# New species of the genus *Demonax* Thomson, 1861 (Coleoptera: Cerambycidae: Cerambycinae: Clytini)

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#### Taxonomy, new species, Coleoptera, Cerambycidae, Clytini, Demonax, Oriental Region

Abstract. The following new species of the genus Demonax Thomson, 1861 are described: Demonax hispidus sp. nov. from Vietnam (Kon Tum), Demonax kokutensis sp. nov. from Thailand (Trat province - Ko Kut Island), Demonax rondoni sp. nov. from Laos (Attapeu, Khammouane) and Thailand (Loei, Nan), Demonax gialaiensis sp. nov. from Vietnam (Gia Lai), Demonax extraordinarius sp. nov. from Vietnam (Yen Bai), Demonax trusmadiensis sp. nov. from Malaysia (Sabah), Demonax bacoensis sp. nov. from Philippines (Mindoro Island - Oriental Mindoro province), Demonax sanluisensis sp. nov. from Philippines (Mindanao Island - Agusan del Sur province), Demonax lanaoensis sp. nov. from Philippines (Mindanao Island - Catabato province), Demonax zamboangaensis sp. nov. from Philippines (Luzon Island - Cagayan province), Demonax cagayanensis sp. nov. from Philippines (Luzon Island - Cagayan province), Demonax cagayanensis sp. nov. from Philippines (Luzon Island - Cagayan province), Demonax portines), Demonax gonzagaensis sp. nov. from Philippines (Luzon Island - Cagayan province), Demonax gonzagaensis sp. nov. from Philippines (Luzon Island - Lanao del Sur province, Davao del Sur province), Demonax malicoensis sp. nov. from Philippines (Mindanao Island - Lanao del Sur province, Davao del Sur province), Demonax malicoensis sp. nov. from Philippines (Nueva Vizcaya province, Quirino province, Nueva Ecija province), Demonax malicoensis sp. nov. from Philippines (Nueva Vizcaya province, Quirino province), Demonax soppongensis sp. nov. from Thailand (Mae Hong Son) and Demonax karnatakaensis sp. nov. from India (Karnataka). Habitus and male genitalia are illustrated.

#### INTRODUCTION

The tribe Clytini Mulsant, 1839 is one of the most species-rich tribes of Cerambycidae. Species of the tribe Clytini are known from all biogeographic zones of the Earth except the Antarctic Region. The tribe Clytini is currently divided into approximately 70 genera. From the Palaearctic, Oriental and Australian biogeographic regions, approximately 1630 species have been described so far (Tavakilian & Chevillotte 2024). Within these regions, the most species-rich genera are Demonax J. Thomson, 1861, Chlorophorus Chevrolat, 1863, Xylotrechus Chevrolat, 1860 and Rhaphuma Pascoe, 1858.

In the present paper, I describe new species of the genus *Demonax* from materials which were collected in the last twenty-five years. Descriptions of the following nineteen *Demonax* species are given: *Demonax hispidus* sp. nov. from Vietnam (Kon Tum), *Demonax kokutensis* sp. nov. from Thailand (Trat province - Ko Kut Island), *Demonax rondoni* sp. nov. from Laos (Attapeu, Khammouane) and Thailand (Loei, Nan), *Demonax gialaiensis* sp. nov. from Vietnam (Gia Lai), *Demonax extraordinarius* sp. nov. from Vietnam (Yen Bai), *Demonax trusmadiensis* sp. nov. from Malaysia (Sabah), *Demonax bacoensis* sp. nov. from Philippines (Mindoro Island - Oriental Mindoro province), *Demonax sanluisensis* sp. nov. from Philippines (Mindanao Island - Lanao del Sur province, Bukidnon province, Cotabato province), *Demonax zamboangaensis* sp. nov. from Philippines (Mindanao Island - Lanao del Sur province, Mindanao Island - Zamboanga del Norte province, Cotabato province), *Demonax santaanaensis* sp. nov. from Philippines (Luzon Island - Cagayan province, Quirino province), *Demonax ifugaoensis* sp. nov. from Philippines (Luzon Island - Ifugao province), *Demonax gonzagaensis* sp. nov. from Philippines (Luzon Island - Cagayan province, Ifugao province,

Isabela province), *Demonax waoensis* sp. nov. from Philippines (Mindanao Island - Lanao del Sur province, Davao del Sur province, Davao de Oro province), *Demonax dingalanensis* sp. nov. from Philippines (Luzon Island - Aurora province, Nueva Ecija province), *Demonax malicoensis* sp. nov. from Philippines (Nueva Vizcaya province, Quirino province), *Demonax soppongensis* sp. nov. from Thailand (Mae Hong Son) and *Demonax karnatakaensis* sp. nov. from India (Karnataka). Habitus and male genitalia are illustrated.

The new species are compared to similar congeners (Demonax albicinctus (Hope, 1831), Demonax alcanor Gressitt & Rondon, 1970, Demonax algebraicoides Dauber, 2016, Demonax ater Aurivillius, 1922, Demonax atkinsoni Gardner, 1940, Demonax biguttatus Aurivillius, 1922, Demonax christinae Holzschuh, 1983, Demonax coriaceocollis Aurivillius, 1922, Demonax deceptus Dauber, 2016, Demonax inhumeralis Pic, 1916, Demonax persimilis Chevrolat, 1863, Demonax piliger Holzschuh, 1992, Demonax sabinae Holzschuh, 1983, Demonax sausai Holzschuh, 1995, Demonax similis Aurivillius, 1928, Demonax triguttatus Aurivillius, 1928 and Demonax virescens Aurivillius, 1928).

#### MATERIAL AND METHODS

Observation and photography. The habitus of specimens and genitalia photographs were taken using 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:

BPBM Bernice P. Bishop Museum, Honolulu, U.S.A.;

CFR collection of Francesco Ruggiero, Viterbo, Italy;

CLD collection of Luboš Dembický, Brno, Czech Republic;

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

CRH collection of Roman Hergovits, Bratislava, Slovakia;

CTT collection of Tomáš Tichý, Opava, Czech Republic;

NRM Naturhistoriska Riksmuseet, Stockholm, Sweden.

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

#### **TAXONOMY**

# Tribe Clytini Mulsant, 1839

#### Genus Demonax Thomson, 1861

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

# Demonax hispidus sp. nov.

(Fig. 1)

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

**Type material.** Holotype (3): 'Vietnam' / 'Ngoc Linh' / 'Kon Tum' / '6/2022', (CPV). The type is provided with a printed red label: 'Demonax hispidus sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 1a. Body from blackish brown to black, elongate, narrow, parallel (only slightly narrowing apically), punctate, with pubescence. Body length from head to elytral apex 9.27 mm, the widest at humeral part of elytra (2.42 mm), 3.83 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with distinct, irregular granulate punctation (anterior part and frons with irregular small-sized punctation). Head covered by sparse whitish pubescence (longer and more distinct on frons) and very long, erect colourless setation (especially under eyes). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles blackish brown with narrowly black tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus pale largely ochre yellow, semi-glossy, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, distinctly widened apically, axe-shaped with distinctly rounded apex (apical margin paler).

Antennae relatively narrow, reaching three fifths elytral length. Antennameres blackish brown (antennameres 8-11 paler than rest of antennameres, antennameres 10-11 brown). Antennameres distinctly widened apically, with indistinct, shallow small-sized punctation, covered by whitish pubescence (longer and more distinct in antennameres 1-7), antennameres 1-5 semi-glossy. Antennameres 1-8 with long pale setation on inner side (mainly in apical parts). Antennameres 3-5 with sharp edge without distinctly prolonged spine in inner side of apex. Antennameres 4-10 serrate in outer side of apex. Antennamere 2 the shortest, antennamere 3 the longest. Ratios of relative lengths of antennameres 1-11 equal to: 0.68: 0.26: 1.00: 0.65: 0.70: 0.65: 0.59: 0.51: 0.45: 0.40: 0.50.

Pronotum black, almost symmetrical, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 1a). Pronotum 1.52 times longer than wide at base and 1.08 times longer than wide at the widest point (middle of pronotum). Lateral margins distinctly arcuate, anterior margin and base almost straight. Dorsal surface with dense small-sized, coarse reticulation with microgranulation in cells. Pronotal disc with small elevation with larger-sized reticulation near base. Pronotum covered by sparse long setation with goldenish lustre and very long, erect colourless setation. Pronotum with distinct stripe of dense white pubescence all around margin (invisible in lateral parts from dorsal view).

Scutellum black, small, triangular, with micropunctation, largely covered by dense white pubescence.

Elytra 5.73 mm long and 2.42 mm wide (2.36 times longer than wide), slightly narrowing apically, black, elytral surface largely semi-glossy. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark places and white pubescence (as in Fig. 1a). Elytral disc with long, erect colourless setation in basal part and around suture. Apex cut, apical margin undulate, lateral and sutural angle with short spine. Apical margin with very long pale setation.

Pygidium largely pale brown, shiny, with shallow micropunctation and larger-sized shallow punctation, covered by sparse, long pale pubescence. Apical margin rounded, with longer yellowish setation.

Legs long and narrow, largely blackish, with shallow punctation and micropunctation, partly covered by sparse whitish pubescence (mainly on femora) and longer yellowish setation (the densest in apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora.

Tibial spurs sharp. Tarsi long, narrow, blackish brown (claws reddish brown). Metatarsi the longest. Tarsi with dense, small-sized irregular punctation, covered by long, pale yellowish setation. Metatarsomere 1 2.03 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black (largely black), with small-sized irregular punctation, mesepisternum with stripe of dense white pubescence apically, metepisternum almost completely covered by dense white pubescence, metasternum with narrow stripe of dense white pubescence apically, ventrites 1-2 with large spots of dense white pubescence in apical parts, rest of ventrites partly covered by relatively sparse pale setation. Ventral side largely covered by long, erect colourless setation. Elytral epipleura black, distinctly undulate, with indistinct micropunctation, covered by sparse shiny pubescence.

Genitalia as in Fig. 1b.



Fig. 1. Demonax hispidus sp. nov.: a-male holotype; b-male genitalia.

Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax christinae* Holzschuh, 1983, described from Nepal and *Demonax inhumeralis* Pic, 1916, described from China (Sichuan). *Demonax hispidus* sp. nov. (based on comparison of males) differs from the similar species *D. christinae* mainly by the different shape of pronotum (distinctly wider in *D. hispidus*), the pronotum with distinct stripe of dense white pubescence all around margin (white pubescence only in basal pronotal angles in *D. christinae*), and the distinctly wider and serrate antennae (narrower and filiform in *D. christinae*).

D. hispidus (based on comparison of males) differs from the similar species D. inhumeralis mainly by the pronotum with distinct stripe of dense white pubescence all around margin (white pubescence only in basal pronotal angles in D. inhumeralis), the distinctly shorter metatarsi, the different shape of stripes of white pubescence on elytra, and the distinctly more hairy pronotum and legs in D. hispidus.

**Etymology.** From Latin *hispidus* (it means "hirsute").

**Distribution.** Vietnam (Kon Tum).

## Demonax kokutensis sp. nov.

(Figs. 2-3)

**Type locality.** Thailand, Trat province, Ko Kut Island.

**Type material.** Holotype (♂): 'C-THAILAND, Trat Prov.' / 'Ko Kut Isl., 1. - 11. 11.' / '2022, leg. A. Skale', (CPV). Paratype: (1 ♀): same data as holotype, (CPV).

The types are provided with a printed red label: 'Demonax kokutensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 2a. Body from blackish brown to black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 12.9 mm, the widest at humeral part of elytra (2.97 mm), 4.34 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular granulate punctation (anterior part and frons with irregular small-sized punctation/micropunctation). Head with narrow longitudinal furrow between eyes and in middle of frons). Head covered by recumbent yellowish pubescence and long, erect pale setation (especially under eyes). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles black, shiny, with yellowish pubescence and long yellowish setae in edges.

Maxillary palpus pale brown, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with distinctly rounded apex (apical margin paler).

Antennae narrow, reaching three quarters elytral length. Antennomeres from blackish brown to black, widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennomeres 1-6 semi-glossy, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3-10 serrate in outer

side of apex. Antennomeres 3-5 with sharp spines on inner side of apex (spines in antennomeres 3-4 long and distinct), antennomeres 1-2 rounded apically. Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.85:0.30:1.00:0.87:1.04:0.99:0.91:0.82:0.78:0.68:0.82.



Fig. 2. Demonax kokutensis sp. nov.: a-male holotype; b-male genitalia.

Fig. 3. Demonax kokutensis sp. nov.: female paratype.

Pronotum black, slightly elongate, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 2a). Pronotum 1.6 times longer than wide at base and 1.15 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins arcuate and slightly undulate, anterior margin slightly arcuate, base slightly excised. Dorsal surface with dense granulation and microgranulation between granules. Pronotum largely covered by short, recumbent yellowish pubescence except two vague spots on pronotal disc with dark pubescence (as in Fig. 2a).

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

Elytra 8.5 mm long and 2.97 mm wide (2.86 times longer than wide), almost parallel, blackish, largely semi-glossy. Elytra with dense small-sized punctation, covered by short dark pubescence with lustre in dark parts and recumbent yellowish pubescence (as in Fig. 2a). Apex cut, apical margin distinctly undulate, lateral angle with short spine. Apical margin with very long yellowish setation.

Pygidium blackish, with dense micropunctation, covered by sparse, recumbent yellowish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, blackish, with small-sized, shallow irregular punctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesofibiae and pro- and mesofemora. Tibial spurs sharp. Tarsi long and narrow, blackish brown (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsomere 1 2.48 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely blackish, with small-sized irregular punctation, almost completely covered by dense, pale yellowish grey pubescence, partly with indistinct pale setation (mainly on ventrites). Elytral epipleura blackish, narrow, only slightly undulate, with dense small-sized punctation, covered by short, indistinct shiny pubescence.

Genitalia as in Fig. 2b.

**Female.** Habitus of female paratype as in Fig. 3. Body length from head to elytral apex 11.8 mm. Colour of female similar to male. Female without distinct differences, body less elongate, tarsi narrower, protarsi and antennae shorter than in male (as in Figs. 2a and 3).

**Differential diagnosis.** The most similar species are *Demonax piliger* Holzschuh, 1992 (Fig. 6), *Demonax alcanor* Gressitt & Rondon, 1970 (Fig. 7), *Demonax atkinsoni* Gardner, 1940 and *Demonax rondoni* sp. nov. (Figs. 4-5).

Demonax kokutensis sp. nov. (based on comparison of males) differs from the similar species D. piliger mainly by the different shape of pronotum (more elongate with less arcuate lateral margins in D. piliger, while lateral margins more arcuate and slightly undulate in D. kokutensis), the distinctly shorter spines in antennomeres 3 and 4, the shorter spines in lateral angles of elytral apical margin (as in Figs. 2a and 6a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 2b and 6b).

D. kokutensis (based on comparison of males) differs from the similar species D. alcanor mainly by the different shape of pronotum (lateral margins regularly rounded in D. alcanor, while slightly undulate in D. kokutensis), the different shape of dark stripes on elytra (mainly in basal elytral third), the preapical dark transverse stripe on elytra uniformly covered by short dark pubescence in D. kokutensis, while covered by dark short pubescence with distinct even admixture of sparse

pale pubescence in *D. alcanor* (as in Figs. 2a and 7a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 2b and 7b).

D. kokutensis differs from the similar species D. atkinsoni by the different shape of pronotum (lateral margins regularly rounded in D. atkinsoni, while slightly undulate in D. kokutensis), the distinctly shorter metatarsi, and the different shape of dark stripes on elytra (transverse stripe in the middle of elytra almost straight in D. kokutensis, while distinctly arrow-shaped in D. atkinsoni; preapical dark transverse stripe uniformly covered by short dark pubescence in D. kokutensis, while covered by dark short pubescence with distinct even admixture of sparse pale pubescence in D. atkinsoni). Female of D. kokutensis has dorsal surface of pronotal disc with dense granulation, while female of D. atkinsoni has pronotal disc with distinct reticulation.

D. kokutensis (based on comparison of males) differs from the similar species D. rondoni mainly by the distinctly shorter metatarsi, the different structure of pronotal disc (denser and smaller-sized granulation in D. kokutensis), the different shape of dark stripes on elytra (mainly in basal elytral third) (as in Figs. 2a and 4a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 2b and 4b). Female of D. kokutensis has dorsal surface of pronotal disc with dense granulation, while female of D. rondoni has pronotal disc with distinct reticulation (as in Figs. 3 and 5).

**Etymology.** Toponymic, named after the type locality, Ko Kut Island in the province of Trat.

**Distribution.** Thailand (Trat).

# Demonax rondoni sp. nov.

(Figs. 4-5)

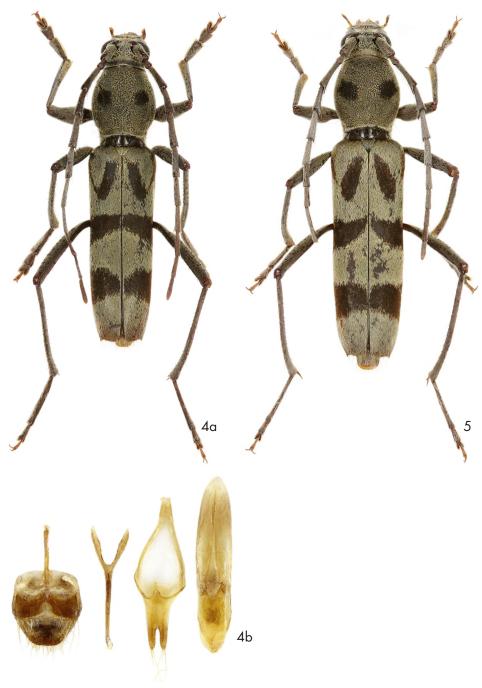
Type locality. Laos, Attapeu province, Annam Highlands mts., Nong Fa Lake env.

Type material. Holotype ( $\frak{d}$ ): 'LAOS: Attapeu prov.' / 'Annam Highlands mts.' / 'cca 1150m, NONG FA' / '(crater lake env.)' / '30.4.-4.5.2010, St. Jakl lgt.', (CPV), Paratypes: (1  $\frak{d}$ ): same data as holotype, (CPV); (1  $\frak{d}$ ): 'LAOS centr., Kham Mouan pr.' / 'NAKAI vill. env., ca. 70 km NNE' / 'Muang Khammouan, -560m' / '7 - 25. V 2002, M. Štrba leg.', (CRH); (1  $\frak{d}$ ): 'Thailand NE - Nan prov.' / 'Khun Nan NP' / '30. 4. 2004' / 'P. Viktora lgt.', (CPV); (1  $\frak{d}$ ): 'NE-THAILAND, LOEI prov.' / 'PHU KRADUNG N.P., 1300m' / '16°53'N 101°47'E' / 'M. Říha leg., 11.-15.v.1999', (CLD). The types are provided with a printed red label: 'Demonax rondoni sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 4a. Body from pale ochre yellow to black (largely blackish brown), elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 11.08 mm (male paratypes from 10.3 to 12.0 mm), the widest at humeral part of elytra (2.43 mm), 4.56 times longer than wide.

Head from brown in anterior margin to black (largely brown), narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular granulate punctation (anterior part and frons with irregular small-sized punctation/micropunctation). Head covered by recumbent yellowish pubescence and long, erect pale setation (especially under eyes). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles brown with narrowly blackish tip, shiny, with yellowish pubescence and long yellowish setae in edges.

Maxillary palpus ochre yellow, semi-matt, with micropunctation and short yellowish setation.



 $\label{eq:fig.4.Demonax} \emph{Fig. 4. Demonax rondoni} \ \emph{sp. nov.: a-male holotype; b-male genitalia.} \\ \emph{Fig. 5. Demonax rondoni} \ \emph{sp. nov.: female paratype.} \\$ 

Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with distinctly rounded apex (apical margin paler).

Antennae narrow, reaching four fifths elytral length. Antennomeres brown, widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennomeres 1-6 semi-glossy, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3-10 serrate in outer side of apex. Antennomeres 3 and 4 with distinct, long sharp spines on inner side of apex (spine in antennomeres 4 longer), antennomeres 1-2 rounded apically. Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.75:0.32:1.00:0.93:1.23:1.13:1.07:0.96:0.91:0.81:0.89.

Pronotum black, slightly elongate, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 4a). Pronotum 1.53 times longer than wide at base and 1.12 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins arcuate, anterior margin indistinctly arcuate (almost straight), base slightly undulate. Dorsal surface with dense granulation and microgranulation between granules. Pronotum largely covered by short, recumbent yellowish pubescence except two distinct spots on pronotal disc with dark pubescence (as in Fig. 4a). Pronotal disc with a few erect colourless setae.

Scutellum black, roundly triangular, completely covered by recumbent yellowish pubescence.

Elytra 7.04 mm long and 2.43 mm wide (2.89 times longer than wide), almost parallel, black with brown apex, semi-glossy in apical third, semi-matt in basal two thirds. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with goldenish lustre in dark parts and yellowish pubescence (as in Fig. 4a). Apex cut, apical margin distinctly undulate, lateral angle with distinct spine. Apical margin with very long yellowish setation.

Pygidium ochre yellow, shiny, with dense micropunctation, covered by sparse, recumbent yellowish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, sharp. Tarsi long and narrow, brown (claws pale reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsomere 1 2.63 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely blackish, with small-sized irregular punctation, largely covered by dense, pale yellowish grey pubescence (mesepisternum only with stripe of dense pubescence apically), partly with long, erect colourless or pale yellowish setation (mainly on ventrites). Elytral epipleura from blackish to brown in apical part, narrow, only slightly undulate, with small-sized punctation, covered by short, shiny pale yellowish pubescence.

Genitalia as in Fig. 4b.

**Female.** Habitus of female paratype as in Fig. 5. Body length from head to elytral apex 11.25 mm. Colour of female similar to male. Female without distinct differences, pronotal disc partly reticulated (granulated in male), tarsi narrower, protarsi and antennae shorter than in male (as in Figs. 4a and 5).

**Differential diagnosis.** The most similar species are *Demonax alcanor* Gressitt & Rondon, 1970 (Fig. 7), *Demonax kokutensis* sp. nov. (Figs. 2-3) and *Demonax gialaiensis* sp. nov. (Fig. 8).

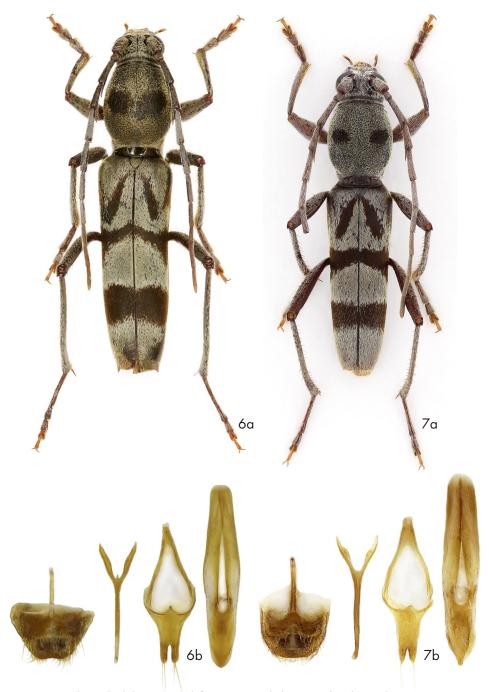


Fig. 6. Demonax piliger Holzschuh, 1992: a-male from Vietnam (Vinh Phuc), (CPV); b-male genitalia. Fig. 7. Demonax alcanor Gressitt & Rondon, 1970: a-male from Laos (Khammouane), (CPV); b-male genitalia.

Demonax rondoni sp. nov. (based on comparison of males) differs from the similar species D. alcanor mainly by the different shape of pronotum, the different shape of dark stripes on elytral basal third, the preapical dark transverse stripe on elytra uniformly covered by short dark pubescence in D. rondoni, while covered by dark short pubescence with distinct admixture of sparse pale pubescence in D. alcanor (as in Figs. 4a and 7a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 4b and 7b).

D. rondoni (based on comparison of males) differs from the similar species D. kokutensis mainly by the distinctly longer metatarsi, the different structure of pronotal disc, the different shape of dark stripes on elytra (mainly in basal elytral third) (as in Figs. 2a and 4a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 2b and 4b). Female of D. kokutensis has dorsal surface of pronotal disc largely with dense granulation, while female of D. rondoni has pronotal disc with distinct reticulation (as in Figs. 3 and 5).

D. rondoni (based on comparison of males) differs from the similar species D. gialaiensis mainly by the elytra less elongate and more parallel, the narrower pronotum of different shape, the distinctly longer antennae in proportion to body length, the different shape of dark spots/stripes on elytra, the distinctly shorter metatarsi (as in Figs. 4a and 8a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 4b and 8b).

**Note.** Gressitt & Rondon (1970: 268) published species records of *Demonax mulio* Pascoe, 1869 from the territory of Laos. In the same publication is on page 269, fig. 40j erroneously given as *Demonax mulio* species similar to *Demonax rondoni* sp. nov. *Demonax mulio* Pascoe, 1869 was described from Borneo and it is a quite different species. All Laotian specimens designated as *D. mulio* in the collection of BPBM are wrongly determined, these are different species. I don't know the verified record of *Demonax mulio* Pascoe, 1869 from the territory of Laos, data from Laos are caused by wrong determination.

**Etymology.** The name is dedicated to the memory of J. A. Rondon, a joint author of Cerambycids of Laos (Disteniidae, Prioninae, Philiinae, Aseminae, Lepturinae, Cerambycinae) (Gressitt & Rondon 1970).

**Distribution.** Laos (Attapeu, Khammouane), Thailand (Loei, Nan).

# Demonax gialaiensis sp. nov.

(Fig. 8)

Type locality. Vietnam, Gia Lai province.

Type material. Holotype (3): 'Vietnam' / 'Gia Lai' / '6/2021', (CPV). The type is provided with a printed red label: 'Demonax gialaiensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 8a. Body from brown to blackish brown, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 11.58 mm, the widest at humeral part of elytra (2.65 mm), 4.37 times longer than wide.

Head from brown in anterior margin to black (largely black), narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular granulate punctation (anterior part and frons with irregular small-sized punctation/micropunctation). Head covered by recumbent yellowish pubescence and long, erect pale setation (especially under eyes). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on

inner side. Eyes goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles blackish brown, shiny, with yellowish pubescence and long yellowish setae in edges.

Maxillary palpus ochre yellow, semi-glossy, with micropunctation and yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with indistinctly rounded, paler apical margin.

Antennae narrow, reaching two thirds elytral length. Antennomeres blackish brown, widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennomeres 1-6 semi-glossy, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3-10 serrate in outer side of apex. Antennomeres 3 and 4 with distinct, long sharp spines on inner side of apex (spine in antennomeres 4 longer), antennomeres 1-2 rounded apically. Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.75:0.30: 1.00:0.92:1.13:0.99:0.97:0.82:0.78:0.67:0.80.

Pronotum black, slightly elongate, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 8a). Pronotum 1.56 times longer than wide at base and 1.12 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins distinctly arcuate, anterior margin slightly arcuate, base slightly excised. Dorsal surface with dense granulation and microgranulation between granules. Pronotum largely covered by short, recumbent yellowish pubescence except two distinct spots on pronotal disc with dark pubescence (as in Fig. 8a). Pronotal disc with erect colourless setation in basal part.

Scutellum black, roundly triangular, completely covered by recumbent yellowish pubescence.

Elytra 7.32 mm long and 2.65 mm wide (2.76 times longer than wide), narrowing apically, black with brown apex, semi-glossy except basal part. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with goldenish lustre in dark parts and yellowish pubescence (as in Fig. 8a). Apex cut, apical margin indistinctly undulate, lateral angle with indistinct spine. Apical margin with very long yellowish setation.

Pygidium ochre yellow, shiny, with dense micropunctation, covered by sparse, recumbent yellowish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, sharp. Tarsi long and narrow, blackish brown (claws pale reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsomere 1 2.65 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely blackish (ventrites dark brown), with small-sized irregular punctation, almost completely covered by whitish pubescence (the densest on metepisternum), partly with long, erect colourless or pale yellowish setation (mainly on ventrites). Elytral epipleura blackish, narrow, only slightly undulate, with small-sized punctation, covered by short yellowish pubescence (as in dorsal elytral surface).

Genitalia as in Fig. 8b.

Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax alcanor* Gressitt & Rondon, 1970 (Fig. 7), *Demonax extraordinarius* sp. nov. (Fig. 9) and *Demonax rondoni* sp. nov. (Figs. 4-5).

Demonax gialaiensis sp. nov. (based on comparison of males) differs from the similar species D. alcanor mainly by the less elongate pronotum of different shape with more arcuate lateral margins, the different shape of dark spots/stripes on elytra, the distinctly longer metatarsi (as in Figs. 7a and 8a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 7b and 8b).

9a 8a 9b 8b

Fig. 8. Demonax gialaiensis sp. nov.: a-male holotype; b-male genitalia. Fig. 9. Demonax extraordinarius sp. nov.: a-male holotype; b-male genitalia.

D. gialaiensis (based on comparison of males) differs from the similar species D. extraordinarius mainly by the elytra more elongate and more narrowing apically, the wider pronotum of different shape with more arcuate lateral margins, the different predominant shade of pubescence (distinctly more yellowish in D. extraordinarius), the distinctly longer antennae, the different shape of dark spots/stripes on elytra, the distinctly longer metatarsi (as in Figs. 8a and 9a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 8b and 9b).

D. gialaiensis (based on comparison of males) differs from the similar species D. rondoni mainly by the elytra more elongate and more narrowing apically, the wider pronotum of different shape, the distinctly shorter antennae in proportion to body length, the different shape of dark spots/stripes on elytra, the distinctly longer metatarsi (as in Figs. 4a and 8a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 4b and 8b).

**Etymology.** Toponymic, named after the type locality, Gia Lai province in Vietnam's Central Highlands.

Distribution. Vietnam (Gia Lai).

# Demonax extraordinarius sp. nov.

(Fig. 9)

Type locality. Vietnam, Yen Bai province, Mu Cang Chai.

**Type material.** Holotype [3]: 'Vietnam' / 'Yen Bai' / 'Mu Cang Chai' / '6/2022' / '1800-2100m', (CPV). The type is provided with a printed red label: 'Demonax extraordinarius sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 9a. Body largely blackish brown, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 12.37 mm, the widest at humeral part of elytra (2.9 mm), 4.26 times longer than wide.

Head from dark brown in anterior margin to black (largely blackish), narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular granulate punctation (anterior part and frons with irregular small-sized punctation/micropunctation). Head covered by recumbent yellowish pubescence and long, erect pale setation (especially under eyes). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum dark brown, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles blackish brown, shiny, with yellowish pubescence and long yellowish setae in edges.

Maxillary palpus brown, semi-matt, with micropunctation and yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with rounded apex, apical margin paler.

Antennae narrow, reaching four sevenths elytral length. Antennomeres blackish brown, widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennomeres 1-6 semi-glossy, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3-10 serrate in outer side of apex. Antennomeres 3-5 with sharp spines on inner side of apex (spine in antennomeres 3 and 4 long and distinct, spine in antennomere 5 short and indistinct), antennomeres 1-2 rounded apically. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.72:0.30:1.00:0.80:0.96:0.87:0.82:0.68:0.67:0.57:0.71.

Pronotum black, slightly elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 9a). Pronotum 1.53 times longer than wide at base and 1.15 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins arcuate, anterior margin almost straight, base slightly excised. Dorsal surface with dense granulation and microgranulation between granules. Pronotum largely covered by short, recumbent yellowish pubescence except two distinct spots on pronotal disc with dark pubescence (as in Fig. 9a). Pronotal disc with a few, erect, very long colourless setae.

Scutellum black, roundly triangular, with microgranulation, completely covered by recumbent yellowish pubescence.

Elytra 8.15 mm long and 2.9 mm wide (2.81 times longer than wide), almost parallel, blackish with brown apex, semi-glossy in apical half. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with lustre in dark parts and yellowish pubescence (as in Fig. 9a). Apex cut, apical margin indistinctly undulate, lateral angle with spine. Apical margin with very long yellowish setation.

Pygidium pale brown, shiny, with dense micropunctation/microgranulation, covered by sparse, recumbent yellowish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, sharp. Tarsi long and narrow, blackish brown (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsomere 1 2.34 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely blackish, with small-sized irregular punctation, almost completely covered by yellowish pubescence (paler than in dorsal surface), partly with long, erect colourless or pale yellowish setation (mainly on ventrites). Elytral epipleura blackish, narrow, only slightly undulate, with small-sized punctation, covered by short yellowish pubescence (as in dorsal elytral surface).

Genitalia as in Fig. 9b.

#### Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax alcanor* Gressitt & Rondon, 1970 (Fig. 7), *Demonax kokutensis* sp. nov. (Figs. 2-3) and *Demonax gialaiensis* sp. nov. (Fig. 8). *Demonax extraordinarius* sp. nov. (based on comparison of males) differs from the similar species *D. alcanor* mainly by the different predominant shade of pubescence (distinctly more yellowish in *D. extraordinarius*), the distinctly shorter and wider antennae, the different shape of dark spots/stripes on elytra, the preapical dark transverse stripe on elytra uniformly covered by short dark pubescence in *D. extraordinarius*, while covered by dark short pubescence with distinct admixture of sparse pale pubescence in *D. alcanor* (as in Figs. 7a and 9a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 7b and 9b).

D. extraordinarius (based on comparison of males) differs from the similar species D. kokutensis mainly by the different shape of pronotum, the distinctly shorter and wider antennae, the different shape of dark spots/stripes on elytra (as in Figs. 2a and 9a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 2b and 9b).

D. extraordinarius (based on comparison of males) differs from the similar species D. gialaiensis

mainly by the elytra less elongate and less narrowing apically, the narrower pronotum of different shape with less arcuate lateral margins, the different predominant shade of pubescence (distinctly more yellowish in *D. extraordinarius*), the distinctly shorter antennae, the different shape of dark spots/stripes on elytra, the distinctly shorter metatarsi (as in Figs. 8a and 9a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 8b and 9b).

**Etymology.** From Latin extraordinarius (it means "unusual").

Distribution. Vietnam (Yen Bai).

## Demonax trusmadiensis sp. nov.

(Fig. 10)

Type locality. Malaysia, Sabah, Mt. Trus Madi.

**Type material.** Holotype (3): 'Malaysia, Sabah' / 'Mt. Trus-Madi' / '900m IV-11-2009' / 'local coll', (CPV). The type is provided with a printed red label: 'Demonax trusmadiensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 10a. Body from pale ochre yellow to black, elongate, narrow, almost parallel, punctate, with pubescence. Body length from head to elytral apex 5.4 mm, the widest at humeral part of elytra (1.33 mm), 4.06 times longer than wide.

Head from ochre yellow in anterior margin to black, narrow, the widest across the eyes, as wide as pronotum at the widest point. Dorsal surface with dense, irregular granulate punctation (anterior part and frons with irregular small-sized punctation/micropunctation). Head with narrow longitudinal furrow in middle of frons). Head covered by recumbent pale yellowish pubescence and long, erect pale setation (especially under eyes). Interspace between antennal insertions very narrow, antennal insertions prolonged to thorn on inner side. Eyes distinct, goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly with punctation, with long pale yellowish setation in edges. Mandibles ochre yellow with darker tip, shiny, with yellowish pubescence and long yellowish setae in edges.

Maxillary palpus pale yellowish, semi-glossy, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with rounded apex.

Antennae narrow, reaching three quarters elytral length. Antennomeres 6-11 ochre yellow, antennomeres 1-5 reddish brown, slightly widened apically, with shallow small-sized punctation, covered by shiny, pale yellowish pubescence (the longest on antennomeres 1-4), antennomeres 1-6 semi-glossy, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3-10 serrate in outer side of apex. Antennomeres 3 and 4 with distinct, long, slightly curved sharp spines on inner side of apex (spine in antennomere 3 more than twice long as in antennomere 4), antennomeres 1-2 and 5-11 rounded apically. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.68: 0.29: 1.00: 0.89: 0.81: 0.80: 0.78: 0.63: 0.60: 0.56: 0.84.

Pronotum black, elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 10a), the narrowest at anterior margin. Pronotum 1.65 times longer than wide at base and 1.38 times longer than wide at the widest point (middle of pronotum). Lateral margins arcuate, anterior margin and base almost straight. Dorsal surface with relatively sparse small-sized granulation and micropunctation/microgranulation between granules. Pronotum partly covered by

recumbent whitish pubescence (the densest in basal angles) and very long, erect pale setation (mainly in basal half) (as in Fig. 10a).

Scutellum black, small, triangular, covered by sparse whitish pubescence.



Fig. 10. Demonax trusmadiensis sp. nov.: a-male holotype; b-male genitalia.

Elytra 3.27 mm long and 1.33 mm wide (2.45 times longer than wide), only slightly narrowing apically, blackish, largely semi-glossy. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark parts and whitish pubescence (as in Fig. 10a). Apex cut, apical margin indistinctly undulate, sutural and lateral angle with indistinct short spine. Apical margin with very long yellowish setation.

Pygidium pale ochre yellow, shiny, with dense micropunctation, covered by sparse, indistinct yellowish pubescence, margins with yellowish setae. Apex distinctly rounded.

Legs long and narrow, reddish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely

glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs ochre yellow, sharp. Tarsi long and narrow, ochre yellow including claws, with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsi the longest, metatarsomere 1 1.8 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black (largely blackish), with small-sized irregular punctation, mesepisternum with stripe of dense white pubescence apically, metepisternum almost completely covered by dense white pubescence, metasternum largely covered by white pubescence (denser apically), ventrites 1-2 with large spots of dense white pubescence, rest of ventrites with long pale yellowish setation. Ventral side partly with sparse, erect colourless setation. Elytral epipleura from blackish brown to brown in apical part, slightly undulate, with small-sized punctation, covered by indistinct short pubescence.

Genitalia as in Fig. 10b.

Female, Unknown.

**Differential diagnosis.** The most similar species are *Demonax algebraicoides* Dauber, 2016 and *Demonax deceptus* Dauber, 2016, both described from Indonesia (Kalimantan). *Demonax trusmadiensis* sp. nov. differs from the similar species *D. algebraicoides* and *D. deceptus* mainly by the different shape of pronotum (more elongate, distinctly the narrowest at anterior margin in *D. trusmadiensis*), the shorter and less elongate elytra, and the distinctly paler and longer tarsi.

**Etymology.** Toponymic, named after the type locality, Mount Trus Madi.

**Distribution.** Malaysia (Sabah).

# Demonax bacoensis sp. nov.

(Figs. 11-12)

Type locality. Philippines, Mindoro Island, Oriental Mindoro province, Baco.

**Type material.** Holotype ( $\mathcal{S}$ ): 'PHILIPPINES' / 'Baco, Mindoro Oriental' / 'V. 2017, local collector leg.', (CPV). Paratype: (1  $\mathfrak{S}$ ): same data as holotype, (CPV).

The types are provided with a printed red label: 'Demonax bacoensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 11a. Body black, elongate, narrow, almost parallel (slightly narrowing apically), punctate, with pubescence. Body length from head to elytral apex 9.9 mm, the widest at humeral part of elytra (2.22 mm), 4.46 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent yellowish pubescence. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale yellowish, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown with black tip, shiny, with pale yellowish pubescence and long yellowish setae in edges.



Fig. 11. *Demonax bacoensis* sp. nov.: a- male holotype; b- male genitalia. Fig. 12. *Demonax bacoensis* sp. nov.: female paratype.

Maxillary palpus brown, semi-glossy, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with paler rounded apex.

Antennae narrow, reaching two thirds elytral length. Antennomeres blackish brown, widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennomeres 1-6 semi-glossy, antennomeres 2-5 with long yellowish setation on inner side. Antennomeres 6-10 slightly serrate in outer side of apex. Antennomeres 3 and 4 with distinct, long sharp spines on inner side of apex (spine in antennomere 3 slightly longer). Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.57:0.22:1.00:0.80:0.96:0.92:0.86:0.74:0.68:0.60:0.55.

Pronotum black, quite flat, slightly elongate, only indistinctly narrower than elytra at humeri (shape of pronotum as in Fig. 11a), the narrowest at anterior margin. Pronotum 1.67 times longer than wide at base and 1.11 times longer than wide at the widest point (two fifths pronotal length from base to anterior margin). Lateral margins only slightly arcuate (basal and anterior angles more arcuate), anterior margin and base almost straight. Dorsal surface with dense small-sized granulation. Pronotum covered by very short, recumbent yellowish pubescence (the densest in basal angles) except two dark transverse spots in middle of pronotal disc with dark pubescence (spots almost connected) (as in Fig. 11a). Pronotum with a few erect pale setae.

Scutellum black, small, roundly triangular, covered by indistinct, sparse pale pubescence.

Elytra 6.62 mm long and 2.22 mm wide (3 times longer than wide), narrowing apically, black with paler apex, semi-glossy in apical part. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark parts and pale yellowish/whitish pubescence (as in Fig. 11a). Apex cut, apical margin slightly undulate, sutural angle with short indistinct spine, lateral angle with distinct spine. Apical margin with very long yellowish setation.

Pygidium brown, shiny, with dense micropunctation, covered by sparse pale yellowish pubescence, margins with yellowish setae. Apex rounded.

Legs long and narrow, black, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, sharp. Tarsi long and narrow, blackish brown (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsi the longest and the narrowest, metatarsomere 1 2.34 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, with dense small-sized punctation, mesepisternum with stripe of dense white pubescence apically, metepisternum and metasternum almost completely covered by white pubescence (denser in metepisternum), ventrites 1-4 largely covered by whitish pubescence (denser and more distinct in ventrites 1-2), ventrites 3-5 with long and dense pale setation. Ventral side partly with erect colourless or pale yellowish setation. Elytral epipleura black, narrow, slightly undulate, with small-sized punctation, covered by indistinct, short shiny pubescence.

Genitalia as in Fig. 11b.

**Female.** Habitus of female paratype as in Fig. 12. Body length from head to elytral apex 10.5 mm. Colour of female similar to male. Female without distinct differences, pronotum less robust, pronotal disc with small-sized reticulation (small-sized granulation in male), tarsi shorter and narrower, antennae shorter than in male (as in Figs. 11a and 12).

**Differential diagnosis.** The most similar species are *Demonax virescens* Aurivillius, 1928 (Fig. 17), described from Philippines (Luzon Island - Nueva Vizcaya Province), *Demonax* 

lanaoensis sp. nov. (Figs. 13-14) and Demonax cagayanensis sp. nov. (Figs. 15-16).

Demonax bacoensis sp. nov. (based on comparison of females) differs from the similar species D. virescens mainly by the different predominant shade of pubescence (pale yellowish/whitish pubescence in D. bacoensis, while greenish in D. virescens), the different shape of pronotum (less elongate in D. bacoensis), the shorter antennae, and the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 12 and 17).

D. bacoensis (based on comparison of males) differs from the similar species D. lanaoensis mainly by the larger and more robust body, the different predominant shade of pubescence (pale yellowish/whitish pubescence in D. bacoensis, while distinctly yellowish in D. lanaoensis), the wider pronotum of different shape, the different shape and placement of pale pubescent stripes/spots on elytra (spot at elytral apex reaching lateral margins in D. bacoensis, while D. lanaoensis has spot at elytral apex placed near suture) (as in Figs. 11a and 13a), and the different shape of tegmen and median lobe (as in Figs. 11b and 13b).

D. bacoensis (based on comparison of males) differs from the similar species D. cagayanensis mainly by the larger and more robust body, the more elongate elytra, the different predominant shade of pubescence (pale yellowish/whitish pubescence in D. bacoensis, while greyish in D. cagayanensis), the pronotum of different shape with different dark spot on pronotal disc, the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 11a and 15a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 11b and 15b).

**Etymology.** Toponymic, named after the type locality, Baco municipality in the province of Oriental Mindoro.

**Distribution.** Philippines (Mindoro Island - Oriental Mindoro province).

# Demonax lanaoensis sp. nov.

(Figs. 13-14)

Type locality. Philippines, Mindanao Island, Lanao del Sur province, Wao.

Type material. Holotype (3): 'PHILIPPINES' / 'Mindanao, Wao' / 'Lanao del Sur' / 'IX. 2018', (CPV). Paratypes: (1 3): 'PHILIPPINES' / 'Wao, Lanao del Sur' / 'Mindanao' / 'X. 2016, local collector leg.', (CPV); (1 3): 'Philippines' / 'Mindanao' / 'Bukidnon' / 'Duminorog' / 'X. 2018', (CPV); (1 3): 'Wao' / 'Lanao del Sur' / 'Mindanao' / 'IX 2018', (CFR); (1 9): 'Philippines' / 'Mindanao' / 'Dado, Alamada' / 'North Cotabato' / 'III. 2019', (CPV). The types are provided with a printed red label: 'Demonax lanaoensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 13a. Body from blackish brown to black (largely black), elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 8.83 mm (male paratypes from 7.2 to 8.3 mm), the widest at humeral part of elytra (1.87 mm), 4.72 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent yellowish pubescence. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum ochre yellow, shiny, partly punctured, with long pale yellowish setation in

edges. Mandibles blackish brown with black tip, shiny, with pale yellowish pubescence and long pale setae in edges.

Maxillary palpus dirty ochre yellow, semi-glossy, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, axe-shaped with paler rounded apex.



Fig. 13. *Demonax lanaoensis* sp. nov.: a-male holotype; b-male genitalia. Fig. 14. *Demonax lanaoensis* sp. nov.: female paratype.

Antennae narrow, reaching four fifths elytral length. Antennameres blackish brown, slightly widened apically, with shallow small-sized punctation and micropunctation, covered by yellowish grey pubescence (the longest on antennal scape), antennameres 1-4 semi-glossy,

antennomeres 2-5 with long yellowish setation on inner side. Antennomeres 6-10 slightly serrate in outer side of apex. Antennomeres 3 and 4 with distinct, long, slightly curved sharp spines on inner side of apex (approximately the same length). Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73:0.24:1.00:0.81:0.95:0.90:0.87:0.75:0.74:0.66:0.82.

Pronotum black, quite flat, elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 13a), the narrowest at anterior margin. Pronotum 1.61 times longer than wide at base and 1.15 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins slightly arcuate, anterior margin and base almost straight. Dorsal surface with dense small-sized granulation. Pronotum covered by very short, recumbent yellowish pubescence (the densest in basal angles) except two dark spots in middle of pronotal disc with dark pubescence (as in Fig. 13a). Pronotum with a few erect pale setae.

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

Elytra 5.85 mm long and 1.87 mm wide (3.12 times longer than wide), elongate and very narrow, indistinctly narrowing apically, black with paler apex, largely semi-glossy. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark parts and yellowish pubescence (as in Fig. 13a). Apex cut, apical margin almost straight, sutural and lateral angle with short indistinct spine. Apical margin with very long yellowish setation.

Pygidium ochre yellow with narrowly brown margin, shiny, with dense micropunctation, covered by sparse yellowish pubescence, margins with yellowish setae. Apex rounded.

Legs long and narrow, blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, almost sharp. Tarsi long and narrow, blackish brown (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsi the longest and the narrowest, metatarsomere 1 2.24 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, partly with irregular small-sized punctation, apical two thirds of mesepisternum, margins of metasternum, metepisternum and ventrites covered by dense whitish pubescence. Ventral side partly with erect colourless setae. Elytral epipleura black, narrow, slightly undulate, with small-sized punctation, covered by short pubescence with goldenish lustre. Genitalia as in Fig. 13b.

**Female.** Habitus of female paratype as in Fig. 14. Body length from head to elytral apex 9.6 mm. Colour of female similar to male. Female without distinct differences, pronotum and elytra less elongate, antennae shorter than in male (as in Figs. 13a and 14).

**Differential diagnosis.** The most similar species are *Demonax virescens* Aurivillius, 1928 (Fig. 17), described from Philippines (Luzon Island - Nueva Vizcaya Province), *Demonax bacoensis* sp. nov. (Figs. 11-12) and *Demonax cagayanensis* sp. nov. (Figs. 15-16). *Demonax lanaoensis* sp. nov. (based on comparison of females) differs from the similar species *D. virescens* mainly by the different shape of pronotum (less elongate in *D. lanaoensis*),

D. virescens mainly by the different shape of pronotum (less elongate in D. lanaoensis), the different shape and placement of pale pubescent stripes/spots on elytra (spot at elytral apex reaching lateral margins in D. virescens, while D. lanaoensis has spot at elytral apex placed near suture, distinctly different are long longitudinal stripes near lateral margins in D. lanaoensis) (as in Figs. 14 and 17).

D. lanaoensis (based on comparison of males) differs from the similar species D. bacoensis mainly by the smaller and less robust body, the different predominant shade of pubescence (pale yellowish/whitish pubescence in D. bacoensis, while distinctly yellowish in D. lanaoensis), the narrower pronotum of different shape, the different shape and placement of pale pubescent stripes/spots on elytra (spot at elytral apex reaching lateral margins in D. bacoensis, while D. lanaoensis has spot at elytral apex placed near suture) (as in Figs. 11a and 13a), and the different shape of tegmen and median lobe (as in Figs. 11b and 13b).

D. lanaoensis (based on comparison of males) differs from the similar species D. cagayanensis mainly by the more elongate body, the different predominant shade of pubescence (greyish pubescence in D. cagayanensis, while distinctly yellowish in D. lanaoensis), the narrower pronotum of different shape with different dark spots on pronotal disc, the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 13a and 15a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 13b and 15b).

**Etymology.** Toponymic, named after the type locality, Lanao del Sur province.

**Distribution.** Philippines (Mindanao Island - Lanao del Sur province, Bukidnon province, Cotabato province).

# Demonax cagayanensis sp. nov.

(Figs. 15-16)

**Type locality.** Philippines, Luzon Island, Cagayan province, Santa Ana.

Type material. Holotype (3): 'PHILIPPINES' / 'Sta. Ana, Cagayan' / 'North Luzon' / 'IX. 2018, local collector leg.', (CPV). Paratypes: (1 3): 'PHILIPPINES' / 'Gonzaga, Cagayan' / 'North Luzon' / 'IX. 2018, local collector leg.', (CPV); (1 3): 'Philippines' / 'North Luzon' / 'Cagayan' / 'Sta. Ana, I. 2019', (CPV); (1 \$\varphi\$): 'Sierra Madre, Tapsoy' / 'Nagtipunan' / 'Quirino, Eastern Luzon' / 'PHILIPPINES' / 'IV. 2018', (CPV); (1 \$\varphi\$): 'Sierra Madre' / 'Desimungal' / 'Madela' / 'Quirino' / 'E.Luzon V 2016', (CFR).

The types are provided with a printed red label: 'Demonax cagayanensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 15a. Body largely black, elongate, parallel, narrow, punctate, with pubescence. Body length from head to elytral apex 7.2 mm (male paratypes from 6.7 to 6.9 mm), the widest at humeral part of elytra (1.75 mm), 4.11 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent greyish pubescence. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown with black tip, shiny, with greyish pubescence and long pale setae in edges.

Maxillary palpus dirty ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, slightly widened apically, apex cut.

Antennae narrow, reaching two thirds elytral length. Antennomeres dark brown, slightly widened apically, with shallow small-sized punctation and micropunctation, covered by indistinct

yellowish grey pubescence (the longest and more distinct on antennal scape), antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 6-10 only slightly serrate in outer side of apex. Antennomeres 3 and 4 with distinct, very long, slightly curved sharp spines on inner side of apex (spine in antennomere 3 indistinctly longer). Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.63:0.23:1.00:0.86:0.98:0.92:0.78:0.66:0.62:0.52:0.76.

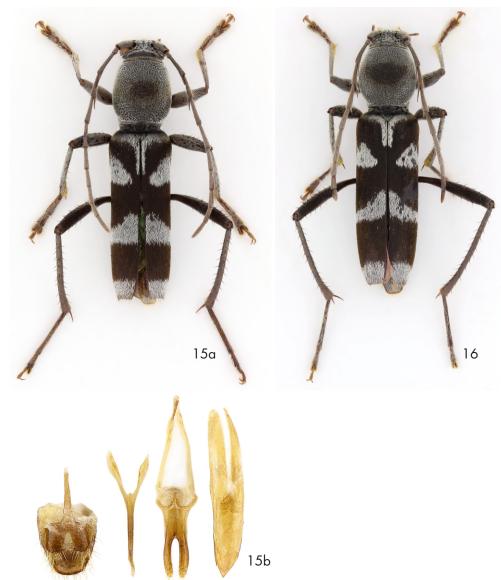


Fig. 15. Demonax cagayanensis sp. nov.: a-male holotype; b-male genitalia.

Fig. 16. Demonax cagayanensis sp. nov.: female paratype.

Pronotum black, quite flat, slightly elongate, only slightly narrower than elytra at humeri (shape of pronotum as in Fig. 15a), the narrowest at anterior margin. Pronotum 1.49 times longer than wide at base and 1.11 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins slightly arcuate, anterior margin and base indistinctly undulate (almost straight). Dorsal surface with dense small-sized granulation and micropunctation/microgranulation. Pronotum covered by very short, recumbent greyish pubescence (the densest in basal angles) except dark spot in middle of pronotal disc with dark pubescence (as in Fig. 15a). Pronotum with a few erect pale setae.

Scutellum black, small, triangular, with micropunctation, covered by sparse greyish pubescence.

Elytra 4.7 mm long and 1.75 mm wide (2.68 times longer than wide), indistinctly narrowing apically, blackish with paler apex, semi-glossy in apical part. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark parts and greyish pubescence (as in Fig. 15a). Apex cut, apical margin indistinctly undulate, sutural angle with very short indistinct spine, lateral angle with distinct spine. Apical margin with long yellowish setation.

Pygidium ochre yellow, shiny, with dense micropunctation, covered by relatively long whitish pubescence, margins with yellowish setae. Apex rounded.

Legs long and narrow, brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs reddish brown, sharp. Tarsi long and narrow, brown (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale yellowish setation. Metatarsi the longest and the narrowest, metatarsomere 1 2.31 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely black, with dense small-sized punctation, apical half of mesepisternum, metasternum, metepisternum and ventrites 1-2 covered by dense white pubescence. Ventrites 3-5 largely covered by dense and long goldenish pubescence and setation. Ventral side partly with erect colourless setae. Elytral epipleura blackish, narrow, slightly undulate, with small-sized punctation, covered by short dark pubescence with lustre.

Genitalia as in Fig. 15b.

**Female.** Habitus of female paratype as in Fig. 16. Body length from head to elytral apex (female paratypes) from 7.8 to 8.25 mm. Colour of female similar to male. Female without distinct differences, pronotal disc with small-sized reticulation (small-sized granulation in male), antennae shorter than in male (as in Figs. 15a and 16).

**Differential diagnosis.** The most similar species are *Demonax virescens* Aurivillius, 1928 (Fig. 17), described from Philippines (Luzon Island - Nueva Vizcaya Province), *Demonax bacoensis* sp. nov. (Figs. 11-12) and *Demonax lanaoensis* sp. nov. (Figs. 13-14).

Demonax cagayanensis sp. nov. (based on comparison of females) differs from the similar species D. virescens mainly by the different predominant shade of pubescence (greyish pubescence in D. cagayanensis, while greenish in D. virescens), the different shape of pronotum (less elongate in D. cagayanensis), the distinctly shorter antennae, the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 16 and 17).

D. cagayanensis (based on comparison of males) differs from the similar species D. bacoensis mainly by the smaller and less robust body, the less elongate elytra, the different predominant

shade of pubescence (pale yellowish/whitish pubescence in *D. bacoensis*, while greyish in *D. cagayanensis*), the pronotum of different shape with different dark spot on pronotal disc, the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 11a and 15a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 11b and 15b).

D. cagayanensis (based on comparison of males) differs from the similar species D. lanaoensis mainly by the less elongate body, the different predominant shade of pubescence (greyish pubescence in D. cagayanensis, while distinctly yellowish in D. lanaoensis), the wider pronotum of different shape with different dark spots on pronotal disc, the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 13a and 15a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 13b and 15b).

**Etymology.** Toponymic, named after the type locality, Cagayan province.

**Distribution.** Philippines (Luzon Island - Cagayan province, Quirino province).

# Demonax ifugaoensis sp. nov.

(Fig. 18)

**Type locality.** Philippines, Luzon Island, Ifugao province, Hungduan.

**Type material.** Holotype (3): 'PHILIPPINES' / 'Hungduan, Ifugao' / 'North Luzon' / 'IV. 2018, local collector leg.', (CPV). Paratype: (1 3): 'Philippines' / 'North Luzon' / 'Ifugao' / 'Hungduan, IV. 2020', (CPV). The types are provided with a printed red label: 'Demonax ifugaoensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 18a. Body largely black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 5.95 mm (male paratype 6.85 mm), the widest at humeral part of elytra (1.4 mm), 4.25 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, only indistinctly narrower than pronotum at the widest point (almost the same width). Dorsal surface with dense, irregular, small-sized granulate punctation/micropunctation (anterior part and frons with shallow irregular punctation/micropunctation). Head partly covered by recumbent pale yellowish pubescence and very long, erect colourless setae. Interspace between antennal insertions relatively narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum brown, shiny, narrow, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown, shiny, with pale yellowish pubescence and long pale setae in edges.

Maxillary palpus brown, semi-glossy, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere distinctly prolonged, knife-shaped.

Antennae narrow, reaching four fifths elytral length. Antennomeres blackish brown, slightly widened apically, with shallow small-sized punctation and micropunctation, covered by indistinct yellowish grey pubescence (the longest and more distinct on antennal scape), antennomeres 2-4 with long yellowish setation on inner side. Antennal scape wit a few wery long, erect colourless setae. Antennomeres 6-10 only slightly serrate in outer side of apex. Antennomeres 3 and 4 with sharp spines on inner side of apex (spine in antennomere 3 short and indistinct, spine in antennomere 4 longer and distinct). Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.52:0.29:1.00:0.74:0.89:0.86:0.80:0.69:0.64:0.62:0.81.

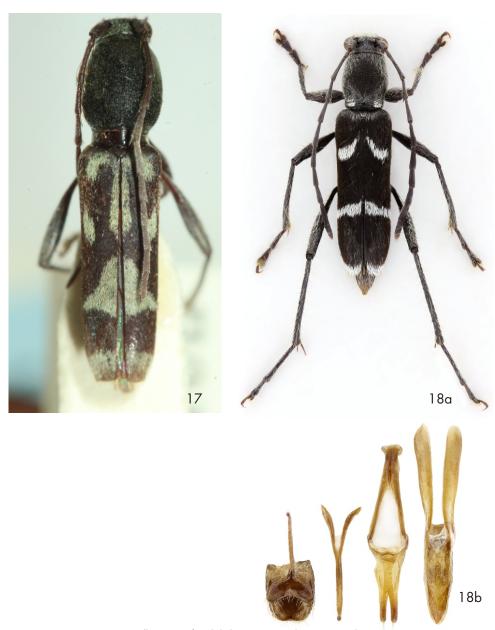


Fig. 17. Demonax virescens Aurivillius, 1928: female holotype, (NRM). Photo: Tomáš Tichý. Fig. 18. Demonax ifugaoensis sp. nov.: a-male holotype; b-male genitalia.

Pronotum black, elongate, cylindrical, narrower than elytra at humeri (shape of pronotum as in Fig. 18a), the narrowest at anterior margin. Pronotum 1.43 times longer than wide at base and 1.2 times longer than wide at the widest point (approximately middle of pronotum). Lateral

margins slightly arcuate, anterior margin and base almost straight. Dorsal surface with dense small-sized granulation and microgranulation between granules. Pronotum partly covered by long whitish pubescence (the densest in basal angles), middle of pronotal disc with large dark spot with sparse dark pubescence with goldenish lustre (as in Fig. 18a). Pronotum with distinct, very long, erect colourless setation.

Scutellum black, small, roundly triangular, covered by recumbent whitish pubescence.

Elytra 4.08 mm long and 1.4 mm wide (2.91 times longer than wide), almost parallel, black, largely semi-glossy. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with distinct lustre in dark parts and dense white pubescence (as in Fig. 18a). Elytral disc with very long, sparse, erect colourless setation. Apex cut, apical margin slightly undulate, sutural and lateral angle with short spine. Apical margin with long pale setation.

Pygidium from pale reddih brown in apex to dark brown, shiny, with shallow punctation and dense micropunctation, covered by sparse, long whitish pubescence, margins with yellowish setae. Apex significantly prolonged to rounded tip (as in Fig. 18a).

Legs long and narrow, blackish, with small-sized, shallow irregular punctation and micropunctation, partly covered by greyish pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae), femora and tibiae with sparse, very long, erect colourless setation. Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesofibiae and pro- and mesofemora. Tibial spurs reddish brown, almost sharp. Tarsi long and narrow, blackish (claws reddish brown), with dense, small-sized shallow punctation, covered by long, pale shiny setation. Metatarsi the longest, metatarsomere 1 2.01 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely black, with irregular small-sized punctation, partly with distinct spots of dense white pubescence (in mesepisternum, metepisternum, metasternum and ventrite 1). Ventral side with long, erect colourless setation. Elytral epipleura black, distinctly undulate, with small-sized punctation, covered by short pubescence with lustre.

Genitalia as in Fig. 18b.

#### Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax biguttatus* Aurivillius, 1922, described from Philippines (Luzon Island) and *Demonax similis* Aurivillius, 1828, described from Philippines (Mindanao Island).

Demonax ifugaoensis sp. nov. differs from the similar species D. biguttatus by the more elongate body, the darker body (black in D. ifugaoensis, while dark brown in D. biguttatus), the longer legs, and the different shape and placement of pale pubescent stripes/spots on elytra, mainly in basal third (curved stripe in D. ifugaoensis, while round spot in D. biguttatus).

*D. ifugaoensis* differs from the similar species *D. similis* by the smaller, more elongate body, the glossy pronotum and elytra (matt in *D. similis*), the narrower pronotum of different shape, the distinctly more hairly body, and the different shape and placement of pale pubescent stripes/spots on elytra, mainly in elytral apex.

**Etymology.** Toponymic, named after the type locality, Ifugao province.

**Distribution.** Philippines (Luzon Island - Ifugao province).

## Demonax santaanaensis sp. nov.

(Fig. 19)

Type locality. Philippines, Luzon Island, Cagayan province, Santa Ana.

**Type material.** Holotype (3): 'PHILIPPINES' / 'North Luzon' / 'Sta. Ana, Cagayan' / 'II. 2019', (CPV). The type is provided with a printed red label: 'Demonax santaanaensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 19a. Body from pale brown to blackish brown, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 5.24 mm, the widest at humeral part of elytra (1.2 mm), 4.36 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, slightly narrower than pronotum at the widest point. Dorsal surface with dense, irregular, shallow, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent pale yellowish pubescence. Interspace between antennal insertions relatively narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale brown, narrow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles brown, shiny, with pale yellowish pubescence and long pale setae in edges.

Antennae narrow, reaching four fifths elytral length. Antennomeres 1-2 ochre yellow, antennomere 3-6 brown, antennomeres 7-11 pale brown, with shallow small-sized punctation and micropunctation, covered by indistinct pale pubescence (the longest and more distinct on antennal scape), antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3 and 4 with distinct, extremely long, slightly curved spines with rounded tip (spine in antennomere 3 longer). Antennomere 2 the shortest, antennomere 4 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.71: 0.30: 1.00: 1.14: 1.08: 0.99: 0.94: 0.85: 0.78: 0.72: 0.89.

Pronotum black, elongate, only indistinctly narrower than elytra at humeri (shape of pronotum as in Fig. 19a), the narrowest at anterior margin. Pronotum 1.5 times longer than wide at base and 1.14 times longer than wide at the widest point (before middle of pronotum from base to apex). Lateral margins only slightly arcuate, anterior margin and base almost straight. Dorsal surface with irregular dense small-sized punctation/granulation and microgranulation (partly with irregular larger-sized punctures). Pronotum largely covered by short, recumbent whitish pubescence (the densest in basal angles), middle of pronotal disc with darker spot with darker pubescence with goldenish lustre (as in Fig. 19a). Pronotum with a few pale erect setae.

Scutellum black, small, triangular, covered by sparse indistinct pubescence.

Elytra 3.43 mm long and 1.2 mm wide (2.85 times longer than wide), slightly narrowing apically, blackish with paler apex, semi-glossy in apical part. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with goldenish lustre in dark parts and dense whitish pubescence (as in Fig. 19a). Apex cut, apical margin slightly undulate, sutural and lateral angle with short spine. Apical margin with long yellowish setation.

Pygidium pale ochre yellow, shiny, with shallow punctation and dense micropunctation, covered by sparse, long whitish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, pale brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by pale shiny pubescence (meso- and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer

than pro- and mesotibiae and pro- and mesofemora. Tibial spurs pale reddish brown, sharp. Tarsi long and narrow, pale brown (claws ochre yellow), with dense, small-sized shallow punctation, covered by long, pale shiny setation. Metatarsi the longest, metatarsomere 1 2.23 times longer than metatarsomeres 2 and 3 together.



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

Ventral side of body largely dark brown, with dense small-sized punctation, mesepisternum with spot of dense whitish pubescence apically, metepisternum completely covered by dense whitish pubescence, metasternum almost completely covered by whitish pubescence (sparser than in metepisternum), ventrites 1-2 with spots of dense whitish pubescence. Ventrites 3-5 covered by long goldenish pubescence and setation. Ventral side partly with erect colourless and yellowish setation (mainly in ventrites). Elytral epipleura dark brown, narrow, slightly undulate, with small-sized punctation, covered by short pubescence with goldenish lustre.

Genitalia as in Fig. 19b.

Female. Unknown.

**Differential diagnosis.** The most similar species is *Demonax coriaceocollis* Aurivillius, 1922, described from Philippines (Mindanao Island).

Demonax santaanaensis sp. nov. (based on comparison of males) differs from the similar species D. coriaceocollis by the smaller body, the less elongate pronotum of different shape with more arcuate lateral margins (pronotal disc with narrow longitudinal elevations in D. coriaceocollis, which is missing in D. santaanaensis), the shorter antennae (antennae exceeding elytral apex in D. coriaceocollis), and the different shape and placement of pale pubescent stripes/spots on elytra.

**Etymology.** Toponymic, named after the type locality, Santa Ana municipality in the province of Cagayan.

**Distribution.** Philippines (Luzon Island - Cagayan province).

## Demonax sanluisensis sp. nov.

(Fig. 20)

Type locality. Philippines, Mindanao Island, Agusan del Sur province, San Luis.

**Type material.** Holotype (♀): 'PHILIPPINES' / 'San Luis, Agusan Del Sur' / 'Mindanao' / 'IV. 2018, local collector leg.', (CPV).

The type is provided with a printed red label: 'Demonax sanluisensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of female holotype as in Fig. 20. Body largely blackish, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 6.1 mm, the widest at humeral part of elytra (1.36 mm), 4.48 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, only slightly narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent whitish pubescence. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes brown, emarginate. Clypeus and labrum dirty ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown with narrowly black tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus dirty ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, distinctly widened apically with rounded apical margin.

Antennae narrow, reaching four fifths elytral length. Antennomeres 1-2 pale reddish brown, antennomere 3-6 pale brown, antennomere 7 pale yellowish with pale brown basal half, antennomeres 8-10 pale yellowish, with shallow small-sized punctation and micropunctation, covered by indistinct pale pubescence (the longest and more distinct on antennal scape), antennomeres 3-4 with long yellowish setation on inner side. Antennomeres 3 and 4 with distinct, extremely long, slightly curved spines with extended and rounded tip (spine in antennomere 3 longer). Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.71:0.41:1.00:1.45:1.70:1.45:1.37:1.18:1.15:1.07:-

Pronotum black, elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 20), the narrowest at anterior margin. Pronotum 1.52 times longer than wide at base and 1.28 times longer than wide at the widest point (middle of pronotum). Lateral margins only slightly arcuate, anterior margin and base almost straight. Dorsal surface with dense small-sized granulation. Pronotum largely covered by very short, recumbent whitish pubescence (the densest in basal angles) (as in Fig. 20). Pronotum with a few colourless erect setae.

Scutellum black, small, triangular, covered by sparse, recumbent whitish pubescence.

Elytra 4.03 mm long and 1.36 mm wide (2.96 times longer than wide), almost parallel, blackish, semi-glossy in apical part. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with goldenish lustre in dark parts and denser whitish pubescence (as in Fig. 20). Apex cut, apical margin almost straight, sutural and lateral angle with short indistinct spine. Apical margin with a few yellowish setae.

Pygidium pale reddish brown, shiny, microwrinkled, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, blackish brown (profemora brown), with small-sized, shallow irregular punctation and micropunctation, partly covered by greyish pubescence (meso- and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs pale reddish brown, sharp. Tarsi long and narrow, dark brown (claws pale reddish brown), with dense, small-sized shallow punctation, covered by long, pale shiny setation. Metatarsi the longest, metatarsomere 1 2.56 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely blackish, with dense small-sized punctation, mesepisternum with spot of dense white pubescence apically, metepisternum and metasternum almost completely covered by dense white pubescence, ventrites 1-2 with large spots of dense whitish pubescence. Ventral side partly with erect colourless setae. Elytral epipleura blackish, narrow, slightly undulate, with small-sized punctation, covered by short pale pubescence.

Male. Unknown.

**Differential diagnosis.** The most similar species are *Demonax coriaceocollis* Aurivillius, 1922, *Demonax zamboangaensis* sp. nov. (Fig. 21) and *Demonax gonzagaensis* sp. nov. (Fig. 22).

Demonax sanluisensis sp. nov. differs from the similar species D. coriaceocollis by the smaller body, the pronotum with distinct stripe of white pubescence at basal margin (it is missing in D. coriaceocollis), the pronotal disc without elevations (pronotal disc with distinct narrow longitudinal elevations in D. coriaceocollis), the different colour of antennomeres (antennomeres 8-10 pale yellowish in D. sanluisensis, while antennae completely blackish brown in

D. coriaceocollis), and the different shape and placement of pale pubescent stripes/spots on elytra.

D. sanluisensis differs from the similar species D. zamboangaensis by the less elongate body, the different colour of legs and antennomeres (antennomeres reddish brown with antennomeres 8-10 pale yellowish in D. sanluisensis, while antennae completely ochre yellow in D. zamboangaensis), and the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 20 and 21a).

D. sanluisensis (based on comparison of females) differs from the similar species D. gonzagaensis by the narrower and more elongate body, the narrower pronotum with less arcuate lateral margins, the pronotal disc with small-sized granulation (reticulation in D. gonzagaensis), the longer antennae, the different colour of legs and antennomeres (antennomeres reddish brown with antennomeres 8-10 pale yellowish in D. sanluisensis, while antennae completely blackish brown in D. gonzagaensis), and the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 20 and 22).

**Etymology.** Toponymic, named after the type locality, San Luis municipality in the province of Agusan del Sur.

**Distribution.** Philippines (Mindanao Island - Agusan del Sur province).

# Demonax zamboangaensis sp. nov.

(Fig. 21)

Type locality. Philippines, Mindanao Island, Zamboanga del Norte province, Sandayong.

**Type material.** Holotype (3): 'Philippines' / 'Mindanao' / 'Zamboanga Del Norte' / 'Sandayong, V. 2020', (CPV). Paratype: (1 3): 'Mindanao' / 'Jun 2014; Philippines' / 'Maqpet [Magpet]' / 'S Cotobato [Cotabato]' / 'col Ismael', (CTT). The types are provided with a printed red label: 'Demonax zamboangaensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 21a. Body largely blackish, elongate, very narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 5.27 mm (male paratype 5.5 mm), the widest at humeral part of elytra (1.06 mm), 4.97 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, only indistinctly narrower than pronotum at the widest point (almost the same width). Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent whitish pubescence (very dense on frons, sparse in basal part). Frons with very narrow longitudinal furrow in middle. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes brown, emarginate. Clypeus and labrum ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles brown with narrowly blackish tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus pale ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, distinctly widened apically with rounded apical margin.

Antennae narrow, reaching nine tenths elytral length. Antennomeres ochre yellow, with shallow small-sized punctation and micropunctation, covered by indistinct pale pubescence (the longest

and more distinct on antennal scape), antennomeres 3-4 with long yellowish setation on inner side. Antennomeres 3 and 4 with distinct, extremely long spines with extended and rounded tip (spine in antennomere 3 twice longer). Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 1.08: 0.47: 1.00: 1.69: 1.95: 1.79: 1.87: 1.67: 1.50: 1.28: 1.58.

Pronotum black, elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 21a). Pronotum 1.7 times longer than wide at base and 1.37 times longer than wide at the widest point (middle of pronotum). Lateral margins only slightly arcuate, anterior margin and base almost straight. Dorsal surface with dense small-sized granulation. Pronotum partly covered by recumbent whitish pubescence (the densest in base and anterior angles) (as in Fig. 21a). Pronotum with a few colourless erect setae.

Scutellum black, small, roundly triangular, covered by recumbent whitish pubescence.

Elytra 3.45 mm long and 1.06 mm wide (3.25 times longer than wide), elongate and very narrow, almost parallel, blackish brown with paler apex, semi-glossy in apical part. Elytra with small-sized punctation/micropunctation, covered by dark pubescence with lustre in dark parts and dense whitish pubescence (as in Fig. 21a). Apex cut, apical margin arcuate, sutural and lateral angle with very short indistinct spine. Apical margin with long yellowish setation.

Legs long and narrow, ochre yellow (metafemora partly darker), with small-sized, shallow irregular punctation and micropunctation, partly covered by indistinct pale pubescence (meso-and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs ochre yellow, sharp. Tarsi long and narrow, ochre yellow including claws, with dense, small-sized shallow punctation, covered by indistinct, pale shiny setation. Metatarsi the longest, metatarsomere 1 2.22 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish, with small-sized punctation, mesepisternum with large spot of dense pubescence apically, prosternum, metepisternum and metasternum almost completely covered by dense white pubescence, ventrites 1-2 largely covered by dense white pubescence, rest of ventrites with pale setation. Elytral epipleura blackish, narrow, slightly undulate, with small-sized punctation, covered by short pale pubescence.

Genitalia as in Fig. 21b.

#### Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax coriaceocollis* Aurivillius, 1922 and *Demonax sanluisensis* sp. nov. (Fig. 20).

Demonax zamboangaensis sp. nov. differs from the similar species D. coriaceocollis by the smaller body, the pronotum with distinct stripe of white pubescence at basal margin (it is missing in D. coriaceocollis), the pronotal disc without elevations (pronotal disc with distinct narrow longitudinal elevations in D. coriaceocollis), the different colour of antennomeres (antennae ochre yellow in D. zamboangaensis, while antennae completely blackish brown in D. coriaceocollis), and the different shape and placement of pale pubescent stripes/spots on elytra.

D. zamboangaensis differs from the similar species D. sanluisensis by the more elongate body, the different colour of legs and antennomeres (antennomeres reddish brown with antennomeres 8-10 pale yellowish in D. sanluisensis, while antennae completely ochre yellow in

D. zamboangaensis), and the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 20 and 21a).

**Etymology.** Toponymic, named after the type locality, Zamboanga del Norte province.

**Distribution.** Philippines (Mindanao Island - Zamboanga del Norte province, Cotabato province).



Fig. 21. Demonax zamboangaensis sp. nov.: a-male holotype; b-male genitalia. Fig. 22. Demonax gonzagaensis sp. nov.: female holotype.

### Demonax gonzagaensis sp. nov.

(Fig. 22)

Type locality. Philippines, Luzon Island, Cagayan province, Gonzaga.

**Type material.** Holotype ( $\varphi$ ): 'PHILIPPINES' / 'Gonzaga, Cagayan' / 'North Luzon' / 'IX. 2018, local collector leg.', (CPV). Paratypes: (1  $\varphi$ ): 'Hungduan, Ifugao' / 'North Luzon' / 'PHILIPPINES' / 'IV. 2018', (CPV); (1  $\varphi$ ): 'PHILIPPINES' / 'Cabagan, Isabela' / 'Eastern Luzon' / 'III. 2017, local collector leg.', (CPV).

The types are provided with a printed red label: 'Demonax gonzagaensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of female holotype as in Fig. 22. Body from blackish brown to black, elongate, parallel, punctate, with pubescence. Body length from head to elytral apex 6.64 mm (female paratypes from 6.3 to 6.6.5 mm), the widest at two thirds elytral length (1.64 mm), 4.04 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent whitish pubescence. Frons with very narrow longitudinal furrow in middle. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles brown with narrowly blackish tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus pale reddish brown, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, distinctly widened apically, axe-shaped with rounded apex.

Antennae narrow, reaching three fifths elytral length. Antennomeres blackish brown, slightly widened apically, with shallow small-sized punctation and micropunctation, covered by indistinct, pale shiny pubescence (the longest on antennal scape), some antennomeres partly with long yellowish setation on inner side. Antennomeres 3-5 with sharp spines on inner side of apex (spine in antennomeres 3 and 4 longer and distinct (approximately the same length), spine in antennomere 5 short and indistinct), rest of antennomeres rounded apically. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73:0.30:1.00:0.72:0.97:0.80:0.73:0.57:0.53:0.45:0.52.

Pronotum black, almost symmetrical, narrower than elytra at humeri (shape of pronotum as in Fig. 22). Pronotum 1.56 times longer than wide at base and 1.13 times longer than wide at the widest point (middle of pronotum). Lateral margins distinctly arcuate, anterior margin slightly arcuate, base almost straight. Dorsal surface with reticulation, cells with dense microstructure inside. Pronotum largely covered by recumbent whitish pubescence (the densest in basal angles) (as in Fig. 22), middle of pronotal disc with darker spot with sparse, darker short pubescence. Pronotum with a few colourless erect setae.

Scutellum black, small, triangular, covered by recumbent, dense white pubescence.

Elytra 4.3 mm long and 1.64 mm wide (2.62 times longer than wide), almost parallel (slightly wider at two thirds elytral length), blackish with paler apex, semi-matt. Elytra with dense microgranulation, covered by short dark pubescence with lustre in dark parts and dense whitish pubescence (as in Fig. 22). Apex cut, apical margin indistinctly undulate, sutural and lateral angle with short spine (longer in lateral angle).

Pygidium pale reddish brown, shiny, microwrinkled, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by greyish pubescence (meso- and metafemora partly glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Meso- and metatibiae slightly curved. (as in Fig. 22). Tibial spurs pale reddish brown, sharp. Tarsi long and narrow, dark brown (claws reddish brown), with dense, small-sized shallow punctation, covered by pale shiny setation. Metatarsi the longest, metatarsomere 1 2.32 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely black, with small-sized punctation, mesepisternum with large spot of dense pubescence apically, prosternum, metepisternum, metasternum and ventrites 1-2 almost completely covered by dense white pubescence, rest of ventrites with short pale setation. Elytral epipleura blackish, narrow, slightly undulate, with dense small-sized punctation, pubescence very short and indistinct.

Male. Unknown.

**Differential diagnosis.** The most similar species are *Demonax ater* Aurivillius, 1922, described from Philippines (Mindanao Island) and *Demonax sanluisensis* sp. nov. (Fig. 20).

Demonax gonzagaensis sp. nov. (based on comparison of females) differs from the similar species *D. ater* by the wider and more robust body, the distinctly wider legs, the longer antennae, the scutellum covered by dense white pubescence (scutellum with a few indistinct pale setae in *D. ater*), and the different shape and placement of pale pubescent stripes/spots on elytra (wider and more distinct in *D. gonzagaensis*).

D. gonzagaensis (based on comparison of females) differs from the similar species D. sanluisensis by the wider and less elongate body, the wider pronotum with more arcuate lateral margins, the pronotal disc with reticulation (small-sized granulation in D. sanluisensis), the shorter antennae, the different colour of legs and antennomeres (antennomeres reddish brown with antennomeres 8-10 pale yellowish in D. sanluisensis, while antennae completely blackish brown in D. gonzagaensis), and the different shape and placement of pale pubescent stripes/spots on elytra (as in Figs. 20 and 22).

**Etymology.** Toponymic, named after the type locality, Gonzaga municipality in the province of Cagayan.

**Distribution.** Philippines (Luzon Island - Cagayan province, Ifugao province, Isabela province).

# Demonax waoensis sp. nov.

(Figs. 23-24)

Type locality. Philippines, Mindanao Island, Lanao del Sur province, Wao.

**Type material.** Holotype (3): 'PHILIPPINES' / 'Wao, Lanao del Sur' / 'Mindanao' / 'VIII. 2017, local collector leg.', (CPV). Paratypes:  $\{1\ \mathcal{Q}\}$ : 'PHILIPPINES' / 'New Albay, Compostela valley' / 'Mindanao' / 'III. 2017, local collector leg.', (CPV);  $\{1\ \mathcal{Z}\}$ : 'Philippines' / 'Mindanao' / 'Davao del Sur' / 'Gumitan' / 'V. 2020', (CPV). The types are provided with a printed red label: 'Demonax waoensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

Description. Habitus of male holotype as in Fig. 23a. Body black, elongate, narrow, parallel,

punctate, with pubescence. Body length from head to elytral apex 6.06 mm (male paratype 6.1 mm), the widest at humeral part of elytra (1.34 mm), 4.52 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent whitish pubescence (very dense on frons). Frons with very narrow longitudinal furrow in middle. Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown, shiny, with dense whitish pubescence and long pale setae in edges.

Maxillary palpus ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, shortly knife-shaped.

Antennae narrow, reaching fifth sixths elytral length. Antennomeres blackish brown (antennomeres 1-2 paler, some antennomeres narrowly paler at base), only slightly widened apically, with shallow small-sized punctation and micropunctation, covered by indistinct, pale shiny pubescence, antennomeres 2-4 with long yellowish setation on inner side. Antennomeres 3 and 4 with sharp spines on inner side of apex (spine in antennomeres 3 short and indistinct, spine in antennomere 4 distinctly longer), rest of antennomeres rounded apically. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.54:0.24:1.00:0.65:0.94:0.87:0.80:0.71:0.69:0.62:0.72.

Pronotum black, symmetrical, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 23a). Pronotum 1.37 times longer than wide at base and as long as wide at the widest point (middle of pronotum). Lateral margins distinctly arcuate, anterior margin slightly arcuate, base slightly excised. Dorsal surface with dense small-sized granulation/microgranulation. Pronotum covered by very short, indistinct pale pubescence and white pubescence (the densest in stripe in middle of basal margin) (as in Fig. 23a). Pronotum with a few colourless erect setae.

Scutellum black, small, triangular, covered by sparse, indistinct pale pubescence.

Elytra 4.14 mm long and 1.34 mm wide (3.09 times longer than wide), elongate and very narrow, almost parallel, black with paler apex, largely semi-glossy. Elytra with dense small-sized punctation, covered by dark pubescence with lustre in dark parts and dense white pubescence (as in Fig. 23a). Apex cut, apical margin slightly undulate, sutural and lateral angle with short spine. Apical margin with long yellowish setation.

Pygidium pale brown, shiny, microwrinkled, covered by sparse, indistinct, recumbent pale pubescence, margins with yellowish setae. Apex rounded.

Legs long and narrow, largely blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by greyish pubescence (pubescence on profemora the densest, meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs pale reddish brown, sharp. Tarsi long and narrow, reddish brown including claws (metatarsi slightly darker), with dense, small-sized shallow punctation, covered by long yellowish setation. Metatarsi the longest, metatarsomere 1 2.24 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, with small-sized punctation, prosternum, mesepisternum and metepisternum largely covered by dense white pubescence, metasternum with small spot of dense white pubescence apically, ventrites 1-2 with spot of dense white pubescence in apical part, rest

of ventrites with short pale setation with lustre. Elytral epipleura black, narrow, slightly undulate, with dense small-sized punctation, pubescence very short and indistinct.

Genitalia as in Fig. 23b.

**Female.** Habitus of female paratype as in Fig. 24. Body length from head to elytral apex 5.9 mm. Colour of female similar to male. Female without distinct differences, frons with sparser whitish pubescence, tarsi narrower and shorter than in male (as in Figs. 23a and 24).



Fig. 23. *Demonax waoensis* sp. nov.: a- male holotype; b- male genitalia. Fig. 24. *Demonax waoensis* sp. nov.: female paratype.

**Differential diagnosis.** The most similar species are *Demonax triguttatus* Aurivillius, 1928, *Demonax dingalanensis* sp. nov. (Figs. 25-26) and *Demonax malicoensis* sp. nov. (Figs. 27-28). *Demonax waoensis* sp. nov. (based on comparison of males) differs from the similar species *D. triguttatus* by the more elongate body, the different shape of pronotum (wider with more arcuate lateral margins in *D. waoensis*), the pronotal disc with small-sized granulation/microgranulation (coarse large-sized granulation in *D. triguttatus*), and the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with stripe of white pubescence in the middle of basal margin which does not reach basal angles in *D. waoensis*, while large spots of white pubescence in basal angles, the middle of basal margin without white pubescence in *D. triguttatus*).

D. waoensis (based on comparison of males) differs from the similar species D. dingalanensis by the narrower and more elongate body, the different shape of pronotum, the longer legs and antennae, the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with stripe of white pubescence in the middle of basal margin which does not reach basal angles in D. waoensis, while vague spots of white pubescence in basal angles, the middle of basal margin without white pubescence in D. dingalanensis) (as in Figs. 23a and 25a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 23b and 25b).

D. waoensis (based on comparison of males) differs from the similar species D. malicoensis by the different shape of pronotum, the different structure of pronotal disc, the shorter antennae, the distinctly shorter spine in antennomere 3, the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with stripe of dense white pubescence in the middle of basal margin which does not reach basal angles in D. waoensis, while wider and sparser stripe of white pubescence which reaching basal angles in D. malicoensis) (as in Figs. 23a and 27a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 23b and 27b).

**Etymology.** Toponymic, named after the type locality, Wao municipality in the province of Lanao del Sur, Philippines.

**Distribution.** Philippines (Mindanao Island - Lanao del Sur province, Davao del Sur province, Davao de Oro province).

# Demonax dingalanensis sp. nov.

(Figs. 25-26)

**Type locality.** Philippines, Luzon Island, Aurora province, Sierra Madre mts., Dingalan.

Type material. Holotype (♂): 'PHILIPPINES' / 'Sierra Madre, Dingalan' / 'Aurora, Eastern Luzon' / 'II. 2019, local collector leg.', (CPV). Paratype: (1 ♀): 'PHILIPPINES' / 'Sierra Madre, Gabaldon' / 'Nueva Ecija, Eastern Luzon' / 'III. 2018, local collector leg.', (CPV).

The types are provided with a printed red label: 'Demonax dingalanensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 25a. Body largely blackish, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 6.3 mm, the widest at humeral part of elytra (1.37 mm), 4.6 times longer than wide.

Head from pale brown in anterior margin to blackish brown, narrow, the widest across the eyes,

narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent pale yellowish pubescence (denser on frons). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles largely pale reddish brown with narrowly blackish tip, shiny, with pale yellowish pubescence and long yellowish setae in edges.

Maxillary palpus ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically with slightly rounded apical margin.

Antennae narrow, reaching three fifths elytral length. Antennameres pale reddish brown (antennameres 3-5 slightly darker), with shallow small-sized punctation and micropunctation, covered by pale shiny pubescence (the longest and more distinct on antennal scape), some antennameres partly with long yellowish setation on inner side. Antennameres 1-2 shiny. Antennameres 3 and 4 with distinct, extremely long, slightly curved spines with extended and rounded tip (spine in antennamere 3 approximately twice longer). Antennamere 2 the shortest, antennamere 5 the longest. Ratios of relative lengths of antennameres 1-11 equal to: 0.85:0.33: 1.00:1.15:1.22:1.04:1.00:0.80:0.74:0.63:0.79.

Pronotum black, almost symmetrical, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 25a). Pronotum 1.48 times longer than wide at base and 1.11 times longer than wide at the widest point (approximately middle of pronotum). Lateral margins distinctly arcuate, anterior margin slightly arcuate, base straight. Dorsal surface with small-sized granulation and micropunctation/microgranulation between granules. Pronotum partly covered by very short whitish pubescence (the densest in basal angles), pronotal disc in middle with dark spot with short darker pubescence (as in Fig. 25a). Pronotum with a few pale erect setae.

Scutellum black, small, triangular, covered by very sparse, indistinct pale pubescence.

Elytra 4.16 mm long and 1.37 mm wide (3.03 times longer than wide), almost parallel, blackish with paler apex, semi-glossy in apical third. Elytra with dense small-sized punctation/micropunctation, covered by dark pubescence with goldenish lustre in dark parts and denser whitish pubescence (as in Fig. 25a). Apex cut, apical margin undulate, sutural and lateral angle with short spine. Apical margin with very long yellowish setation.

Pygidium ochre yellow, shiny, microwrinkled, covered by sparse, recumbent whitish pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, from brown to blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by yellowish grey pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Meso- and metatibiae slightly curved apically. Tibial spurs pale reddish brown, almost sharp. Tarsi long and narrow, reddish brown including claws (metatarsi slightly darker), with dense, small-sized shallow punctation, covered by long yellowish setation. Metatarsi the longest, metatarsomere 1 2.27 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish, with small-sized punctation, prosternum, mesepisternum apically, metepisternum, metasternum and ventrites 1-2 apically covered by dense white pubescence, rest of ventrites with pale goldenish setation. Ventral side partly with erect pale setation (mainly in ventrites). Elytral epipleura blackish, narrow, slightly undulate, with small-sized punctation,

covered by indistinct short pubescence with lustre. Genitalia as in Fig. 25b.

**Female.** Habitus of female paratype as in Fig. 26. Body length from head to elytral apex 6.35 mm. Colour of female similar to male. Female without distinct differences, body less elongate than in male (as in Figs. 25a and 26).

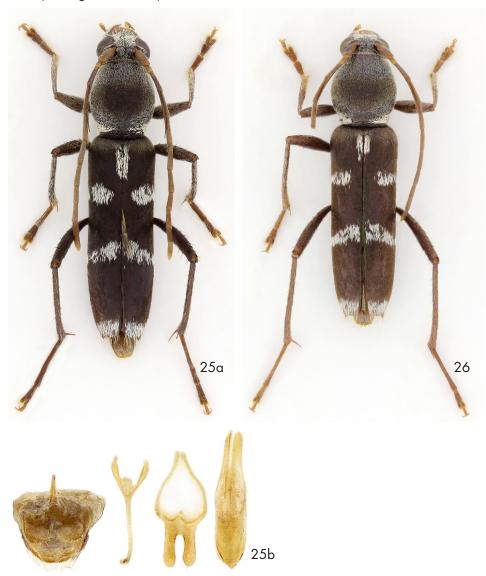


Fig. 25. Demonax dingalanensis sp. nov.: a-male holotype; b-male genitalia.

Fig. 26. Demonax dingalanensis sp. nov.: female paratype.

**Differential diagnosis.** The most similar species are *Demonax triguttatus* Aurivillius, 1928, *Demonax waoensis* sp. nov. (Figs. 23-24) and *Demonax malicoensis* sp. nov. (Figs. 27-28).

Demonax dingalanensis sp. nov. (based on comparison of males) differs from the similar species D. triguttatus by the different shape of pronotum (wider with more arcuate lateral margins in D. dingalanensis), the pronotal disc with small-sized granulation and micropunctation/microgranulation between granules (coarse large-sized granulation in D. triguttatus), the antennomeres 3 and 4 with distinct, extremely long, slightly curved spines with extended and rounded tip (short sharp spines in D. triguttatus), and the different shape and placement of pale pubescent stripes/spots on elytra and pronotum.

D. dingalanensis (based on comparison of males) differs from the similar species D. waoensis by the wider and less elongate body, the different shape of pronotum, the shorter legs and antennae, the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with stripe of white pubescence in the middle of basal margin which does not reach basal angles in D. waoensis, while vague spots of white pubescence in basal angles, the middle of basal margin without white pubescence in D. dingalanensis) (as in Figs. 23a and 25a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 23b and 25b). D. dingalanensis (based on comparison of males) differs from the similar species D. malicoensis by the wider and less elongate body, the different shape of pronotum, the different structure of pronotal disc, the shorter legs and antennae, the antennomeres 3 and 4 with distinct, extremely long, slightly curved spines with extended and rounded tip (sharp spines in D. malicoensis), the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (as in Figs. 25a and 27a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 25b and 27b).

**Etymology.** Toponymic, named after the type locality, Dingalan municipality in the province of Aurora, Philippines.

**Distribution.** Philippines (Luzon Island - Aurora province, Nueva Ecija province).

# Demonax malicoensis sp. nov.

(Figs. 27-28)

**Type locality.** Philippines, Luzon Island, Nueva Vizcaya province, Malico.

**Type material.** Holotype (3): 'PHILIPPINES' / 'Malico, Nueva Vizcaya' / 'North Luzon' / 'Ill. 2018, local collector leg.', (CPV). Paratypes: (1 9): 'PHILIPPINES' / 'Sierra Madre, Tapsoy, Nagtipunan' / 'Quirino, Eastern Luzon' / 'Ill. 2018, local collector leg.', (CPV); (1 3): 'Philippines' / 'Nueva Vizcaya' / 'North Luzon' / 'Malico, Ill. 2018', (CPV). The types are provided with a printed red label: 'Demonax malicoensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 27a. Body black, elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 7.25 mm (male paratype 6.5 mm), the widest at humeral part of elytra (1.51 mm), 4.8 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part and frons with dense irregular punctation/micropunctation). Head covered by recumbent whitish pubescence (very dense on frons). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly

emarginate. Clypeus and labrum pale ochre yellow, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles blackish brown, shiny, with dense whitish pubescence and long yellowish setae in edges.

Maxillary palpus ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, shortly knife-shaped with rounded apex.

Antennae narrow, almost reaching elytral apical margin. Antennomeres largely dark brown (antennomeres 1-2 and 10-11 partly slightly paler), with shallow small-sized punctation and micropunctation, covered by indistinct, pale shiny pubescence, some antennomeres partly with long yellowish setation on inner side. Antennomeres 1-2 shiny. Antennomeres 3 and 4 with distinct, long sharp spines (spines approximately the same length). Antennomere 2 the shortest, antennomere 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.54:0.25:1.00:0.78:1.21:1.11:1.14:1.01:0.91:0.84:0.87.

Pronotum black, slightly elongate, slightly narrower than elytra at humeri (shape of pronotum as in Fig. 27a). Pronotum 1.63 times longer than wide at base and 1.15 times longer than wide at the widest point (middle of pronotum). Lateral margins arcuate, anterior margin and base almost straight. Dorsal surface with irregular small-sized granulation and micropunctation/microgranulation between granules, pronotal disc with admixture of irregular, sparse larger-sized puncation. Pronotum covered by very short, indistinct pale pubescence with lustre and short, dense white pubescence (the densest in distinct stripe near basal margin) (as in Fig. 27a).

Scutellum black, small, triangular, covered by sparse, recumbent whitish pubescence.

Elytra 5.0 mm long and 1.51 mm wide (3.31 times longer than wide), elongate and very narrow, only slightly narrowing apically, black with paler apex, semi-glossy in apical half. Elytra with dense small-sized punctation, covered by dark pubescence with lustre in dark parts and dense white pubescence (as in Fig. 27a). Apex cut, apical margin undulate, sutural and lateral angle with short spine. Apical margin with long yellowish setation.

Pygidium pale brown, shiny, microwrinkled, covered by indistinct pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, largely blackish brown, with small-sized, shallow irregular punctation and micropunctation, partly covered by greyish pubescence (meso- and metafemora largely glabrous on inner side) and long yellowish setation (the densest on apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs pale reddish brown, sharp. Tarsi long and narrow, brown (claws pale reddish brown, meso- and metatarsi slightly darker than protarsi), with dense, small-sized shallow punctation, covered by long yellowish setation. Metatarsi the longest, metatarsomere 1 2.4 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, with small-sized punctation, mesepisternum in apical three quarters, metepisternum, metasternum and ventrites 1-2 in apical two thirds covered by dense white pubescence, rest of ventrites with short pale setation with lustre. Elytral epipleura black, narrow, slightly undulate, with dense small-sized punctation, pubescence very short and indistinct.

Genitalia as in Fig. 27b.

**Female.** Habitus of female paratype as in Fig. 28. Body length from head to elytral apex 7.25 mm. Colour of female similar to male. Female without distinct differences, tarsi shorter and narrower, antennae shorter than in male (as in Figs. 27a and 28).



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

**Differential diagnosis.** The most similar species are *Demonax triguttatus* Aurivillius, 1928, *Demonax waoensis* sp. nov. (Figs. 23-24) and *Demonax dingalanensis* sp. nov. (Figs. 25-26). *Demonax malicoensis* sp. nov. (based on comparison of males) differs from the similar species *D. triguttatus* by the more elongate body, the different shape of pronotum (wider with more arcuate lateral margins in *D. malicoensis*), the distinctly longer legs and antennae, and

the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with wide and sparse stripe of white pubescence which reaching basal angles in *D. malicoensis*, while large spots of dense white pubescence in basal angles, the middle of basal margin without white pubescence in *D. triguttatus*).

D. malicoensis (based on comparison of males) differs from the similar species D. waoensis by the different shape of pronotum, the different structure of pronotal disc, the longer antennae, the distinctly longer spine in antennomere 3, the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (pronotal disc with stripe of dense white pubescence in the middle of basal margin which does not reach basal angles in D. waoensis, while wider and sparser stripe of white pubescence which reaching basal angles in D. malicoensis) (as in Figs. 23a and 27a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 23b and 27b).

D. malicoensis (based on comparison of males) differs from the similar species D. dingalanensis by the narrower and more elongate body, the different shape of pronotum, the different structure of pronotal disc, the longer legs and antennae, the antennomeres 3 and 4 with sharp spines (antennomeres 3 and 4 with distinct, extremely long, slightly curved spines with extended and rounded tip in D. dingalanensis), the different shape and placement of pale pubescent stripes/spots on elytra and pronotum (as in Figs. 25a and 27a), and the different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 25b and 27b).

**Etymology.** Toponymic, named after the type locality, Malico village in Municipality of Santa Fe, Nueva Vizcaya, Philippines.

**Distribution.** Philippines (Luzon Island - Nueva Vizcaya province, Quirino province).

## Demonax soppongensis sp. nov.

(Fig. 29)

Type locality. Thailand, Mae Hong Son province, Soppong village.

Type material. Holotype (3): 'Thailand NW' / 'Mae Hong Son prov.' / 'Soppong vill. env.' / '29.4. - 17.5. 2007' / 'P. Viktora lgt.', (CPV).

The type is provided with a printed red label: 'Demonax soppongensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 29a. Body from ochre yellow to black (largely black), elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 5.55 mm, the widest at humeral part of elytra (1.16 mm), 4.78 times longer than wide.

Head from brown in anterior margin to black, narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part with dense micropunctation). Head covered by sparse whitish pubescence (longer and more distinct on frons). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, emarginate. Clypeus and labrum pale yellowish, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles dirty ochre yellow with narrowly blackish tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus pale ochre yellow, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, shortly knife-shaped with distinctly rounded apex.

Antennae narrow, reaching two thirds elytral length. Antennomeres 6-11 reddish brown, antennomeres 1-5 ochre yellow. Antennomeres slightly widened apically, with dense small-sized punctation, covered by indistinct, very short pale pubescence, antennomeres 1-4 semi-glossy. Some antennomeres partly with yellowish setation on inner side (mainly in apical parts). Antennomeres 3 and 4 with sharp edge without spine in inner side of apex. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.53:0.27:1.00:0.72:0.78:0.75:0.67:0.55:0.58:0.55:0.72.

Pronotum black, distinctly elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 29a). Pronotum 1.72 times longer than wide at base and 1.26 times longer than wide at the widest point (middle of pronotum). Lateral margins arcuate, anterior margin slightly arcuate, base slightly excised. Dorsal surface with dense granulation/reticulation with microgranulation inside cells. Pronotum covered by recumbent white pubescence, pronotal disc in middle darker (as in Fig. 29a).

Scutellum black, small, triangular, covered by sparse, recumbent whitish pubescence.

Elytra 3.58 mm long and 1.16 mm wide (3.08 times longer than wide), only shortly narrowing apically, blackish, largely semi-glossy. Elytra with small-sized punctation, covered by dark pubescence with goldenish lustre in dark places and white pubescence (dense in two transverse stripes and sparse at elytral base and apex) (as in Fig. 29a). Apex cut, apical margin slightly undulate, lateral and sutural angle with short spine. Apical margin with long yellowish setae.

Pygidium ochre yellow, shiny, microwrinkled, covered by indistinct pubescence, margins with yellowish setae. Apical angles rounded.

Legs long and narrow, largely dark brown (protibiae ochre yellow), with shallow small-sized punctation and micropunctation, partly covered by sparse pale yellowish pubescence with lustre (mainly on femora) and longer yellowish setation (the densest in apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Tibial spurs ochre yellow, protibial spurs with truncate tip. Tarsi long, narrow, reddish brown (protarsi paler), claws ochre yellow. Metatarsi the longest. Tarsi with dense, small-sized punctation, covered by pale yellowish setation. Metatarsomere 1 1.83 times longer than metatarsomeres 2 and 3 together.

Ventral side of body blackish, with small-sized irregular punctation, mesepisternum in apical third, metepisternum largely, metasternum apically and ventrites 1-2 apically covered by dense white pubescence, rest of ventrites with sparse silvery setation. Ventral side with a few erect colourless setae. Elytral epipleura blackish, narrow, slightly undulate, with small-sized punctation, pubescence very short and indistinct.

Genitalia as in Fig. 29b.

#### Female, Unknown.

**Differential diagnosis.** The most similar species are *Demonax albicinctus* (Hope, 1831), described from Nepal, *Demonax sabinae* Holzschuh, 1983, described from India (Uttarakhand), *Demonax sausai* Holzschuh, 1995, described from China (Yunnan), *Demonax persimilis* Chevrolat, 1863, described from India (Tamil Nadu), and *Demonax karnatakaensis* sp. nov. (Fig. 30).

Demonax soppongensis sp. nov. (based on comparison of males) clearly differs from the similar species D. albicinctus, D. sabinae and D. persimilis by the different shape of pronotum (distinctly narrower and more elongate in D. soppongensis).

D. soppongensis (based on comparison of males) differs from the similar species D. sausai by more elongate body, the different shape of white curved stripes in basal elytral third (longer and more elongate in D. soppongensis), the sparse stripe of white pubescence at elytral apex (distinctly narrower and dense stripe in D. sausai), the paler antennomeres 1-5 and protarsi, and the distinctly different shape of abdominal segment 8, tegmen and median lobe.

D. soppongensis (based on comparison of males) differs from the similar species D. karnatakaensis by more elongate body, the different shape of pronotum (distinctly narrower and more elongate in D. soppongensis), the shorter protarsi, protibial spurs and antennae, the different shape of white curved stripes in basal elytral third (longer and more elongate in D. soppongensis) (as in Figs. 29a and 30a), and the distinctly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 29b and 30b).

**Etymology.** Toponymic, named after the type locality, Soppong village in the province of Mae Hong Son.

**Distribution.** Thailand (Mae Hong Son).

## Demonax karnatakaensis sp. nov.

(Fig. 30)

Type locality. India, Karnataka state, 20 km SE of Sagar, 14°06.37′ N, 75°08.93′ E.

**Type material.** Holotype (3): 'INDIA - KARNATAKA' / '20kmSE SAGAR, 600m' / '14°06,37' N, 75°08,93' E' / 'leg. M. Halada, 12.5.2005', (CPV).

The type is provided with a printed red label: 'Demonax karnatakaensis sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2024'.

**Description.** Habitus of male holotype as in Fig. 30a. Body from ochre yellow to black (largely black), elongate, narrow, parallel, punctate, with pubescence. Body length from head to elytral apex 6.12 mm, the widest at humeral part of elytra (1.35 mm), 4.53 times longer than wide.

Head from brown in anterior margin to black (largely black), narrow, the widest across the eyes, narrower than pronotum at the widest point. Dorsal surface with dense, irregular, small-sized granulate punctation (anterior part with dense micropunctation). Head covered by sparse whitish pubescence (longer and more distinct on frons). Interspace between antennal insertions narrow, antennal insertions prolonged to thorn on inner side. Eyes goldenish, strongly emarginate. Clypeus and labrum pale yellowish, shiny, partly punctured, with long pale yellowish setation in edges. Mandibles pale reddish brown with narrowly blackish tip, shiny, with whitish pubescence and long pale setae in edges.

Maxillary palpus pale reddish brown, semi-matt, with micropunctation and short yellowish setation. Palpomeres short, slightly widened apically, last palpomere the longest and the largest, widened apically, shortly knife-shaped with rounded paler apical margin.

Antennae narrow, reaching four fifths elytral length. Antennomeres 5-11 reddish brown, dark, antennomeres 1-4 paler. Antennomeres slightly widened apically, with dense small-sized punctation, covered by indistinct, very short pale pubescence, antennomeres 1-4 semi-glossy. Some antennomeres partly with yellowish setation on inner side (mainly in apical parts). Antennomeres 3 and 5 with sharp edge without spine in inner side of apex, antennomere 4 with short sharp spine in inner side of apex. Antennomere 2 the shortest, antennomere 3 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.49:0.33:1.00:0.69:0.80:0.78:0.75:0.65:0.60:0.54:0.68.

Pronotum black, only slightly elongate, narrower than elytra at humeri (shape of pronotum as in Fig. 30a). Pronotum 1.58 times longer than wide at base and 1.1 times longer than wide at the widest point (middle of pronotum). Lateral margins distinctly arcuate, anterior margin and base straight. Dorsal surface with dense granulation/reticulation with microgranulation inside cells. Pronotum covered by sparse, short, recumbent whitish pubescence, pronotal disc in middle darker with less distinct pale pubescence (as in Fig. 30a).



Fig. 30. Demonax karnatakaensis sp. nov.: a-male holotype; b-male genitalia.

Scutellum black, small, roundly triangular.

Elytra 3.95 mm long and 1.35 mm wide (2.92 times longer than wide), only shortly narrowing apically, largely black, semi-glossy. Elytra with dense small-sized punctation/micropunctation, covered by dark pubescence with lustre in dark places and whitish pubescence (dense in two transverse stripes, indistinct and sparse at elytral base and apex) (as in Fig. 30a). Apex cut, apical margin distinctly undulate, lateral and sutural angle with short spine. Apical margin with a few longer yellowish setae.

Pygidium pale reddish brown, shiny, microwrinkled, margins with yellowish setae. Apex rounded.

Legs long and narrow, from brown to blackish brown, with shallow small-sized punctation and micropunctation, partly covered by sparse pale yellowish grey pubescence with lustre (mainly on femora) and longer yellowish setation (the densest in apical part of tibiae). Tibiae widened apically, femora narrowly club-shaped, metatibiae and metafemora distinctly longer than proand mesotibiae and pro- and mesofemora. Tibial spurs pale reddish brown, relatively wide, slightly curved protibial spurs with truncate tip, meso- and metatibial spurs long, narrow and sharp. Tarsi long, narrow, brown (protarsi paler), claws pale reddish brown. Metatarsi the longest. Tarsi with dense, small-sized punctation, covered by pale yellowish setation. Metatarsomere 1 1.63 times longer than metatarsomeres 2 and 3 together.

Ventral side of body largely black, with small-sized irregular punctation, apical parts of mesepisternum, metepisternum, metasternum and ventrites 1-2 covered by dense white pubescence, rest of ventrites with short pale setation with lustre. Ventral side with a few erect colourless setae. Elytral epipleura blackish, narrow, undulate, with small-sized punctation, pubescence very short and indistinct.

Genitalia as in Fig. 30b.

#### Female. Unknown.

**Differential diagnosis.** The most similar species are *Demonax albicinctus* (Hope, 1831), described from Nepal, *Demonax sabinae* Holzschuh, 1983, described from India (Uttarakhand), *Demonax sausai* Holzschuh, 1995, described from China (Yunnan), *Demonax persimilis* Chevrolat, 1863, described from India (Tamil Nadu), and *Demonax soppongensis* sp. nov. (Fig. 29).

Demonax karnatakaensis sp. nov. (based on comparison of males) differs from the similar species D. albicinctus, D. sabinae, D. sausai, and D. persimilis by the different shape of pronotum, the indistinct and sparse stripe of white pubescence at elytral apex (dense and distinct stripe in D. albicinctus, D. sabinae, D. sausai, and D. persimilis), the different shape of white stripes in basal elytral third (shorter and less curved in D. karnatakaensis), and the distinctly different shape of abdominal segment 8, tegmen and median lobe. D. karnatakaensis has antennomeres 3 and 5 with sharp edge without spine in inner side of apex and antennomere 4 with short sharp spine in inner side of apex, while D. persimilis has antennomeres 3-5 with long sharp spines in inner side of apex.

D. karnatakaensis (based on comparison of males) differs from the similar species D. soppongensis by less elongate body, the different shape of pronotum (distinctly wider and less elongate in D. karnatakaensis), the longer protarsi, protibial spurs and antennae, the different shape of white curved stripes in basal elytral third (shorter and less curved in D. karnatakaensis) (as in Figs. 29a and 30a), and the distinctly different shape of abdominal segment 8, tegmen and median lobe (as in Figs. 29b and 30b).

**Etymology.** Toponymic, named after the type locality, Karnataka state of India.

**Distribution.** India (Karnataka).

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