

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

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Abstract. *Clytus dongziensis* sp. nov., *Clytus qingmaiensis* sp. nov. and *Chlorophorus ursus* sp. nov. from China (Sichuan), *Chlorophorus prodromus* sp. nov. from Cambodia (Mondulkiri) and Vietnam (Binh Thuan, Lam Dong), *Demonax cognoscibilis* sp. nov. from Vietnam (Lam Dong), *Demonax comparabilis* sp. nov. from China (Hainan), *Demonax consimilis* sp. nov. from China (Yunnan), *Demonax machi* sp. nov. from Malaysia (Perak, Pahang), *Demonax patruus* sp. nov. from the Philippines (Oriental Mindoro), *Demonax subditivus* sp. nov. from the Philippines (Davao City), *Rhaphuma bachmaica* sp. nov. from Vietnam (Thua Thien Hue), *Rhaphuma coniectura* sp. nov. from Vietnam (Dak Nong, Lam Dong), *Rhaphuma neverca* sp. nov. from Laos (Houaphanh, Xiangkhouang), *Rhaphuma patrina* sp. nov. from Vietnam (Binh Thuan), *Rhaphuma rivalis* sp. nov. and *Rhaphuma soror* sp. nov. from Vietnam (Lam Dong) and Cambodia (Mondulkiri) and *Rhaphuma sontraica* sp. nov. from Vietnam (Da Nang, Quang Nam) are described. All the habitus and male genitalia are illustrated.

INTRODUCTION

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

In the present paper, I describe new species of the genus *Clytus*, *Chlorophorus*, *Demonax* and *Rhaphuma* from materials which were recently collected in Cambodia, China, Laos, Malaysia, Philippines and Vietnam. Descriptions of the following seventeen new Clytini species are given: *Clytus dongziensis* sp. nov., *Clytus qingmaiensis* sp. nov. and *Chlorophorus ursus* sp. nov. from China (Sichuan), *Chlorophorus prodromus* sp. nov. from Cambodia (Mondulkiri) and Vietnam (Binh Thuan, Lam Dong), *Demonax cognoscibilis* sp. nov. from Vietnam (Lam Dong), *Demonax comparabilis* sp. nov. from China (Hainan), *Demonax consimilis* sp. nov. from China (Yunnan), *Demonax machi* sp. nov. from Malaysia (Perak, Pahang), *Demonax patruus* sp. nov. from the Philippines (Oriental Mindoro), *Demonax subditivus* sp. nov. from the Philippines (Davao City), *Rhaphuma bachmaica* sp. nov. from Vietnam (Thua Thien Hue), *Rhaphuma coniectura* sp. nov. from Vietnam (Dak Nong, Lam Dong), *Rhaphuma neverca* sp. nov. from Laos (Houaphanh, Xiangkhouang), *Rhaphuma patrina* sp. nov. from Vietnam (Binh Thuan), *Rhaphuma rivalis* sp. nov. and *Rhaphuma soror* sp. nov. from Vietnam (Lam Dong) and Cambodia (Mondulkiri) and *Rhaphuma sontraica* sp. nov. from Vietnam (Da Nang, Quang Nam). The new species are compared to the congeners (*Clytus rufobasalis* Pic, 1917, *Chlorophorus arciferus* (Chevrolat, 1863), *Chlorophorus hainanicus* Gressitt, 1940, *Chlorophorus hauseri* Pic, 1931, *Chlorophorus semiformosus* (Pic, 1908), *Demonax bowringii* (Pascoe, 1859), *Demonax iniquus* Holzschuh, 1993, *Demonax langsonius* (Fairmaire, 1895), *Demonax macilentus* (Chevrolat, 1858), *Demonax reticollis* Gahan, 1894, *Demonax transversalis* Aurivillius, 1910, *Rhaphuma aequalis*

Holzschuh, 1991, *Rhaphuma anongi* Gressitt & Rondon, 1970, *Rhaphuma binotata* Hua, 1989, *Rhaphuma brodskyi* Holzschuh, 1992, *Rhaphuma campanulifera* Aurivillius, 1922, *Rhaphuma conformis* (Gahan, 1906), *Rhaphuma falx* Holzschuh, 1991, *Rhaphuma maculicollis* Gressitt & Rondon, 1970, *Rhaphuma pseudominuta* Gressitt & Rondon, 1970, *Rhaphuma ryjaceki* Viktora, 2015, and *Rhaphuma vagesignata* Pic, 1937), which are also illustrated in most cases.

MATERIAL AND METHODS

Observation and photography. The habitus of all specimens were taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Composite images were created using the software Image Stacking Software Combine ZP. Microstructures of dissected parts were observed under the DNT DigiMicro Profi USB microscope. The genitalia photographs were taken with a Canon MP-E 65mm/2.8 1–5× Macro lens 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:

- BPBM Bernice P. Bishop Museum, Honolulu, U.S.A.;
 CCH collection of Carolus Holzschuh, Villach, Austria;
 CJC collection of Jim Cope, San Jose, U.S.A.;
 CPK collection of Petr Kabátek, Praha, Czech Republic;
 CPV collection of Petr Viktora, Kutná Hora, Czech Republic;
 CRH collection of Roman Hergovits, Bratislava, Slovakia.

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 dongziensis sp. nov.

(Fig. 1)

Type locality. China, Sichuan, valley 7 km E Dongzi, 28°30'N 100°57'E.

Type material. Holotype (♀): 'China, S Sichuan,' / 'valley 7 km E DONGZI,' / '28.30N/100.57E, 2900m' / 'J. Kaláb leg., 27. vi. 2006,' / 'agricultural landscape', (CPV).

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

Description. Habitus of female holotype as in Fig. 1. Body from pale ochre yellow to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 10.45 mm, widest in humeral and preapical parts of elytra (2.58 mm), 4.05 times longer than wide.

Head black, short, widest through the eyes, only slightly narrower than pronotum at widest point, with coarse reticulate punctation, punctures with microgranulation inside. Head in front side with long yellowish pubescence near eyes, rest of head with very sparse long erect yellowish pubescence. Eyes goldenish brown, distinctly emarginate. Clypeus and labrum brown, shiny.

Mandibles blackish brown, shiny, with yellowish setation in edges.

Maxillary palpus brown with black margins, with indistinct small-sized punctuation and short pale setation. Ultimate palpomere longest, elliptical with cut apex.

Antennae short (reaching one third elytral length), antennomeres wide, reddish brown with darker margins (antennomeres 6-11 distinctly darker). Antennomeres with distinct punctuation (punctuation in antennomeres 6-11 denser, punctures smaller). Antennomeres without spines, widened apically. Antennomeres 1-4 covered by long bicolor (yellowish and black) pubescence, antennomeres 5-11 covered by denser short dark pubescence. Antennomeres 2-5 with longer yellowish setation in inner side. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.96 : 0.36 : 1.00 : 0.84 : 1.11 : 0.93 : 0.95 : 0.74 : 0.79 : 0.66 : 1.00.

Pronotum black, narrower than elytra, shape of pronotum as in Fig. 1. Pronotum 1.24 times longer than wide at base and 1.07 times longer than wide at widest point (before middle of pronotum from base to apex). Dorsal surface with coarse reticulate punctuation, punctures with microgranulation inside. Pronotum with stripe of recumbent yellow pubescence in margins (in lateral margins invisible in dorsal view), dorsal surface with very long pale erect setation. Lateral margins slightly arcuate, anterior margin and base almost straight.

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

Elytra 7.11 mm long and 2.58 mm wide (2.75 times longer than wide); elongate, parallel, shortly narrowing apically, from pale ochre yellow to blackish brown in humeri and suture. Elytra punctured by small-sized punctuation, covered by sparse yellowish and dark pubescence (as in Fig. 1). Elytral apex rounded, apical margin covered by long yellowish setation.

Pygidium brown, punctate, with sparse yellowish pubescence, apex rounded, with long yellowish setation.

Legs narrow, pale reddish brown, punctate by shallow large-sized punctuation, partly covered by very sparse whitish pubescence (in femora) and relatively dense yellowish setation. Tarsi relatively long, punctured, covered by yellowish setation. Claws very long. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.72 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, punctate, partly covered by yellowish pubescence. Mesepisternum with yellowish pubescence only in apex, metepisternum with large spot of yellowish pubescence in middle, metasternum with sparse long whitish setation and narrowly yellowish pubescence in apex, each ventrite with relatively small spot of yellowish pubescence. Elytral epipleura brown, covered by sparse yellowish setation.

Male. Unknown.

Differential diagnosis. The most similar species are *Clytus rufobasalis* Pic, 1917, described from Yunnan and *Clytus qingmaiensis* sp. nov. (Fig. 2).

Clytus dongziensis sp. nov. distinctly differs from the similar species *C. rufobasalis* mainly by narrower and more elongate body, by narrower and otherwise placed stripes of pale pubescence on elytra, by pronotal disc covered only by long pale setation except margins with yellow pubescence (pronotal disc covered by relatively dense pale pubescence in *C. rufobasalis*), and by elytral apex rounded (lateral angle sharp in elytral apex of *C. rufobasalis*).

Clytus dongziensis sp. nov. distinctly differs from the similar species *C. qingmaiensis* mainly by more elongate body (ratio body length / body width 4.05), by pronotum with stripes of yellow pubescence in margins, by pronotal disc without pubescence (only with long pale setation) and by different shape of stripes of pale pubescence on elytra; while *C. qingmaiensis* has less elongate

body (ratio body length / body width 3.17), pronotum without stripes of yellow pubescence in margins and pronotal disc with indistinct places of yellowish pubescence.

Etymology. Named after the type locality.

Distribution. China (Sichuan).



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

Fig. 2. *Clytus qingmaiensis* sp. nov.: female holotype.

***Clytus qingmaiensis* sp. nov.**

(Fig. 2)

Type locality. China, Sichuan, Qingmai, 28°47'N 99°56'E.

Type material. Holotype (♀): 'CHINA, Sichuan 1.-3.vii.06' / 'Qingmai 2700-3500m' / '28° 47'N, 99° 56'E' / 'lgt. A. Mikyška', (CPV); Paratype: (1 ♀): 'China, S.W. Sichuan' / 'Qingmai 3000m' / 'N 28°48'46.7"', E 099° 52'09.2''' / '3.vii.2006, lgt. Janata M.', (CPV).

The types are provided with a printed red label: '*Clytus qingmaiensis* sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2020'.

Description. Habitus of female holotype as in Fig. 2. Body from pale ochre yellow to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 11.8 mm (female paratype 9.2 mm), widest in humeral part of elytra (3.23 mm), 3.17 times longer than wide.

Head black, short, widest through the eyes, only slightly narrower than pronotum at widest point, with coarse reticulate punctation, punctures with microgranulation inside. Head in front side with long yellowish pubescence near eyes, rest of head with very sparse long erect yellowish pubescence. Eyes dark brown, distinctly emarginate. Clypeus and labrum brown, shiny. Mandibles blackish brown, shiny, with yellowish setation in edges.

Maxillary palpus pale brown with darker margins, shiny, with a few pale setae. Ultimate palpomere longest, elliptical with rounded apex.

Antennae short (reaching one third elytral length), antennomeres wide, reddish brown with darker margins (antennomeres 6-11 darker). Antennomeres with distinct punctation (punctation in antennomeres 6-11 denser, punctures smaller). Antennomeres without spines, widened apically. Antennomeres 1-4 covered by long yellowish pubescence, antennomeres 5-11 covered by short, dense, dark shiny pubescence. Antennomeres 2-5 with longer yellowish setation in inner side. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.95 : 0.37 : 1.00 : 0.79 : 1.29 : 1.10 : 1.06 : 0.82 : 0.81 : 0.64 : 0.87.

Pronotum black, narrower than elytra, shape of pronotum as in Fig. 2. Pronotum 1.14 times longer than wide at base and as long as wide at widest point (middle of pronotum). Dorsal surface with relatively coarse punctation, punctures with microgranulation inside. Pronotum with stripe of sparse yellowish pubescence in edges and with indistinct places of yellowish pubescence on pronotal disc (as in Fig. 2). Dorsal surface with long pale erect setation. Lateral margins slightly arcuate, anterior margin and base almost straight.

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

Elytra 8.0 mm long and 3.23 mm wide (2.47 times longer than wide); elongate, parallel, shortly narrowing apically, from pale ochre yellow to blackish brown at humeri and suture. Elytra punctured by small-sized, very shallow indistinct punctation, covered by sparse yellowish and black pubescence (as in Fig. 2). Elytral apex rounded, apical margin covered by long yellowish setation.

Pygidium blackish brown with paler apical margin, punctate, with sparse yellowish pubescence, apex rounded, with yellowish setation.

Legs narrow, pale reddish brown with darker femora, punctate by shallow large-sized punctation, partly covered by sparse yellowish pubescence (in femora) and relatively dense yellowish setation. Tarsi relatively long, punctured, covered by yellowish setation. Claws very long. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.87 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish brown, punctate, partly covered by whitish pubescence. Mesepisternum covered by pale whitish pubescence in apical half, metepisternum and ventrites almost completely covered by whitish pubescence, metasternum almost completely covered by whitish pubescence (pubescence distinctly sparser than in ventrites). Elytral epipleura brown, covered by sparse yellowish setation.

Male. Unknown.

Differential diagnosis. The most similar species are *Clytus rufobasalis* Pic, 1917, described from Yunnan and *Clytus dongziensis* sp. nov. (Fig. 1).

Clytus qingmaiensis sp. nov. distinctly differs from the similar species *C. rufobasalis* mainly by

significantly different shape of stripes of pale pubescence on elytra and by pronotum without yellow pubescence in margins (*C. rufobasalis* has wide stripes of yellow pubescence in anterior margin and base).

Clytus qingmaiensis sp. nov. distinctly differs from the similar species *C. dongziensis* mainly by less elongate body (ratio body length / body width 3.17), by pronotum without stripes of yellow pubescence in margins, by pronotal disc with indistinct places of yellowish pubescence and by different shape of stripes of pale pubescence on elytra; while *C. dongziensis* has more elongate body (ratio body length / body width 4.05), pronotum with stripes of yellow pubescence in margins and pronotal disc without pubescence (only with long pale setation).

Etymology. Named after the type locality.

Distribution. China (Sichuan).

Genus *Chlorophorus* Chevrolat, 1863

Type species. *Callidium annulare* Fabricius, 1787.

Chlorophorus prodromus sp. nov.

(Figs. 3-4)

Type locality. E Cambodia, Mondulkiri Province, 25 km SE of Sen Monorom, 12°21.23093'N 107°17.59453'E.

Type material. Holotype (♂): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093' E 107°17.59453'' / '840 m, 13. v. 2019' / 'P. Viktora lgt.', (CPV); Paratypes: (2 ♀♀): same data as holotype, (CPV); (2 ♀♀): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093' E 107°17.59453'' / '840 m, 19. - 21. v. 2019' / 'P. Viktora lgt.', (CPV); (1 ♂, 2 ♀♀): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093' E 107°17.59453'' / '840 m, 7. - 8. v. 2019' / 'P. Viktora lgt.', (CPV); (4 ♂♂, 1 ♀): 'E Cambodia, 25 km SE of' / 'Sen Monorom, 840 m, N 12°' / '21.23093' E 107°17.59453'' / '7. - 13. and 19. - 21. v.' / '2019, leg. P. Kabátek', (CPK); (2 ♂♂, 1 ♀): 'Dambri, Bao Lam' / 'Lam Dong, Vietnam' / 'v. 2017', (CPV); (1 ♀): 'Vietnam' / 'Binh Thuan' / 'Dong Tien' / 'vi/2018', (CPV); (1 ♂, 1 ♀): 'Vietnam' / 'Bao Loc' / 'Lam Dong' / 'iv/2019', (CPV).

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

Description. Habitus of male holotype as in Fig. 3a. Body from blackish brown to black, elongate, punctate, with pubescence. Body length from head to elytral apex 11.46 mm (male paratypes from 10.5 to 12.6 mm), widest in humeral part of elytra (3.07 mm), 3.73 times longer than wide.

Head black, narrow, narrower than pronotum, widest through the eyes. Head with coarse punctation near base, rest of head with small-sized punctation, between eyes with longitudinal narrow furrow. Head covered by relatively sparse yellowish recumbent pubescence (in base narrowly without pubescence), anterior part of head with a few long pale erect setae. Eyes goldenish brown, strongly excised. Clypeus brown, shiny. Mandibles black with yellowish pubescence and setation in edges.

Maxillary palpus brown, matte, with short indistinct pale setation. Palpomeres short, wide, ultimate palpomere longest, widened apically, drop-shaped with rounded apex.

Antennae narrow, filiform, reaching two fifths elytral length. Antennomeres dark brown, punctured by small-sized punctation, widened apically with rounded apex. Antennomeres without spines. Antennomeres 1-4 covered by sparse yellowish pubescence, antennomeres 5-11 covered by dense and short pale pubescence. Antennomeres 2-5 with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 4 longest. Ratios of relative lengths of antennomeres 1-11

equal to: 1.04 : 0.37 : 1.00 : 1.12 : 1.02 : 0.96 : 0.93 : 0.73 : 0.63 : 0.71 : 0.81.

Pronotum black, elongate, with arcuate lateral margins, anterior margin and base straight. Pronotum narrower than elytra at humeri, 1.48 times longer than wide at base and 1.21 times longer than wide at widest point (before middle from base to apex). Dorsal surface with distinct irregular granulate punctation, partly covered by greenish ginger, whitish and black pubescence (as in Fig. 3a). Basal half of pronotum with long pale erect setation.

Scutellum black, semielliptical, completely covered by yellowish pubescence (pubescence in apical margin denser).

Elytra 7.22 mm long and 3.07 mm wide (2.35 times longer than wide); narrowing apically, black, covered by greenish ginger, whitish and black pubescence (as in Fig. 3a). Elytra completely punctured by dense small-sized punctation. Elytral apex cut, slightly undulate, each elytron with short spine in lateral and sutural angle. Apical margin covered by dense long yellowish setation.

Pygidium blackish brown, punctured by indistinct punctation, covered by recumbent yellow pubescence, apical margin with yellowish setation. Apex finely rounded.

Legs long, from dark brown to blackish brown, punctured by dense small-sized punctation, partly covered by yellowish and whitish pubescence and long pale setae. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long, with dense punctation, covered by yellowish pubescence and setation. Metatarsomere 1 1.26 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured, ventrites brown. Mesepisternum covered by dense white pubescence in apical third, metepisternum almost completely covered by dense white pubescence, metasternum covered by white pubescence in basal half and by yellowish pubescence in apical half, ventrite 1 covered by dense white pubescence, ventrites 2-5 covered by long yellowish pubescence (pubescence sparser than in ventrite 1). Elytral epipleura black, matte, distinctly undulate, wide in basal part, narrow in apical part, with sparse small-sized punctation, covered by sparse yellowish pubescence.

Genitalia as in Fig. 3b.

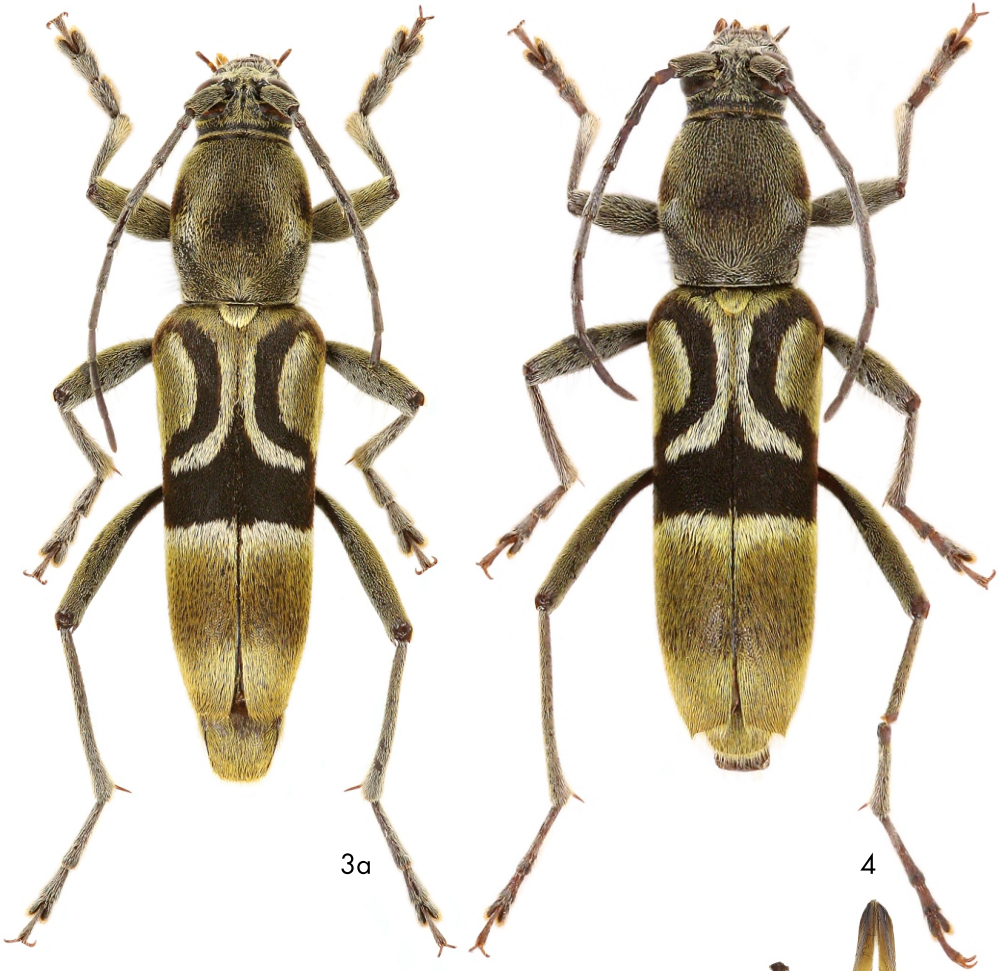
Female. Habitus of female paratype as in Fig. 4. Body length from head to elytral apex (female paratypes) from 9.35 to 13.0 mm. Colour of female the same as in male. Female without distinct differences, only tarsi distinctly narrower and shorter than in male.

Differential diagnosis. The most similar species are *Chlorophorus arciferus* (Chevrolat, 1863) (Fig. 28) and *Chlorophorus hainanicus* Gressitt, 1940 (Fig. 29).

Chlorophorus prodromus sp. nov. differs from the similar species *C. arciferus* and *C. hainanicus* mainly by different colour of pubescence on pronotum and elytra, which is partly whitish and greenish ginger in combination with black pubescence (combination of black and yellow pubescence in *C. arciferus* and *C. hainanicus*), and by distinctly different shape of spots and stripes of pubescence on elytra. *C. prodromus* has ventral side of body covered by white pubescence (including ventrite 1) and yellowish pubescence in ventrites 2-5; while *C. arciferus* and *C. hainanicus* have ventral side of body completely covered by yellowish pubescence (including all ventrites). Differences can also be found in the shape of genitalia, mainly in shape of tegmen and apex of median lobe (as you can see in Figs. 3b, 28b and 29b).

Etymology. From Latin *prodromus* (it means "envoy").

Distribution. Cambodia (Mondulkiri), Vietnam (Binh Thuan, Lam Dong).



3a

4

Fig. 3. *Chlorophorus prodromus* sp. nov.: a- male holotype;
b- male genitalia.

Fig. 4. *Chlorophorus prodromus* sp. nov.: female paratype.



3b

***Chlorophorus ursus* sp. nov.**

(Fig. 5)

Type locality. China, Sichuan, Muli County, Liangshan Yi Autonomous Prefecture, 28°54.046'N 100°47.878'E.**Type material.** Holotype (♂): 'CHINA, Sichuan prov.' / 'Muli County' / 'Liangshan Yi Autonomous Prefecture' / '28°54.046'N, 100°47.878'E' / '3842 m alt., 9. vi. 2016', (CPV).

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

Description. Habitus of male holotype as in Fig. 5a. Body from blackish brown to black, robust, widely elongate, punctate, with pubescence. Body length from head to elytral apex 11.64 mm, widest in humeral part of elytra (3.18 mm), 3.66 times longer than wide.

Head black, narrow, distinctly narrower than pronotum, widest through the eyes. Head with distinct punctation (in posterior part punctation coarser and punctures larger than in anterior part), between eyes with narrow longitudinal furrow. Head completely covered by dense yellowish grey pubescence. Eyes blackish brown, strongly excised. Clypeus blackish brown, shiny. Mandibles black with yellowish grey pubescence and pale setation in edges.

Maxillary palpus brown, shiny, with short indistinct pale setation. Palpomeres short, wide, ultimate palpomere longest, slightly widened apically, with oval depression near base.

Antennae blackish brown, almost reaching one half elytral length. Antennomeres wide, punctured by small-sized punctation, widened apically, antennomeres 6-10 serrate in outer side of apex. Antennomeres without spines. Antennae completely covered by dense yellowish grey pubescence, antennomeres 2-6 with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.77 : 0.28 : 1.00 : 0.76 : 0.81 : 0.78 : 0.74 : 0.70 : 0.62 : 0.59 : 0.69.

Pronotum black, robust, transverse, narrowest at base, with arcuate lateral margins, anterior margin indistinctly arcuate, base almost straight. Pronotum only finely narrower than elytra at humeri, 1.31 times longer than wide at base and 1.09 times wider than long at widest point (before middle from base to apex). Dorsal surface with dense small-sized irregular punctation, completely covered by long dense recumbent yellowish grey pubescence (as in Fig. 5a).

Scutellum black, wide, semielliptical, completely covered by yellowish grey recumbent pubescence.

Elytra 7.65 mm long and 3.18 mm wide (2.4 times longer than wide); only slightly narrowing apically, black, covered by yellowish grey and black pubescence (as in Fig. 5a). Elytra completely punctured by dense small-sized punctation. Elytral apex undulate, each elytron with short thorn in lateral angle. Apical margin covered by dense long yellowish setation.

Pygidium black, punctured by dense punctation, covered by dense yellowish grey pubescence and yellowish setation in apex. Apex finely rounded.

Legs long, relatively robust, from blackish brown to black, punctured by dense small-sized punctation, partly covered by yellowish grey pubescence and long dense pale setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long, with dense punctation, covered by yellowish grey pubescence and yellowish setation in edges. Metatarsomere 1 1.35 times longer than metatarsomeres 2 and 3 together.

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

Genitalia as in Fig. 5b.

Female. Unknown.

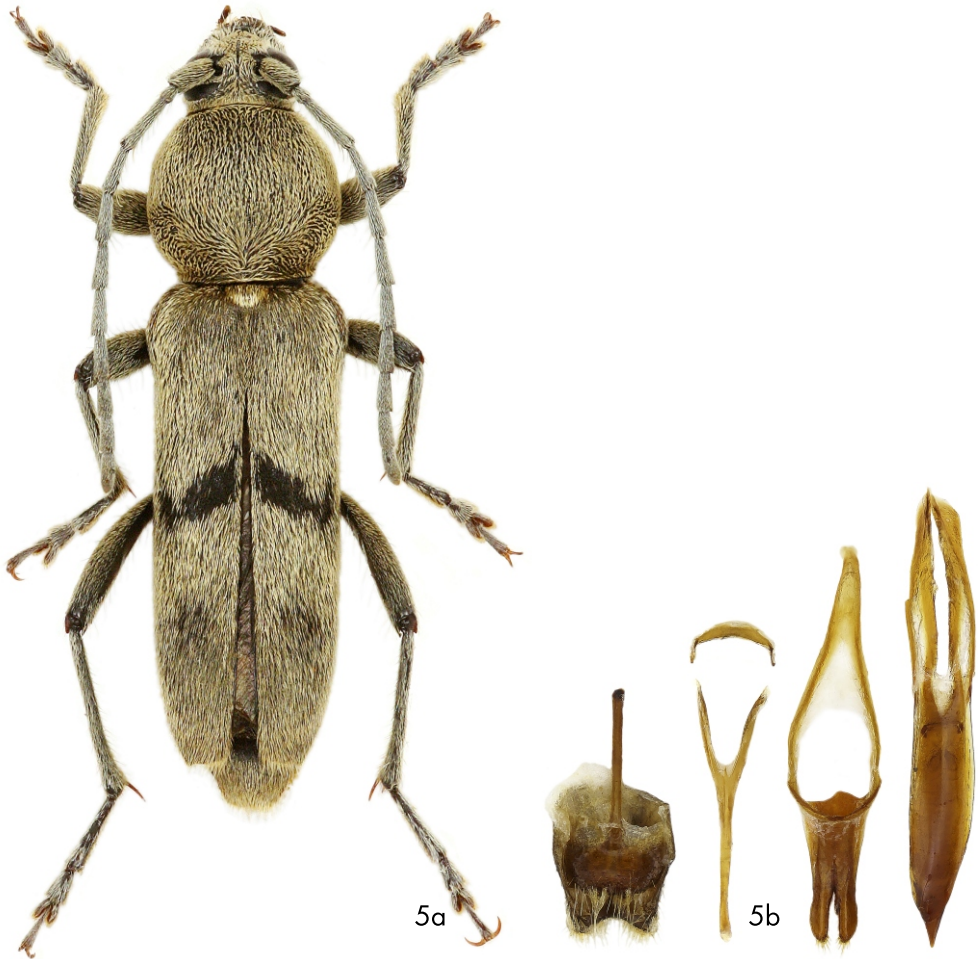


Fig. 5. *Chlorophorus ursus* sp. nov.: a- male holotype; b- male genitalia.

Differential diagnosis. The most similar species are *Chlorophorus hauseri* Pic, 1931 and *Chlorophorus semiformosus* (Pic, 1908).

Chlorophorus ursus sp. nov. distinctly differs from *C. hauseri* mainly by wider, transverse pronotum (slightly elongate pronotum in *C. hauseri*), by scutellum covered by yellowish grey pubescence, which is of the same colour as in elytra (scutellum with whitish, distinctly paler pubescence than in elytra in *C. hauseri*), and by significantly different shape of black spots on elytra.

Chlorophorus ursus sp. nov. distinctly differs from *C. semiformosus* mainly by wider, transverse pronotum (slightly elongate pronotum in *C. semiformosus*), by scutellum covered by yellowish grey pubescence, which is of the same colour as in elytra (scutellum with distinctly paler and denser pubescence than in elytra in *C. semiformosus*), by shorter antennae, distinctly shorter pro- and metatibiae, and by significantly different shape of black spots on elytra than in *C. semiformosus*.

Etymology. From Latin *ursus* (it means "bear").

Distribution. China (Sichuan).

Genus *Demonax* Thomson, 1861

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

Demonax cognoscibilis sp. nov.

(Fig. 6)

Type locality. Vietnam, Lam Dong, Bao Lam, Dambri.

Type material. Holotype (♂): 'Vietnam' / 'Lam Dong' / 'Dambri, Bao Lam' / 'iv. 2019', (CPV).

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

Description. Habitus of male holotype as in Fig. 6a. Body from dark brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 8.85 mm, widest in humeral part of elytra (1.79 mm), 4.94 times longer than wide.

Head black (dark brown near anterior margin), relatively short, widest through the eyes, almost as wide as pronotum, dorsal surface with dense granulate punctation, frons with indistinct punctation and small shiny place without punctation and pubescence in middle. Head with indistinct narrow longitudinal furrow between eyes. Head covered by short grey pubescence except small place in middle of frons and a few long pale erect setae behind eyes. Eyes goldenish, distinctly emarginate. Clypeus and labrum pale ochre yellow, shiny, with yellowish setation. Mandibles brown with black apical quarter, shiny, with long yellowish setation in edges.

Maxillary palpus pale brown (palpomeres with paler apex), palpomeres short, punctate by indistinct punctation, covered by short sparse pale setation. Ultimate palpomere longest, slightly widened apically.

Antennae long, distinctly longer than body (as in Fig. 6a), filiform, narrow, antennomeres brown (first antennomeres darker), antennomeres slightly widened apically, with indistinct punctation. Antennomeres 1-6 and partly antennomere 7 covered by recumbent grey pubescence, antennomeres 8-11 covered by dense short dark pubescence. Antennomeres 3-5 with short sharp spine in inner side of apex, spine in antennomere 3 shorter than in antennomeres 4 and 5. Antennomeres 3-5 with long erect yellowish setation in inner side in full length. Antennomere 2 shortest, antennomeres 6, 7 and 9 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.61 : 0.18 : 1.00 : 0.84 : 1.19 : 1.35 : 1.40 : 1.24 : 1.34 : 1.20 : 0.97.

Pronotum black, elongate, long, narrow, narrower than elytra at humeri, shape of pronotum as in Fig. 6a. Lateral margins slightly arcuate, anterior and posterior margin almost straight. Pronotum 1.64 times longer than wide at base and 1.29 times longer than wide at widest point (middle of pronotum). Dorsal surface with dense granulate punctation, covered by short grey recumbent pubescence except two spots with short black pubescence (as in Fig. 6a). Disc with distinct elevation in middle near base. Pronotum with a few long pale setae near base.

Scutellum black, shield-shaped with rounded apex, completely covered by grey recumbent pubescence.

Elytra 5.62 mm long and 1.79 mm wide (3.14 times longer than wide); almost parallel, black with dark brown apex. Elytra punctured by dense small-sized punctation, covered by grey and

black pubescence (as in Fig. 6a). Elytral apex cut, sutural and lateral angle sharp. Apical margin covered by long yellowish setation.

Pygidium pale brown, semimatte, with indistinct punctation and sparse pale setation in apical third.

Legs very long and very narrow, from brown to blackish brown, tarsi slightly paler. Legs with dense shallow punctation, partly covered by greyish pubescence and longer yellowish setation. Tarsi long and narrow, punctured by dense small-sized punctation, covered by long yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.0 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to dark brown, almost completely covered by whitish pubescence, pubescence in mesepisternum, metepisternum and ventrites denser. Ventrites with long erect pale setae. Elytral epipleura blackish brown, covered by short dark pubescence.

Genitalia as in Fig. 6b.

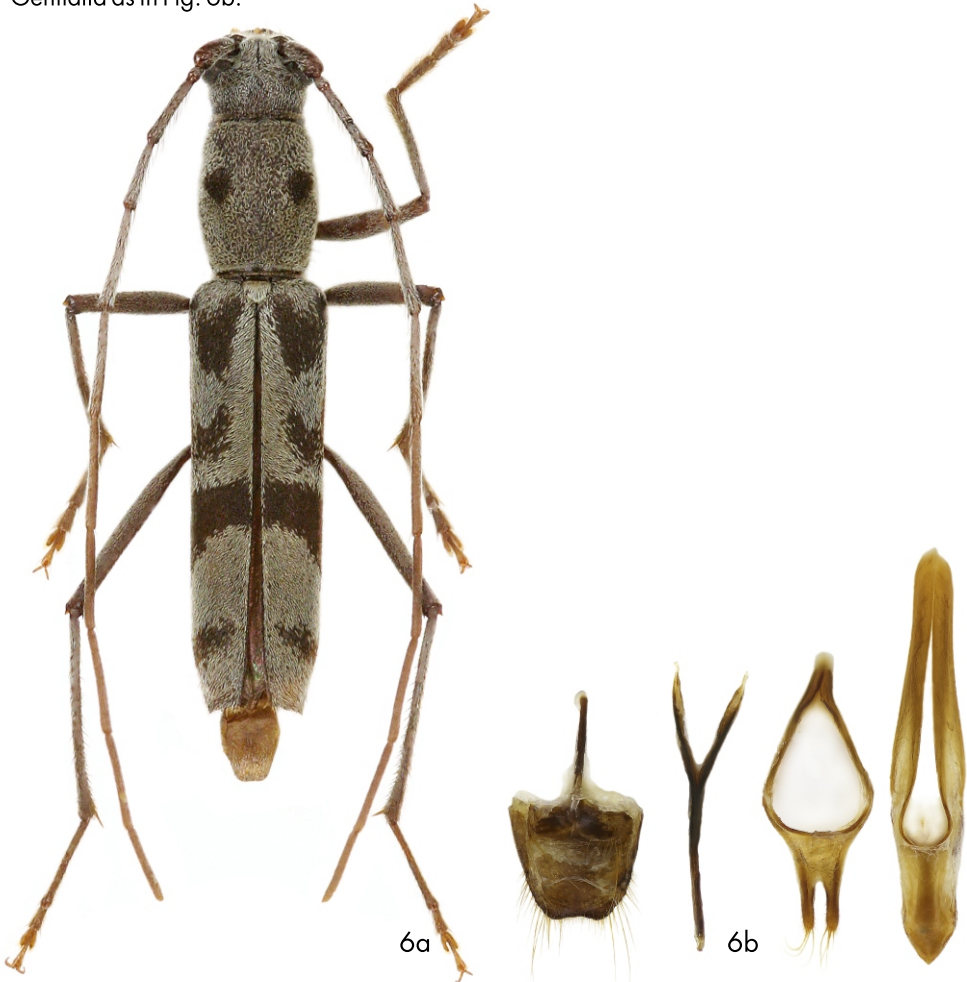


Fig. 6. *Demonax cognoscibilis* sp. nov.: a-male holotype; b-male genitalia.

Female. Unknown.

Differential diagnosis. The most similar species is *Demonax macilentus* (Chevrolat, 1858) (Fig. 34), described from Singapore.

Demonax cognoscibilis sp. nov. differs from the similar species *D. macilentus* mainly by different shape of pronotum with narrower pronotal base, by more arcuate pronotal lateral margins, by distinctly sharper lateral angles in elytral apex, by longer grey pubescence on pronotum, by distinctly shorter spines in antennomeres 3 and 4, and by distinctly different shape of abdominal segment 8 and tegmen (as in Figs. 6b and 34b).

Etymology. From Latin *cognoscibilis* (it means "recognizable").

Distribution. Vietnam (Lam Dong).

***Demonax comparabilis* sp. nov.**

(Figs. 7-8)

Type locality. China, Hainan, Ledong Li Autonomous County, Jianfeng Township, Mt. Jianfengling.

Type material. Holotype (♂): 'Mt. Jianfengling, Main peak, Jianfeng Township, / 'Ledong Li Autonomous County, Hainan, China' / '22-vi-2018 / 1412m / 18°43'0.85"N / '108°52'17.74"E / coll. Bin LIU', (CPV); Paratypes: (2 ♂♂): 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '10-v-2017' / '1412 m, 18°43'0.85"N, '108°52'17.74"E' / 'coll. Bin LIU', (CPV); (1 ♀): 'Hainan, CHINA' / 'Mt. Jianfengling, Main peak' / 'Jianfeng Township, Ledong Li Autonomous County' / '31-v-2017' / '1412 m, 18°43'0.85"N, '108°52'17.74"E' / 'coll. Bin LIU', (CPV).

The types are provided with a printed red label: '*Demonax comparabilis* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 7a. Body from brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 8.45 mm (male paratypes from 8.85 to 9.6 mm), widest in humeral part of elytra (1.84 mm), 4.59 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, only slightly narrower than pronotum at widest point, with dense irregular punctation in basal part and indistinct small-sized punctation in anterior part. Head with narrow longitudinal furrow between eyes. Head covered by relatively dense yellowish grey recumbent pubescence, anterior part with a few long erect pale setae. Eyes goldenish, emarginate. Clypeus and labrum pale ochre yellow, shiny, with yellowish setation. Mandibles blackish brown, shiny, with pale yellowish setation in edges.

Maxillary palpus pale ochre yellow, palpomeres short. Ultimate palpomere longest, distinctly widened apically (axe-shaped with rounded apex), with indistinct punctation, covered by short yellowish setation.

Antennae long (reaching almost five sixths elytral length), narrow, filiform. Antennomeres brown (scape indistinctly darker than rest of antennomeres). Antennomeres indistinctly widened apically, antennomeres 3 and 4 with long sharp spine in inner side of apex. Antennae with indistinct small-sized punctation, scape covered by long yellowish grey pubescence and long yellowish setation, antennomeres 2-5 with sparse pale pubescence and yellowish setation in inner side, antennomeres 6-11 with very short dense pale pubescence. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.50 : 0.16 :

1.00 : 0.74 : 1.13 : 1.03 : 1.04 : 0.93 : 0.84 : 0.78 : 0.85.

Pronotum black, elongate, narrow, shape of pronotum as in Fig. 7a. Pronotum 1.68 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 arcuate, anterior margin and base almost straight. Pronotum narrower than elytra at humeri. Dorsal surface with irregular granulate punctation, covered by recumbent yellowish grey pubescence except two vague spots (as in Fig. 7a), and relatively dense long pale erect setation in full length.

Scutellum black, narrow, triangular, covered by yellowish grey pubescence.

Elytra 5.6 mm long and 1.84 mm wide (3 times longer than wide); almost parallel, black with brown apex, completely punctured by dense punctation (punctures very small), covered by yellowish grey, grey and black shiny pubescence (as in Fig. 7a). Elytral apex slightly undulate, lateral and sutural angle terminated to short spines. Apical margin with long yellowish setation.

Legs long and narrow, brown (femora slightly darker), punctured by small-sized shallow punctation, partly covered by pale pubescence and longer yellowish setation. Protibial spur large, wide with rounded apex. Tarsi pale brown, very long, punctured by dense small-sized punctation, covered by pale pubescence and yellowish setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.16 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, with distinct punctation, mesepisternum covered by dense white pubescence except spot in base, metepisternum and metasternum completely covered by dense white pubescence, ventrites 1-2 almost completely covered by dense white pubescence, pubescence in ventrites 3-5 distinctly sparser. Ventral side with long pale erect setation. Elytral epipleura black, matte, covered by bicolour (dark and pale) pubescence.

Genitalia as in Fig. 7b.

Female. Habitus of female paratype as in Fig. 8. Body length from head to elytral apex 10.75 mm. Colour of female similar to male. Female without distinct differences, antennae slightly shorter, pronotum slightly wider than in male. Dorsal surface of pronotum with small-sized reticulation (irregular granulation in male).

Differential diagnosis. The most similar species are *Demonax langsonius* (Fairmaire, 1895) (Figs. 32-33), described from Vietnam, *Demonax reticollis* Gahan, 1894, described from Myanmar, and *Demonax bowringii* (Pascoe, 1859), described from Hong Kong.

Demonax comparabilis sp. nov. distinctly differs from the similar species *D. langsonius* mainly by black elytra (elytra pale brown in basal half in *D. langsonius*), by different shape of stripes of pale pubescence on elytra (mainly shorter longitudinal stripes at humeri), by narrower pronotum, by less arcuate tergite 8 in apex, by different shape of tegmen and by distinctly proportionally shorter median lobe to tegmen than in *D. langsonius* (as in Figs. 7b and 32b).

Demonax comparabilis sp. nov. distinctly differs from the similar species *D. reticollis* mainly by black elytra (elytra pale brown in basal half in *D. reticollis*), by less elongate body (elytra distinctly longer in *D. reticollis*), by different shape of stripes of pale pubescence on elytra (mainly shorter and wider longitudinal stripes at humeri), by shorter and narrower pro- and mesotarsi, by less arcuate tergite 8 in apex, by distinctly proportionally shorter median lobe to tegmen than in *D. reticollis*.

Demonax comparabilis sp. nov. distinctly differs from the similar species *D. bowringii* by different shape of stripes of pubescence on elytra (mainly in humera), by distinctly longer tarsi, by protibial

spur large, wide with rounded apex (narrow and sharp protibial spur in *D. bowringii*), by different shape of abdominal segment 8, and by distinctly different shape of tegmen and median lobe.

Etymology. From Latin *comparabilis* (it means “comparable”).

Distribution. China (Hainan).

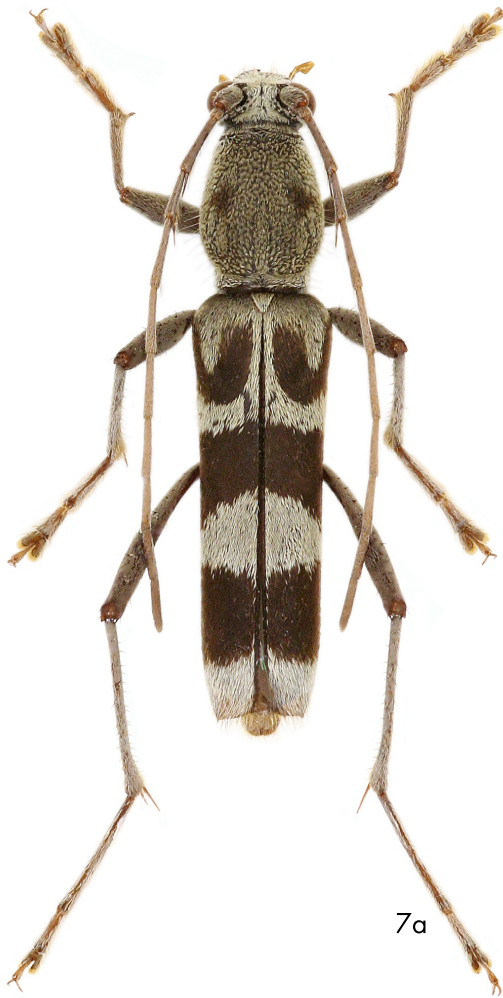


Fig. 7. *Demonax comparabilis* sp. nov.: a- male holotype; b- male genitalia.
Fig. 8. *Demonax comparabilis* sp. nov.: female paratype.

***Demonax consimilis* sp. nov.**

(Figs. 9-10)

Type locality. China, Yunnan, Lijiang.**Type material.** Holotype (♂): 'CHINA - YUNNAN' / 'Lijiang' / '7.v. - 10.v. 2019' / 'Lgt. E. Kučera', (CPV); Paratypes: (1 ♂, 2 ♀♀): same data as holotype, (CPV); (1 ♀): 'CHINA - YUNNAN' / '10.-15.vi. 94 LITIANG' / 'Lgt. E. Kučera', (CPV). The types are provided with a printed red label: '*Demonax consimilis* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.**Description.** Habitus of male holotype as in Fig. 9a. Body from pale reddish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 9.12 mm (male paratype 8.95 mm), widest in preapical part of elytra (2.57 mm), 3.54 times longer than wide.

Head black (blackish brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with distinct granulate punctation in basal part and dense small-sized punctation in anterior part. Head with thorns near antennal insertions in inner side, frons with longitudinal bald place in middle with very narrow furrow in middle. Head covered by yellowish recumbent pubescence and pale erect setation near eyes and near anterior margin. Eyes brown, distinctly emarginate. Clypeus and labrum pale ochre yellow, shiny, labrum with a few yellowish setae. Mandibles blackish brown with black tip, shiny, with yellowish pubescence and long pale setation in edges.

Maxillary palpus dark brown, semimatte with small-sized punctation, covered by short pale setation. Ultimate palpomere longest, distinctly widened apically, axe-shaped with rounded apex.

Antennae reaching five sevenths elytral length, narrow, filiform, antennomeres brown (scape blackish brown). Antennomeres with dense small-sized punctation. Antennomeres widened apically. Antennomeres without spines, antennomeres 3-5 angled in inner side of apex. Antennomeres 1-4 with longer recumbent yellowish pubescence, antennomeres 5-11 with short shiny indistinct pubescence. Antennomeres 3-5 with long pale setation in inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.60 : 0.31 : 1.00 : 0.87 : 0.95 : 0.98 : 0.95 : 0.80 : 0.75 : 0.62 : 0.77.

Pronotum black, quite flat, only slightly elongate, narrower than elytra at humeri, shape of pronotum as in Fig. 9b. Pronotum 1.39 times longer than wide at base and 1.07 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins slightly arcuate, anterior margin and base indistinctly undulate. Dorsal surface with dense granulate punctation, disc with three longitudinal elevations in basal half. Pronotum covered by recumbent yellowish pubescence and erect pale setation (as in Fig. 9b).

Scutellum elliptical, wide, completely covered by pale yellowish pubescence.

Elytra 5.98 mm long and 2.32 mm wide at humera (2.57 times longer than wide at humeri); almost parallel (distinctly enlarged preapically), brown with small darker places, punctured by dense small-sized punctation, covered by yellowish and black pubescence (as in Fig. 9a). Each elytral apex indistinctly undulate with angled lateral angle, without distinct spines, covered by long dense yellowish setation.

Legs long and narrow, brown, punctured by dense shallow punctation, partly covered by yellowish pubescence and yellowish setation. Tarsi long, dark brown, with dense small-sized punctation, covered by pale setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.77 times longer than metatarsomeres 2 and 3 together.



9a



10



9b

Fig. 9. *Demonax consimilis* sp. nov.: a- male holotype; b- pronotum; c- male genitalia.

Fig. 10. *Demonax consimilis* sp. nov.: female paratype.



9c

Ventral side of body from dark brown to black, ventrites pale brown with blackish brown margins, punctured by dense punctation. Ventral side completely covered by dense recumbent pale yellowish pubescence and long pale erect setation. Elytral epipleura brown, punctured, covered by yellowish pubescence.

Genitalia as in Fig. 9c.

Female. Habitus of female paratype as in Fig. 10. Body length from head to elytral apex (female paratypes) from 10.3 to 10.5 mm. Colour of female similar to male. Female without distinct differences from male.

Differential diagnosis. The most similar species is *Demonax iniquus* Holzschuh, 1993 (Figs. 30-31), described from the same area as *Demonax consimilis* sp. nov.

Demonax consimilis sp. nov. differs from the similar species *D. iniquus* mainly by more robust body, by body covered by yellowish pubescence (greyish in *D. iniquus*), by wider elytra, by distinctly wider pronotum covered by denser pubescence (as in Figs. 9b and 30b), by shorter antennae, and by different shape of abdominal segment 8 (tergite 8 wider with less excised apex in *D. consimilis*) and different shape of tegmen (markedly more elongate apical half of tegmen in *D. consimilis*) (as in Figs. 9c and 30c).

Etymology. From Latin *consimilis* (it means "quite similar").

Distribution. China (Yunnan).

***Demonax machi* sp. nov.**

(Figs. 11-12)

Type locality. Malaysia, Perak, Belum Forest, 84 km E of Gerik, 05°32.53' N 101°36.28' E.

Type material. Holotype (♂): 'MALAYSIA - Perak, Belum Forest' / '84km E of Gerik, alt. 950m' / '05°32'53" N, 101°36'28" E' / '25. iii. - 2. iv. 2014' / 'P. Viktora lgt.', (CPV); Paratypes: (11 ♂, 6 ♀♀): same data as holotype, (CPV); (1 ♂): 'W MALAYSIA, ' / 'Cameron Highlands' / '19 mls (near Ringlet)' / 'iii. - v. 2007' / 'local collector leg.', (CPV); (1 ♂): 'W Malaysia' / 'Cameron Highlands' / 'Tanah Rata' / 'iii. - v. 2007' / 'local collector', (CPV); (3 ♂♂, 1 ♀): 'MALAYSIA - Pahang' / 'Cameron Highlands' / 'Ringlet' / '9. iv. - 16. iv. 2014' / 'P. Viktora lgt.', (CPV); (1 ♂): 'Malaysia NW' / 'Cameron Highlands' / 'v. 2005' / '19. miles' / 'local collector', (CPV).

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

Description. Habitus of male holotype as in Fig. 11a. Body from dark brown to black, elongate, relatively narrow, punctate, with pubescence. Body length from head to elytral apex 9.9 mm (male paratypes from 7.25 to 10.0 mm), widest in humeral part of elytra (2.14 mm), 4.62 times longer than wide.

Head black (blackish brown in anterior margin), relatively short, widest through the eyes, only slightly narrower than pronotum at widest point, dorsal surface with dense distinct irregular punctation, anterior part with sparser distinct punctation. Head with narrow longitudinal furrow between eyes. Head covered by recumbent yellowish pubescence and long erect pale setation in lateral margins and anterior part of head. Eyes goldenish, emarginate. Clypeus and labrum ochre yellow, shiny, with yellowish setation. Mandibles dark brown with black tip, shiny, with long yellowish setation in edges.

Maxillary palpus pale brown (palpomeres with paler apex), punctate by indistinct punctation, palpomeres widened apically. Ultimate palpomere longest, axe-shaped with rounded apex.

Antennae long (reaching elytral apical margin), filiform, narrow, antennomeres 1-5 blackish brown, antennomeres 6-11 brown. Antennomeres 1-5 with sparser distinct punctation, antennomeres 6-11 with denser small-sized punctation. Antennomeres 1-5 covered by long yellowish and grey pubescence, antennomeres 6-11 covered by short shiny pubescence. Antennomeres widened apically, antennomeres 6-10 slightly serrate in outer side of apex. Antennomeres 3 and 4 with very long sharp spine in inner side of apex. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.61 : 0.28 : 1.00 : 0.94 : 1.07 : 1.03 : 0.91 : 0.80 : 0.73 : 0.70 : 0.84.

Pronotum black, elongate, narrow, narrower than elytra at humeri, shape of pronotum as in Fig. 11a. Lateral margins slightly arcuate, anterior margin indistinctly arcuate, base slightly undulate. Pronotum 1.83 times longer than wide at base and 1.49 times longer than wide at widest point (before middle of pronotum from base to apex). Dorsal surface with coarse irregular granulate punctation, partly covered by yellowish grey and dark pubescence (as in Fig. 11a) and dense long erect pale setation. Yellowish grey pubescence denser in lateral margins (invisible in dorsal view) and in basal angles.

Scutellum black, triangular, covered by dense recumbent yellowish pubescence.

Elytra 6.05 mm long and 2.14 mm wide (2.82 times longer than wide); slightly narrowing apically, black with blackish brown apex and two pale yellow transverse stripes near base and in middle of elytra under yellowish pubescence, suture black in full length. Elytra with relatively sparse small-sized punctation near base, rest of elytra punctured by dense small-sized punctation. Elytra covered by yellowish and black pubescence (as in Fig. 11a). Elytral apex without spines, covered by long yellowish setation.

Pygidium pale brown, with indistinct punctation, with sparse pale setation in apical half. Apex rounded.

Legs long and narrow, from dark brown to black, punctured by large-sized punctation, partly covered by sparse long yellowish pubescence and very long dense pale setation. Tarsi long, punctured by dense small-sized punctation, covered by yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.36 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black, punctured, almost completely covered by white pubescence. Pubescence in apex of mesepisternum, metepisternum and ventrites 1 and 2 denser. Ventral side with long pale erect setation. Elytral epipleura black, matte, with sparse dark pubescence.

Genitalia as in Fig. 11b.

Female. Habitus of female paratype as in Fig. 12. Body length from head to elytral apex (female paratypes) from 9.4 to 11.15 mm. Colour of female similar to male. Female without distinct differences except shorter tarsi and antennae than in male.

Differential diagnosis. The most similar species is *Demonax transversalis* Aurivillius, 1910 (Figs. 35-36), described from Borneo.

Demonax machi sp. nov. differs from the similar species *D. transversalis* by longer antennae and mainly by different pubescence of elytra: *D. machi* has large yellowish spot in middle of elytra with distinctly rounded top and black places in apical half and lateral margins of elytra with admixture of sparse (but distinct) yellowish pubescence; while *D. transversalis* has large yellowish spot in middle of elytra almost triangular with sharp top and black places in apical half and lateral margins of elytra without admixture of yellowish pubescence. Tergite 8 in *D. machi* has flat apical

margin with rounded angles; while tergite 8 in *D. transversalis* has apex extended into a rounded tip, shape of tegmen and median lobe is also different (as you can see in Figs. 11b and 35b).

Etymology. This new species is dedicated to my very good long-time friend Jiří Mach (Kutná Hora, Czech Republic).

Distribution. Malaysia (Perak, Pahang).



Fig. 11. *Demonax machi* sp. nov.: a- male holotype; b- male genitalia.

Fig. 12. *Demonax machi* sp. nov.: female paratype.

***Demonax patruus* sp. nov.**

(Fig. 13)

Type locality. Philippines, Mindoro Island, Oriental Mindoro province, Puerto Galera.**Type material.** Holotype (♂): 'PHILIPPINES' / 'Puerto Galera, Mindoro' / 'v. 2017, local collector leg.', (CPV); Paratype: (1 ♂): 'Philippines' / 'Oriental Mindoro' / 'Baco' / 'v. 2019', (CPV).

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

Description. Habitus of male holotype as in Fig. 13a. Body from dark brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 14.43 mm (male paratype 18.6 mm), widest in humeral part of elytra (3.06 mm), 4.71 times longer than wide.

Head from blackish brown to black (brown in edges), widest through the eyes, approximately as wide as pronotum, with relatively coarse irregular punctation (frons with dense small-sized punctation), covered by yellowish grey pubescence and long pale setae. Head with distinct tubercles between antennal insertions and furrow in middle. Eyes goldenish brown, emarginate. Clypeus and labrum pale ochre yellow, with yellowish setation. Mandibles blackish brown, shiny, with yellowish setation in edges.

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

Antennae long, filiform, antennomeres blackish brown (ultimate antennomeres dark brown), punctured (antennomeres 1-5 with sparse punctation, antennomeres 6-11 with dense small-sized punctation). Antennomeres 1-6 covered by long yellowish grey pubescence, antennomeres 7-11 covered by short and dense yellowish pubescence. Scape long, antennomere 2 shortest, antennomere 7 longest. Antennomeres 2-6 with long yellowish setation in inner side. Antennomeres 3-5 with sharp spines in inner side of apex (spine in antennomere 5 short). Antennae distinctly longer than body length (as in Fig. 13a). Ratios of relative lengths of antennomeres 1-11 equal to: 0.67 : 0.24 : 1.00 : 0.86 : 1.22 : 1.33 : 1.44 : 1.17 : 1.26 : 1.19 : 1.22.

Pronotum black, long, narrow, distinctly narrower than elytra at humeri, shape of pronotum as in Fig. 13a. Anterior margin rounded, base indistinctly undulate. Pronotum 1.59 times longer than wide at base and 1.4 times longer than wide at widest point (two sevenths pronotal length from base to apex). Dorsal surface with dense granulate punctation, covered by short yellowish pubescence except two spots with very short black pubescence (as in Fig. 13a). Disc with distinct elevation in middle near base. Pronotum with a few long pale setae near base.

Scutellum black, shield-shaped, with dense punctation, covered by yellowish grey pubescence.

Elytra 9.34 mm long and 3.06 mm wide (3.05 times longer than wide); black with blackish brown apex, long and narrow, distinctly narrowing apically, with dense small-sized punctation. Elytra covered by black and yellowish grey pubescence (as in Fig. 13a). Elytral apex cut, apex slightly rounded, sutural angle rounded, lateral margin angled. Apical margin with long yellowish setation.

Pygidium brown, with dense punctation, covered by yellowish grey pubescence.

Legs very long and very narrow, from blackish brown to black, ultimate tarsomeres slightly paler. Legs with dense shallow punctation, partly covered by greyish pubescence and longer yellowish setation. Tarsi with indistinct shallow small-sized punctation, covered by greyish pubescence and dark setation. Tarsi very long. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.32 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to dark brown, almost completely covered by whitish pubescence. Elytral epipleura blackish brown, punctured, covered by yellowish grey and dark pubescence.

Genitalia as in Fig. 13b.

Female. Unknown.

Differential diagnosis. The most similar species are *Demonax macilentus* (Chevrolat, 1858) (Fig. 34), described from Singapore and *Demonax subditivus* sp. nov. (Fig. 14) from Philippines (Mindanao).

Demonax patruus sp. nov. differs from the similar species *D. macilentus* mainly by elytra distinctly narrowing apically (more parallel elytra in *D. macilentus*), by distinctly shorter and wider protarsi, by curved V-shaped spot of grey pubescence in basal quarter of elytron not reaching scutellum (V-shaped spot in basal quarter of elytron reaching scutellum in *D. macilentus*), and by different shape of male genitalia, chiefly tegmen (as in Figs. 13b and 34b).

Demonax patruus sp. nov. differs from the similar species *D. subditivus* sp. nov. mainly by more elongate pronotum, by curved V-shaped spot of grey pubescence in basal quarter of elytron not reaching scutellum (V-shaped spot in basal quarter of elytron reaching scutellum in *D. subditivus*), by longer shield-shaped scutellum (shorter semicircular scutellum in *D. subditivus*), and by different shape of male genitalia, chiefly tegmen (as in Figs. 13b and 14b).

Etymology. From Latin *patruus* (it means "uncle").

Distribution. Philippines (Oriental Mindoro).

***Demonax subditivus* sp. nov.**

(Fig. 14)

Type locality. Philippines, Mindanao Island, Davao City province, Mount Malambo.

Type material. Holotype (♂): 'PHILIPPINES' / 'Mindanao isl.' / 'Davao City prov.' / 'Mt. Malambo, 1200m alt.' / '25. ii. 2017', (CPV).

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

Description. Habitus of male holotype as in Fig. 14a. Body from dark brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 15.55 mm, widest in humeral part of elytra (3.39 mm), 4.58 times longer than wide.

Head from dark brown to black (brown in edges), widest through the eyes, slightly narrower than pronotum, with relatively coarse irregular punctation (frons with dense small-sized punctation), covered by yellowish grey pubescence and long pale setae. Head with distinct tubercles between antennal insertions and furrow in middle. Eyes goldenish brown, emarginate. Clypeus pale ochre yellow, labrum brown, with yellowish setation. Mandibles blackish brown, shiny, with yellowish setation in edges.

Maxillary palpus brown with dark margins, with indistinct punctation and short pale setation. Ultimate palpomere widened apically.

Antennae long, filiform, antennomeres blackish brown (ultimate antennomeres dark brown), punctured (antennomeres 1-5 with distinct coarser and sparser punctation, antennomeres 6-11 with dense small-sized punctation). Antennomeres 1-6 covered by long yellowish grey

pubescence, antennomeres 1-7 covered by short and dense dark pubescence. Scape long, antennomere 2 shortest, antennomeres 6, 7 and 8 longest. Antennomeres 2-6 with long yellowish setation in inner side. Antennomeres 3-4 with sharp spines in inner side of apex. Antennae distinctly longer than body length (as in Fig. 14a). Ratios of relative lengths of antennomeres 1-11 equal to: 0.79 : 0.24 : 1.00 : 0.90 : 1.23 : 1.31 : 1.33 : 1.31 : 1.22 : 1.21 : 1.15.

Pronotum black, long, narrow, distinctly narrower than elytra at humeri, shape of pronotum as in Fig. 14a. Anterior margin rounded, base only slightly rounded. Pronotum 1.61 times longer than wide at base and 1.34 times longer than wide at widest point (three eighths pronotal length from base to apex). Dorsal surface with dense granulate punctation, covered by short yellowish grey pubescence except two spots with very short black pubescence (as in Fig. 14a). Disc with distinct elevation in middle near base. Pronotum with a few long pale setae near base.

Scutellum black, semicircular, with dense punctation, covered by yellowish grey pubescence.

Elytra 10.35 mm long and 3.39 mm wide (3.05 times longer than wide); black with brown apex, long and narrow, narrowing apically, with dense small-sized punctation. Elytra covered by black and yellowish grey pubescence (as in Fig. 14a). Elytral apex cut, sutural angle angled, lateral angle prolonged, sharp. Apical margin with long yellowish setation.

Pygidium brown, with dense punctation, covered by yellowish grey pubescence.

Legs very long and very narrow, from blackish brown to black, ultimate tarsomeres slightly paler. Legs with dense shallow punctation, partly covered by greyish pubescence and longer yellowish setation. Tarsi with dense punctation, covered by long yellowish setation. Tarsi very long. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.15 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to blackish brown, almost completely covered by grey pubescence. Elytral epipleura brown, punctured, covered by yellowish grey pubescence.

Genitalia as in Fig. 14b.

Female. Unknown.

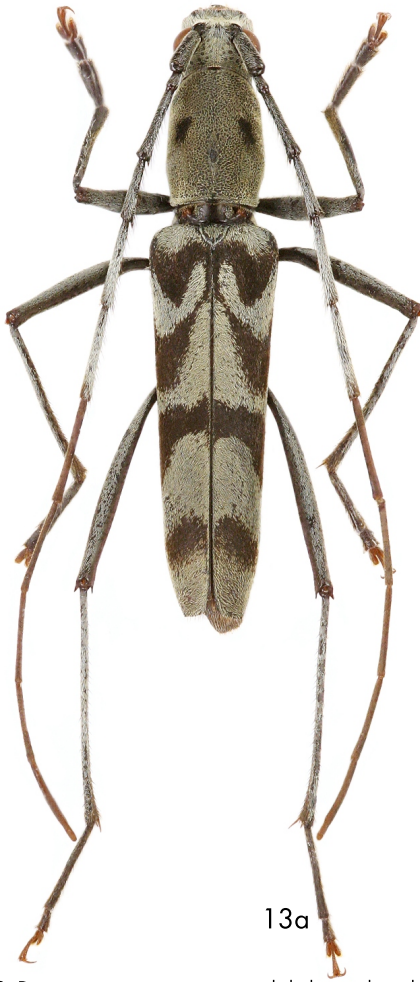
Differential diagnosis. The most similar species are *Demonax macilentus* (Chevrolat, 1858) (Fig. 34), described from Singapore and *Demonax patruus* sp. nov. (Fig. 13) from Philippines (Oriental Mindoro).

Demonax subditivus sp. nov. differs from the similar species *D. macilentus* mainly by elytra distinctly narrowing apically (more parallel elytra in *D. macilentus*), by distinctly shorter and wider protarsi, by distinctly shorter scutellum, by sharper lateral angles in elytral apex, and by different shape of male genitalia (as in Figs. 14b and 34b).

Demonax subditivus sp. nov. differs from the similar species *D. patruus* sp. nov. mainly by less elongate pronotum, by curved V-shaped spot of grey pubescence in basal quarter of elytron reaching scutellum (V-shaped spot in basal quarter of elytron not reaching scutellum in *D. patruus*), by shorter semicircular scutellum (longer shield-shaped scutellum in *D. patruus*), and by different shape of male genitalia, chiefly tegmen (as in Figs. 14b and 13b).

Etymology. From Latin *subditivus* (it means "forged").

Distribution. Philippines (Davao City).



13a



14a

Fig. 13. *Demonax patruus* sp. nov.: a- male holotype; b- male genitalia.
 Fig. 14. *Demonax subditivus* sp. nov.: a- male holotype; b- male genitalia.



13b



14b

Genus *Rhaphuma* Pascoe, 1858

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

Rhaphuma bachmaica sp. nov.

(Figs. 15-16)

Type locality. Vietnam, Thua Thien Hue province, Phu Loc, Bach Ma NP.

Type material. Holotype (♂): 'C-VIETNAM, Thua Thien-Hue' / 'Prov., Phu Loc, Bach Ma NP,' / '16°11'39"N, 107°51'12"E, 1250' / '1400m, 05.-09.v.2019 A. Skale', (CPV); Paratype: (1 ♀): same data as holotype, (CPV). The types are provided with a printed red label: '*Rhaphuma bachmaica* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 15a. Body from pale brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 11.24 mm, widest in humeral part of elytra (2.2 mm), 5.1 times longer than wide.

Head black (dark brown near anterior margin), widest through the eyes, as wide as pronotum at widest point, with coarse dense punctation in basal part and dense small-sized punctation in anterior part. Head with narrow longitudinal furrow between eyes. Head covered by relatively sparse recumbent yellow pubescence except stripe in base. Base and anterior margin with a few long pale erect setae. Eyes goldenish brown, emarginate. Clypeus ochre yellow, shiny. Mandibles dark brown with black tip, shiny, with dense yellow pubescence and a few long pale setae in edges.

Maxillary palpus unicolored ochre yellow. Palpomeres short, ultimate palpomere longest with rounded apex. Palpomeres with short sparse pale setation.

Antennae long (exceeding elytral apex), narrow, filiform. Antennomeres 1-4 pale brown, antennomeres 5-11 pale brown with darker apical part. Antennomeres with indistinct small-sized punctation. Antennomeres widened apically, without spines, antennomere 11 distinctly narrower in apical third. Antennomeres 1-5 with longer sparse yellowish pubescence, antennomeres 6-11 with dense very short pale pubescence. Antennomeres 2-6 with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 11 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.57 : 0.23 : 1.00 : 0.94 : 1.11 : 1.17 : 1.09 : 1.05 : 0.99 : 0.96 : 1.21.

Pronotum black, slightly convex, elongate, narrow, shape of pronotum as in Fig. 15a. Pronotum 1.74 times longer than wide at base and 1.48 times longer than wide at widest point (near middle of pronotum). Lateral margins indistinctly arcuate, anterior margin and base almost straight. Pronotum distinctly narrower than elytra. Dorsal surface with relatively coarse irregular punctation, partly covered by sparse (in basal angles denser) yellow pubescence, partly by short sparse black pubescence (as in Fig. 15a). Pronotum with long yellowish erect setation in full length.

Scutellum black, semielliptical, punctured, completely covered by sparse yellow pubescence.

Elytra 7.38 mm long and 2.2 mm wide (3.35 times longer than wide); slightly narrowing apically, with dense small-sized punctation. Elytra from pale brown (in places with yellow pubescence) to blackish brown (in places with black pubescence), covered by relatively sparse yellow and shiny black pubescence (as in Fig. 15a). Elytral apex slightly undulate, lateral angle terminated into short spine. Apical margin with very long ginger setation.

Legs long and narrow, pale brown (femora partly darker), punctured by shallow punctation, covered by sparse long yellow pubescence and yellowish setation. Tarsi long, covered by yellowish setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 2.0 times longer than metatarsomeres 2 and 3 together.



15a



16



15b

Fig. 15. *Rhaphuma bachmaica* sp. nov.: a- male holotype;
b- male genitalia.Fig. 16. *Rhaphuma bachmaica* sp. nov.: female paratype.

Ventral side of body black, almost completely covered by dense recumbent yellow pubescence, ventrites with a few very long yellowish setae. Elytral epipleura brown, punctured, covered by dark pubescence.

Genitalia as in Fig. 15b.

Female. Habitus of female paratype as in Fig. 16. Body length from head to elytral apex 11.3 mm. Colour of female almost the same as in male. Female with less elongate pronotum and elytra than in male, protarsi shorter than in male, antennae shorter, reaching five sevenths elytral length.

Differential diagnosis. The most similar species are *Rhaphuma brodskyi* Holzschuh, 1992 (Fig. 42), *Rhaphuma falx* Holzschuh, 1991 (Fig. 45) and *Rhaphuma vagesignata* Pic, 1937 (Fig. 51).

Rhaphuma bachmaica sp. nov. differs from the similar species *R. brodskyi* mainly by more elongate elytra, by penultimate transverse dark spot on elytron closer to the apical edge and by significantly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 15b and 42b).

Rhaphuma bachmaica sp. nov. differs from the similar species *R. falx* mainly by less elongate elytra, by shorter longitudinal dark stripe in middle of elytron and by significantly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 15b and 45b).

Rhaphuma bachmaica sp. nov. differs from the similar species *R. vagesignata* mainly by less elongate elytra, by darker legs, by distinct dark spots and stripes on pronotum and elytra (vague spots and stripes in *R. vagesignata*), and by significantly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 15b and 51b).

Etymology. Named after the type locality, Bach Ma National Park.

Distribution. Vietnam (Thua Thien Hue).

***Rhaphuma coniectura* sp. nov.**

(Figs. 17-18)

Type locality. Vietnam, Dak Nong province, Quang Son.

Type material. Holotype (♂): 'VIETNAM, Dak Nong' / 'Quang Son' / 'v.2019', (CPV); Paratypes: (1 ♀): 'Dambri, Bao Lam' / 'Lam Dong, Vietnam' / 'iv. 2018', (CPV); (1 ♀): 'Bao Loc, Lam Dong' / 'Vietnam' / 'v. 2018', (CPV); (2 ♀♀): 'Bao Loc, Lam Dong' / 'Vietnam' / 'iv. 2020', (CPV). The types are provided with a printed red label: '*Rhaphuma coniectura* sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 17a. Body black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 12.07 mm, widest in humeral part of elytra (2.32 mm), 5.2 times longer than wide.

Head black (dark brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with coarse dense punctation in basal part and small-sized granulate punctation in anterior part. Head covered by dense recumbent yellowish pubescence except stripe in base. Base and anterior margin with a few long erect pale setae. Eyes goldenish brown, emarginate. Clypeus pale brown, shiny. Mandibles dark brown with black tip, shiny, with dense yellowish pubescence and a few long pale setae in edges.

Maxillary palpus ochre yellow, ultimate palpomere darker (brown with ochre yellow apical

margin). Palpomeres short (except ultimate palpomere). Ultimate palpomere longest, with dense small-sized punctation, lengthwise triangular with rounded apex, covered by dense short pale setation.

Antennae long (reaching almost four fifths elytral length), narrow, filiform, antennomeres brown. Antennomeres with indistinct small-sized punctation. Antennomeres widened apically, without spines. Scape with relatively long recumbent yellowish pubescence, antennomeres 2-3 with short and sparse indistinct whitish pubescence, antennomeres 4-11 with denser very short indistinct pale pubescence. Antennomeres 2-7 with tuft of long yellowish setae in inner side of apex. Antennomere 2 shortest, antennomeres 5 and 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.60 : 0.27 : 1.00 : 0.92 : 1.11 : 1.09 : 0.99 : 0.89 : 0.81 : 0.76 : 0.85.

Pronotum black, slightly convex, elongate, narrow, shape of pronotum as in Fig. 17a. Pronotum 1.6 times longer than wide at base and 1.35 times longer than wide at widest point (two fifths pronotal length from base to apex). Lateral margins slightly arcuate, anterior margin and base indistinctly undulate (almost straight). Pronotum slightly narrower than elytra at humeri. Dorsal surface with coarse granulation, partly covered by dense yellowish pubescence, partly by short sparse dark pubescence (as in Fig. 17a). Pronotal disc with a few long pale erect setae in basal third.

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

Elytra 8.0 mm long and 2.32 mm wide (3.44 times longer than wide); narrowing apically, with dense small-sized punctation. Elytra black with blackish brown apex, partly covered by yellowish, partly by black pubescence (as in Fig. 17a). Elytral apex cut, slightly undulate, each elytral apex with short spine in sutural and lateral angle. Apical margin with long yellowish setation.

Legs long and narrow, from brown to blackish brown (femora darker), punctured by dense small-sized punctation, covered by pale yellowish pubescence and yellowish setation. Tarsi long, with dense punctation, covered by yellowish pubescence and setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.76 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by dense recumbent whitish pubescence, ventrites with a few pale erect setae. Elytral epipleura black, punctured, covered by dark pubescence.

Genitalia as in Fig. 17b.

Female. Habitus of female paratype as in Fig. 18. Body length from head to elytral apex (female paratypes) from 10.8 to 10.85 mm. Female with less elongate pronotum and elytra than in male, protarsi distinctly shorter than in male, antennae shorter, reaching five eighths elytral length.

Differential diagnosis. The most similar species are *Rhaphuma aequalis* Holzschuh, 1991 (Figs. 37-38) and *Rhaphuma pseudominuta* Gressitt & Rondon, 1970 (Figs. 47-48). Both species have males with distinctly more elongate body with narrower elytra and pronotum than in females like in *Rhaphuma coniectura* sp. nov. (as you can see in Figs. 17-18, 37-38 and 47-48). The following differences apply to males.

Rhaphuma coniectura sp. nov. distinctly differs from both similar species *R. aequalis* and *R. pseudominuta* by longer dark longitudinal stripe in basal half of each elytron (parallel to suture), which reaching almost five tenths elytral length from base to apex (not reaching four tenths elytral length from base to apex in *R. aequalis* and *R. pseudominuta*).

R. coniectura sp. nov. differs from *R. aequalis* by long longitudinal dark stripes on pronotal disc;

while *R. aequalis* has only short dark spots on pronotal disc.

R. coniectura sp. nov. differs from *R. pseudominuta* by more elongate pronotum (1.35 times longer than wide at widest point); while *R. pseudominuta* has pronotum only 1.25 times longer than wide at widest point.

All three species have significant differences in shape of sternite 8 (as in Figs. 17b, 37b and 47b).

Etymology. From Latin *coniectura* (it means "conjecture").

Distribution. Vietnam (Dak Nong, Lam Dong).



Fig. 17. *Rhaphuma coniectura* sp. nov.: a-male holotype; b-male genitalia.

Fig. 18. *Rhaphuma coniectura* sp. nov.: female paratype.

***Rhaphuma noverca* sp. nov.**

(Figs. 19-20)

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

Type material. Holotype (♂): 'NE LAOS, Huaphanne Pr.' / 'MT. PHU PANE, 1200-1900 m' / 'Ban Saluei v. env., 26.iv.10.v.' / '20°12'N 103°59'E, 2013' / 'St. Jakl + Lao collector leg.', (CPV); Paratypes: (1 ♀): 'LAOS-NE, Houa Phan pr.' / 'Ban Saluei v. - Mt. Phou Pane' / '1920-1450m, 10.-21.vi.2010' / 'St. Jakl et local collectors lgt.', (CPV); (1 ♀): 'LAOS - NE, Hua Phan prov.' / '20°12'N, 104°01'E' / 'PHU PANE Mt., 1500-1900m' / '20. iv. - 15. v. 2007' / 'Lao collector leg.', (CPV); (1 ♀): 'NE LAOS, Hua Phan Prov.,' / 'MT. PHU PANE' / '1200-1600m, 1.-10.vi.2011' / '20,12N 103,59E' / 'Lao collectors lgt.', (CPV); (1 ♀): 'NE LAOS, Hua Phan Prov.,' / 'MT. PHU PANE' / '1200-1600m, 10.-22.v.2011' / '20,12N 103,59E' / 'St. Jakl and Lao collectors lgt.', (CPV); (1 ♀): 'NE LAOS,' / 'Hua Phan Prov., MT. PHU PANE' / '1200 - 1600m, 31.v.-11.vi.2011' / '20°12'N 103°59'E' / 'St. Jakl and Lao collectors lgt.', (CPV); (2 ♀♀): 'NE LAOS' / 'Xiang Khouang PL.' / '25 km E of Pongsavan' / 'v. 2011' / 'local collector leg.', (CPV); (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', (CRH). The types are provided with a printed red label: 'Rhaphuma noverca sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 19a. Body from brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 12.76 mm, widest in humeral part of elytra (2.86 mm), 4.46 times longer than wide.

Head black (blackish brown near anterior margin), narrow, distinctly narrower than pronotum, widest through the eyes, basal part with dense distinct punctation (almost without pubescence), rest of head with finer small-sized punctation, covered by yellowish pubescence. Eyes goldenish brown, emarginate. Anterior and lateral margins with a few erect pale setae. Clypeus and labrum pale brown, shiny. Mandibles dark brown, covered by whitish pubescence and yellowish setation in edges.

Maxillary palpus pale brown, matte, punctured by dense indistinct punctation, covered by sparse short setation. Ultimate palpomere longest, drop-shaped with wider apex.

Antennae long (reaching four fifths elytral length), filiform, from dark brown to blackish brown, punctured by dense small-sized punctation. Antennomeres widened apically with rounded apex, without spines. Apical fifth of antennomere 11 narrower than first four fifths. Antennomeres covered by whitish pubescence (pubescence in last antennomeres shorter and denser, indistinct). Antennomeres 3-5 with long yellowish setation in inner side. Antennomere 2 shortest, antennomeres 6 and 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.77 : 0.36 : 1.00 : 0.94 : 1.09 : 1.13 : 1.12 : 0.96 : 0.91 : 0.88 : 1.01.

Pronotum black, slightly elongate, quite flat, narrower than elytra at humeri, shape of pronotum as in Fig. 19a. Lateral margins arcuate, anterior margin and base indistinctly undulate. Pronotum narrowest at anterior margin, 1.47 times longer than wide at base and 1.16 times longer than wide at widest point (before middle of pronotum from base to apex). Dorsal surface with irregular granulate punctation, punctation different in various places (stripes). Pronotum covered by yellowish pubescence (as in Fig. 19a).

Scutellum black, semicircular, covered by recumbent pale greenish grey pubescence.

Elytra 8.56 mm long and 2.86 mm wide (3 times longer than wide); black with brown apical part, long and narrow, distinctly narrowing apically, with dense small-sized punctation, covered by greenish grey and black pubescence (as in Fig. 19a). Elytral apex cut, each elytron terminated by very short spine in sutural angle, lateral angle sharp. Elytral apex with long yellowish setation.

Legs very long and very narrow, from dark brown to blackish brown, with dense small-sized shallow punctation, partly covered by whitish pubescence and yellowish setation. Tarsi long, dark brown, punctured by dense punctation, covered by whitish pubescence and yellowish setation.

Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.88 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured, partly covered by white pubescence. Mesepisternum with large spot of dense white pubescence, metepisternum almost completely covered by dense white pubescence, metasternum covered by sparse whitish pubescence (apical margin with denser pubescence). Ventrites almost completely covered by whitish pubescence (not so dense as in metepisternum). Elytral epipleura dark, punctured, covered by yellowish 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 15.3 to 17.8 mm. Colour of female almost the same as in male. Female without distinct differences, antennae slightly shorter and body more robust than in male.

Differential diagnosis. The most similar species are *Rhaphuma binotata* Hua, 1989 (Fig. 41) and *Rhaphuma rivalis* sp. nov. (Figs. 22-23).

Rhaphuma noverca sp. nov. distinctly differs from the similar species *R. binotata* by quite flat body (significantly convex pronotum and elytra in *R. binotata*), by narrower pronotum of a different shape, by distinctly narrower and more elongate elytra, which are also more narrowing apically, by different shape of spots of pubescence on elytra, and by distinctly shorter metatarsomere 1 (metatarsomere 1 1.88 times longer than metatarsomeres 2 and 3 together in *R. noverca*; while *R. binotata* has metatarsomere 1 2.05 times longer than metatarsomeres 2 and 3 together).

Note. Gressitt & Rondon (1970: 240) described new species *Rhaphuma elongata* from type series from Phou Khao Khoay (Vientiane Province) in Laos (holotype in BPBM). Hua (1989: 113) states species *Rhaphuma elongata* Gressitt & Rondon, 1970 as a junior homonym of *Rhaphuma elongata* Gressitt, 1940 from Jiangxi Province of China (Gressitt 1940a: 184) and published for species *Rhaphuma elongata* Gressitt & Rondon, 1970 a new name *Rhaphuma binotata* Hua, 1989.

In (Weigel, Meng & Lin, 2013) is on page 170, fig. 15h erroneously given as *Rhaphuma elongata* Gressitt & Rondon, 1970 (invalid name, see paragraph above) species similar to *Rhaphuma noverca* sp. nov. This specimen is from locality Anmaxianzhai, Yunnan Province of China. In the same publication is on page 87 published new province record of *Rhaphuma elongata* Gressitt et Rondon, 1970 (invalid name, see paragraph above), erroneously mixed with distribution of *R. elongata* Gressitt, 1940. I personally don't know the record of *Rhaphuma binotata* Hua, 1989 from territory of China. Data from China can be caused by wrong determination in the same way as in Weigel, Meng & Lin, 2013.

There are no confirmed data of *Rhaphuma binotata* Hua, 1989 from China. Species is known only from Laos: Vientiane Province (type series in BPBM) and Bolikhamxai Province (CPV).

Rhaphuma noverca sp. nov. distinctly differs from the similar species *R. rivalis* mainly by protibiae, which aren't widened and prolonged apically in both sexes, both sexes have only indistinct, thin, almost straight, sharp protibial spur; while *R. rivalis* has in male protibiae distinctly widened apically, prolonged into expressive curved thorn in outer side of apex, also protibial spur long, wide and curved, *R. rivalis* has in female protibiae prolonged to rounded hump in outer side of apex, with distinct curved long protibial spurs as in male. *R. noverca* has different shape of spots of pubescence on elytra, different colour of pubescence in apical third of elytra, which is greenish grey (ginger in *R. rivalis*), by scutellum covered by pale greenish grey pubescence (white pubescence in *R. rivalis*). Both species differ by shape of abdominal segment 8 and tegmen (as in Figs. 19b and 22b).

Etymology. From Latin *noverca* (it means "stepmother").

Distribution. Laos (Houaphanh, Xiangkhouang).

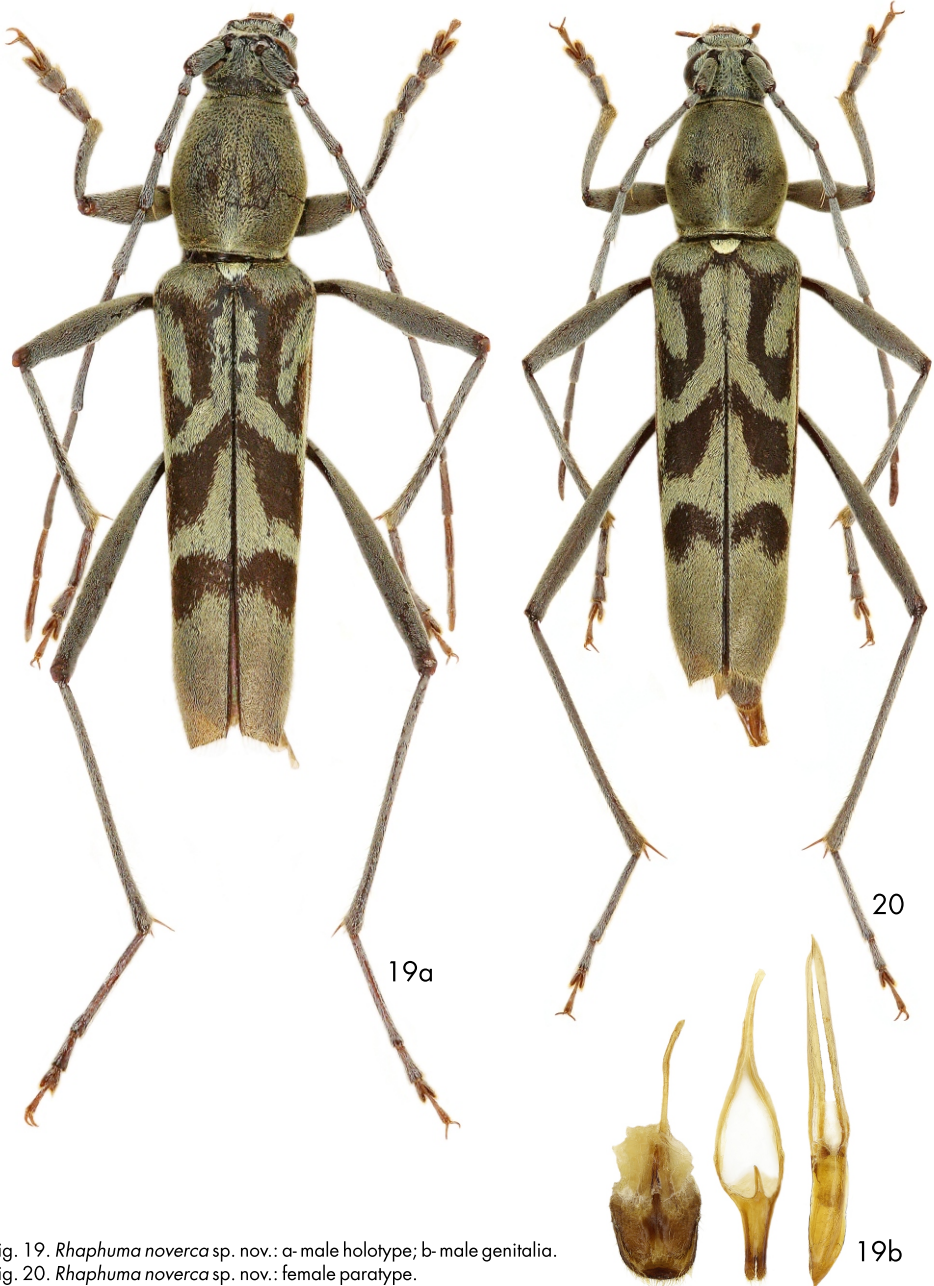


Fig. 19. *Rhaphuma noverca* sp. nov.: a- male holotype; b- male genitalia.
Fig. 20. *Rhaphuma noverca* sp. nov.: female paratype.

***Rhaphuma patrina* sp. nov.**

(Fig. 21)

Type locality. Vietnam, Binh Thuan, Dong Tien.**Type material.** Holotype (♂): 'Vietnam' / 'Binh Thuan prov.' / 'Dong Tien' / 'v. 2019', (CPV).The type is provided with a printed red label: '*Rhaphuma patrina* sp. nov.' / 'HOLOTYPE' / 'P. Viktora det., 2020'.**Description.** Habitus of male holotype as in Fig. 21a. Body from dark brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 9.4 mm, widest in humeral part of elytra (2.04 mm), 4.6 times longer than wide.

Head black (dark brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with distinct punctation in basal part and very dense small-sized punctation in anterior part. Head with narrow longitudinal furrow between eyes. Head covered by greenish white recumbent pubescence except stripe in base. Anterior margin with a few long erect pale setae. Eyes goldenish, strongly emarginate. Clypeus pale ochre yellow, shiny. Labrum pale brown, shiny, covered by sparse yellowish setation. Mandibles blackish brown with black tip, shiny, with pale pubescence and setation in edges.

Maxillary palpus pale brown. Ultimate palpomere longest, distinctly widened apically (axe-shaped with rounded apex), with dense small-sized punctation and very sparse short pale setation.

Antennae long (reaching seven eighths elytral length), narrow, filiform, antennomeres dark brown. Antennomeres with indistinct, small-sized punctation. Antennomeres widened apically, without spines (antennomeres angled in inner side of apex). Antennomeres 7-10 serrate in outer side of apex. Antennomeres 1-4 with sparse whitish pubescence, antennomeres 5-11 with very dense and short pale pubescence. Antennomeres 3-5 with long yellowish setation in inner side. Antennomere 2 shortest, antennomere 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.57 : 0.26 : 1.00 : 0.78 : 1.03 : 0.97 : 1.05 : 0.89 : 0.86 : 0.73 : 0.79.

Pronotum black, slightly convex, elongate, slightly narrower than elytra at humeri, shape of pronotum as in Fig. 21b. Pronotum 1.6 times longer than wide at base and 1.21 times longer than wide at widest point (three sevenths pronotal length from base to apex). Lateral margins arcuate, anterior margin almost straight, base indistinctly undulate. Dorsal surface with irregular punctation and granulation, near base irregularly reticulate (as in Fig. 21b). Pronotum partly covered by greenish white pubescence, pubescence denser in basal angles (as in Fig. 21b).

Scutellum black, semielliptical, punctured by dense small-sized punctation, covered by recumbent whitish pubescence.

Elytra 6.0 mm long and 2.04 mm wide (2.94 times longer than wide); narrowing apically, with dense small-sized punctation. Elytra black with blackish brown apex, covered by greenish white, whitish and black pubescence (as in Fig. 21a). Each elytral apex indistinctly excised, with very short spine in sutural angle and lateral angle prolonged into longer spine. Apical margin with long yellowish setation.

Legs long and narrow, from dark brown to blackish brown, punctured by dense small-sized punctation, partly covered by whitish pubescence (mainly in femora) and yellowish setation. Tarsi long, with dense punctation, covered by whitish pubescence and yellowish setation. Metatibiae and metafemora 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 whitish pubescence, ventrites with a few pale erect setae. Elytral epipleura black, punctured, covered by dark shiny pubescence.

Genitalia as in Fig. 21c.

Female. Unknown.

Differential diagnosis. The most similar species is *Rhaphuma maculicollis* Gressitt & Rondon, 1970 (Fig. 46), described from Laos.

Rhaphuma patrina sp. nov. differs from the similar species *R. maculicollis* by different surface of pronotal disc, which is with irregular large-sized punctation and granulation, near base irregularly reticulate (*R. maculicollis* has dorsal surface of pronotum with dense small-sized granulate punctation) (as in Figs. 21b and 46b), by distinctly narrower protarsomere 1 and by distinctly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 21c and 46c).

Etymology. From Latin *patrina* (it means "godmother").

Distribution. Vietnam (Binh Thuan).



21a



21b



21c

Fig. 21. *Rhaphuma patrina* sp. nov.: a-male holotype; b-pronotum; c-male genitalia.

***Rhaphuma rivalis* sp. nov.**

(Figs. 22-23)

Type locality. Vietnam, Lam Dong, Bao Lam, Dambri.**Type material.** Holotype (♂): 'Vietnam, Lam Dong prov.' / 'Bao Lam, Dambri' / 'vi. 2019', (CPV); Paratype: (1 ♀): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093' E 107°17.59453'' / '840 m, 19. - 21. v. 2019' / 'P. Viktora lgt.', (CPV).

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

Description. Habitus of male holotype as in Fig. 22a. Body black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 17.4 mm, widest in humeral part of elytra (4.08 mm), 4.26 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, distinctly narrower than pronotum, basal part with dense distinct punctation (covered by very short sparse yellowish pubescence), rest of head with finer small-sized punctation, covered by yellowish pubescence, frons between eyes with distinct narrow furrow. Head with distinct large sharp tubercles between antennal insertions. Eyes dark brown, strongly emarginate. Anterior and lateral margins with a few erect pale setae. Clypeus and labrum pale brown, shiny. Mandibles blackish brown, covered by whitish pubescence and yellowish setation in edges.

Maxillary palpus brown, palpomeres with narrowly paler apex, widened apically, shiny with indistinct punctation, covered by sparse yellowish setation. Ultimate palpomere longest, widened apically, with distinct oval depression in middle.

Antennae long (reaching more than two thirds elytral length), filiform, from dark brown to blackish brown, punctured by dense small-sized punctation. Antennomeres widened apically with rounded apex, without spines. Apical fifth of antennomere 11 narrower than first four fifths. Antennomeres covered by whitish pubescence (pubescence in last antennomeres shorter and denser, indistinct). Antennomeres 3-5 and less antennomeres 6-7 with long erect yellowish setation in inner side. Scape long, antennomere 2 shortest, antennomeres 5, 6 and 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.70 : 0.35 : 1.00 : 0.93 : 1.08 : 1.08 : 1.10 : 1.01 : 0.96 : 0.82 : 1.02.

Pronotum black, convex, slightly elongate, narrower than elytra at humeri, shape of pronotum as in Fig. 22a. Lateral margins arcuate, anterior margin and base indistinctly undulate. Pronotum narrowest in anterior margin, 1.42 times longer than wide at base and 1.13 times longer than wide at widest point (approximately two fifths pronotal length from base to apex). Dorsal surface with irregular granulate punctation, punctation different in various places (stripes), same places of disc depressed. Pronotum covered by short yellowish and black pubescence (as in Fig. 22a).

Scutellum black, semicircular, covered by dense recumbent white pubescence.

Elytra 11.33 mm long and 4.08 mm wide (2.77 times longer than wide); black, long and narrow, distinctly narrowing apically, with dense small-sized punctation, covered by greyish, black and ginger pubescence (as in Fig. 22a). Elytral apex cut (indistinctly excised), each elytron terminated by very short spine in sutural angle and long sharp spine in lateral angle. Elytral apex with long yellowish setation.

Legs long, blackish brown, with dense small-sized shallow punctation, partly covered by whitish pubescence and yellowish setation. Tarsi long, dark brown, punctured by dense punctation, covered by whitish pubescence and yellowish setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Protibia distinctly widened apically,

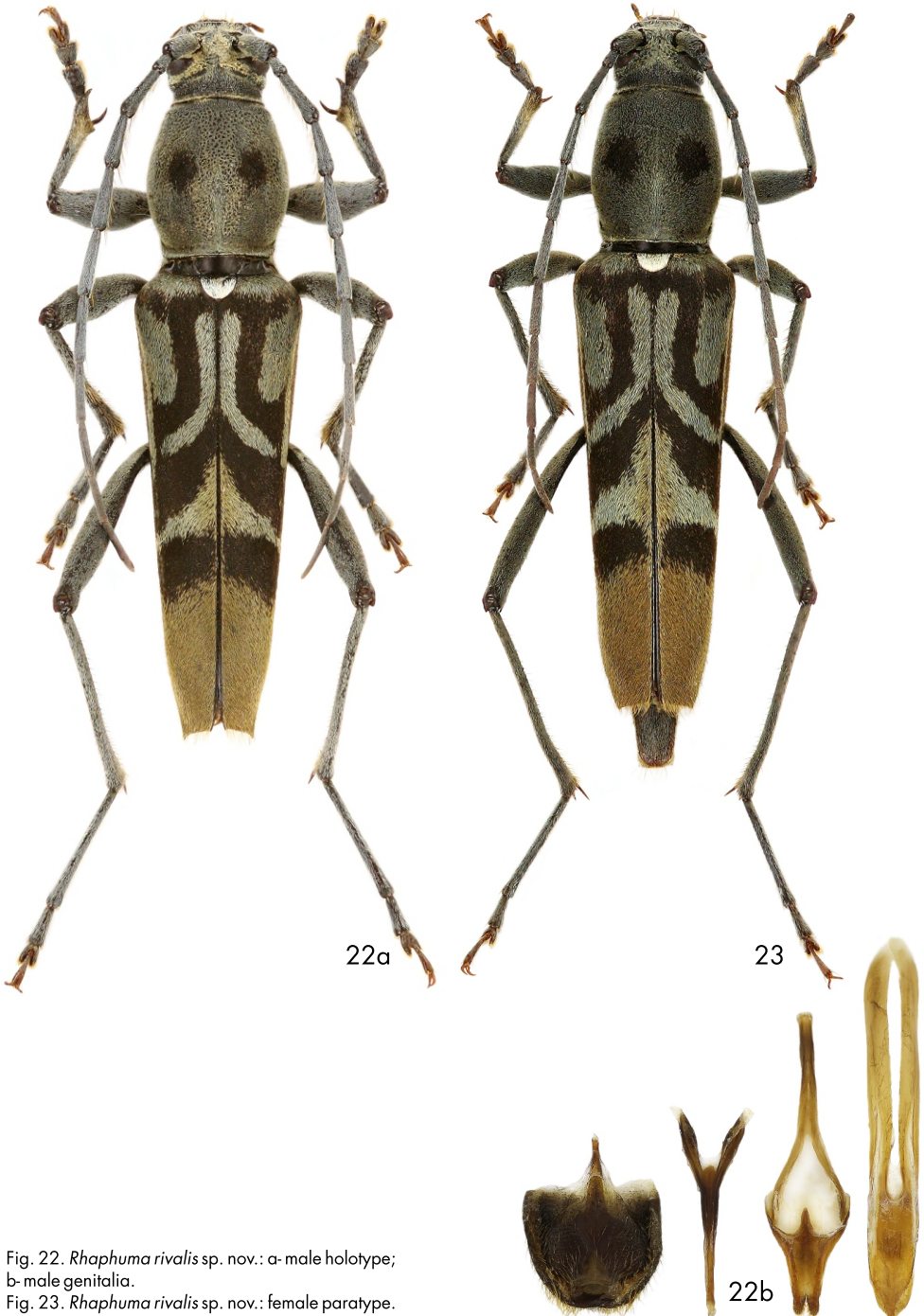


Fig. 22. *Rhaphuma rivalis* sp. nov.: a- male holotype; b- male genitalia.

Fig. 23. *Rhaphuma rivalis* sp. nov.: female paratype.

prolonged into expressive curved thorn in outer side of apex, also protibial spur long, wide and curved (as in Fig. 22a). Metatarsomere 1 2.13 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black, punctured, partly covered by white pubescence. Mesepisternum with spots of dense white pubescence, metepisternum almost completely covered by dense white pubescence, ventrites and partly coxae covered by white pubescence. Elytral epipleura dark, punctured, covered by dark yellowish pubescence.

Genitalia as in Fig. 22b.

Female. Habitus of female paratype as in Fig. 23. Body length from head to elytral apex 13.25 mm. Colour of female almost the same as in male. Female with narrower pronotum, antennae and legs, antennae slightly shorter than in male. Protibiae prolonged to rounded hump in outer side of apex, with distinct curved long protibial spurs as in male.

Differential diagnosis. The most similar species are *Rhaphuma binotata* Hua, 1989 (Fig. 41) and *Rhaphuma noverca* sp. nov. (Figs. 19-20), both from Laos.

Rhaphuma rivalis sp. nov. distinctly differs from the similar species *R. binotata* by quite flat body (significantly convex pronotum and elytra in *R. binotata*), by distinctly narrower and more elongate elytra, which are also more narrowing apically, by different shape of spots of pubescence on elytra, by different colour of pubescence in apical third of elytra, which is ginger (greenish grey in *R. binotata*), and by protibiae, which are distinctly widened apically, prolonged into expressive curved thorn in outer side of apex, also protibial spur long, wide and curved in male, and prolonged to rounded hump in outer side of apex, with distinct curved long protibial spur in female. *R. binotata* hasn't protibiae widened and prolonged apically in both sexes, both sexes have only indistinct, thin, almost straight, sharp protibial spur.

Rhaphuma rivalis sp. nov. distinctly differs from the similar species *R. noverca* mainly by protibiae, which are distinctly widened apically, prolonged into expressive curved thorn in outer side of apex, also protibial spur long, wide and curved in male, and prolonged to rounded hump in outer side of apex, with distinct curved long protibial spur in female. *R. noverca* hasn't protibiae widened and prolonged apically in both sexes, both sexes have only indistinct, thin, almost straight, sharp protibial spur. *R. rivalis* has different shape of spots of pubescence on elytra, different colour of pubescence in apical third of elytra, which is ginger (greenish grey in *R. noverca*), by scutellum covered by white pubescence (pale greenish grey pubescence in *R. noverca*). Both species differ by shape of abdominal segment 8 and tegmen (as in Figs. 19b and 22b).

Etymology. From Latin *rivalis* (it means "rival").

Distribution. Vietnam (Lam Dong), Cambodia (Mondulkiri).

Rhaphuma sontraica sp. nov.

(Figs. 24-25)

Type locality. Vietnam, Da Nang, Son Tra Mountain.

Type material. Holotype (♂): 'Vietnam, Da Nang prov.' / 'Son Tra Mt.' / 'iv. 2018', (CPV); Paratypes: (1 ♂, 1 ♀): same data as holotype, (CJC, CPV); (2 ♂♂, 4 ♀♀): 'Vietnam, Quang Nam' / 'Tay Giang' / 'iv. 2020, local collector', (CPV). The types are provided with a printed red label: 'Rhaphuma sontraica sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2020'.

Description. Habitus of male holotype as in Fig. 24a. Body from brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 10.32 mm (male paratypes from 10.65 to 11.4 mm), widest in humeral part of elytra (2.14 mm), 4.82 times longer than wide.

Head black (blackish brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with coarse granulate punctation in basal part and indistinct small-sized punctation in anterior part. Head with narrow longitudinal furrow between eyes, frons with small bald longitudinal elliptical place. Head partly covered by recumbent yellow pubescence (denser in frons and below eyes). Eyes goldenish brown, emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles blackish brown, shiny, with yellowish setation in edges.

Maxillary palpus pale brown, palpomeres short. Ultimate palpomere longest, distinctly widened apically with rounded apex, semimatte with indistinct punctation, covered by short sparse yellowish indistinct setation.

Antennae long (reaching three fifths elytral length), narrow, filiform. Antennomeres dark brown, narrowly paler in base. Antennomeres slightly widened apically, apex of antennomeres without spines, rounded. Antennomeres punctured by dense small-sized punctation, antennomeres 1-4 with sparse yellowish pubescence and yellowish setation in inner side, rest of antennomeres covered by denser short yellowish pubescence. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.52 : 0.20 : 1.00 : 0.82 : 0.77 : 0.76 : 0.70 : 0.65 : 0.59 : 0.57 : 0.64.

Pronotum black, elongate, narrow, shape of pronotum as in Fig. 24a. Pronotum 1.66 times longer than wide at base and 1.26 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin indistinctly arcuate, base almost straight. Pronotum narrower than elytra at humeri. Dorsal surface with coarse irregular granulate punctation, middle of disc reticulate with microgranulation. Pronotum partly covered by short recumbent yellow pubescence (as in Fig. 24a) and a few pale setae in basal third.

Scutellum black, small, triangular with rounded apex, covered by sparse yellow pubescence.

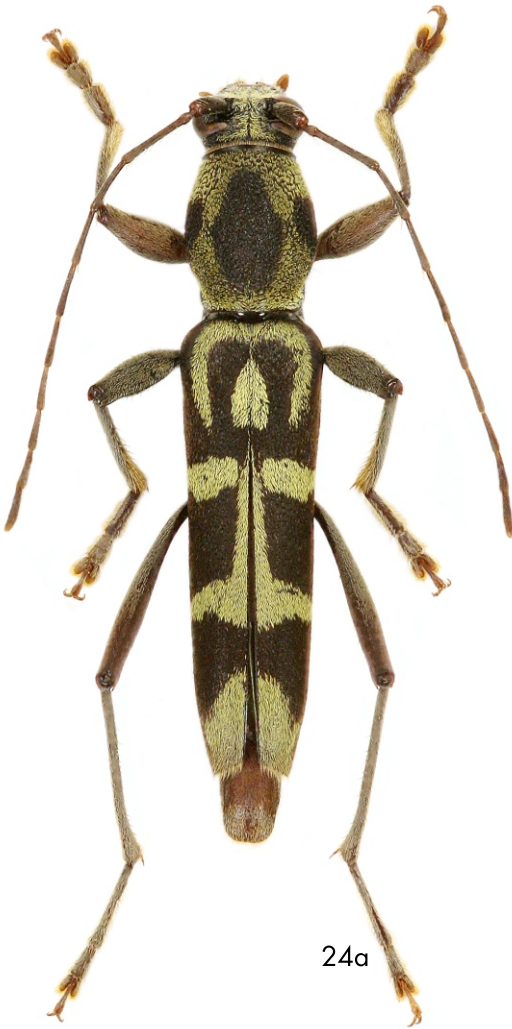
Elytra 6.85 mm long and 2.14 mm wide (3.2 times longer than wide); narrowing apically, apical third of elytra punctured by dense small-sized punctation, basal two thirds of elytra with sparse large-sized punctation. Elytra covered by yellow and sparser black pubescence (as in Fig. 24a). Elytral apex cut, each elytron shorter in sutural angle. Lateral and sutural angle sharp, without distinct spines. Apical margin with long yellowish setation.

Legs long and narrow, brown (meso- and metafemora blackish brown), punctured by dense distinct punctation, partly covered by sparse pale pubescence and longer yellowish setation. Tarsi brown, punctured by very dense small-sized punctation, covered by yellowish pubescence and setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.72 times longer than metatarsomeres 2 and 3 together.

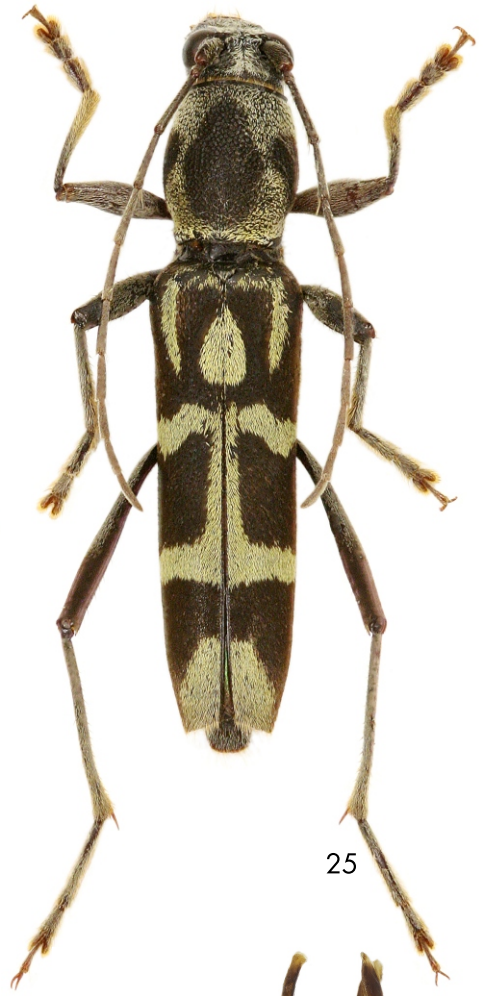
Ventral side of body from blackish brown to black, with distinct punctation, mesepisternum narrowly covered by dense yellowish pubescence in apex, metepisternum almost completely covered by dense yellowish pubescence, metasternum covered by sparser yellowish pubescence in first three quarters and dense yellowish pubescence in apical quarter. Ventrite 1 almost completely covered by dense yellowish pubescence, ventrites 2-4 covered by dense yellowish pubescence except basal part with sparse pubescence, ventrite 5 with long erect pale setation. Elytral epipleura black, matte, covered by short dark shiny pubescence.

Genitalia as in Fig. 24b.

Female. Habitus of female paratype as in Fig. 25. Body length from head to elytral apex (female paratypes) from 10.9 to 11.9 mm. Colour of female similar to male. Female without distinct differences, antennae slightly shorter than in male.



24a



25

Fig. 24. *Rhaphuma sontraica* sp. nov.: a- male holotype; b- male genitalia.

Fig. 25. *Rhaphuma sontraica* sp. nov.: female paratype.



24b

Differential diagnosis. The most similar species are *Rhaphuma campanulifera* Aurivillius, 1922, described from Philippines (Luzon) and *Rhaphuma conformis* (Gahan, 1906) (Figs. 43-44), described from West Malaysia.

Rhaphuma sontraica sp. nov. differs from the similar species *R. campanulifera* mainly by less elongate pronotum with one large more or less elliptical dark spot in middle and two small dark spots in lateral margins (pronotum with three wide dark longitudinal stripes in almost full length of pronotum in *R. campanulifera*), by sharp lateral angles in elytral apex (lateral angles distinctly arcuate in *R. campanulifera*), by wider protarsi, and by different shape of tegmen, median lobe and tergite 8.

Rhaphuma sontraica sp. nov. differs from the similar species *R. conformis* mainly by less elongate elytra with different shape of spots of yellow pubescence (mainly in apical half), by narrower profemora, by antennomeres narrowly paler in base (paler parts of antennomeres significantly longer in *R. conformis*), and by different shape of tegmen, median lobe and tergite 8, which is indistinctly undulate in apical margin (distinctly undulate and excised in *R. conformis*) (as in Figs. 24b and 43b).

Etymology. Named after the type locality, Son Tra Mountain.

Distribution. Vietnam (Da Nang, Quang Nam).

***Rhaphuma soror* sp. nov.**

(Figs. 26-27)

Type locality. Vietnam, Lam Dong province, Dambri, Bao Lam.

Type material. Holotype (♂): 'Dambri, Bao Lam' / 'Lam Dong, Vietnam' / 'v. 2019', (CPV); Paratypes: (1 ♀): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093' E 107°17.59453'' / '840 m, 13. v. 2019' / 'P. Viktora lgt.', (CPV); (1 ♀): 'E Cambodia' / '13 km N of Sen Monorom' / 'N 12°31.17117' E 107°15.23450'' / '600 m, 22. - 24. v. 2019' / 'P. Viktora lgt.', (CPV).

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

Description. Habitus of male holotype as in Fig. 26a. Body from reddish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 9.21 mm, widest in humeral part of elytra (2.0 mm), 4.6 times longer than wide.

Head black (dark brown near anterior margin), widest through the eyes, slightly narrower than pronotum at widest point, with distinct punctation in basal part and dense small-sized punctation in anterior part. Head with narrow longitudinal furrow between eyes. Head covered by dense yellow recumbent pubescence except stripe in base. Anterior margin with a few erect pale setae. Eyes dark brown, distinctly emarginate. Clypeus and labrum ochre yellow, shiny, labrum with a few yellowish setae. Mandibles blackish brown with dense yellowish pubescence and setation in edges.

Maxillary palpus pale brown, palpomeres short. Ultimate palpomere longest, widened apically with rounded apex, with small-sized punctation and relatively dense pale setation.

Antennae long (reaching five sixths elytral length), narrow, filiform, antennomeres brown. Antennomeres with indistinct small-sized punctation. Antennomeres widened apically, without spines (antennomeres angled in inner side of apex). Antennomeres 6-10 serrate in outer side of apex. Antennomeres 1-5 with recumbent yellowish pubescence, antennomeres 6-11 with very short indistinct pale pubescence. Antennomeres 3-5 with long yellowish setation in inner side.

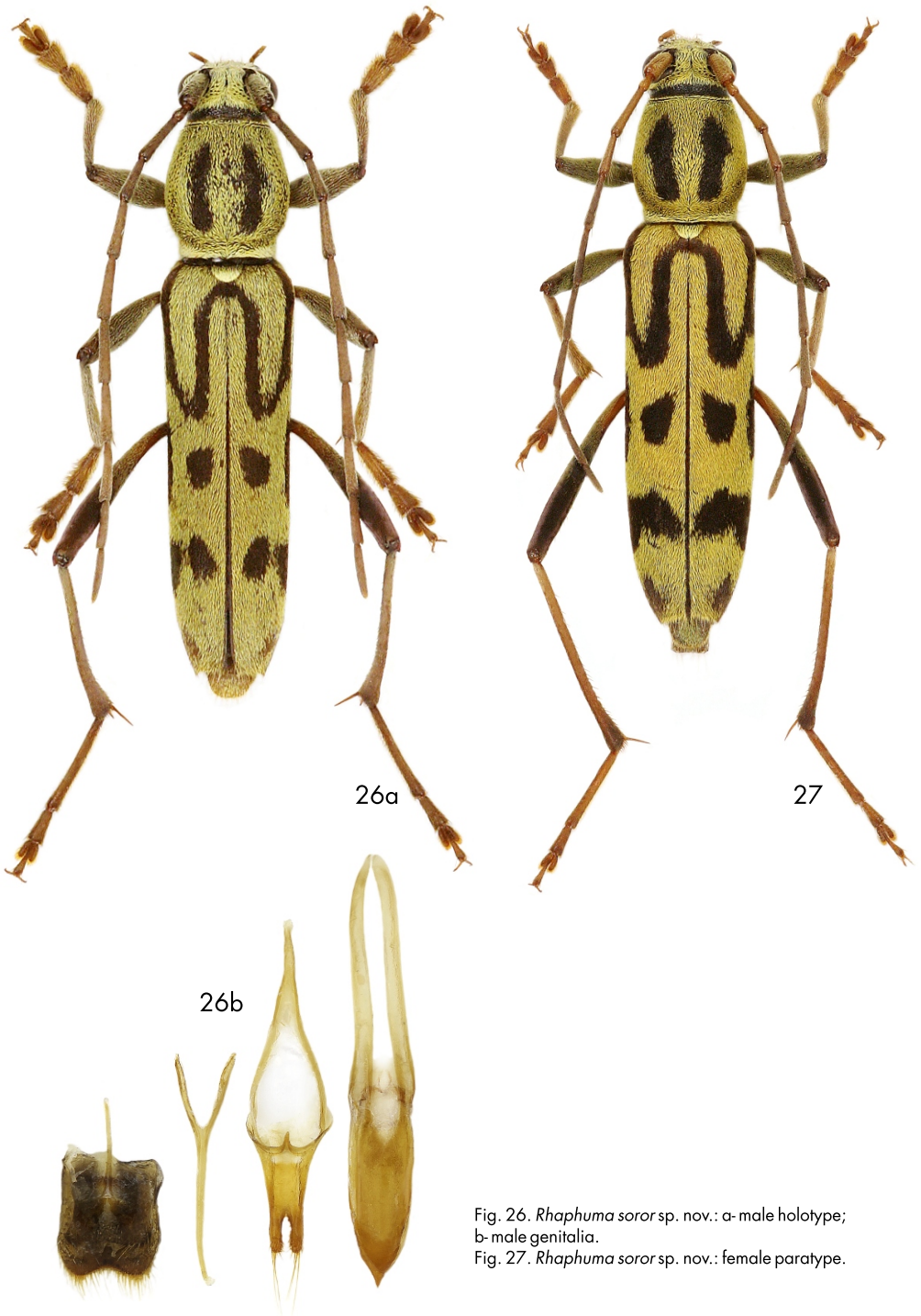


Fig. 26. *Rhaphuma soror* sp. nov.: a- male holotype; b- male genitalia.

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

Antennomere 2 shortest, antennomeres 6 and 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.81 : 0.27 : 1.00 : 0.85 : 1.08 : 1.19 : 1.21 : 1.09 : 1.12 : 0.92 : 1.06.

Pronotum black, slightly convex, almost as wide as elytra, shape of pronotum as in Fig. 26a. Pronotum 1.46 times longer than wide at base and 1.12 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin and base straight. Dorsal surface with dense granulate punctation. Pronotum partly covered by yellow recumbent pubescence (denser in basal angles), partly by short sparse black pubescence (as in Fig. 26a.)

Scutellum black, semielliptical, completely covered by dense recumbent pale yellow pubescence.

Elytra 6.2 mm long and 2.0 mm wide (3.1 times longer than wide); almost parallel, with dense small-sized punctation. Elytra brown, covered by yellow and black pubescence (as in Fig. 26a). Each elytral apex indistinctly excised, with very short spine in sutural angle and lateral angle prolonged into distinct spine. Apical margin with long yellowish setation.

Legs long and narrow, brown (femora darker), punctured by dense small-sized punctation, partly covered by yellowish pubescence and yellowish setation. Tarsi long, with dense punctation, covered by yellowish setation. Protarsi wide. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.75 times longer than metatarsomeres 2 and 3 together.

Ventral side of body brown, punctured, almost completely covered by yellowish pubescence, ventrites with a few pale erect setae. Elytral epipleura brown, punctured, covered by dark 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 9.85 to 10.6 mm. Colour of female similar to male. Female without distinct differences except shorter antennae and distinctly narrower protarsi.

Differential diagnosis. The most similar species are *Rhaphuma anongi* Gressitt & Rondon, 1970 (Figs. 39-40) and *Rhaphuma ryjaceki* Viktora, 2015 (Figs. 49-50).

Rhaphuma soror sp. nov. differs from the similar species *R. anongi* mainly by distinctly more elongate elytra, by longer dark longitudinal stripe in basal part of each elytron, by shorter metatarsi and by different shape of tegmen (as in Figs. 26b and 39b).

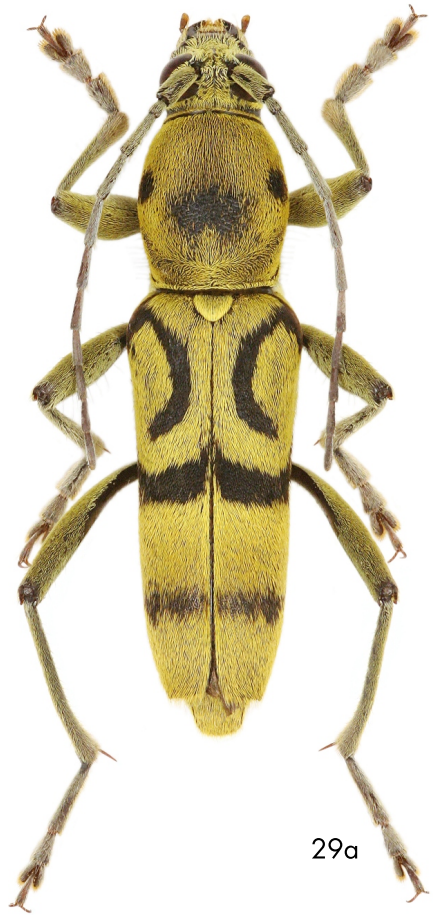
Rhaphuma soror sp. nov. differs from the similar species *R. ryjaceki* mainly by narrower and more elongate dark spots on pronotal disc, by longer dark longitudinal stripe in basal part of each elytron, by different shape of spots in rest of elytra and by different shape of tegmen (as in Figs. 26b and 49b).

Etymology. From Latin *soror* (it means "sister").

Distribution. Vietnam (Lam Dong), Cambodia (Mondulkiri).



28a



29a



28b



29b

Fig. 28. *Chlorophorus arciferus* (Chevrolat, 1863): a- male from India (Arunachal Pradesh), (CPV); b- male genitalia.
Fig. 29. *Chlorophorus hainanicus* Gressitt, 1940: a- male from China (Hainan Island), (CPV); b- male genitalia.



30a



31



30c



30b

Fig. 30. *Demonax iniquus* Holzschuh, 1993: a- male from China (Yunnan, Lijiang), (CPV); b- pronotum; c- male genitalia.
 Fig. 31. *Demonax iniquus* Holzschuh, 1993: female from China (Yunnan, Dequen), (CPV).

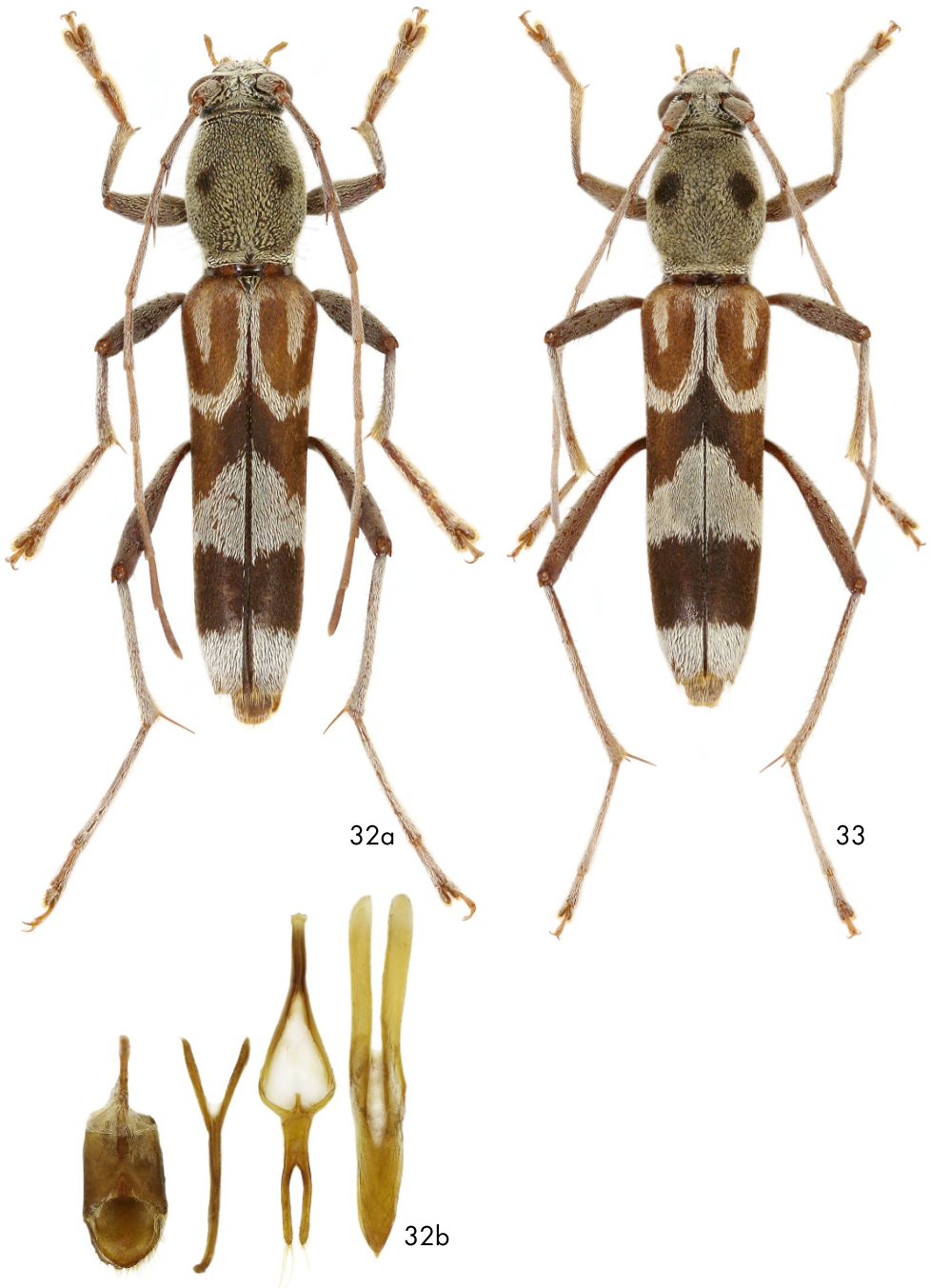


Fig. 32. *Demonax langsonius* (Fairmaire, 1895): a- male from Vietnam (Vinh Phuc, Tam Dao), (CPV); b- male genitalia.
Fig. 33. *Demonax langsonius* (Fairmaire, 1895): female from Vietnam (Vinh Phuc, Tam Dao), (CPV).

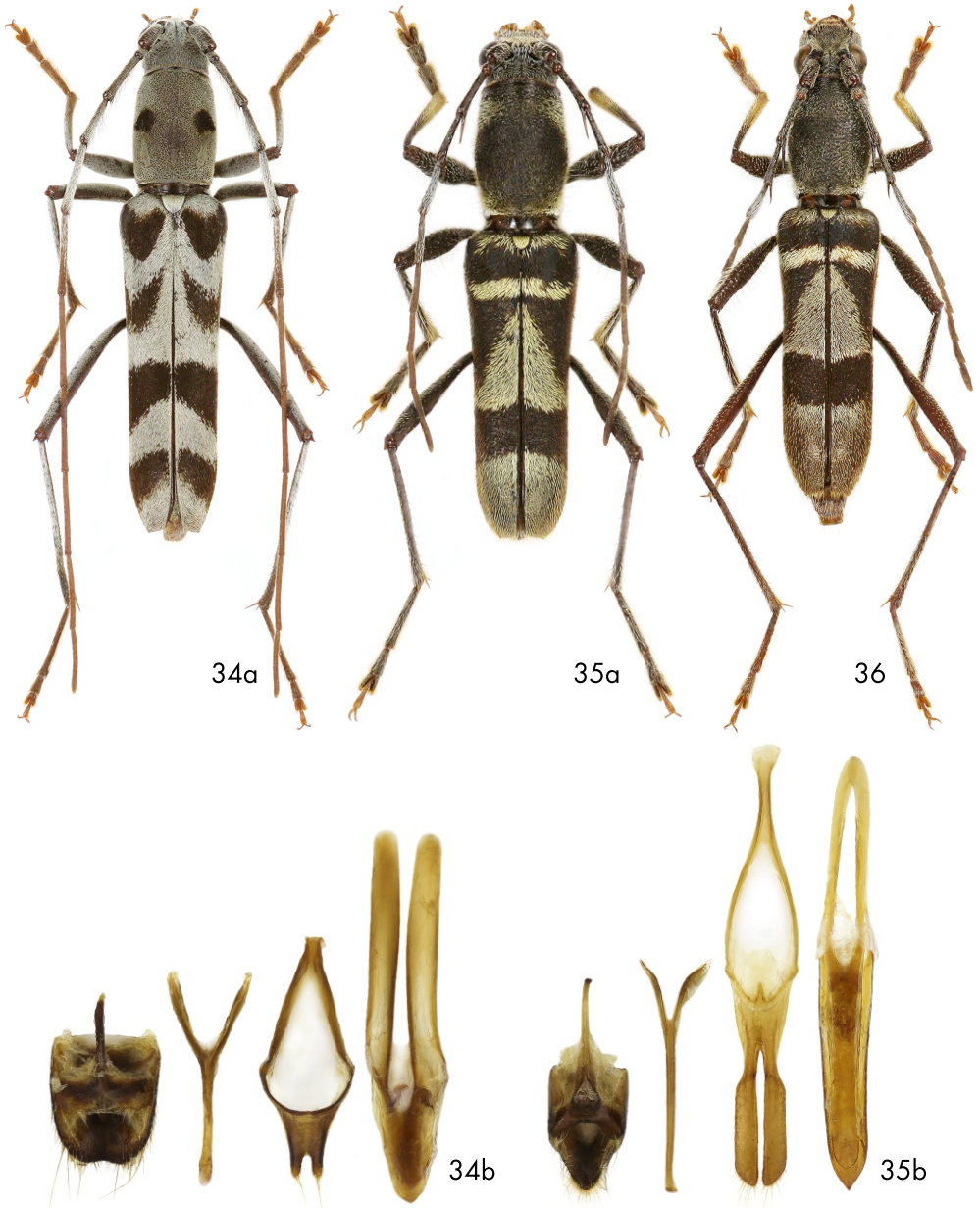


Fig. 34. *Demonax macilentus* (Chevrolat, 1858): a- male from Malaysia (Pahang, Cameron Highlands), (CPV); b- male genitalia.

Fig. 35. *Demonax transversalis* Aurivillius, 1910: a- male from Indonesia (Kalimantan, Mt. Bawang), (CPV); b- male genitalia.

Fig. 36. *Demonax transversalis* Aurivillius, 1910: female from Malaysia (Borneo, Sabah, Crocker Range), (CPV).

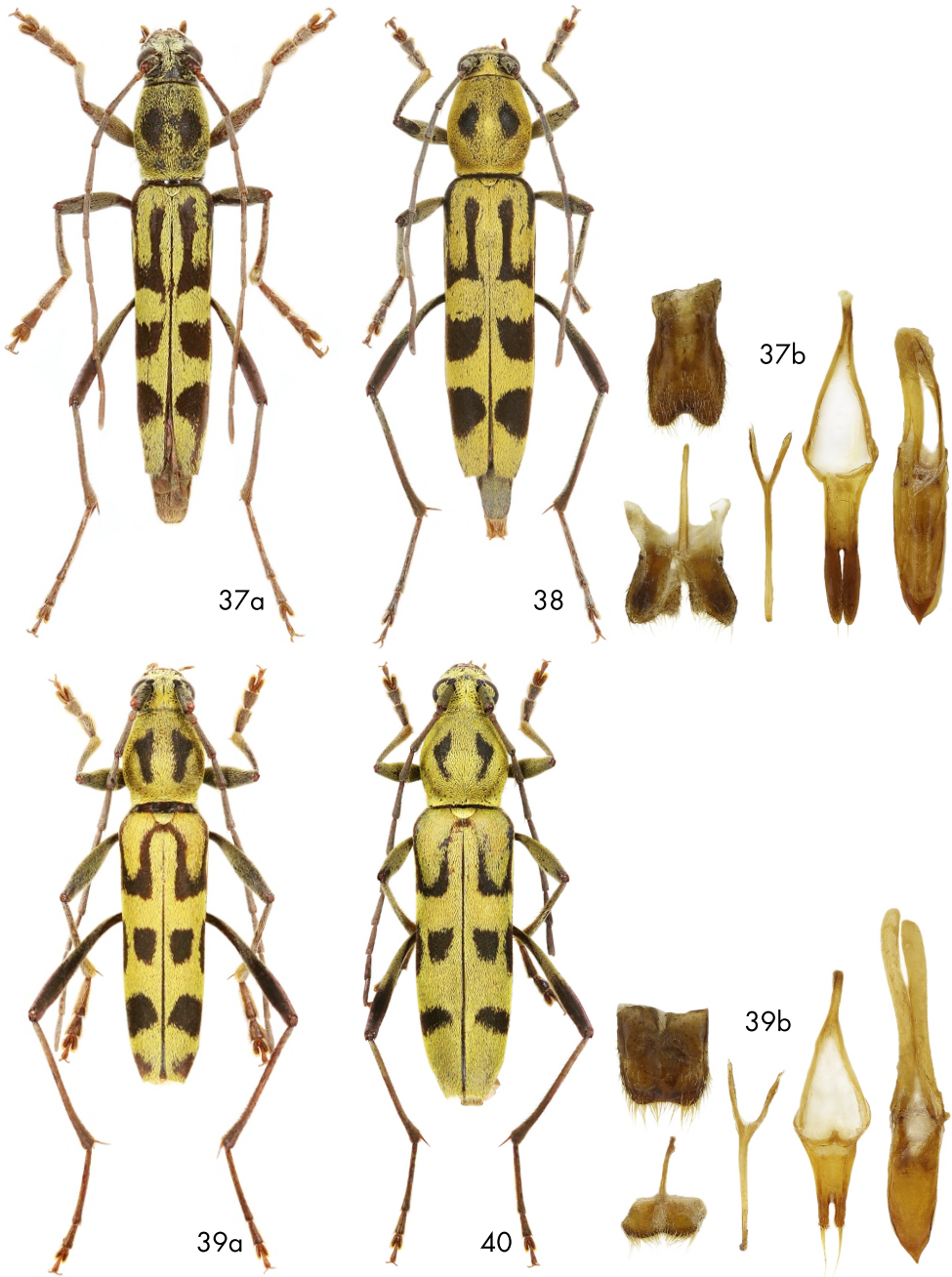


Fig. 37. *Rhaphuma aequalis* Holzschuh, 1991: a- male from Thailand (Chiang Mai), (CPV); b- male genitalia.
Fig. 38. *Rhaphuma aequalis* Holzschuh, 1991: female from Thailand (Chiang Mai), (CPV).
Fig. 39. *Rhaphuma anongi* Gressitt & Rondon, 1970: a- male from N Thailand (Chiang Rai), (CPV); b- male genitalia.
Fig. 40. *Rhaphuma anongi* Gressitt & Rondon, 1970: female from Laos (Houaphanh), (CPV).

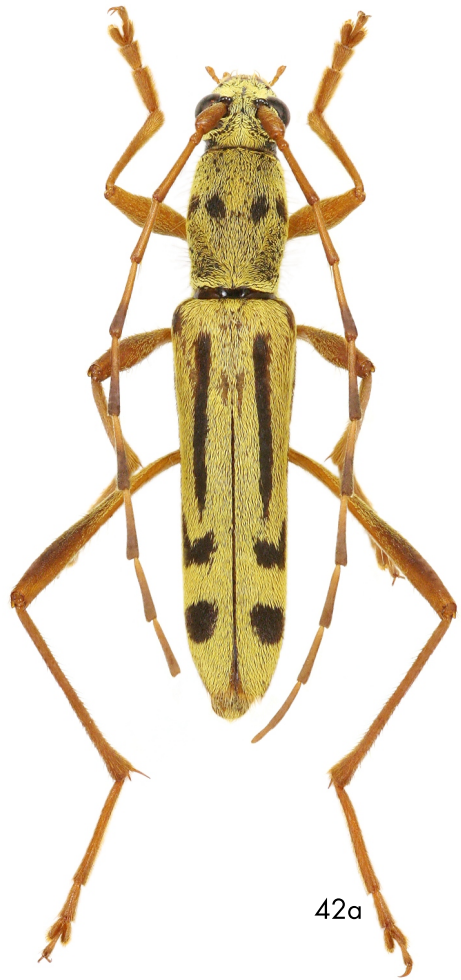


Fig. 41. *Rhaphuma binotata* Hua, 1989: female from Laos (Bolikhamsai), (CPV).

Fig. 42. *Rhaphuma brodskyi* Holzschuh, 1992: a- male from Vietnam (Vinh Phuc, Tam Dao), (CPV); b- male genitalia.

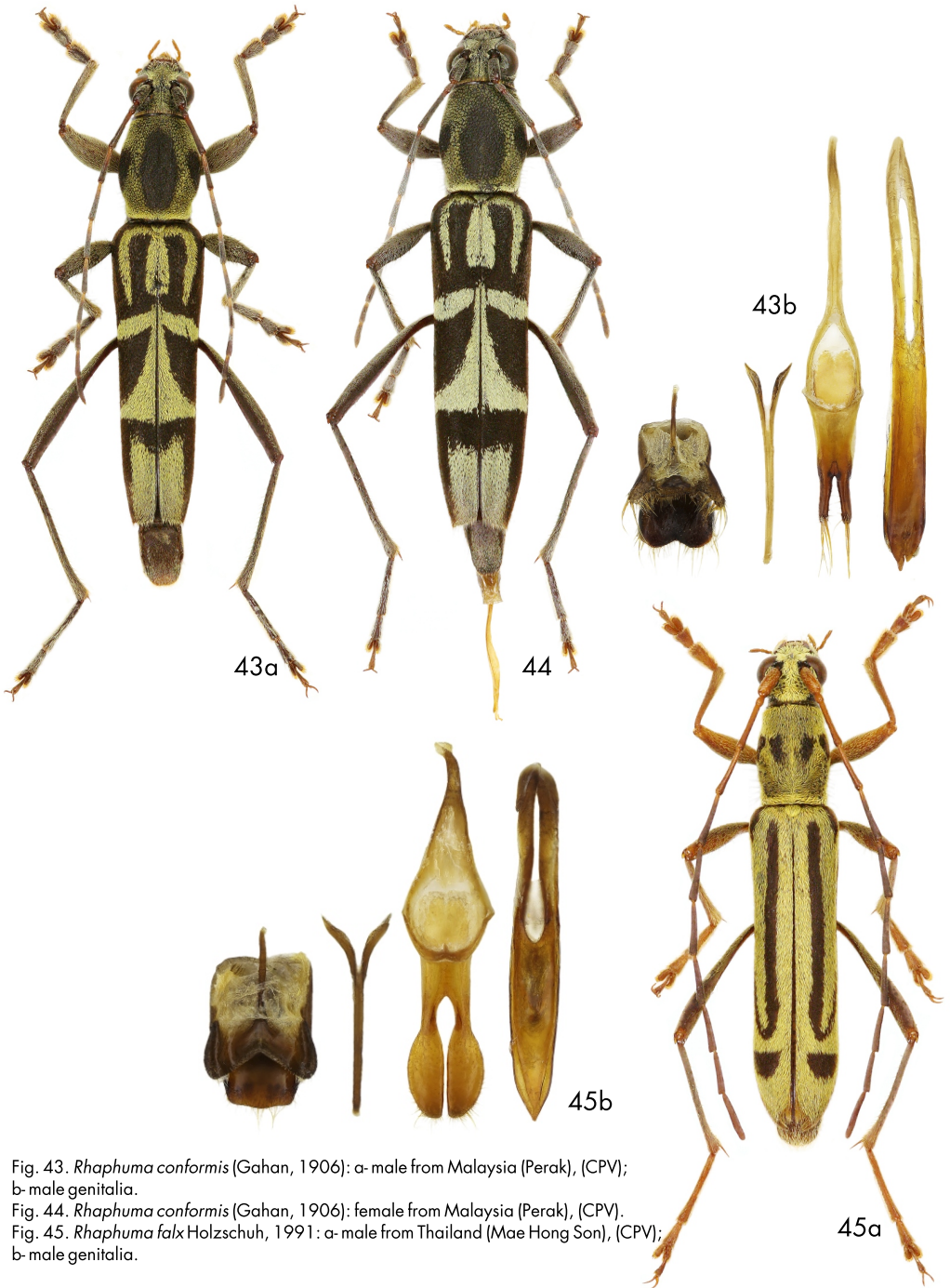


Fig. 43. *Rhaphuma conformis* (Gahan, 1906): a- male from Malaysia (Perak), (CPV); b- male genitalia.

Fig. 44. *Rhaphuma conformis* (Gahan, 1906): female from Malaysia (Perak), (CPV).

Fig. 45. *Rhaphuma falx* Holzschuh, 1991: a- male from Thailand (Mae Hong Son), (CPV); b- male genitalia.

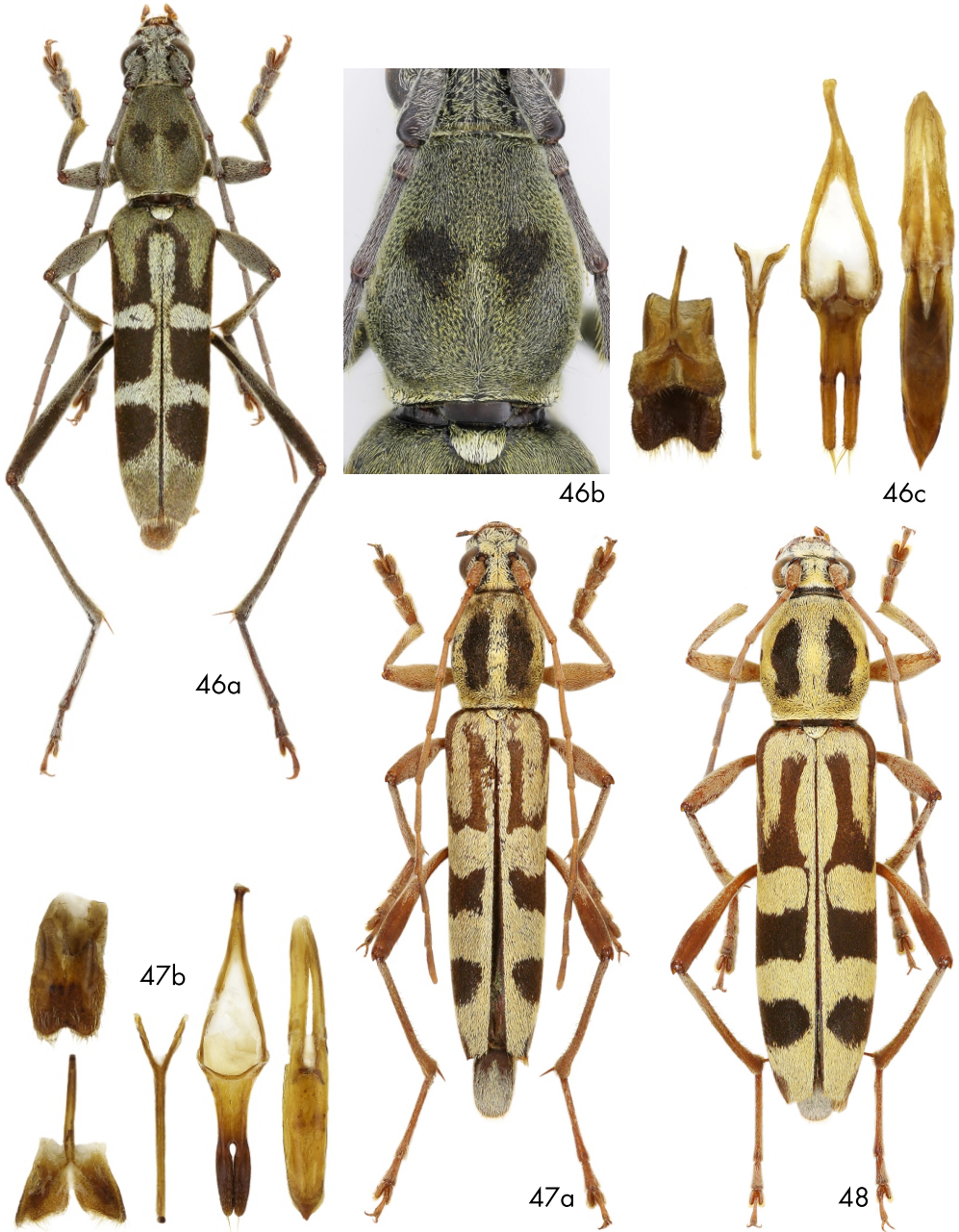


Fig. 46. *Rhaphuma maculicollis* Gressitt & Rondon, 1970: a- male from N Thailand (Chiang Rai), (CPV); b- pronotum; c- male genitalia.

Fig. 47. *Rhaphuma pseudominuta* Gressitt & Rondon, 1970: a- male from N Thailand (Chiang Rai), (CPV); b- male genitalia.

Fig. 48. *Rhaphuma pseudominuta* Gressitt & Rondon, 1970: female from N Thailand (Chiang Rai), (CPV).

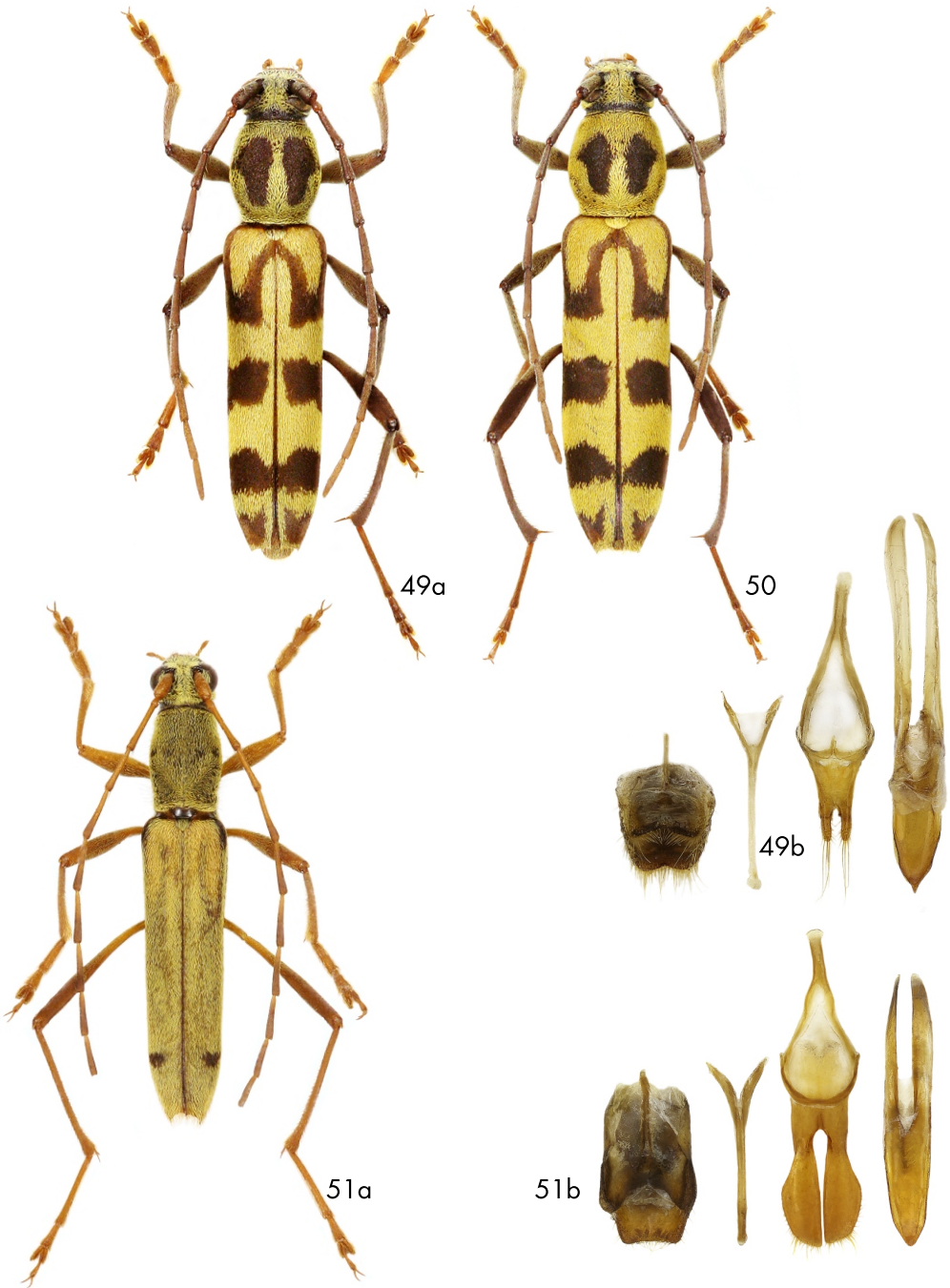


Fig. 49. *Rhaphuma ryjaceki* Viktora, 2015: a- holotype male from Laos (Sekong), (CCH); b- male genitalia.
Fig. 50. *Rhaphuma ryjaceki* Viktora, 2015: paratype female from Laos (Sekong), (CCH).
Fig. 51. *Rhaphuma vagesignata* Pic, 1937: a- male from Laos (Houaphanh), (CPV); b- male genitalia.

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