# New Clytini from the Palaearctic and Oriental Regions (Coleoptera: Cerambycidae: Cerambycinae)

#### Petr VIKTORA

Trebišovská 605, CZ-28401 Kutná Hora, Czech Republic e-mail: viktora\_print@centrum.cz

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Abstract. The new following species are described: Demonax jasarensis sp. nov. and Demonax ringletensis sp. nov. from Malaysia (Pahang, Perak), Demonax excubitor sp. nov. from Malaysia (Perak), Demonax opulentus sp. nov. from India (Arunachal Pradesh), Demonax dapsilis sp. nov. from China (Tibet), Demonax clandestinus sp. nov. and Demonax decrepitus sp. nov. from Laos (Houaphanh), Demonax faustus sp. nov. from Vietnam (Ha Giang) and China (Yunnan), Demonax plausibilis sp. nov. from Laos (Khammouane), Demonax siberutensis sp. nov. from Indonesia (West Sumatra - Mentawai Islands - Siberut Island), Rhaphuma fautrix sp. nov. from China (Yunnan), Rhaphuma fortuna sp. nov. from Vietnam (Ha Giang, Vinh Phuc), Rhaphuma musca sp. nov. from Vietnam (Lam Dong), Rhaphuma parca sp. nov. from Vietnam (Binh Thuan) and Xylotrechus emeritus sp. nov. from Vietnam (Ha Giang). All the habitus and male genitalia are illustrated. Demonax weigeli Dauber, 2010 is treated as a junior synonym of Demonax algebraicus Pascoe, 1869. Xylotrechus canus Holzschuh, 2003 is firstly recorded from Thailand.

#### 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 1500 species have been described so far. Within these regions, the most numerous genera are *Demonax J. Thomson*, 1861, *Chlorophorus Chevrolat*, 1863, *Xylotrechus Chevrolat*, 1860 and *Rhaphuma Pascoe*, 1858.

In the present paper, I describe new species of the genera Demonax, Rhaphuma and Xylotrechus from materials which were recently collected in China, India, Indonesia, Laos, Malaysia and Vietnam. Descriptions of the following fifteen new Clytini species are given as follows: Demonax jasarensis sp. nov. and Demonax ringletensis sp. nov. from Malaysia (Pahang, Perak), Demonax excubitor sp. nov. from Malaysia (Perak), Demonax opulentus sp. nov. from India (Arunachal Pradesh), Demonax dapsilis sp. nov. from China (Tibet), Demonax clandestinus sp. nov. and Demonax decrepitus sp. nov. from Laos (Houaphanh), Demonax faustus sp. nov. from Vietnam (Ha Giang) and China (Yunnan), Demonax plausibilis sp. nov. from Laos (Khammouane), Demonax siberutensis sp. nov. from Indonesia (West Sumatra - Mentawai Islands - Siberut Island), Rhaphuma fautrix sp. nov. from China (Yunnan), Rhaphuma fortuna sp. nov. from Vietnam (Ha Giang, Vinh Phuc), Rhaphuma musca sp. nov. from Vietnam (Lam Dong), Rhaphuma parca sp. nov. from Vietnam (Binh Thuan) and Xylotrechus emeritus sp. nov. from Vietnam (Ha Giang). All the habitus and male genitalia are illustrated. The new species are compared to the congeners (Demonax algebraicus Pascoe, 1869, Demonax ambiguus Dauber, 2008, Demonax cinereus Dauber, 2004, Demonax cognoscibilis Viktora, 2020, Demonax fugongensis Guo & Chen, 2005, Demonax fractus Holzschuh, 2016, Demonax imitatus Holzschuh, 1991, Demonax latispinus Holzschuh, 2016, Demonax piliger Holzschuh, 1992, Demonax promptus Dauber,

2016, Demonax seductus Viktora, 2016, Demonax sospitalis Pascoe, 1869, Demonax theresae Pic, 1927, Demonax ventralis Gahan, 1906, Rhaphuma ducissa Viktora, 2019, Rhaphuma filipedes Holzschuh, 2016, Rhaphuma grisescens Pic, 1928, Rhaphuma heres Viktora, 2019, Rhaphuma pseudobinhensis Gressitt & Rondon, 1970, Rhaphuma sexnotata Chevrolat, 1863 and Xylotrechus canus Holzschuh, 2003), which are also illustrated in many cases.

Demonax weigeli Dauber, 2010 is treated as a junior synonym of Demonax sospitalis Pascoe, 1869, Demonax despectus Dauber, 2016 is treated as a junior synonym of Demonax algebraicus Pascoe, 1869.

#### MATERIAL AND METHODS

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

Specimens examined including type materials are deposited in the following collections:

BMNH The Natural History Museum, London, United Kingdom;

CAW collection of Andreas Weigel, Wernburg, Germany;

CLD collection of Luboš Dembický, Brno, Czech Republic;

CPV collection of Petr Viktora, Kutná Hora, Czech Republic;

MZB Museum Zoologicum Bogoriense, Cibinong, Indonesia.

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

#### **TAXONOMY**

## Tribe Clytini Mulsant, 1839

#### Genus Demonax Thomson, 1861

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

# Demonax jasarensis sp. nov.

(Figs. 1-2)

Type locality. Malaysia, Pahang, Cameron Highlands, Tanah Rata, Mt. Jasar.

**Type material.** Holotype (3): 'Malaysia NW' / 'Cameron Highlands' / 'Tanah Rata, Mt. Gunung Jasar' / '26.iv. - 15.v. 2006' / 'P. Viktora |gt.'|, (CPV); Paratypes: (1 3): same data as holotype, (CPV); (1 3, 1  $\bigcirc$ ): 'Malaysia NW' / 'Cameron Highlands' / 'Tanah Rata, Mt. Gunung Jasar' / 'ii. 2012' / 'local coll.', (CPV); (1  $\bigcirc$ ): 'MALAYSIA W. PERAK' / '40km SE of IPOH, 900 m' / 'Banjaran Titi Wangsa' / 'RINGLET, 29. iii. - 15. iv.' / '2004 Čechovsky Petr |gt.'|, (CLD). The types are provided with a printed red label: 'Demonax jasarensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of male holotype as in Fig. 1a. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 13.68 mm (male paratypes from 13.54 to 14.23 mm), widest in humeral part of elytra (2.91 mm), 4.7 times longer than wide.



Head black (blackish brown near anterior margin), narrow, widest through the eyes, narrower than pronotum at widest point, with very dense, small-sized granulate punctation in anterior part, posterior part with dense, small-sized granulate punctation and rows of larger punctures behind the eyes. Frons with indistinct, narrow longitudinal furrow in the middle. Head covered by short, recumbent, yellowish gray pubescence, anterior margin with a few erect pale setae. Eyes blackish brown, distinctly emarginate. Antennal insertions with sharp keel on inner side. Clypeus and labrum pale ochre yellow, shiny, with pale yellowish setation. Mandibles black, shiny, with grayish pubescence and a few pale setae in edges.

Maxillary palpus from pale ochre yellow to brown (last palpomere brown except narrowly ochre yellow apex), palpomeres widened apically, semi-matt with indistinct small-sized punctation and yellowish setation. Last palpomere longest and largest, widely axe-shaped with rounded apex and angles.

Antennae long (reaching six sevenths elytral length), narrow, filiform, blackish brown, punctured by shallow small-sized punctation, covered by recumbent grayish pubescence, antennomeres 2-7 with long yellowish setation in inner side. Antennomeres widened apically, antennomeres 3 and 4 with very long spine on inner side of apex (approximately the same length). Antennomeres rounded in apex. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.86:0.33:1.00:0.93:1.32:1.22:1.19:1.03:0.97:0.80:0.89.

Pronotum black, elongate, slightly convex, shape of pronotum as in Fig. 1a. Pronotum 1.58 times longer than wide at base and 1.22 times longer than wide at widest point (middle of pronotum). Lateral margins arcuate, anterior margin undulate, base undulate (slightly excised in middle). Pronotum narrower than elytra at humeri. Dorsal surface with irregular punctation (partly granulate, partly reticulate), punctures with microgranulation inside. Pronotum covered by very short gray pubescence and by short, shiny black pubescence forming two dark spots in pronotal disc (as in Fig. 1a). Basal third of pronotum with sparse, erect, long colorless setation.

Scutellum black, triangular (apex indistinctly rounded), covered by short, relatively sparse gray pubescence.

Elytra 9.05 mm long and 2.91 mm wide (3.1 times longer than wide), from brown in apex to black, elongate, narrow, almost parallel, punctured by dense small-sized punctation, semi-gloss, covered by gray and black shiny pubescence (as in Fig. 1a). Elytra with cut apex, sutural angle with very short indistinct spine, lateral angle prolonged to very long spine. Apical margin with long yellowish setae.

Pygidium pale brown, punctured by dense, shallow small-sized punctation, covered by sparse, pale recumbent pubescence. Apex rounded, covered by yellowish setation.

Legs very long and narrow, blackish brown, punctured by dense shallow punctation, partly covered by short grayish pubescence in femora and longer grayish pubescence in tibiae. Tibiae with long yellowish setation (densest in apical part), meso- and metafemora with distinct sparse setation at dorsal and ventral side. Tibiae slightly widened apically, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi dark brown (claws pale brown), punctured by dense small-sized punctation, covered by long pale pubescence and yellowish setation. Metatarsi very long, metatarsomere 1 2.67 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to black, partly punctured by small-sized punctation. Mesepisternum largely covered by long, relatively dense whitish pubescence and setation except spot in basal part. Metepisternum and metasternum completely covered by long, recumbent white pubescence. Ventrites 1-4 in basal part with spots without pubescence, covered by long goldenish

setation. Ventrites covered by white pubescence except stripes in apex (pubescence in last ventrites sparser). Ventral side partly with long, erect colorless setation. Elytral epipleura brown, slightly undulate, relatively wide in base and very narrow in apex, punctured by dense small-sized punctation, covered by short, indistinct shiny setation.

Genitalia as in Fig. 1b.

**Female.** Habitus of female paratype as in Fig. 2. Body length from head to elytral apex (female paratypes) from 12.64 to 13.46 mm. Colour of female similar to male. Female with shorter antennae and distinctly narrower tarsi than in male.

**Differential diagnosis.** The most similar species are *Demonax cinereus* Dauber, 2004, described from Malaysia (Sabah) and *Demonax sospitalis* Pascoe, 1869 (Figs. 3-4), described from Indonesia (West Papua).

Demonax jasarensis sp. nov. distinctly differs from similar species D. cinereus by different shape of dark spot in basal quarter of each elytron (narrow oblique, pointing basally to suture in D. jasarensis, while transverse and wide, reaching lateral margins in D. cinereus). D. jasarensis has metatarsi dark brown, while D. cinereus has metatarsi pale yellowish.

Demonax jasarensis sp. nov. distinctly differs from similar species D. sospitalis by different colour of antennomeres 5-11 (blackish brown in D. jasarensis, while pale brown in D. sospitalis), by almost parallel elytra (elytra distinctly narrowing apically in D. sospitalis), by less elongate pronotum (1.22 times longer than wide at widest point in D. jasarensis, while 1.34 times in D. sospitalis). D. jasarensis has each elytron with cut apex (apical margin transverse), while elytron in D. sospitalis has distinctly oblique apical margin (elytron distinctly shorter in sutural angle). D. jasarensis has straight apical margin in tergite 8 (more arcuate margin in D. sospitalis), differences can also be found in shape of tegmen (as in Figs. 1b and 3b).

**Etymology.** New species named after type locality, Mt. Jasar.

**Distribution.** Malaysia (Pahang, Perak).

# Demonax sospitalis Pascoe, 1869

(Figs. 3-4)

Demonax sospitalis Pascoe, 1869: 625. Demonax weigeli Dauber, 2010: 570, fig. 5. **syn. nov.** 

**Type locality.** Demonax sospitalis Pascoe, 1869: Dorey [Indonesia, West Papua, Manokwari]. Demonax weigeli Dauber, 2010: W. Papua, Manokwari prov., ca. 20 km W Manokwari, Prafi, 0°53,57′S, 133°55,06′E.

**Remark.** Based on a comparison of the type specimen of *Demonax sospitalis* Pascoe, 1869 (BMNH) (Fig. 3) with the description and holotype photo of *Demonax weigeli* Dauber, 2010 (Fig. 4), it is clear, that they belong to the same species. Both species are described from the same locality (Indonesia, West Papua, Manokwari), species characters agree in all aspects. A comparison with *D. sospitalis* is missing in Differential diagnosis in Dauber (2010: 570). *Demonax weigeli* Dauber, 2010 is thus treated as a junior synonym of *Demonax sospitalis* Pascoe, 1869. Type material of *D. weigeli* - holotype and one paratype in CAW are both males (based on personal communication with Andreas Weigel), in Dauber's description are both type specimens incorrectly listed as females. Intensity and size of two dark spots on pronotum varies

3b

from specimen to specimen from distinct large dark spots to vague, almost imperceptible spots (based large series of specimens from Manokwari in CPV).

## **Distribution.** Indonesia (West Papua).



Fig. 3. Demonax sospitalis Pascoe, 1869: a-type (BMNH) -photograph by Tomáš Tichý; b-male genitalia.

Fig. 4. Demonax weigeli Dauber, 2010: holotype (CAW), reproduction of a photograph from the description (Dauber, 2010: Fig. 5)
(a new synonym of Demonax sospitalis Pascoe, 1869).

## Demonax opulentus sp. nov.

(Figs. 6, 8b, 9b, 10b)

Type locality. India, Arunachal Pradesh, Along env.

**Type material.** Holotype (?): 'NE INDIA' / 'Arunachal Pradesh' / 'Along env., ca 1800m alt.' / '15. vi. 2012', (CPV). The type is provided with a printed red label: 'Demonax opulentus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021'.

**Description.** Habitus of female holotype as in Fig. 6. Body from blackish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 13.55 mm, widest in humeral part of elytra (3.37 mm), 4 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, distinctly narrower than pronotum at widest point, with very dense small-sized punctation, posterior part with a few larger punctures behind eyes. Head covered by short, recumbent yellowish gray pubescence, anterior margin and lateral margins under eyes with very long, erect colorless setae. Eyes blackish brown, emarginate. Antennal insertions with sharp keel on inner side. Clypeus pale ochre yellow, shiny. Labrum pale ochre yellow with brown margins. Margins with distinct coarse punctation, covered by long yellowish setation. Mandibles black, shiny, with pale yellowish pubescence and erect setae in edges. Front view as in Fig. 10b.

Maxillary palpus ochre yellow with darker lateral margins, last palpomere largely dark brown (apex narrowly ochre yellow). Palpomeres widened apically, semi-matt with indistinct small-sized punctation and yellowish setation. Last palpomere longest and largest, widely axe-shaped with rounded angles.

Antennae reaching one half elytral length, relatively wide, blackish brown, punctured by shallow small-sized punctation, covered by yellowish gray pubescence, antennomeres 2-6 with long yellowish setation on inner side. Antennomeres distinctly widened apically, antennomeres 6-9 slightly serrate in outer side. Antennomeres 3 and 4 with long sharp spine in inner side of apex (approximately the same length). Antennomere 5 prolonged to sharp angle in inner side of apex without spine. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.80:0.34:1.00:0.94:1.06:0.98:0.72:0.61:0.53:0.52:0.53.

Pronotum black, convex, robust, slightly elongate, shape of pronotum as in Fig. 8b. Pronotum 1.58 times longer than wide at base and 1.1 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin indistinctly arcuate (almost straight), base slightly excised in middle. Pronotum only slightly narrower than elytra at humeri. Dorsal surface with reticulation, covered by short yellowish gray pubescence (as in Figs. 8b, 9b). Pronotum with a few long colorless setae (longer and denser in basal third).

Scutellum black, shield-shaped, punctured by dense small-sized punctation, covered by recumbent yellowish gray pubescence.

Elytra 8.87 mm long and 3.37 mm wide (2.63 times longer than wide), black, relatively wide, slightly narrowing apically, punctured by small-sized punctation, basal quarter dull, apical three quarters semi-gloss. Elytra covered by yellowish gray and black shiny pubescence (as in Fig. 6). Each elytron with elevation in middle of basal part. Elytral apex undulate, sutural angle with indistinct short spine, lateral angle with long curved spine. Apical margin with very long yellowish setation.

Pygidium dark brown, punctured by shallow indistinct punctation, covered by sparse, recumbent yellowish gray pubescence. Apex with indistinctly arcuate apical margin, angles rounded. Margin with long yellowish setation.

Legs long and narrow, from blackish brown to black, punctured by dense small-sized punctation (metafemora almost bald in inner side), partly covered by grayish pubescence in femora and longer grayish pubescence in tibiae. Tibiae with long yellowish setation (densest in apical part), meso- and metafemora with sparse setation at dorsal and ventral side. Profemora widest, tibiae slightly widened apically, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi blackish brown (claws brown), punctured by dense small-sized punctation, covered by dense yellowish setation. Metatarsi very long, metatarsomere 1 2.87 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, partly punctured by dense small-sized punctation. Mesepisternum covered by very dense white pubescence in apical third, basal two thirds with sparse pale setation and admixture of white pubescence. Metepisternum almost completely covered by dense white pubescence, metasternum covered by white pubescence and stripes of very dense and long pale setation in base and largely in apex. Ventrites 1 and 2 almost completely covered by dense white pubescence except spots of pale and sparser setation in base, ventrites 3-5 covered by dense shiny setation. Ventral side partly with long, erect colorless setation (in ventrite 5 distinctly longer and denser). Elytral epipleura black, punctured by dense small-sized punctation, relatively wide in base, very narrow in apex, covered by short, pale shiny setation.

Male. Unknown.

**Differential diagnosis.** The most similar species are *Demonax dapsilis* sp. nov. (Figs. 7, 8c, 9c, 10c) and *Demonax fugongensis* Guo & Chen, 2005 (Figs. 5, 8a, 9a, 10a).

Demonax opulentus sp. nov. distinctly differs from the similar species *D. dapsilis* by different shape of pronotum, by dorsal surface of pronotum with reticulation, covered by short yellowish gray pubescence (as in Fig. 8b), while dorsal surface of pronotum with irregular granulate punctation, covered by short yellowish gray pubescence in *D. dapsilis* (as in Fig. 8c). *D. opulentus* has distinctly different length, density and arrangement of pubescence on pronotum (see details of anterior margins in Figs. 9b and 9c). Elytral apex with lateral angles prolonged to long curved spine in *D. opulentus*, while short wide spine in *D. dapsilis*.

Demonax opulentus sp. nov. differs from the similar species *D. fugongensis* by distinctly more robust body, by different (wider, less elongate) shape of pronotum (as in Figs. 8a and 8b), by different length, density and arrangement of pubescence on pronotum (see details of anterior margins in Figs. 9a and 9b) and by differently colored and more contrasting dark spots on elytra. *D. opulentus* has elytral apex with lateral angles prolonged to long curved spine, while *D. dapsilis* has lateral angles in elytral apex with short indistinct spine.

Other differences between these species, such as the shape of mandibles etc., you can see in Fig. 10.

**Etymology.** From Latin opulentus (it means "mighty").

**Distribution.** India (Arunachal Pradesh).

# Demonax dapsilis sp. nov.

(Figs. 7, 8c, 9c, 10c)

Type locality. China, Tibet, Chayu, Xiachayu.

**Type material.** Holotype  $\{\phi\}$ : 'Tibet' / 'Chayu' / 'Xiachayu' / 'vii. 2017' / 'local collector leg.', (CPV). The type is provided with a printed red label: 'Demonax dapsilis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021'.



Fig. 5. Demonax fugongensis Guo & Chen, 2005: female from China (Yunnan), (CPV).

**Description.** Habitus of female holotype as in Fig. 7. Body from blackish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 13.04 mm, widest in humeral part of elytra (3.46 mm), 3.76 times longer than wide.

Head black (blackish brown near anterior margin), narrow, widest through the eyes, distinctly narrower than pronotum at widest point, with very dense small-sized punctation, posterior part with a few larger punctures. Head covered by short, recumbent yellowish gray pubescence, under eyes with a few long, erect colorless setae. Eyes blackish brown, emarginate. Antennal insertions with sharp keel on inner side. Clypeus and labrum pale ochre yellow, shiny. Labrum with long yellowish setation. Mandibles black, semi-matt, with distinct punctation and yellowish setation in edges. Front view as in Fig. 10c.

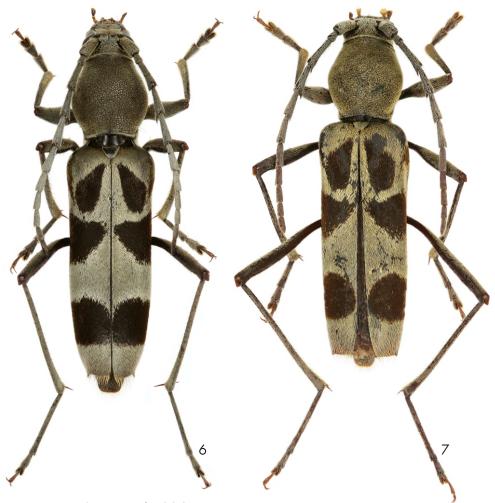


Fig. 6. *Demonax opulentus* sp. nov.: female holotype. Fig. 7. *Demonax dapsilis* sp. nov.: female holotype.

Maxillary palpus brown, semi-matt, palpomeres widened apically, with yellowish setation. Last palpomere longest, axe-shaped with rounded apex, apex narrowly paler (pale ochre yellow).

Antennae reaching three fifths elytral length, blackish brown, punctured by shallow small-sized punctation, covered by yellowish gray pubescence (pubescence in antennomeres 1-7 longer and more distinct than in antennomeres 8-11), antennomeres 1-7 with long yellowish setation in inner side. Antennomeres distinctly widened apically, antennomeres 5-9 slightly serrate on outer side. Antennomeres 3-5 with long sharp spine in inner side of apex (spines in antennomeres 3 and 4 longer, approximately the same length, spine in antennomere 5 of half length). Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.75: 0.33: 1.00: 0.81: 0.93: 0.87: 0.77: 0.59: 0.53: 0.45: 0.52.

Pronotum black, convex, robust, shape of pronotum as in Fig. 8c. Pronotum 1.53 times longer

than wide at base and 1.1 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin indistinctly arcuate, base slightly excised. Pronotum narrower than elytra at humeri. Dorsal surface with irregular granulate punctation, covered by short yellowish gray pubescence (as in Figs. 8c, 9c). Pronotum with a few long colorless setae.

Scutellum black, shield-shaped with distinctly rounded apex, covered by recumbent yellowish gray pubescence.

Elytra 8.96 mm long and 3.46 mm wide (1.58 times longer than wide), from pale brown in apex to black, relatively wide, slightly narrowing apically, punctured by small-sized punctation, basal quarter dull, apical three quarters semi-gloss. Elytra covered by yellowish gray and black shiny pubescence (as in Fig. 7). Each elytron with elevation in middle of basal part. Elytral apex cut, indistinctly undulate. Sutural angle with very short spine, lateral angle with more distinct, short wide spine. Apical margin with long yellowish setation.

Pygidium dark brown with pale apex, punctured by dense small-sized punctation, covered by long, recumbent yellowish gray pubescence. Apex rounded, margin with long yellowish setation.

Legs long and narrow, from dark brown to black, punctured by dense indistinct punctation (metafemora almost bald in inner side), partly covered by yellowish gray pubescence (mainly in femora) and long yellowish setation (densest and longest in apical part of tibiae). Tibiae slightly widened apically, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long, dark brown (claws paler - brown), punctured by very dense small-sized punctation, covered by long yellowish pubescence and setation. Metatarsi very long, metatarsomere 1 2.49 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black with blackish brown coxae, partly punctured by dense small-sized punctation. Mesepisternum covered by very dense, pale yellowish pubescence in apical quarter, basal three quarters partly bald, partly with sparse whitish setation. Metepisternum and metasternum largely covered by recumbent, pale yellowish pubescence (denser in metepisternum). Ventrites 1 and 2 covered by sparse, pale yellowish pubescence in basal half and dense, pale yellowish pubescence in apical half, ventrites 3-5 covered by long, sparse whitish pubescence. Ventral side partly with long, erect colorless setation (very long and dense in ventrites 4-5). Elytral epipleura black, distinctly undulate, wide in base and very narrow in apex, covered by relatively dense, pale yellowish setation.

Male. Unknown.

**Differential diagnosis.** The most similar species are *Demonax fugongensis* Guo & Chen, 2005 (Figs. 5, 8a, 9a, 10a) and *Demonax opulentus* sp. nov. (Figs. 6, 8b, 9b, 10b).

Demonax dapsilis sp. nov. differs from the similar species *D. fugongensis* by distinctly more robust body, by different (wider, less elongate) shape of pronotum (as in Figs. 8a and 8c), by different length, density and arrangement of pubescence on pronotum (see details of anterior margins in Figs. 9a and 9c) and by differently colored and more contrasting dark spots on elytra. *D. dapsilis* has compared to *D. fugongensis* distinctly longer legs including longer tarsi.

Demonax dapsilis sp. nov. distinctly differs from the similar species *D. opulentus* by different shape of pronotum, by dorsal surface of pronotum with irregular granulate punctation, covered by short yellowish gray pubescence (as in Fig. 8c), while dorsal surface of pronotum with reticulation, covered by short yellowish gray pubescence in *D. opulentus* (as in Fig. 8b). *D. dapsilis* has distinctly different length, density and arrangement of pubescence on pronotum (see details of anterior margins in Figs. 9b and 9c). Lateral angles in elytral apex with short wide spine in

D. dapsilis, while lateral angles prolonged to long curved spine in D. opulentus.

Other differences between these species, such as the shape of mandibles etc., you can see in Fig. 10.

**Etymology.** From Latin *dapsilis* (it means "rich").

Distribution. China (Tibet).

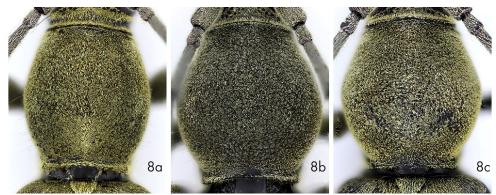


Fig. 8. Pronotum (dorsal view): a-female of *D. fugongensis* Guo & Chen, 2005; b-female holotype of *D. opulentus* sp. nov.; c-female holotype of *D. dapsilis* sp. nov.



Fig. 9. Anterior margin of pronotum: a-female of *D. fugongensis* Guo & Chen, 2005; b-female holotype of *D. opulentus* sp. nov.; c-female holotype of *D. dapsilis* sp. nov.

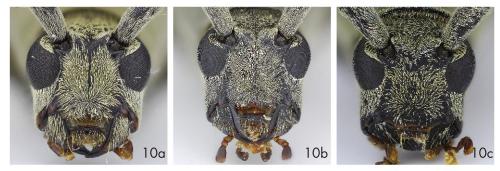


Fig. 10. Head (front view): a- female of *D. fugongensis* Guo & Chen, 2005; b- female holotype of *D. opulentus* sp. nov.; c-female holotype of *D. dapsilis* sp. nov.

### Demonax clandestinus sp. nov.

(Figs. 11-12)

Type locality. Laos, Houaphanh Prov., Mt. Phu Pane, 20°12′ N, 103°59′ E.

**Type material.** Holotype (3): 'NE LAOS, Hua Phan Prov.,' / 'MT. PHU PANE' / '1200-1600m, 30.V.-11.VI.2011' / '20,12N 103,59E' / 'St. Jakl and Lao collectors lgt.', (CPV); Paratype: (1  $\$ ): 'NE LAOS, Hua Phan Prov.,' / 'MT. PHU PANE' / '1200-1600m, 1.-10.VI.2011' / '20,12N 103,59E' / 'Lao collectors lgt.', (CPV). The types are provided with a printed red label: 'Demonax clandestinus sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of male holotype as in Fig. 11a. Body from brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 10.34 mm, widest in humeral part of elytra (2.17 mm), 4.76 times longer than wide.

Head black (blackish brown in anterior part), narrow, widest through the eyes, narrower than pronotum at widest point, with small-sized punctation in anterior part and relatively coarse granulate punctation in posterior part. Head covered by short yellowish gray pubescence, under eyes with a few long, erect colorless setae. Eyes goldenish brown, distinctly emarginate. Antennal insertions with sharp keel on inner side. Clypeus and labrum pale ochre yellow, shiny. Labrum with long yellowish setation in edges. Mandibles blackish brown with black tip, shiny, with pale yellowish pubescence and setation in edges.

Maxillary palpus ochre yellow (last palpomere darker in basal three quarters), short, palpomeres widened apically, semi-gloss, with yellowish setation. Last palpomere longest and distinctly largest, widened apically, drop-shaped with rounded apex.

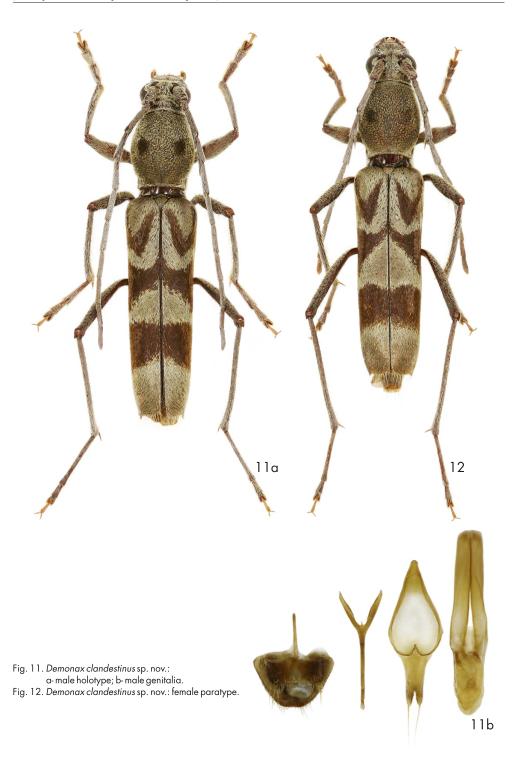
Antennae long (reaching almost three quarters elytral length), narrow, filiform, blackish brown, punctured by shallow small-sized punctation, covered by yellowish gray pubescence (pubescence in antennomeres 1-7 longer and more distinct than in antennomeres 8-11), antennomeres 2-6 with distinct yellowish setation on inner side. Antennomeres slightly widened apically, antennomere 11 narrowed apically in apical third. Antennomeres 3 and 4 with very long sharp spine in inner side of apex (spine in antennomere 3 slightly longer than in antennomere 4), antennomere 5 prolonged to sharp angle in inner side of apex without spine. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.70: 0.29: 1.00: 0.88: 1.14: 1.10: 1.06: 0.96: 0.88: 0.77: 0.86.

Pronotum blackish brown, convex, elongate, shape of pronotum as in Fig. 11a. Pronotum 1.61 times longer than wide at base and 1.23 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin indistinctly undulate (almost straight), base indistinctly excised. Pronotum slightly narrower than elytra at humeri. Dorsal surface with irregular granulate punctation, covered by short yellowish gray pubescence except two semicircular spots in pronotal disc (as in Fig. 11a). Dorsal surface with erect colorless setation.

Scutellum black, triangular with only slightly rounded apex, punctured by dense small-sized punctation, covered by short, recumbent yellowish gray pubescence.

Elytra 6.74 mm long and 2.17 mm wide (3.1 times longer than wide), from brown in apex to blackish brown, narrow, almost parallel, punctured by small-sized punctation, basal quarter dull, apical three quarters semi-gloss. Elytra covered by yellowish gray and black pubescence (as in Fig. 11a). Each elytron undulate in apex, shorter in sutural angle. Sutural angle with short sharp spine, lateral angle with long sharp spine. Apical margin with long yellowish setation.

Pygidium dark brown with pale brown apical part, punctured by shallow small-sized punctation, covered by sparse yellowish gray pubescence. Apex with almost straight (indistinctly



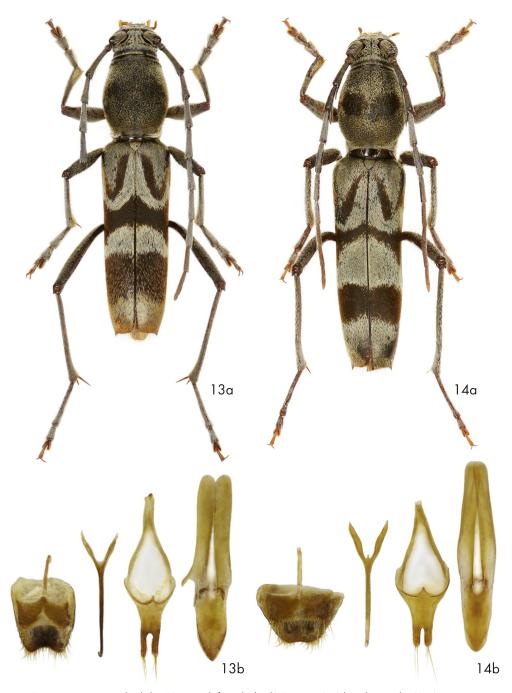


Fig. 13. Demonax imitatus Holzschuh, 1991: a-male from Thailand (Mae Hong Son); b-male genitalia, (CPV). Fig. 14. Demonax piliger Holzschuh, 1992: a-male from Vietnam (Vinh Phuc); b-male genitalia, (CPV).

arcuate) apical margin, angles rounded. Apical margin with yellowish setation.

Legs long and narrow, dark brown, punctured by dense shallow punctation (meso- and metafemora almost bald in inner side), partly covered by yellowish gray pubescence and long yellowish setation (densest in apical part of tibiae). Tibiae only slightly widened apically, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long, dark brown (claws pale brown), punctured by dense small-sized punctation, covered by grayish pubescence and yellowish setation. Metatarsomere 1 2.42 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to black, partly punctured by small-sized punctation. Mesepisternum with dense whitish pubescence in apical half and very sparse pale setation in basal part. Metepisternum, metasternum and ventrites almost completely covered by dense whitish pubescence. Ventral side with long, erect colorless setation (more distinct and denser in ventrites). Elytral epipleura brown, wide in basal part, very narrow in apical part, undulate, dull, covered by short, sparse yellowish setation.

Genitalia as in Fig. 11b.

**Female.** Habitus of female paratype as in Fig. 12. Body length from head to elytral apex 11.2 mm. Colour of female similar to male. Female with shorter antennae and shorter and narrower protarsi than in male.

**Differential diagnosis.** The most similar species are *Demonax imitatus* Holzschuh, 1991 (Fig. 13), described from Thailand (Chiang Rai) and *Demonax piliger* Holzschuh, 1992 (Fig. 14), described from Vietnam (Vinh Phuc).

Demonax clandestinus sp. nov. distinctly differs from similar species *D. imitatus* by narrower body with distinctly more elongate elytra, by different shape of pronotum (smaller, less elongate), by dark transverse spot in elytral apical half without significant admixture of goldenish pubescence compared to *D. imitatus*, by shorter antennae, by distinctly longer metatarsomere 1 (2.42 times longer than metatarsomeres 2 and 3 together, while 2.03 times longer in *D. imitatus*), and by distinctly different shape of tergite 8 and tegmen (as in Figs. 11b and 13b).

Demonax clandestinus sp. nov. distinctly differs from similar species *D. piliger* by narrower body with distinctly more elongate elytra, by different shape of pronotum (smaller, less elongate), by pronotal disc with different surface structure and smaller, less distinct dark spots than in *D. piliger*, by narrower legs, by longer metatarsomere 1 (2.42 times longer than metatarsomeres 2 and 3 together, while 2.2 times longer in *D. piliger*), and by distinctly different shape of tegmen (as in Figs. 11b and 14b).

**Etymology.** From Latin *clandestinus* (it means "secret").

**Distribution.** Laos (Houaphanh).

## Demonax decrepitus sp. nov.

(Fig. 15)

Type locality. Laos, Houaphanh Prov., Mt. Phu Pane, 20°12′N, 103°59′E.

Type material. Holotype ( $\varphi$ ): '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).

The type is provided with a printed red label: 'Demonax decrepitus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021'.

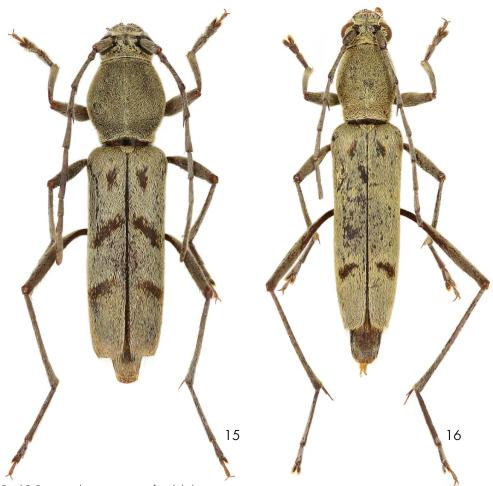


Fig. 15. Demonax decrepitus sp. nov.: female holotype.
Fig. 16. Demonax latispinus Holzschuh, 2016: female from Laos (Houaphanh), (CPV).

**Description.** Habitus of female holotype as in Fig. 15. Body from blackish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 9.34 mm, widest in humeral part of elytra (2.28 mm), 4.09 times longer than wide.

Head black (blackish brown in anterior part), narrow, widest through the eyes, distinctly narrower than pronotum at widest point, with very dense small-sized punctation in anterior part and small-sized granulate punctation in posterior part. Head covered by short yellowish gray pubescence, under eyes with a few erect colorless setae. Eyes blackish brown, distinctly emarginate. Antennal insertions with sharp keel on inner side. Clypeus pale ochre yellow, shiny. Labrum from pale ochre yellow to brown, with distinct punctation and long yellowish setation. Mandibles dark brown with blackish tip, shiny, with yellowish pubescence and setation in edges.

Maxillary palpus pale brown (palpomeres with darker margins), short, palpomeres widened apically, shiny, with yellowish setation. Last palpomere distinctly widened apically, axe-shaped, apical margin bent into two parts with the apex in the middle.

Antennae long (reaching three fifths elytral length), narrow, brown, punctured by shallow small-sized punctation, covered by yellowish gray pubescence (pubescence in antennomeres 1-6 longer and more distinct than in antennomeres 7-11), antennomeres 2-5 with distinct yellowish setation in inner side. Antennomeres widened apically, antennomeres 5-8 slightly serrate in outer side. Antennomeres 3 and 4 with long sharp spine in inner side of apex (spine in antennomere 4 longer than in antennomere 3), antennomere 5 with sharp angle without spine on inner side of apex. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.69: 0.29: 1.00: 0.81: 0.91: 0.80: 0.70: 0.53: 0.49: 0.49: 0.48.

Pronotum blackish brown, convex, robust, shape of pronotum as in Fig. 15. Pronotum 1.55 times longer than wide at base and 1.08 times longer than wide at widest point (near middle of pronotum). Lateral margins distinctly arcuate, anterior margin straight, base slightly excised. Pronotum only indistinctly narrower than elytra at humeri (almost the same wide). Dorsal surface with irregular, small-sized granulate punctation, covered by short, relatively dense, recumbent yellowish gray pubescence. Basal half with a few pale erect setae.

Scutellum blackish brown, semielliptical, covered by recumbent yellowish gray pubescence.

Elytra 5.98 mm long and 2.28 mm wide (2.62 times longer than wide), from yellowish brown in apex to blackish brown, almost parallel. Elytra gloss, punctured by small-sized punctation (sparser in basal part), covered by recumbent yellowish gray and black shiny pubescence (as in Fig. 15). Each elytron with elevation in middle of basal part. Apex rounded in apical margin, sutural angle arcuate, lateral angle not acute, without spine. Apical margin with long yellowish setation.

Pygidium brown with paler apical part, punctured by dense, shallow small-sized punctation, covered by long yellowish gray pubescence, apical margin rounded, with long yellowish setation.

Legs long and narrow, from brown to dark brown, punctured by dense shallow punctation, partly covered by yellowish gray pubescence (meso- and metafemora partly bald in inner side) and long yellowish setation (densest in apical part of tibiae). Tibiae widened apically, profemora widest, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi dark brown (claws paler - brown), punctured by dense small-sized punctation, covered by yellowish pubescence and yellowish setation. Metatarsomere 1 2.38 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black, partly punctured by small-sized punctation (in mesepisternum punctures larger). Mesepisternum almost bald in basal quarter, middle with sparse whitish pubescence, apical quarter with dense whitish pubescence. Metepisternum, metasternum and ventrites completely covered by dense, recumbent whitish pubescence. Ventral side partly with long, erect colorless setation, ventrite 5 with very long and more distinct setation. Elytral epipleura blackish in basal half and brown in apical half, narrow, with small-sized punctation, covered by recumbent yellowish setation.

#### Male. Unknown.

**Differential diagnosis.** The most similar species is *Demonax latispinus* Holzschuh, 2016 (Fig. 16), described from the same locality as *Demonax decrepitus* sp. nov.

Demonax decrepitus sp. nov. differs from the similar species D. latispinus mainly by distinctly more robust body, by wider elytra (2.62 times longer than wide in D. decrepitus, while 2.84 times longer in D. latispinus), by distinctly wider pronotum of different shape (1.08 times longer than wide at widest point in D. decrepitus, while 1.31 times longer in D. latispinus), and by different

shape of scutellum (semielliptical in D. decrepitus, while triangular in D. latispinus).

**Etymology.** From Latin *decrepitus* (it means "decrepit").

**Distribution.** Laos (Houaphanh).

### Demonax excubitor sp. nov.

(Fig. 17)

Type locality. Malaysia, Perak, Belum Forest, 84 km E of Gerik, N 105°32′53′′, E 101°36′28′′.

**Type material.** Holotype (3): '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).
The type is provided with a printed red label: 'Demonax excubitor sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021′.

**Description.** Habitus of male holotype as in Fig. 17a. Body from blackish brown to black, elongate, slightly narrowing apically, punctate, with pubescence. Body length from head to elytral apex 7.35 mm, widest at widest point of pronotum (1.69 mm), 4.34 times longer than wide.

Head black (dark brown in anterior part), narrow, widest through the eyes, narrower than pronotum at widest point. Dorsal surface punctured by very dense small-sized punctation, near posterior margin punctures larger. Head with narrow longitudinal furrow between antennal insertions. Antennal insertions extended to sharp elevation on inner side. Head covered by recumbent, pale yellowish pubescence (denser in anterior part and under eyes). Eyes goldenish brown, strongly emarginate. Clypeus and labrum pale ochre yellow, shiny. Clypeus with long yellowish setation. Mandibles brown in basal half and black in apical half, shiny, with pale yellowish pubescence and erect setae in edges.

Maxillary palpus pale brown, palpomeres short, semi-gloss, widened apically. Last palpomere longest, basal two thirds pale brown, apical third pale ochre yellow, only slightly widened apically, cylindrical with rounded apex. Palpomeres covered by short, indistinct pale setation.

Antennae reaching three fifths elytral length, narrow, from brown to dark brown, punctured by shallow small-sized punctation, covered by indistinct yellowish gray pubescence (longest in antennal scape). Antennomeres 1-5 semi-gloss, antennomeres 6-11 dull. Antennomeres widened apically, antennomeres 3 and 4 with very long sharp spine on inner side of apex (spines approximately the same length). Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.79: 0.26: 1.00: 0.77: 0.97: 0.79: 0.69: 0.56: 0.55: 0.50: 0.57.

Pronotum black, oval, elongate, shape of pronotum as in Fig. 17a. Pronotum 1.68 times longer than wide at base and 1.1 times longer than wide at widest point (near middle of pronotum). Lateral margins distinctly arcuate, anterior margin straight, base finely undulate. Pronotum indistinctly wider than elytra at humeri (almost the same wide). Dorsal surface with irregular punctation and irregular narrow filamentous folds, covered by short yellowish gray pubescence, denser in anterior and basal margins (as in Fig. 17a). Basal fifth with a few pale setae.

Scutellum black, roundly triangular, covered by sparse, recumbent grayish pubescence.

Elytra 4.61 mm long and 1.63 mm wide (2.82 times longer than wide), black with pale brown apex, suture black. Elytra slightly widened apically, punctured by dense small-sized punctation, covered by gray and black pubescence with goldenish lustre (as in Fig. 17a). Apical margin undulate, sutural and lateral angle with sharp spine, margin with yellowish setation.

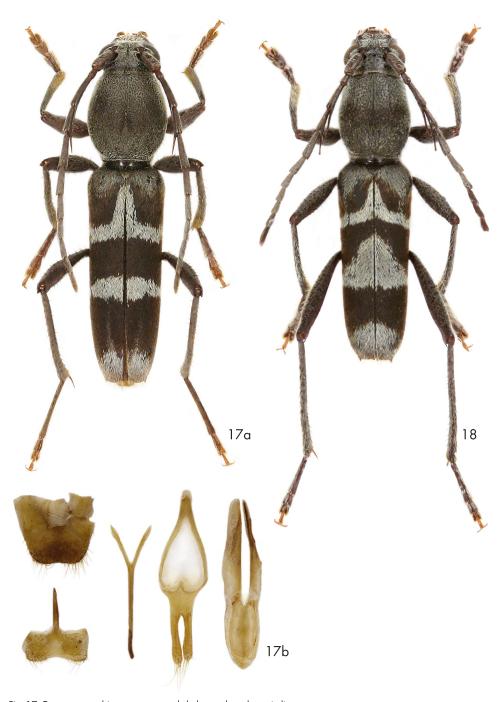


Fig. 17. Demonax excubitor sp. nov.: a-male holotype; b-male genitalia.
Fig. 18. Demonax seductus Viktora, 2016: male holotype from Indonesia (Siberut Island), (CPV).

Pygidium yellowish brown, punctured by shallow small-sized punctation, covered by indistinct pale pubescence, margins with yellowish setation, apex slightly rounded.

Legs long and narrow, from brown to black, punctured by dense shallow punctation, femora partly covered by short gray pubescence, rest of legs mostly covered by long yellowish setation (densest in apical part of tibiae). Tibiae widened apically, profemora widest, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi brown with paler last tarsomeres and claws, punctured by dense small-sized punctation, covered by yellowish setation. Metatarsomere 1 2.58 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black with dark brown coxae, partly punctured by small-sized punctation. Mesepisternum almost bald in basal half, covered by dense white pubescence in apical half. Metepisternum and metasternum almost completely covered by white pubescence except small spots of shiny setation in base and apex, pubescence slightly denser in metepisternum. Ventrites 1 and 2 largely covered by dense white pubescence except small spots of shiny setation in base, ventrites 3-5 with shiny pale setation only. Ventral side with a few colorless setae. Elytral epipleura black, undulate, relatively wide in base and very narrow in apex, punctured by dense small-sized punctation, covered by very short, indistinct shiny setation.

Genitalia as in Fig. 17b.

Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax seductus* Viktora, 2016 (Fig. 18), described from Indonesia (Siberut Island) and *Demonax promptus* Dauber, 2016, described from Indonesia (East Kalimantan).

Demonax excubitor sp. nov. distinctly differs from similar species D. seductus by narrower antennae, by antennomeres 6-10 only indistinctly serrate in outer side of apex (antennomeres 6-10 distinctly wider and strongly serrate in D. seductus), antennomeres 3 and 4 with very long sharp spine on inner side of apex (spines in antennomeres 3-4 wider, with rounded, markedly widened apex in D. seductus), by narrow transverse stripe of pale pubescence in the middle of elytra (large, semitriangular spot in D. seductus), and by distinctly longer metatarsi.

Demonax excubitor sp. nov. distinctly differs from similar species *D. promptus* by more robust body, by wider pronotum of different shape, by tarsi brown (ochre yellow in *D. promptus*), by distinctly shorter antennae (reaching three fifths elytral length, while antennae only shortly not reaching elytral apex in *D. promptus*), by antennae from brown to dark brown (antennomeres 8-11 pale yellow in *D. promptus*), and by narrower transverse stripe of pale pubescence in the middle of elytra than in *D. promptus*.

**Etymology.** From Latin *excubitor* (it means "guard").

**Distribution.** Malaysia (Perak).

# Demonax faustus sp. nov.

(Figs. 19-20)

Type locality. Vietnam, Ha Giang prov.

**Type material.** Holotype (♂): 'Vietnam' / 'Ha Giang' / '7/2020' / 'local collector', (CPV); Paratype: (1 ♀): 'CHINA: Yunnan/Honghe' / 'Dajianshan, 2060m' / '22°54′46′ N, 103°41′52′ E' / '11.vi.2018, ' / 'leg. A. Weigel', (CPV).

The types are provided with a printed red label: 'Demonax faustus sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'. 19a 20 19b

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

**Description.** Habitus of male holotype as in Fig. 19a. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 8.81 mm, widest in humeral part of elytra (1.75 mm), 5.0 times longer than wide.

Head black (blackish brown in anterior margin), narrow, widest through the eyes, slightly narrower than pronotum at widest point, with very dense small-sized punctation, in posterior part punctation coarser with a few larger punctures. Frons with very narrow, indistinct longitudinal furrow between eyes. Head covered by ochre yellowish pubescence, in frons and under eyes pubescence longer. Antennal insertions with sharp keel in inner side. Eyes goldenish brown, emarginate. Clypeus and labrum pale ochre yellow, shiny. Labrum with long yellowish setation. Mandibles blackish brown with black tip, shiny, with long yellowish pubescence and setation in edges.

Maxillary palpus brown, palpomeres short, semi-gloss, with indistinct small-sized punctation and yellowish setation. Last palpomere longest and largest, axe-shaped with rounded apex, apical third pale ochre yellow.

Antennae long (reaching five sevenths elytral length), narrow, brown, punctured by shallow small-sized punctation, covered by yellowish pubescence (longer and more distinct in antennomeres 1-7), antennomeres 2-7 with distinct yellowish setation in inner side. Antennomeres slightly widened apically. Antennomeres 3 and 4 with long sharp spine on inner side of apex (spine in antennomere 3 slightly longer than in antennomere 4). Antennomere 2 shortest, antennomeres 5 and 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.76: 0.32:1.00:1.00:1.32:1.33:1.10:0.90:0.92:0.77:0.94.

Pronotum black, elongate, shape of pronotum as in Fig. 19a. Pronotum 1.76 times longer than wide at base and 1.31 times longer than wide at widest point (before middle from base to apex). Lateral margins slightly arcuate, anterior margin almost straight, base indistinctly undulate. Pronotum narrower than elytra at humeri, dorsal surface with small-sized, dense granulate punctation, covered by dense ochre yellowish pubescence. Basal third with a few pale erect setae.

Scutellum black, triangular with rounded apex, covered by long ochre yellowish pubescence.

Elytra 5.75 mm long and 1.75 mm wide (3.28 times longer than wide), from pale yellowish brown in apex to black, narrow, indistinctly narrowing apically, punctured by small-sized indistinct punctation, each elytron with elevation in middle of basal part. Elytra covered by ochre yellowish and black pubescence (as in Fig. 19a). Each elytron rounded in apical margin, sutural angle with short sharp spine, lateral angle prolonged to longer sharp spine. Apical margin with long yellowish setation.

Pygidium ochre yellow, punctured by shallow small-sized punctation, with indistinct, long yellowish pubescence. Apex only slightly rounded, covered by long yellowish setation.

Legs long and narrow, from brown to dark brown, punctured by dense shallow punctation, covered by ochre yellowish pubescence (longest in profemora) and yellowish setation (longest and densest in apical part of tibiae). Meso- and metafemora partly bald in inner side. Tibiae slightly widened apically, profemora widest, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long and narrow, brown with pale brown claws, punctured by dense small-sized punctation, covered by ochre yellow pubescence and yellowish setation. Metatarsi very long, metatarsomere 1 3.15 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown in ventrites to black, partly with distinct punctation. Mesepisternum black, covered by dense whitish pubescence except basal third, metepisternum and metasternum completely covered by dense, recumbent whitish pubescence, ventrites covered

by recumbent whitish pubescence except narrow stripes in apex, pubescence in ventrites 4-5 distinctly sparser. Ventral side partly with long, pale erect setation. Elytral epipleura pale brown, semi-matt, narrow, covered by long, sparse yellowish pubescence.

Genitalia as in Fig. 19b.

**Female.** Habitus of female paratype as in Fig. 20. Body length from head to elytral apex 9.55 mm. Colour of female similar to male. Female with shorter antennae and distinctly shorter and narrower protarsi than in male.

**Differential diagnosis.** The most similar species are *Demonax fractus* Holzschuh, 2016 and *Demonax latispinus* Holzschuh, 2016 (Fig. 16), both described from Laos (Houaphanh), and *Demonax theresae* Pic, 1927, described from Vietnam (Lao Cai).

Demonax faustus sp. nov. differs from similar species D. fractus by shorter antennae and by distinctly different shape of dark pubescence spots on elytra (each elytron with large dark spot in one half and three quarters elytral length from base to apex in D. faustus, while small vague spots in one sixth, sometimes in two sixths, and five sixths elytral length from base to apex in D. fractus). Demonax faustus sp. nov. differs from similar species D. latispinus by distinctly narrower, more elongate body, by more elongate elytra, by different shape of pubescence spots on elytra, and by distinctly longer metatarsomere 1 in ratio to metatarsomeres 2 and 3 together than in D. latispinus.

Demonax faustus sp. nov. differs from similar species D. theresae by distinctly narrower pronotum (pronotum almost as wide as elytra at humeri in D. theresae), by longer metatarsomere 1 in ratio to metatarsomeres 2 and 3 together than in D. theresae, and by different shape of pubescence spots on elytra (D. faustus without dark spots in basal quarter, while D. theresae with distinct oblique spot in basal quarter of each elytron).

**Etymology.** From Latin faustus (it means "lucky").

**Distribution.** Vietnam (Ha Giang), China (Yunnan).

# Demonax plausibilis sp. nov.

(Figs. 21-22)

**Type locality.** Laos, Khammouane, Ban Khoun Ngeun env., N 18°07′, E 104°29′.

**Type material.** Holotype (3): 'LAOS centr., Khammouan prov.' / '4-16.xi., 25-30.xi. 2000' / 'BAN KHOUN NGEUN env.' / 'N 18°07', E 104°29', alt. 250m' / 'E. Jendek & P. Pacholátko leg.', (CLD); Paratypes: (1 3): same data as holotype, (CLD); (1 3): 'LAOS-C; KHAM MOUAN prov.' / 'BAN KHOUN NGEUN; -200m;' / '18°07' N, 104°29' E;' / 'L. Dembický leg.; 19.-31.v.2001', (CPV).

The types are provided with a printed red label: 'Demonax plausibilis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of male holotype as in Fig. 21a. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 11.37 mm (male paratype 14.84 mm), widest in humeral part of elytra (2.56 mm), 4.44 times longer than wide.

Head black (dark brown in anterior part), narrow, widest through the eyes, narrower than pronotum at widest point, with dense small-sized punctation, in posterior part with a few larger punctures. Head covered by recumbent yellowish gray pubescence, under eyes with erect

colorless setation. Antennal insertions with sharp keel on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale ochre yellow, shiny. Labrum with long yellowish setation. Mandibles blackish brown, shiny, with pale yellowish pubescence and setation in edges.

Maxillary palpus brown, palpomeres short, semi-gloss, with indistinct small-sized punctation and yellowish setation. Last palpomere longest and largest, axe-shaped with rounded apex, apex narrowly pale ochre yellow.

Antennae long, exceeding elytra (as in Fig. 21a), dark brown, punctured by shallow small-sized punctation, covered by yellowish gray pubescence in antennomeres 1-7 and darker yellowish pubescence in antennomeres 8-11 (pubescence in antennomeres 1-7 longer and more distinct, in antennomeres 8-11 very short and indistinct). Antennomeres 3-7 with yellowish setation in inner side. Antennomeres only slightly widened apically, antennomeres without spines with rounded apex. Antennomere 2 shortest, antennomere 7 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.86: 0.22: 1.00: 0.86: 1.26: 1.32: 1.46: 1.39: 1.37: 1.23: 1.39.

Pronotum black, relatively flat, elongate, shape of pronotum as in Fig. 21a. Pronotum 1.68 times longer than wide at base and 1.29 times longer than wide at widest point (four ninths pronotal length from base to apex). Lateral margins slightly arcuate, anterior margin distinctly undulate (arcuate in middle), base slightly undulate. Pronotum narrower than elytra at humeri. Dorsal surface with dense, small-sized granulate punctation, pronotal disc with two small depressions (dark spots in pronotal disc as in Fig. 21a). Pronotum covered by recumbent yellowish gray pubescence except two semicircular spots in pronotal disc (as in Fig. 21a).

Scutellum black, lengthwise semielliptical, covered by yellowish gray pubescence.

Elytra 7.24 mm long and 2.56 mm wide (2.82 times longer than wide), from blackish brown in apex to black, slightly narrowing apically, punctured by dense small-sized punctation, each elytron with elevation in middle of basal part. Elytra covered by yellowish gray and black short pubescence (as in Fig. 21a). Apex cut, elytron shorter in sutural angle, lateral angle sharp, without spine. Apical margin with long yellowish setation.

Pygidium pale brown, punctured by shallow small-sized punctation, covered by long, sparse, pale yellowish pubescence. Apex with almost straight apical margin and rounded angles, covered by yellowish setation.

Legs long and narrow, brown, punctured by dense shallow punctation, partly covered by short yellowish gray pubescence in femora and longer yellowish setation (longest and densest in apical part of tibiae). Tibiae slightly widened apically, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi long and narrow, brown, punctured by dense small-sized punctation, covered by dense yellowish setation. Metatarsomere 1 2.42 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from brown to blackish brown (paler in coxae and apical margins of ventrites), punctured by dense small-sized punctation. Mesepisternum largely with sparse, short indistinct setation and stripe of dense whitish pubescence in apex. Metepisternum and metasternum almost completely covered by recumbent whitish pubescence. Ventrites 1-3 covered by whitish pubescence and pale setation (pubescence denser in apical margins), ventrites 4-5 covered by pale setation only. Ventral side with sparse, indistinct, erect pale setation. Elytral epipleura brown, narrow, covered by short, shiny indistinct setation.

Genitalia as in Fig. 21b.

**Female.** Habitus of female paratype as in Fig. 22. Body length from head to elytral apex 17.56 mm. Colour of female similar to male. Female without distinct differences from male.

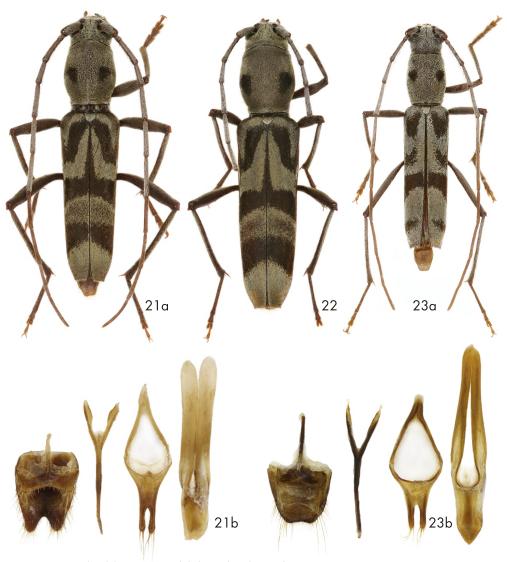


Fig. 21. Demonax plausibilis sp. nov.: a- male holotype; b- male genitalia.

Fig. 22. Demonax plausibilis sp. nov.: female paratype.

Fig. 23. Demonax cognoscibilis Viktora, 2020: a-male holotype from Vietnam (Lam Dong); b-male genitalia, (CPV).

**Differential diagnosis.** The most similar species is *Demonax cognoscibilis* Viktora, 2020 (Fig. 23).

Demonax plausibilis sp. nov. distinctly differs from similar species *D. cognoscibilis* by more robust body, by wider antennae, by wider pronotum with distinctly undulate anterior margin (narrower, more elongate pronotum with straight anterior margin in *D. cognoscibilis*), by different shape of pubescent spots on elytra, and by distinctly different shape of tegmen, median lobe and tergite 8 (as in Figs. 21b and 23b).

**Etymology.** From Latin *plausibilis* (it means "worthy of applause").

**Distribution.** Laos (Khammouane).

# Demonax ringletensis sp. nov.

(Fig. 24)

Type locality. Malaysia, Pahang, Cameron Highlands, Ringlet.

**Type material.** Holotype ( $\$ ): 'MALAYSIA - Pahang' / 'Cameron Highlands' / 'Ringlet' / '9.iv. - 16.iv.2014' / 'P. Viktora Igt.', (CPV); Paratype: ( $\$ 1  $\$ 2): 'MALAYSIA W., PERAK' / '40km SE of IPOH, 900 m' / 'Banjaran Titi Wangsa' / 'RINGLET, 29.iii.-15.iv.' / '2004 Čechovsky Petr Igt.', (CLD).

The types are provided with a printed red label: Demonax ringletensis sp. nov. / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of female holotype as in Fig. 24. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 8.0 mm (female paratype 7.45 mm), widest in humeral part of elytra (1.93 mm), 4.14 times longer than wide.

Head black, narrow, widest through the eyes, distinctly narrower than pronotum at widest point, with very dense small-sized punctation, in posterior part with a few larger punctures, posterior margin narrowly with coarser granulate punctation. Head covered by sparse, recumbent whitish pubescence except narrow stripe in posterior margin. Lateral margins under eyes with a few colorless setae. Antennal insertions extended to sharp elevation in inner side. Eyes blackish brown, emarginate. Clypeus and labrum ochre yellow, shiny. Labrum with indistinct punctation in edges, with yellowish setation. Mandibles brown with black base and tip, shiny, with grayish setation in edges.

Maxillary palpus pale brown, palpomeres short, semi-gloss, with indistinct small-sized punctation and short yellowish setation. Last palpomere longest, axe-shaped, widened apically, apex narrowly pale ochre yellow, rounded.

Antennae slightly over half the elytral length, narrow, filiform, dark brown (apex of antennomeres 1 and 2 pale brown), punctured by dense small-sized punctation, covered by indistinct, pale yellowish gray pubescence (pubescence in antennomeres 1-3 longer than in rest of antennomeres), apex of antennal scape and antennomeres 2-7 with long yellowish setation in inner side. Antennomeres widened apically, antennomeres 3 and 4 with very long spine on inner side of apex (spines approximately the same length), tip of spines slightly and indistinctly rounded. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.64:0.24:1.00:0.79:0.78:0.70:0.58:0.46:0.43:0.38:0.41.

Pronotum black, convex, robust, shape of pronotum as in Fig. 24. Pronotum 1.51 times longer than wide at base and 1.07 times longer than wide at widest point (near middle of pronotum). Lateral margins arcuate, anterior margin and base straight. Pronotum only slightly narrower than elytra at humeri. Dorsal surface with reticulate punctation, covered by short whitish pubescence in margins and very short, indistinct, dark shiny pubescence (as in Fig. 24). Apical half with long, erect colorless setae.

Scutellum widely triangular with rounded apex, with very sparse shiny, (almost invisible) pubescence.

Elytra 5.16 mm long and 1.93 mm wide (2.67 times longer than wide), black with blackish brown apex, slightly narrowing apically, punctured by dense small-sized punctation, covered by

white and black pubescence with goldenish lustre (as in Fig. 24). Apex cut, slightly undulate, sutural and lateral angle with short sharp spine. Apical margin with very long erect yellowish setation.

Pygidium dark brown, punctured by shallow small-sized punctation, covered by recumbent, indistinct pale pubescence. Apex slightly rounded, covered by yellowish setation.

Legs long and narrow, from blackish brown to black, punctured by dense small-sized punctation, partly covered by short whitish pubescence and long yellowish setation (densest in apical part of tibiae). Tibiae slightly widened apically, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Pro- and mesotarsi dark brown with paler claws, metatarsi brown (metatarsomere 1 blackish brown in basal half). Tarsi punctured by dense small-sized punctation, covered by yellowish setation (setation indistinct in metatarsi). Metatarsomere 1 2.0 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black with blackish brown coxae, punctured by dense small-sized punctation. Mesepisternum largely with indistinct short setae and stripe of dense white pubescence in apical part. Metepisternum covered by dense white pubescence except small places in base and apex. Metasternum largely covered by sparse white pubescence and spot of dense white pubescence in apex. Ventrites 1 and 2 covered by pale shiny setation in basal third and dense white pubescence in two apical thirds, ventrites 3-5 with shiny indistinct setation only. Ventral side partly with a few long, pale erect setae. Elytral epipleura black, undulate, relatively wide in base and very narrow in apex, punctured by dense small-sized punctation, covered by very short, indistinct shiny setation.

Male. Unknown.

**Differential diagnosis.** The most similar species is *Demonax algebraicus* Pascoe, 1869, described from Malaysia (Sarawak).

Demonax ringletensis sp. nov. differs from similar species *D. algebraicus* mainly by wider, less elongate pronotum (1.07 times longer than wide at widest point in *D. ringletensis*, while 1.14 times longer in *D. algebraicus*), by distinctly wider and shorter antennomeres 6-11, by dark brown antennae and tarsi (largely pale reddish brown in *D. algebraicus*), by less elongate elytra (2.67 times longer than wide in *D. ringletensis*, while 2.88 times longer in *D. algebraicus*) and by pale curved stripe in basal third of each elytron, which is reaching longer distance from base of elytra than in *D. algebraicus*.

**Etymology.** New species named after type locality, town Ringlet.

**Distribution.** Malaysia (Pahang, Perak). Note. The type locality (town Ringlet) is located on the border of the provinces Pahang and Perak.

## Demonax algebraicus Pascoe, 1869

Demonax algebraicus Pascoe, 1869: 629. Demonax despectus Dauber, 2016: 41, fig. 24. **syn. nov.** 

Type locality. Demonax algebraicus Pascoe, 1869: Malaysia (Sarawak). Demonax despectus Dauber, 2016: Indonesia, East Kalimantan, Bukit Bangkirai.

**Additional material.** (1  $\$ ): 'INDONESIA, Kalimantan Barat Pr.' / 'SW Kalimantan, 1000-1500 m alt.' / 'Singkawang region, I. 2018' / 'MT. BAWANG, Madi vill. env.' / 'local collector leg.', (CPV).

**Remark.** Based on a comparison of the type specimen (holotype female) of *Demonax algebraicus* Pascoe, 1869 (BMNH) with the description and holotype photo of *Demonax despectus* Dauber, 2016 (type material - female holotype in MZB) it is clear, that they belong to the same species. Differences between both species which are listed in Differential diagnosis in Dauber (2016: 42) (lighter color, wider stripe of whitish pubescence in elytral base, wider premedian stripe of whitish pubescence on elytra, redder legs, premedial curved stripe does not reach elytral margin, blurred edge of elytral stripes) don't correspond to reality nor can they be taken as species characters. Based on a comparison of the type specimens, species characters agree in all aspects. *Demonax despectus* Dauber, 2016 is thus treated as a junior synonym of *Demonax algebraicus* Pascoe, 1869.

**Distribution.** Malaysia (Sarawak), Indonesia (East Kalimantan, West Kalimantan).

## Demonax siberutensis sp. nov.

(Fig. 25)

**Type locality.** Indonesia, West Sumatra prov., Mentawai Islands, Siberut Island, Mt. Malancan.

**Type material.** Holotype  $\{\mathcal{P}\}$ : 'N. Siberut, 300 m' / 'Mt. Malancan, 18-21.i.2004' / 'St. Jakl Lgt', (CPV); Paratype:  $\{1\ \mathcal{P}\}$ : 'Mentawai isls, 50 M' / 'S. SIBERUT ISL, ii.2006' / 'SALAPPA vill env' / 'St. Jakl lgt', (CPV). The types are provided with a printed red label: 'Demonax siberutensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of female holotype as in Fig. 25. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 9.19 mm (female paratype 9.25 mm), widest in humeral part of elytra (2.07 mm), 4.43 times longer than wide.

Head black (blackish brown in anterior margin), narrow, widest through the eyes, narrower than pronotum at widest point, with very dense small-sized punctation, in posterior part with a few larger punctures. Head between antennal insertions with very narrow longitudinal furrow. Head covered by short, sparse, recumbent yellowish gray pubescence, under eyes with a few pale erect setae. Antennal insertions extended to sharp elevation on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale ochre yellow, shiny. Labrum narrowly with punctation in base, with yellowish setation in edges. Mandibles from blackish brown to black, shiny, with yellowish gray pubescence and a few setae in edges.

Maxillary palpus brown, palpomeres with narrowly paler apex. Palpomeres short, dull, with short yellowish setation. Last palpomere longest, cylindrical, slightly widened apically, with rounded apex.

Antennae reaching half elytral length, narrow, blackish brown except antennomere 8 and base of antennomere 9 (pale yellow), punctured by shallow small-sized punctation, antennomeres 1-6 and 10-11 covered by indistinct shiny pubescence (pubescence longer and more distinct in antennal scape), antennomeres 7-9 covered by short whitish pubescence. Antennomeres 2-5 with long yellowish setation on inner side. Antennomeres 1-4 semi-gloss, antennomeres 5-11 dull. Antennomeres widened apically, antennomeres 3 and 4 with very long sharp spine on inner side of apex (spines approximately the same length, spine in antennomere 3 indistinctly longer). Antennomere 2 shortest, antennomeres 3 and 5 longest. Ratios of relative lengths of

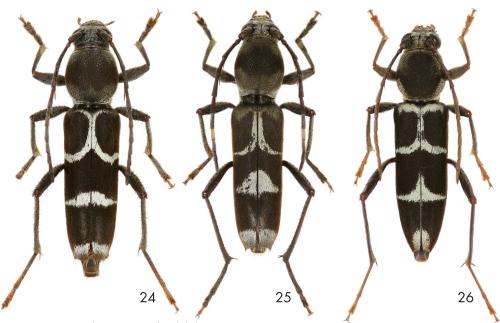


Fig. 24. Demonax ringletensis sp. nov.: female holotype.

- Fig. 25. Demonax siberutensis sp. nov.: female holotype.
- Fig. 26. Demonax ambiguus Dauber, 2008: female from Malaysia (Sabah), (CPV).

antennomeres 1-11 equal to: 0.85 : 0.30 : 1.00 : 0.96 : 1.03 : 0.87 : 0.78 : 0.58 : 0.59 : 0.47 : 0.57.

Pronotum black, slightly convex, elongate, shape of pronotum as in Fig. 25. Pronotum 1.63 times longer than wide at base and 1.2 times longer than wide at widest point (near middle of pronotum). Lateral margins and anterior margin slightly arcuate, base excised. Pronotum indistinctly narrower than elytra at humeri. Dorsal surface with small-sized reticulate punctation, covered by short yellowish and whitish pubescence in basal and apical third, rest of pronotal disc with very short, dark indistinct pubescence (as in Fig. 25). Basal third with long, erect colorless setae.

Scutellum black, widely triangular, punctured by shallow small-sized punctation, covered by sparse, pale (almost invisible) pubescence.

Elytra 5.79 mm long and 2.07 mm wide (2.79 times longer than wide), black with narrowly dark brown apex, suture black. Elytra slightly widened apically, punctured by small-sized punctation, covered by gray, yellowish gray and black pubescence with goldenish lustre (as in Fig. 25). Apex cut, slightly undulate, elytron distinctly shorter in sutural angle. Sutural angle with short sharp spine, lateral angle with longer sharp spine. Apical margin with long, erect yellowish setation.

Pygidium blackish brown with paler (brown) margins, semi-gloss, with sparse small-sized punctation, apex with straight apical margin and rounded angles, with long, erect yellowish setation.

Legs long and narrow, from blackish brown to black, punctured by small-sized punctation, partly covered by short whitish pubescence (mainly in pro- and mesofemora). Pro- and mesotibiae covered by whitish pubescence with long yellowish setation (densest in apical parts), metatibiae

with sparse dark setation. Tibiae slightly widened apically, metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi blackish brown with brown claws, covered by yellowish setation. Metatarsomere 1 2.35 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black with blackish brown coxae, punctured by dense small-sized punctation. Mesepisternum largely with indistinct short setation and stripe of dense white pubescence in apical part. Metepisternum largely covered by dense white pubescence except small places in base and apex. Metasternum covered by very sparse whitish pubescence and spot of dense white pubescence in apical part. Ventrites 1 and 2 largely covered by dense white pubescence except small spots of shiny setation in base, ventrites 3-5 with shiny yellowish setation only. Ventral side partly with a few long, pale erect setae. Elytral epipleura black, undulate, relatively wide in base and very narrow in apex, punctured by dense small-sized punctation, covered by very short, indistinct shiny setation.

Male. Unknown.

**Differential diagnosis.** The most similar species are *Demonax ambiguus* Dauber, 2008 (Fig. 26), described from Malaysia (Sabah) and *Demonax ventralis* Pascoe, 1869, described from Malaysia.

Demonax siberutensis sp. nov. differs from similar species *D. ambiguus* by distinctly elongate pronotum (almost circular in *D. ambiguus*), by blackish brown tarsi (pale reddish brown in *D. ambiguus*), by distinctly shorter metatarsi, by different colour of antennomeres, which are blackish brown except antennomere 8 and base of antennomere 9 (pale yellow) in *D. siberutensis*, while *D. ambiguus* has antennae unicolored brown. *D. siberutensis* has elytral apex in its entirety covered by pale pubescence, while *D. ambiguus* has elytral apex with spot of pale pubescence in middle at suture.

Demonax siberutensis sp. nov. differs from similar species D. ventralis by distinctly paler pubescence on elytra except pubescence in base, by different shape of pale stripes on elytra, mainly by curved stripe in basal third, which is narrower and reaching longer distance from base of elytra than in D. ventralis. A distinctive difference is colour of antennomeres, which are blackish brown except antennomere 8 and base of antennomere 9 (pale yellow) in D. siberutensis, while D. ventralis has antennomeres 1-5 brown and antennomeres 6-11 pale reddish brown.

**Etymology.** New species named after type locality, Siberut Island.

**Distribution.** Indonesia (West Sumatra - Siberut Island).

### Genus Rhaphuma Pascoe, 1858

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

# Rhaphuma fautrix sp. nov.

(Figs. 27-28)

**Type locality.** China, Yunnan, Gongshan County, Dulongjiang Township, Mt. Gaoligongshan, Bapo Village.

Type material. Holotype (3): 'Yunnan, CHINA' / 'Mt. Gaoligongshan,' / 'Bapo Village, Dulongjiang Township,' / 'Gongshan County, 23-25-VI-2017' / '1523 m, 27°41'18.22''N, 98°20'95.80''E' / 'Sweep Flower, coll. Yinghui Ll',

(CPV); Paratype: (1  $\,^{\circ}$ ): Yunnan, CHINA' / 'Mt. Gaoligongshan, Bapo Village' / 'Dulongjiang Township, Gongshan County' / '23-25-VII-2017, 1523 m, 27°41′18.22''N, ' / '98°20'59.80''E, Sweep Flower, coll. Yinghui Ll', (CPV). The types are provided with a printed red label: 'Rhaphuma fautrix sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.



Fig. 27. Rhaphuma fautrix sp. nov.: a-male holotype; b-male genitalia. Fig. 28. Rhaphuma fautrix sp. nov.: female paratype.

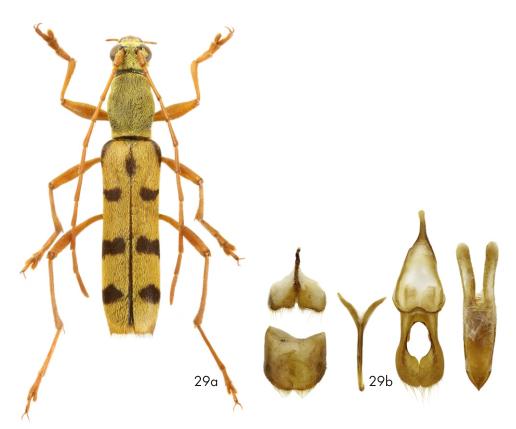


Fig. 29. Rhaphuma filipedes Holzschuh, 2019: a-male from Nepal; b-male genitalia, (CPV).

**Description.** Habitus of male holotype as in Fig. 27a. Body from brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 9.38 mm, widest in humeral part of elytra (2.0 mm), 4.69 times longer than wide.

Head black (blackish brown in anterior part), narrow, widest through the eyes, slightly narrower than pronotum at widest point, with very dense small-sized punctation (punctures partly with microgranulation). Head covered by dense, recumbent yellow pubescence, under and behind eyes with long, erect colorless setae. Antennal insertions extended to sharp elevation in inner side. Eyes goldenish brown, large, strongly emarginate. Clypeus and labrum pale brown, shiny. Labrum with long yellowish setation. Mandibles pale brown with darker base and blackish tip, with dense yellow pubescence in edges.

Maxillary palpus pale ochre yellow, semi-gloss, palpomeres short, with indistinct small-sized punctation and sparse yellowish setation. Last palpomere longest and largest, strongly widened apically, base very narrow, apex and angles rounded.

Antennae filiform, narrow, long (reaching six sevenths elytral length), pale ochre yellow, punctured by shallow small-sized punctation, covered by short yellowish pubescence (denser in antennomeres 6-11). Antennomeres 1-7 semi-gloss, antennomeres 8-11 dull. Antennomeres slightly widened apically, without spines. Antennomere 2 shortest, antennomere 3 longest. Ratios

of relative lengths of antennomeres 1-11 equal to: 0.66 : 0.25 : 1.00 : 0.73 : 0.81 : 0.81 : 0.82 : 0.72 : 0.74 : 0.68 : 0.92.

Pronotum black, elongate, cylindrical, narrow, shape of pronotum as in Fig. 27a. Pronotum 1.56 times longer than wide at base and 1.38 times longer than wide at widest point (three sevenths pronotal length from base to apex). Lateral margins only slightly arcuate, anterior margin finely arcuate, base straight. Pronotum narrower than elytra at humeri. Dorsal surface with dense, irregular, small-sized granulate punctation, almost completely covered by yellow recumbent pubescence. Basal third with a few erect colorless setae.

Scutellum triangular with rounded apex, completely covered by yellow recumbent pubescence. Elytra 6.25 mm long and 2.0 mm wide (3.12 times longer than wide), pale ochre yellow with darker (brown) places, suture from pale brown to dark brown in apex. Elytra narrow, shortly widened apically, punctured by large-sized sparse punctation in basal two thirds and dense small-sized punctation in apical third. Elytra covered by recumbent yellow pubescence and black pubescence in dark spots (humeri, under scutellum, three distinct spots on each elytron) (as in Fig. 27a). Apical margin pale brown, cut, slightly undulate, sutural and lateral angle with sharp spine. Apical margin with long pale setation.

Pygidium pale yellowish brown, punctured by dense, shallow small-sized punctation, covered by long yellow pubescence in apical half. Apex with yellowish setation, rounded.

Legs long and narrow, from ochre yellow to pale brown (darker in apical parts of meso- and metafemora), punctured by shallow punctation, partly covered by sparse yellowish pubescence (densest in profemora) and covered by yellowish setation (densest and longest in apical parts of tibiae). Tibiae widened apically. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi very long, punctured by dense small-sized punctation, covered by long yellowish setation. Metatarsomere 1 1.75 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black with blackish brown coxae and brown last ventrite, punctured by dense small-sized punctation. Mesepisternum covered by dense yellow pubescence except stripe in base, metepisternum and metasternum completely covered by dense yellow pubescence, ventrites covered by dense yellow pubescence except stripes in base and apex. Ventral side of body partly with long, erect colorless setation. Elytral epipleura ochre yellow, punctured by dense small-sized punctation, completely covered by yellow pubescence.

Genitalia as in Fig. 27b.

**Female.** Habitus of female paratype as in Fig. 28. Body length from head to elytral apex 10.00 mm. Colour of female similar to male. Female with slightly shorter antennae and more robust body than in male.

**Differential diagnosis.** The most similar species are *Rhaphuma filipedes* Holzschuh, 2016 (Fig. 29), described from Nepal and Tibet and *Rhaphuma sexnotata* Chevrolat, 1863.

Rhaphuma fautrix sp. nov. differs from the similar species R. filipedes by less elongate elytra, by darker meso- and metafemora, by elytra punctured by large-sized sparse punctation in basal two thirds (dense small-sized punctation in R. filipedes), and by distinctly different shape of tegmen (as in Figs. 27b and 29b).

Rhaphuma fautrix sp. nov. differs from the similar species R. sexnotata by distinctly less elongate elytra, by distinctly longer mesotarsi, by dark spot on suture below scutellum, which is missing in R. sexnotata, and by pronotum with a few erect colorless setae in basal third, while R. sexnotata has pronotum completely covered by long, dense, erect yellowish setation.

**Etymology.** From Latin fautrix (it means "girlfriend").

**Distribution.** China (Yunnan).

## Rhaphuma fortuna sp. nov.

(Figs. 30-31)

**Type locality.** Vietnam, Ha Giang Province.

**Type material.** Holotype [3]: 'Vietnam' / 'Ha Giang' / '7/2020' / 'local collector leg.', (CPV); Paratypes:  $\{1\ 3, 1\ 9\}$ : same data as holotype, (CPV);  $\{1\ 9\}$ : 'N VIETNAM;  $21^{\circ}27'N\ 105^{\circ}39E'$ ;' / '70km NW of Hanoi; Tam Dao;' / '2.-9.vi. 1999; 900-1200m;' / 'P. Spáčil leg.', (CLD).

The types are provided with a printed red label: 'Rhaphuma fortuna sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

**Description.** Habitus of male holotype as in Fig. 30a. Body black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 11.75 mm (male paratype 12.93 mm), widest in humeral part of elytra (2.76 mm), 4.25 times longer than wide.

Head black (blackish brown in anterior margin), narrow, widest through the eyes, narrower than pronotum at widest point. Dorsal surface with dense irregular punctation, punctures very small in frons and anterior part. Frons with distinct longitudinal furrow between eyes. Antennal insertions extended to sharp elevation on inner side. Head covered by yellow pubescence (longer in anterior part), with erect yellowish setation around eyes. Eyes brown, emarginate. Clypeus and labrum pale brown, shiny. Labrum with long yellowish setation in edges. Mandibles blackish brown with black tip, shiny, with pale yellow pubescence and setation in edges.

Maxillary palpus pale brown with pale ochre yellow margins, semi-gloss, with indistinct punctation and short pale setation. Last palpomere longest and largest, axe-shaped with rounded apex and angles.

Antennae long (reaching four fifths elytral length), narrow, filiform, punctured by small-sized punctation, covered by recumbent yellowish gray pubescence (longer in antennomeres 1-7), antennomeres 2-5 with long yellowish setation on inner side, antennomeres 6 and 7 with long yellowish setate on inner side of apex. Antennomeres slightly widened apically with rounded apex, without spines. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.67: 0.24: 1.00: 0.96: 1.10: 1.08: 1.01: 0.91: 0.82: 0.71: 0.82.

Pronotum black, slightly elongate, cylindrical, shape of pronotum as in Fig. 30a. Pronotum narrowest in anterior margin, 1.58 times longer than wide at base, 1.73 times longer than wide at anterior margin, and 1.24 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins indistinctly arcuate, anterior margin and base indistinctly undulate (almost straight). Pronotum narrower than elytra at humeri. Dorsal surface with coarse dense irregular punctation, covered by very short black pubescence and yellow pubescence in margins and median longitudinal stripe from base reaching one third pronotal length (as in Fig. 30a). Basal third with a few pale setae.

Scutellum black, lengthwise semielliptical, completely covered by dense yellow pubescence.

Elytra 8.26 mm long and 2.76 mm wide (3 times longer than wide), black, narrow, narrowing apically, punctured by dense punctation (punctures smaller in apical third). Elytra covered by recumbent yellow and black shiny pubescence (as in Fig. 30a). Apical margin cut, slightly undulate, elytra distinctly shorter in sutural angle. Sutural and lateral angles sharp, lateral angle

prolonged to wide sharp spine. Apical margin with long yellowish setation.

Pygidium blackish brown (paler in apical part), with very dense, irregular small-sized punctation, covered by recumbent pale yellow pubescence (except base), apex with yellowish setation, rounded.

Legs long and narrow, from blackish brown to black, punctured by dense punctation, partly covered by recumbent yellowish pubescence and erect yellowish setation (mainly in apical parts of tibiae and ventral side of metafemora and metatibiae). Tibiae slightly widened apically. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi relatively wide, blackish brown with brown claws, punctured by dense small-sized punctation, covered by yellowish gray pubescence and yellowish setation. Metatarsomere 1 1.61 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, partly punctured by small-sized punctation. Mesepisternum covered by dense pale yellow pubescence in three apical quarters, metepisternum and metasternum covered by dense pale yellow pubescence, ventrites covered by dense pale yellow pubescence except narrow stripes in apex. Ventral side of body partly with long, erect pale setation (densest in last ventrite). Elytral epipleura black, punctured by dense small-sized punctation, covered by short, dark shiny pubescence.

Genitalia as in Fig. 30b.

**Female.** Habitus of female paratype as in Fig. 31. Body length from head to elytral apex (female paratypes) from 13.97 to 14.82 mm. Colour of female similar to male (female with wider stripe of yellow pubescence in anterior part of pronotum). Female with slightly narrower tarsi than in male.

**Differential diagnosis.** The most similar species are *Rhaphuma ducissa* Viktora, 2019, described from Vietnam (Lam Dong), *Rhaphuma parca* sp. nov. (Figs. 33-34) and *Rhaphuma pseudobinhensis* Gressitt & Rondon, 1970 (Figs. 35-36).

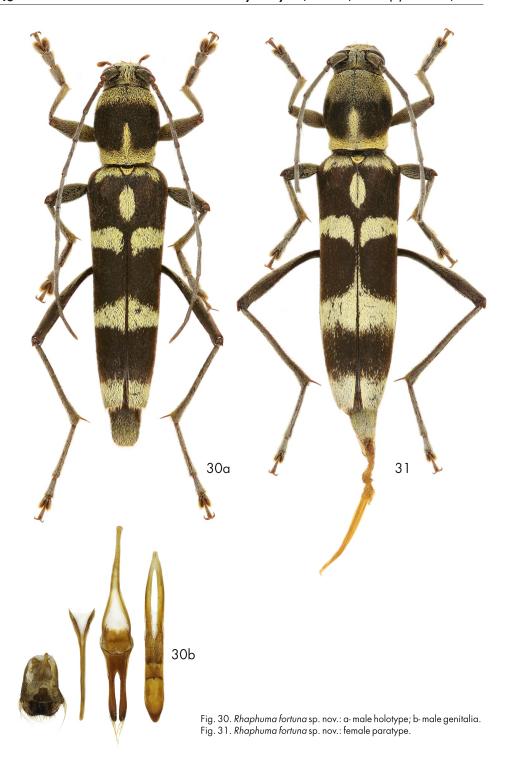
Rhaphuma fortuna sp. nov. differs from the similar species R. ducissa by distinctly narrower, more elongate body, by distinctly more elongate elytra, by pale yellow pubescence in elytra and pronotum (whitish pubescence in R. ducissa), and by different shape of pale pubescence stripes on elytra, especially in basal third of elytra.

Rhaphuma fortuna sp. nov. differs from the similar species R. parca by distinctly wider, less elongate body, by elytra distinctly widest at humeri and distinctly narrowing apically in full length, while almost parallel (shortly narrowing apically) elytra in R. parca, and by longer antennae. R. parca has pronotum with narrower, less distinct stripes of pale yellow pubescence and basal elytral third with different shape of pale yellow stripes (as in Figs. 30a and 33a). Species have different shapes of abdominal segments 8 and tegmens (as in Figs. 30b and 33b).

Rhaphuma fortuna sp. nov. differs from the similar species R. pseudobinhensis by darker legs and antennae, by distinctly wider, less elongate body, by elytra distinctly widest at humeri and distinctly narrowing apically in full length, while almost parallel (shortly narrowing apically) elytra in R. pseudobinhensis, by different shape of pale pubescence stripes on elytra, especially in basal third of elytra, and by distinctly different shape of abdominal segment 8 and tegmen (as in Figs. 30b and 35b).

**Etymology.** From Latin fortuna (it means "fortune").

**Distribution.** Vietnam (Ha Giang, Vinh Phuc).



### Rhaphuma musca sp. nov.

(Fig. 32)

Type locality. Vietnam. Lam Dong, Di Linh.

**Type material.** Holotype (3'): 'Vietnam' / 'Lam Dong' / 'Di Linh' / '4/2017' / 'local collector leg.', (CPV). The type is provided with a printed red label: 'Rhaphuma musca sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021'.

**Description.** Habitus of male holotype as in Fig. 32a. Body from blackish brown to black, elongate, very narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 6.74 mm, widest in humeral part of elytra (1.28 mm), 5.26 times longer than wide.

Head black (blackish brown in anterior margin), narrow, widest through the eyes, indistinctly narrower than pronotum at widest point. Dorsal surface punctured by dense small-sized punctation, between eyes with narrow, indistinct longitudinal furrow. Head covered by recumbent white pubescence (denser around eyes and in anterior part), under eyes with a few erect colorless setae. Eyes brown, large, distinctly emarginate. Clypeus pale brown, shiny. Labrum pale ochre yellow, shiny, with long yellowish setation. Mandibles brown with darker base and tip, with whitish pubescence and pale setation in edges.

Maxillary palpus pale brown, semi-matt, with indistinct punctation and short yellowish setation. Last palpomere longest and largest, axe-shaped with rounded apex and angles.

Antennae filiform, very narrow, long, exceeding elytra (as in Fig. 32a), pale brown, punctured by indistinct shallow punctation, covered by very sparse whitish pubescence in antennomeres 1-4 and shorter indistinct pale pubescence in antennomeres 5-11. Antennomeres 1-4 shiny, antennomeres 5-11 matte. Antennomeres shortly widened apically, antennomeres 3-6 with long yellowish setation on inner side. Antennomeres with rounded apex, without spines. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.50:0.22:1.00:0.85:1.27:1.15:1.10:0.91:0.76:0.58:0.50.

Pronotum black, elongate, narrow, narrowest anteriorly, widest basally (shape of pronotum as in Fig. 32a). Pronotum 1.5 times longer than wide at base (widest point) and 1.8 times longer than wide at anterior margin (narrowest point). Anterior margin indistinctly undulate, base straight. Pronotum narrower than elytra at humeri. Dorsal surface with dense, small-sized granulate punctation, covered by white pubescence, densest narrowly at base (as in Fig. 32a). Basal third with long, erect colorless setae.

Scutellum small, black, shield-shaped with rounded apex, covered by dense, distinct white pubescence.

Elytra 4.39 mm long and 1.28 mm wide (3.43 times longer than wide), from brown in apical part to black, narrow, slightly narrowing apically, punctured by coarse large-sized punctation in basal two thirds, punctation in apical third denser and punctures smaller. Elytra almost completely covered by sparse, long pale yellowish pubescence (as in Fig. 32a). Apical margin rounded, covered by yellowish setation.

Pygidium pale brown, punctured by dense small-sized punctation, covered by sparse yellowish pubescence, apex with yellow setation, distinctly arcuate.

Legs extremely long and narrow, pale brown (meso- and metafemora with ochre yellow basal part), punctured by shallow punctation, partly covered by short, sparse whitish pubescence (more distinct in femora) and long yellowish setation (longest and densest in apical halves of tibiae). Tibiae slightly widened apically. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tarsi very long and narrow, meso- and metatarsi brown, protarsi ochre yellow. Tarsi punctured by dense small-sized punctation, covered by long yellowish

setation (only sparse in metatarsi, relatively dense in protarsi). Metatarsomere 1 2.06 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured, almost completely covered by dense, recumbent white pubescence, partly with long, erect colorless setation. Elytral epipleura narrow, black in basal third, pale brown in apical two thirds, semi-matt with a few punctures and very sparse, short whitish pubescence.

Genitalia as in Fig. 32b.



Fig. 32. Rhaphuma musca sp. nov.: a-male holotype; b-male genitalia.

Female. Unknown.

**Differential diagnosis.** The most similar species are *Rhaphuma grisescens* Pic, 1928 and *Rhaphuma heres* Viktora, 2019.

Rhaphuma musca sp. nov. differs from the similar species R. grisescens by narrower, more elongate body, by more elongate elytra, by elytra almost completely covered by sparse, long pale yellowish pubescence (denser grayish pubescence in R. grisescens), by elytra covered by uniform

unicolored pubescence in *R. musca* (elytra with narrow, preapical, vague, whitish transverse stripe and narrow, vague, whitish transverse stripe beyond one half elytral length from base to apex, which continues as vague narrow stripe along the suture toward the elytral base in *R. grisescens*).

Rhaphuma musca sp. nov. differs from the similar species R. heres by narrower, more elongate body, by antennae unicolored pale brown (ochre yellow antennae with some antennomeres with darker apical part in R. heres). Species can be easily distinguished on the basis of colour of head, pronotum and elytra (black in R. musca, while pale reddish brown in R. heres).

**Etymology.** From Latin *musca* (it means "a fly").

**Distribution.** Vietnam (Lam Dong).

## Rhaphuma parca sp. nov.

(Figs. 33-34)

Type locality. Vietnam, Binh Thuan province, Dong Tien.

**Type material.** Holotype  $\{3\}$ : 'Vietnam' / 'Binh Thuan' / 'Dong Tien' / '6/2018' / 'local collector leg.', (CPV); Paratypes: (1 \$): same data as holotype, (CPV); (1 3): 'Dong Tien' / 'Binh Thuan' / 'Vietnam V. 2018' / 'local collector leg.', (CPV); (2 33, 1 \$): 'Vietnam' / 'Binh Thuan' / 'Dong Tien' / '5/2020' / 'local collector leg.', (CPV). The types are provided with a printed red label: 'Rhaphuma parca sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2021'.

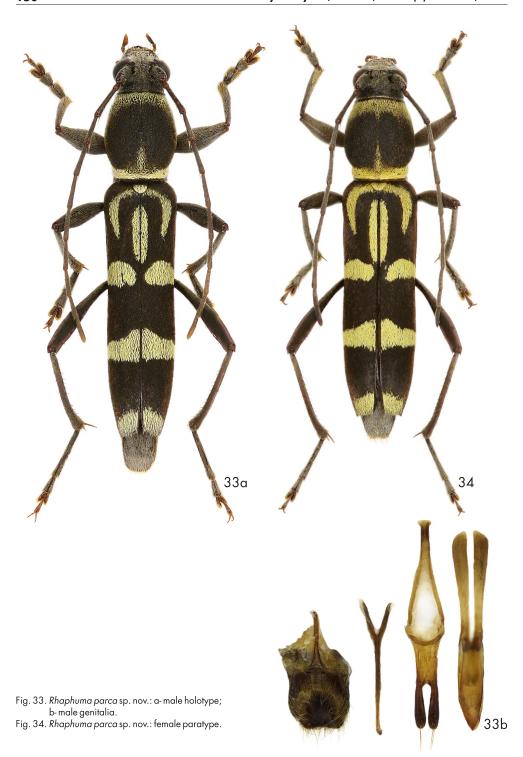
**Description.** Habitus of male holotype as in Fig. 33a. Body black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 9.98 mm (male paratypes from 10.84 to 11.38 mm), widest in humeral part of elytra and widest point of pronotum (1.87 mm), 5.33 times longer than wide.

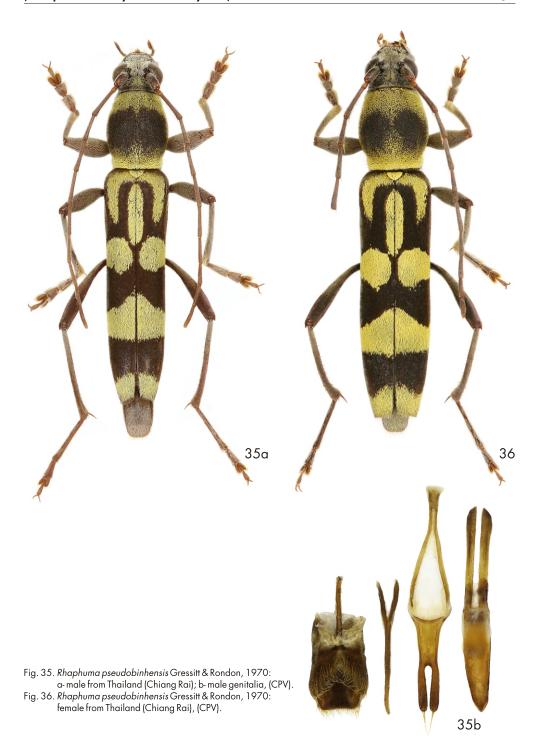
Head black (blackish brown in anterior margin), narrow, widest through the eyes, narrower than pronotum at widest point. Dorsal surface punctured by very dense small-sized punctation, near posterior margins punctures larger. Frons with narrow longitudinal furrow between eyes. Head covered by recumbent, relatively sparse, pale yellowish pubescence except stripe in posterior margin. Pubescence longer around eyes and in anterior part. Head with a few erect setae behind eyes. Eyes goldenish brown, emarginate. Clypeus and labrum pale ochre yellow, shiny. Labrum with long yellowish setation in edges. Mandibles blackish brown, largely black in base and tip, with pale yellow pubescence and a few very long, erect pale setae in edges.

Maxillary palpus pale brown with darker margins, semi-matt, with indistinct punctation and pale setation. Last palpomere longest and largest, axe-shaped with rounded apex and angles, apical half paler than basal half.

Antennae long (over three fifths elytral length), narrow, filiform, from pale brown do dark brown (apex of antennomeres paler), punctured by shallow small-sized punctation, covered by indistinct pale pubescence (longer in antennal scape), antennomeres 2-4 and apex of antennomeres 5-8 with yellowish setation on inner side. Antennomeres slightly widened apically with rounded apex, without spines. Antennomere 2 shortest, antennomere 5 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.70:0.23:1.00:0.94:1.17:1.12:1.05:0.97:0.83:0.79:0.82.

Pronotum black, slightly elongate, shape of pronotum as in Fig. 33a. Pronotum narrowest in anterior margin, 1.82 times longer than wide at base and 1.23 times longer than wide at widest point (near middle of pronotum). Lateral margins arcuate, anterior margin and base almost





straight. Pronotum indistinctly narrower than elytra at humeri (almost the same wide). Dorsal surface with dense, small-sized irregular punctation, covered by short, dark, shiny indistinct pubescence and pale yellow pubescence in margins and median longitudinal stripe from base reaching one third pronotal length (as in Fig. 33a). Basal third with a few pale erect setae.

Scutellum black, semicircular, completely covered by dense pale yellow pubescence.

Elytra 6.59 mm long and 1.87 mm wide (3.52 times longer than wide), from blackish brown to black, narrow, shortly narrowing apically, punctured by dense small-sized punctation, covered by recumbent pale yellow and black pubescence (as in Fig. 33a). Apical margin cut, elytra distinctly shorter in sutural angle. Apical margin with long pale setation.

Pygidium blackish brown, with dense small-sized punctation, covered by long, recumbent, relatively sparse yellowish pubescence, apex with yellowish setation, rounded.

Legs long and narrow, from blackish brown to black, punctured by dense shallow punctation, partly covered by pale yellowish pubescence (less distinct in metafemora and metatibiae) and erect yellowish setation (mainly in apical parts of tibiae and ventral side of metafemora and metatibiae). Profemora widest, tibiae slightly widened apically. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Tarsi blackish brown with brown claws, punctured by dense small-sized punctation, covered by long, relatively sparse yellowish setation. Metatarsomere 1 1.78 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, partly punctured by small-sized punctation. Mesepisternum shiny, partly punctured, covered by dense whitish pubescence in apical quarter. Metepisternum almost completely covered by dense whitish pubescence, metasternum largely covered by sparse whitish pubescence and spot of dense whitish pubescence in apex. Ventrites 1 and 2 covered by dense whitish pubescence except large spots in middle with pale yellowish setation, ventrites 3-5 largely covered by pale yellowish setation, partly with admixture of indistinct whitish pubescence. Ventral side of body with a few pale erect setae. Elytral epipleura black, semi-matt, punctured by dense small-sized punctation, covered by very short, indistinct shiny setation.

Genitalia as in Fig. 33b.

**Female.** Habitus of female paratype as in Fig. 34. Body length from head to elytral apex (female paratypes) from 10.65 to 11.15 mm. Colour of female similar to male. Female without distinct differences, body more robust than in male.

**Differential diagnosis.** The most similar species are *Rhaphuma ducissa* Viktora, 2019, *Rhaphuma fortuna* sp. nov. (Figs. 30-31) and *Rhaphuma pseudobinhensis* Gressitt & Rondon, 1970 (Figs. 35-36).

Rhaphuma parca sp. nov. differs from the similar species R. ducissa by distinctly narrower, more elongate body, by pale yellow pubescence in elytra and pronotum (whitish pubescence in R. ducissa), and by wider tarsi with distinctly shorter metatarsomere 1 (1.78 times longer than metatarsomeres 2 and 3 together, while 2.29 times longer in R. ducissa).

Rhaphuma parca sp. nov. differs from the similar species R. fortuna by distinctly narrower, more elongate body, by elytra almost parallel (shortly narrowing apically), while R. fortuna has elytra distinctly widest at humeri and distinctly narrowing apically in full length, and by shorter antennae. R. parca has pronotum with narrower, less distinct stripes of pale yellow pubescence and basal elytral third with different shape of pale yellow stripes (as in Figs. 30a and 33a). Species have different shapes of abdominal segments 8 and tegmens (as in Figs. 30b and 33b). Rhaphuma parca sp. nov. differs from the similar species R. pseudobinhensis by darker legs and antennae, by shorter antennae and tarsi, by pronotum with narrower, less distinct stripes of pale yellow pubescence, by elytra with different shape of yellow spots, which are distinctly smaller and

narrower in *R. parca* (as in Figs. 33a and 35a), by different shape of scutellum (narrower, semicircular in *R. parca*, while widely triangular with rounded apex in *R. pseudobinhensis*). Differences can also be found in shape of abdominal segment 8 and tegmen in apical part (as in Figs. 33b and 35b).

**Etymology.** From Latin parca (it means "goddess of destiny").

**Distribution.** Vietnam (Binh Thuan).

## Genus Xylotrechus Chevrolat, 1860

**Type species.** Clytus sartorii Chevrolat, 1860.

## Xylotrechus emeritus sp. nov.

(Fig. 37)

Type locality. Vietnam, Ha Giang prov.

**Type material.** Holotype ( $\mathcal{P}$ ): 'Vietnam' / 'Ha Giang' / '7/2020' / 'local collector leg.', (CPV). The type is provided with a printed red label: 'Xylotrechus emeritus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2021'.

**Description.** Habitus of female holotype as in Fig. 37. Body black, elongate, parallel, relatively robust, punctate, with pubescence. Body length from head to elytral apex 11.74 mm, widest in humeral part of elytra (3.19 mm), 3.68 times longer than wide.

Head black, short, widest through the eyes, narrower than pronotum at widest point, interspace between antennal insertions wide. Head punctured by coarse irregular punctation, frons with irregular carinae with irregular reticulation between them. Antennal insertions with sharp longitudinal keel on inner side. Head covered by sparse, long yellowish pubescence, which is heading in different directions. Head with long, erect yellowish setation (longest under eyes). Eyes blackish brown, strongly emarginate. Clypeus and labrum brown, shiny. Labrum with long yellowish setation in anterior margin. Mandibles from blackish brown to black, shiny, with long pale setation in edges.

Maxillary palpus brown with narrowly paler apex, shiny, with indistinct small-sized punctation and yellowish setation. Last palpomere longest, slightly widened apically with rounded apex.

Antennae short (reaching one fifth elytral length), antennomeres 1-4 relatively narrow, antennomeres 5-11 wide. Antennomeres widened apically, without spines, rounded in apex. Antennae dark brown, punctured by dense small-sized punctation, covered by yellowish gray pubescence (longer in first half of antennae). Antennomeres 1 and 2 with very long, erect pale setation in full length, antennomeres 3-5 with long pale setation mainly on inner side and apex. Antennomere 11 narrowing apically in apical half. Antennomere 2 shortest, antennomeres 1 and 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.00: 0.38: 1.00: 0.91: 0.82: 0.64: 0.65: 0.61: 0.55: 0.51: 0.77.

Pronotum black, slightly convex, narrowest at anterior margin, shape of pronotum as in Fig. 37. Pronotum 1.48 times longer than wide at base, 1.75 times longer than wide at anterior margin and 1.1 times longer than wide at widest point (before middle of pronotum from base to apex). Lateral margins arcuate, anterior margin and base almost straight. Pronotum only slightly narrower than elytra at humeri. Dorsal surface with coarse, irregular reticulate punctation (punctures with microgranulation inside), partly covered by long, recumbent yellowish

pubescence (densest in basal angles). Pronotal disc with two dark places without yellowish pubescence in middle and large dark spot near base (as in Fig. 37). Pronotum completely covered by very long, relatively dense, erect yellowish setation.

Scutellum black, widely shield-shaped, completely covered by long, recumbent yellowish pubescence.

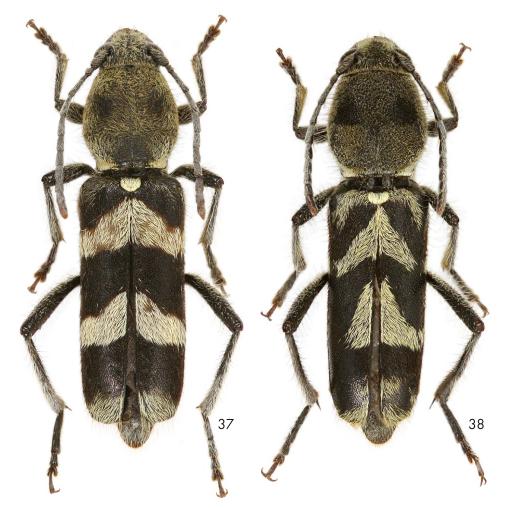


Fig. 37. Xylotrechus emeritus sp. nov.: female holotype. Fig. 38. Xylotrechus canus Holzschuh, 2003: female from Thailand (Chiang Rai), (CPV).

Elytra 7.46 mm long and 3.19 mm wide (2.33 times longer than wide), wide, parallel, punctured by coarse distinct punctation (punctures larger in basal part), from pale yellowish (in two transverse stripes with pale yellowish pubescence) to black, covered by long yellowish and dark shiny pubescence (as in Fig. 37). Basal part with long, erect, pale yellowish setation. Basal fifth of elytra with elevation in middle near scutellum. Elytral apex rounded, sutural angle sharp

without distinct spine, lateral angle almost rounded. Apical margin with long yellowish setation.

Pygidium blackish brown with paler apex, punctured by dense, small-sized shallow punctation, covered by long yellowish pubescence and yellowish setation in edges, apex distinctly arcuate.

Legs long and narrow, from blackish brown to black, punctured by large-sized punctation, partly covered by pale yellowish pubescence and very long, distinct colorless setation (less distinct in metatibiae). Metatibiae and metafemora longer than pro- and mesofibiae and pro- and mesofemora. Tibiae distinctly widened apically. Tarsi blackish brown, relatively narrow, with dense punctation, covered by long setation. Metatarsomere 1 1.72 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, punctured by small-sized punctation. Mesepisternum covered by dense whitish pubescence in apical third, metepisternum and metasternum partly covered by dense whitish pubescence, ventrites 1 and 2 covered by dense whitish pubescence except stripes in base, ventrites 3-5 covered by shiny setation (ventrite 3 with very small indistinct places with white pubescence). Ventral side of body completely covered by very dense and long, erect colorless setation. Elytral epipleura black, narrow, semi-matt, with a few long shiny setae.

Male. Unknown.

**Differential diagnosis.** The most similar species is *Xylotrechus canus* Holzschuh, 2003, described from Laos (Louang Namtha).

*Xylotrechus emeritus* sp. nov. differs from the similar species *X. canus* by different shape of pronotum (distinctly narrower in anterior margin than in base, while almost the same wide in anterior margin and base in *X. canus*), by distinctly longer pubescence in pronotal disc, by pronotal disc with large dark spot near base without pale pubescence, which is missing in *X. canus*, by different shape of scutellum (higher in *X. emeritus*), by different shape of pale pubescence on elytra, which are lower and more transverse in *X. emeritus*, by distinctly lower spot of pale pubescence in elytral apex and less distinct pubescence at humeri in *X. emeritus*.

**Additional material.** *Xylotrechus canus* Holzschuh, 2003:  $(1 \ \wp)$ : 'N THAlLAND' / 'Chiang Rai prov.' / 'Wiang Pa Pao env.' / '21. v. - 10. vi. 2011' / 'P. Viktora lgt.', (CPV) (Fig. 38). New for Thailand.

**Etymology.** From Latin *emeritus* (it means "emeritus, retiree").

**Distribution.** Vietnam (Ha Giang).

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