. Apex covered by long yellowish setation.

Legs long and narrow, blackish brown (tarsi paler), punctured by shallow punctuation, partly covered by long yellow pubescence and very long dense pale setation (especially in pro- and mesotibiae and pro- and mesofemora. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi brown with distinct punctuation, covered by yellowish pubescence and setation. Metatarsomere 1 2.52 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured, almost completely covered by dense recumbent yellow pubescence and pale erect setation. Elytral epipleura black, covered by very sparse yellowish pubescence.

Genitalia as in Fig. 31b.

Female. Unknown.

Differential diagnosis. The most similar species are *Xylotrechus asteius* Holzschuh, 2009 and *Xylotrechus reconditus* Holzschuh, 2009, both described from Laos, *Xylotrechus retractus* Holzschuh, 1998 from China (Shaanxi), *Xylotrechus subcarinatus* Gardner, 1939 and *Xylotrechus vinnulus* Holzschuh, 1993, described from Northern Thailand.

Xylotrechus animosus sp. nov. differs from similar species *X. asteius* mainly by wider pronotum with strongly arcuate lateral margins (pronotum almost cylindrical in *X. asteius*), by pronotum covered by yellow pubescence except black dots (pronotum completely covered by grayish pubescence in *X. asteius*), by body covered by yellow pubescence (grayish pubescence in *X. asteius*), and by different shape of black spots on elytra.

X. animosus differs from similar species *X. reconditus*, *X. retractus* and *X. vinnulus* mainly by more robust body, by wider pronotum and elytra with different shape of black spots, by wider antennae with darker antennomeres and by distinctly wider tarsi.

X. animosus differs from similar species *X. subcarinatus* mainly by more robust body, by wider legs and by different shape of black spots on elytra in basal third.

Etymology. From Latin *animosus* (it means „proud“).

Distribution. Vietnam (Kon Tum).

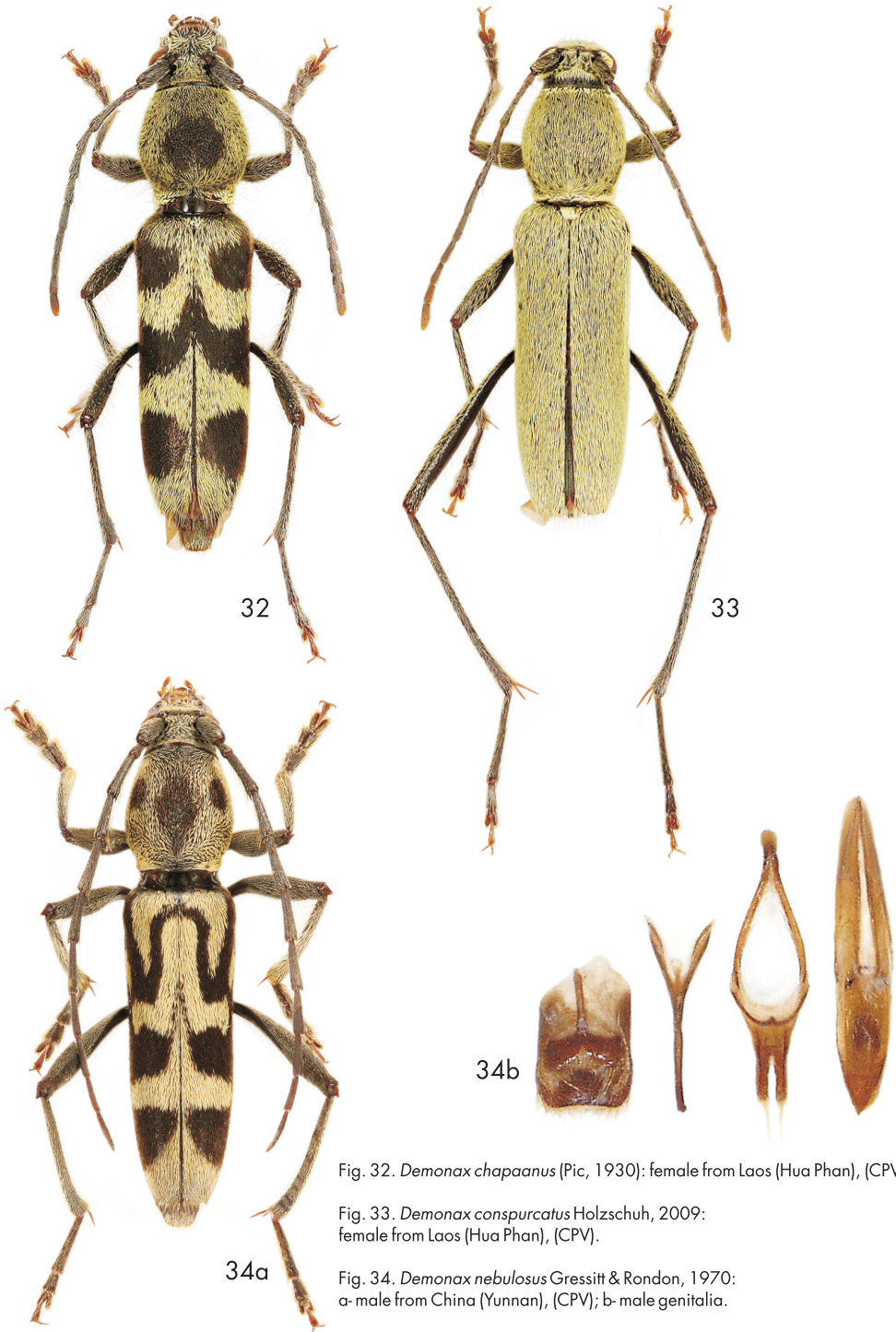


Fig. 32. *Demonax chapaeus* (Pic, 1930): female from Laos (Hua Phan), (CPV).

Fig. 33. *Demonax conspurcatus* Holzschuh, 2009: female from Laos (Hua Phan), (CPV).

Fig. 34. *Demonax nebulosus* Gressitt & Rondon, 1970: a-male from China (Yunnan), (CPV); b- male genitalia.



35a



36a



35b



36b

Fig. 35. *Rhaphuma asellaria* Holzschuh, 2017: a- male from Laos (Hua Phan), (CPV); b- male genitalia.

Fig. 36. *Rhaphuma baibarae* Matsushita, 1931: a- male from Taiwan, (CPV); b- male genitalia.

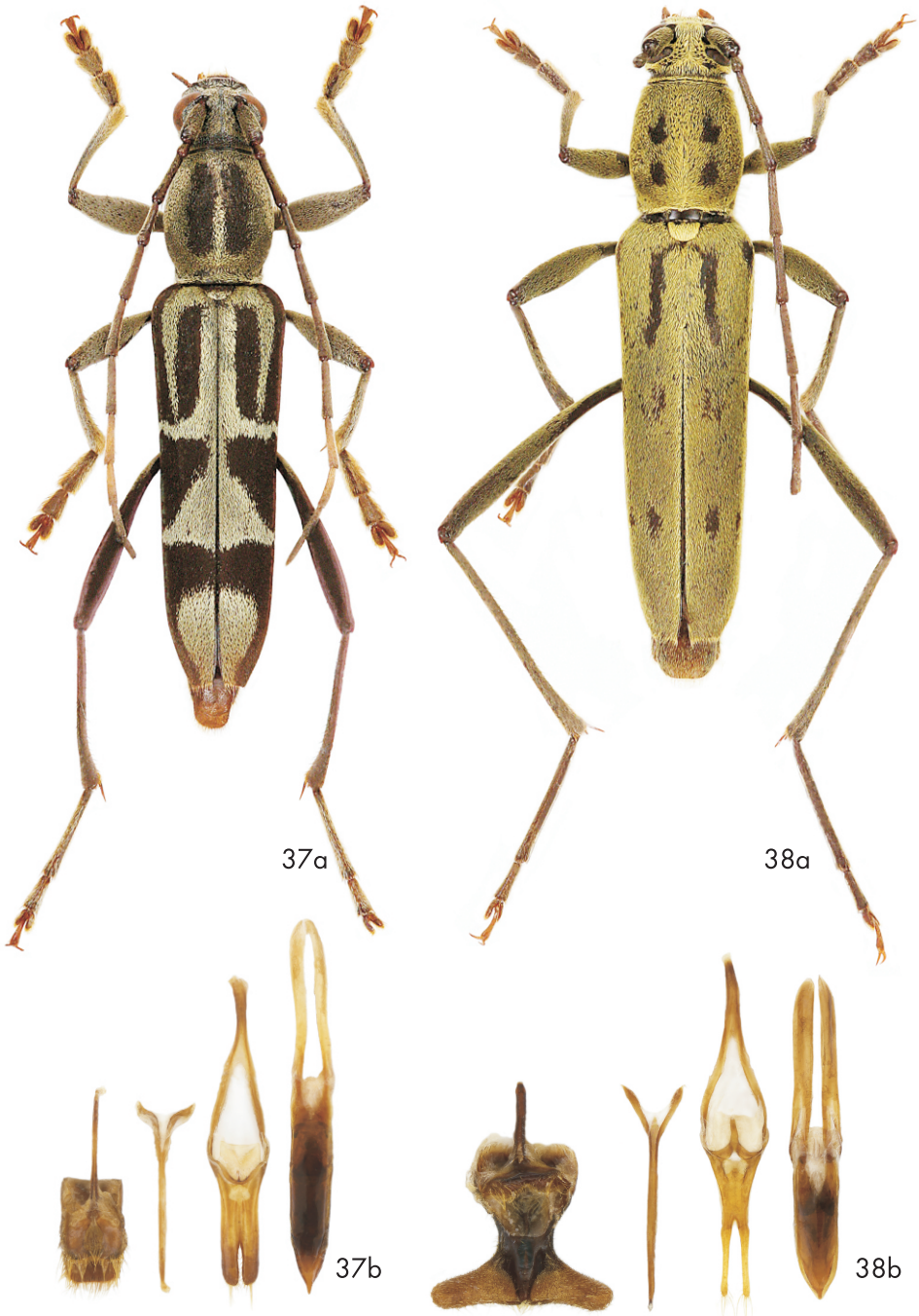


Fig. 37. *Rhaphuma bivittata* Aurivillius, 1916: a- male from Malaysia, Borneo (Sabah), (CPV); b- male genitalia.
Fig. 38. *Rhaphuma familiaris* Holzschuh, 2017: a- male from China (Sichuan), (CPV); b- male genitalia.

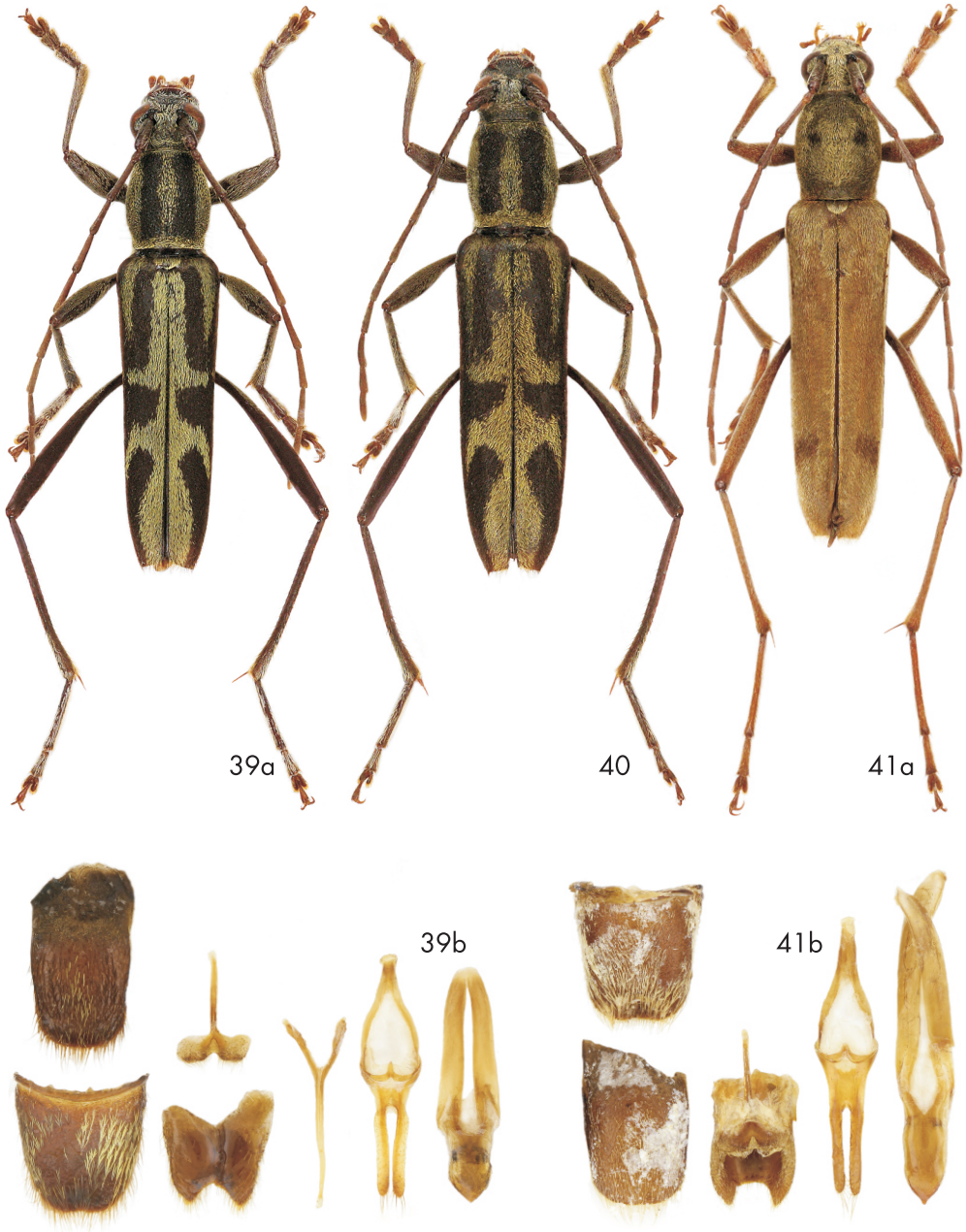


Fig. 39. *Rhaphuma sabahensis* Dauber, 2006: a- male from Malaysia, Borneo (Sabah), (CPV); b- male genitalia.

Fig. 40. *Rhaphuma sabahensis* Dauber, 2006: female from Malaysia, Borneo (Sabah), (CPV).

Fig. 41. *Rhaphuma virens* Matsushita, 1931: a- male from Taiwan, (CPV); b- male genitalia.

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