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A review of species related to *Demonax polyzonus* Pascoe, 1869 with descriptions of five new species (Coleoptera: Cerambycidae: Cerambycinae: Clytini)

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Abstract. Demonax argopurensis sp. nov. from Indonesia (Java), Demonax belumensis sp. nov. from Malaysia (Pahang, Perak), Demonax cambodgensis sp. nov. from Cambodia (Mondulkiri), Demonax exemplaris sp. nov. from Laos (Bolikhamsai, Attapeu) and Vietnam (Kon Tum, Tuyen Quang), and Demonax sanggulensis sp. nov. from Indonesia (Sumatra) are described. All new species are compared with similar species Demonax annamensis Pic, 1943, Demonax nawatai Hayashi, 1975, Demonax perroti Pic, 1950, Demonax polyzonus Pascoe, 1869 and Demonax transversalis Aurivillius, 1910. All the habitus and male genitalia of the new species and similar species are illustrated.

INTRODUCTION

Tribus Clytini Mulsant, 1839 is one of the most numerous - in terms of species - tribus of Cerambycidae. The most numerous genus is *Demonax* J. Thomson, 1861. Species of this genus are distributed in the Palaearctic, Oriental and Australian Regions.

Presently described species are close to *Demonax polyzonus* Pascoe, 1869 (a species with combination of gray, whitish and black colour of pubescence on dorsal surface as in Fig. 14). New related species with similar colouring of dorsal surface like *Demonax polyzonus* were recently collected in Cambodia, Indonesia, Laos, Malaysia and Vietnam and are described as follows: *Demonax argopurensis* sp. nov. from Indonesia (Java), *Demonax belumensis* sp. nov. from Malaysia (Pahang, Perak), *Demonax cambodgensis* sp. nov. from Cambodia (Mondulkiri), *Demonax exemplaris* sp. nov. from Laos (Bolikhamsai, Attapeu) and Vietnam (Kon Tum, Tuyen Quang), and *Demonax sanggulensis* sp. nov. from Indonesia (Sumatra). The new species are compared to the congeners (*Demonax annamensis* Pic, 1943, *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950, *Demonax polyzonus* Pascoe, 1869 and *Demonax transversalis* Aurivillius, 1910).

Habitus and male genitalia of all species are illustrated here. A list of presently known species of the genus *Demonax* Thomson, 1861 related to *Demonax polyzonus* Pascoe, 1869 is presented including the geographical distribution of species from this group.

MATERIAL AND METHODS

Observation and photography. The habitus of all specimens were taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Composite images were

created using the software Image Stacking Software Combine ZP. The genitalia photographs were taken with a Canon MP-E 65mm/2.8 $1-5 \times$ Macrolens on bellows attached to a Canon EOS 550D camera. Each photograph was taken as several partially focused images and afterwards composed in the Helicon Focus 3.20.2 Pro software. The photographs were modified using Adobe Photoshop CC.

Specimens examined including type materials are deposited in the following collections: BMNH The Natural History Museum, London, United Kingdom;

CLD Collection of Luboš Dembický, Brno, Czech Republic;

CPK Collection of Petr Kabátek, Praha, Czech Republic;

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

CRH Collection of Roman Hergovits, Bratislava, Slovakia;

MNHN Muséum National d'Histoire Naturelle, Paris, France;

NRSS Naturhistoriska Riksmuseet, Stockholm, Sweden;

OMNH Osaka Museum of Natural History, Osaka, Japan.

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

TAXONOMY

Tribe Clytini Mulsant, 1839

Genus Demonax Thomson, 1861

Type species. Demonax nigrofasciatus J. Thomson, 1861.

Demonax annamensis Pic, 1943

(Figs. 1-3)

Demonax diversefasciatus Pic, 1937: 8 (junior homonym of Demonax diversefasciatus Pic, 1920 – preoccupied name).

Demonax annamensis Pic, 1943: 2 (new name for Demonax diversefasciatus Pic, 1937).

Type material. Holotype in MNHN (Fig. 1a): 'Sam Neua' / 'Annam' (as in Fig. 1b).

Additional material: $(1 \ Q)$: 'NE LAOS' / '1400 m alt., 20.-30.v.2011' / 'Xieng Khouang prov., SAMSUN env.' / 'cca 35 km E of Phongsavan' / 'local collectors lgt', (CPV); $(1 \ Q)$: 'LAOS, Huaphanne prov.,' / 'Mt. Phu Pane, 1200-1900m,' / 'Ban Saluei v. env., 3.-13.v.2019,' / '20°12'N 103°59'E' / 'A.&R.Hergovits leg. + Lao collector', (CPV); $(3 \ C)^3 \ C^3 \ C^3 \ C^3 \ Q^2 \ Q)$: 'LAOS, Huaphanne prov.,' / 'Mt. Phu Pane, 1200-1900m,' / 'Ban Saluei v. env., 21.-30. iv.2017,' / '20°12'N 103°59'E' / 'A.&R.Hergovits leg. + Lao collector', (CPV); (1 \ Q): 'LAOS, 'LAOS,

Distribution. China (Yunnan), Laos, Thailand, Vietnam.



Demonax argopurensis sp. nov. (Figs. 4-5)

Type locality. Indonesia, East Java, Mt. Argopuro, Bermi village env.

Type material. Holotype (\mathcal{E}): 'INDONESIA, East Java' / 'MT. ARGOPURO, 1200m' / 'Bermi Vill env.' / 'xi. 1998, local collector leg.', (CPV); Paratypes: (1 \mathcal{Q}): 'Indonesia: E Java' / 'Mt. Argopuro' / 'xi. 2014' / 'local collector leg.', (CPV); (1 \mathcal{Q}): 'INDONESIA, i. 2018' / 'East Java prov., MT. ARGOPURO' / 'Bermi vill env., 1200-1400 m alt.' / 'local collector leg', (CPV). The types are provided with a printed red label: 'Demonax argopurensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 4a. Body from dark brown to black, elongate, narrow, punctate, with pubescence. Body length from head to elytral apex 11.66 mm, widest in humeral part of elytra (2.51 mm), 4.64 times longer than wide.

Head black (blackish brown near anterior margin), relatively short, widest through the eyes, only slightly narrower than pronotum at widest point, punctate by relatively coarse irregular reticulate punctation, punctures larger in posterior part. Frons with irregular longitudinal furrows in middle. Head covered by relatively sparse yellowish gray recumbent pubescence and long pale erect setation in lateral margins and anterior part of head. Eyes goldenish, longitudinally emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, with long yellowish setation on edges.

Maxillary palpus brown, punctate by indistinct punctation, palpomeres widened apically, covered by short pale setation. Ultimate palpomere longest, axe-shaped with rounded apex, apex narrowly paler.

Antennae blackish brown, narrow, filiform, reaching three quarters elytral length, punctate by dense punctation (scape with coarse irregular reticulate punctation and almost glabrous apex). Antennomeres covered by pale pubescence, ultimate antennomeres partly covered by dark pubescence. Antennomeres widened apically, antennomeres 8-10 serrate on outer side of apex. Antennomeres 3-4 with distinct long sharp spine on inner side of apex. Antennomere 3-4 with distinct long sharp spine on inner side of apex. Antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.52 : 0.19 : 1.00 : 0.69 : 0.83 : 0.79 : 0.70 : 0.54 : 0.51 : 0.46 : 0.54.

Pronotum black, elongate, narrow, distinctly narrower than elytra, granulate by dense granulation, disc in middle longitudinally with coarser granulation. Shape of pronotum as in Fig. 4a, 1.86 times longer than wide at base and 1.47 times longer than wide at widest point (middle of pronotum). Lateral margins indistinctly arcuate, anterior margin arcuate, base undulate. Pronotum covered by yellowish and gray pubescence (as in Fig. 4a) and a few long pale erect setae.

Scutellum black, wide, shield-shaped with distinctly arcuate apex, with irregular punctuation, covered by sparse yellowish gray pubescence.

Elytra 7.48 mm long and 2.51 mm wide (2.98 times longer than wide); narrowing apically, black with dark brown apical part, suture black in full length. Elytra with dense granulated punctation in basal half, rest of elytra punctate by dense small-sized



4b



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

Fig. 5. Demonax argopurensis sp. nov.: female paratype.

punctation, covered by yellowish gray, whitish and short dark pubescence (as in Fig. 4a). Each elytron with excised apex, sutural and lateral angle sharp. Apical margin covered by longer yellowish setation.

Pygidium brown, punctured by irregular punctuation, covered by partly yellowish, partly dark pubescence.

Legs long and narrow, from dark brown to black, punctate by coarse irregular punctation, covered by sparse pale pubescence and long pale erect setation. Femora with denser and long yellowish setation in apical part. Tarsi wide, punctured by dense punctuation, covered by pale pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesofibiae and pro- and mesofemora. Metatarsomere 1 1.26 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from blackish brown to black, punctured. Metepisternum almost completely covered by dense whitish pubescence, metasternum with coarse punctation, covered by only a few pale setae and dense whitish pubescence in apex. Ventrites covered by whitish pubescence (pubescence distinctly denser in ventrites 1-2). Ventral side of body with long pale erect setation. Elytral epipleura black, punctured, covered by dark shiny pubescence.

Genitalia as in Fig. 4b.

Female. Habitus of female paratype as in Fig. 5. Body length from head to elytral apex (female paratypes) from 13.6 to 13.95 mm. Colour of female similar to male. Female without distinct differences, antennae slightly shorter than in male.

Differential diagnosis. Distinctly different species are *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950 and *Demonax transversalis* Aurivillius, 1910 (as you can see in comparision of Fig. 4 with Figs. 12, 18 and 20).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax annamensis* Pic, 1943 (Fig. 2) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.47 against pronotal ratio 1.27 in *D. annamensis*), by different shape of whitish stripe in basal third of elytra, by longer spines in apex of antennomeres 3 and 4, and by different shape of tergite 8, tegmen and median lobe (as in Figs. 4b and 2b).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax belumensis* sp. nov. (Fig. 6) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.47 against pronotal ratio 1.40 in *D. belumensis*), by more elongate elytra (ratio elytral length / elytral width 2.98 against elytral ratio 2.77 in *D. belumensis*), by longer protarsi, by sharp lateral angle in elytral apex (distinctly arcuate in *D. belumensis*), and by different shape of tegmen and median lobe (as in Figs. 4b and 6b).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax cambodgensis* sp. nov. (Fig. 8) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.47 against pronotal ratio 1.32 in *D. cambodgensis*), by more elongate elytra (ratio elytral length / elytral width 2.98 against elytral ratio 2.71 in *D. cambodgensis*), by different shape of whitish stripe in basal third of elytra, by different colour of pubescence in elytral apical half (grayish in *D. argopurensis* against ginger pubescence in *D. cambodgensis*), by distinctly longer spines in apex of antennomeres 3 and 4, and by different shape of tegmen and median lobe (as in Figs. 4b and 8b).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax exemplaris* sp. nov. (Fig. 10) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.47 against pronotal ratio 1.25 in *D. exemplaris*), by more elongate elytra (ratio elytral length / elytral width 2.98 against elytral ratio 2.52 in *D. exemplaris*), by different shape of whitish stripe in basal third of elytra, by distinctly longer spines in apex of antennomeres 3 and 4, and by different shape of tegmen and median lobe (as in Figs. 4b and 10b).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax polyzonus* Pascoe, 1869 (Fig. 14) mainly by longer antennae (reaching three quarters elytral length against three fifths in *D. polyzonus*), by sharp lateral angle in elytral apex (arcuate in *D. polyzonus*), by different shape of colour spots on elytra, and by different shape of sternite 8, tergite 8, tegmen and median lobe (as in Figs. 4b and 14b).

Demonax argopurensis sp. nov. distinctly differs from similar species *Demonax sanggulensis* sp. nov. (Fig. 16) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.47 against pronotal ratio 1.35 in *D. sanggulensis*), by longer antennae (reaching three quarters elytral length against four sevenths in *D. sanggulensis*), by sharp lateral angle in elytral apex (indistinctly arcuate in *D. sanggulensis*), by different shape of colour spots on elytra, and by different shape of sternite 8, tegmen and median lobe (as in Figs. 4b and 16b).

Etymology. Named after the type locality, Mt. Argopuro.

Distribution. Indonesia (East Java).

Demonax belumensis sp. nov.

(Figs. 6-7)

Type locality. Malaysia, Perak, Belum Forest, 84 km E of Gerik, 05°32′53′′ N, 101°36′28′′ E.

Type material. Holotype (δ): 'MALAYSIA - Perak, Belum Forest' / '84km E of Gerik, alt. 950m' / '05°32'53'' N, 101°36'28'' E' / '25. iii. - 2. iv. 2014' / 'P. Viktora lgt.', (CPV); Paratypes: (8 δ δ , 16 φ φ): same data as holotype, (CPV); (10 δ δ , 8 φ φ): 'W MALAYSIA; PAHANG;' / 'Benom Mts.;3,53N 102,01E;' / '15km E Kampong Dong;' / '24.iii.-15.iv.1998;300-1000m;' / 'Dembický & Pacholátko leg.', (CLD, CPV); (1 φ): 'MALAYSIA-PAHANG;' / 'Banjaran Benom Mts.;' / '10-15km SSE K. Ulu Dong;' / '17.-23.iv.1997;D.Hauck leg', (CLD); (1 δ , 1 φ): 'W MALAYSIA, Pahang, 1500m' / 'Cameron Highlands, Tanah Rata' / 'Robinson Waterfall env.,' / '4°27'52,06' 'N 101°23'30,16''E' / 'L. Dembický leg., 7.-28.iv.2013', (CLD); (1 φ): 'MALAYSIA, PERAK' / '50 km NE Gerik (aerial path),' / 'Belum-Temenggor: Titiwangsa' / '5°36'17,4''N 101°32'34,0''E' / '30.iii.-13.iv.2015, alt. 1100m' / 'E. Jendek & O. Šauša leg.', (CLD); (2 δ δ , 1 φ): 'MALAYSIA - Pahang' / 'Cameron Highlands' / 'N environ Highlands' / 'N environ Highlands' / 'N environ Highlands' / 'Ringlet' / '9.iv. - 16.iv.2014' / 'P. Viktora Igt.', (CPV); (2 φ): 'W MALAYSIA' / 'Cameron Highlands' / 'Ringlet env.' / '9. - 13. iii. 2013' / 'P. Viktora Igt.', (CPV); (2 φ): 'W MALAYSIA' / 'Cameron Highlands' / 'Singlet env.' / '9. - 13. iii. 2013' / 'P. Viktora Igt.', (CPV); (2 φ): 'W MALAYSIA' / 'Cameron Highlands' / 'Inglet env.' / '9. - 13. iii. 2013' / 'P. Viktora Igt.', (CPV); (2 φ): 'W MALAYSIA' / 'Cameron Highlands' / '19 mls (near Ringlet)' / 'iii. - v. 2007' / local collector leg.', (CPV); (2 φ): 'W MALAYSIA' / 'Cameron Highlands' / '19 mls (near Ringlet)' / 'iii. - v. 2007' / local collector leg.', (CPV); 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 6a. Body from pale brown to black, elongate, relatively narrow, punctuate, with pubescence. Body length from head to elytral apex 9.92 mm (male paratypes from 8.9 to 10.6 mm), widest in humeral part of elytra (2.25 mm), 4.4 times longer than wide.

Head black (blackish brown in anterior part), relatively short, widest through the eyes, as wide as pronotum at widest point, posterior part with dense, relatively coarse granulation, frons with less coarse granulation, anterior part with irregular punctuation. Head with indistinct longitudinal furrows between antennal insertions and in middle of frons. Head covered by sparse recumbent yellowish gray pubescence and long pale erect setation in lateral margins and anterior part of head. Eyes dark goldenish brown, longitudinally emarginate. Clypeus and labrum pale yellow, shiny, with yellowish setation. Mandibles blackish brown, shiny, with long yellowish setation in edges.

Maxillary palpus pale brown, punctate by indistinct punctation, palpomeres widened apically, covered by yellowish setation. Ultimate palpomere longest, distinctly widened apically, apex pale yellow, rounded.

Antennae blackish brown, narrow, filiform, reaching almost two thirds elytral length, punctured by dense punctuation (scape with sparser and coarser punctuation). Antennomeres 1-7 covered by whitish pubescence (pubescence denser in antennomeres 5-7), antennomeres 8-11 covered by short dark pubescence. Antennomeres widened apically, antennomeres 7-8 serrate on outer side of apex. Antennomeres 3-4 with distinct sharp spine on inner side of apex. Antennomeres 3-5 with short pale setation in inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.46 : 0.23 : 1.00 : 0.77 : 0.95 : 0.79 : 0.72 : 0.52 : 0.46 : 0.33 : 0.44.

Pronotum black, elongate, narrow, distinctly narrower than elytra, granulated by dense granulation, disc in middle longitudinally with coarser granulation. Shape of pronotum as in Fig. 6a, 1.85 times longer than wide at base and 1.4 times longer than wide at widest point (middle of pronotum). Anterior margin arcuate, base undulate. Pronotum partly covered by yellowish gray recumbent pubescence and shorter dark pubescence, pale pubescence denser in margins, dense in basal angles (as in Fig. 6a). Pronotum with long erect pale setation.

Scutellum black, roundly triangular, covered by yellowish gray pubescence.

Elytra 6.25 mm long and 2.25 mm wide (2.77 times longer than wide); almost parallel (shortly narrowing apically), black with pale brown apical quarter and lateral margins, suture black in full length. Elytra with dense granulate punctation in basal third, rest of elytra punctate by denser small-sized punctation. Elytra covered by yellowish gray and shorter black pubescence (as in Fig. 6a). Elytral apex distinctly arcuate in lateral angles, angled in sutural angles. Apical margin with long yellowish setation.

Legs long and narrow, from dark brown to black, punctured by coarse granulated punctuation, covered by sparse yellowish gray pubescence and long pale erect setation. Proand mesofemora with dense yellowish setation in apical part. Tarsi relatively short and wide, punctured by dense punctuation, covered by yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.35 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black (ultimate ventrites distinctly paler), punctured. Metepisternum almost completely covered by dense white pubescence, metasternum covered by sparser whitish pubescence and dense white pubescence in apical part, mesepisternum covered by dense white pubescence in apical part, ventrites 1-2 almost completely covered by dense recumbent white pubescence, ventrites 3-5 covered by sparser yellowish pubescence. Ventral side of body with long pale erect setation. Elytral epipleura dark brown, covered by short indistinct pubescence.

Genitalia as in Fig. 6b.

Female. Habitus of female paratype as in Fig. 7. Body length from head to elytral apex (female paratypes) from 10.8 to 13.9 mm. Colour of female similar to male. Female without distinct differences, pronotum wider and protarsi narrower than in male.





6b

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

Fig. 7. Demonax belumensis sp. nov.: female paratype.

Differential diagnosis. Distinctly different species are *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950 and *Demonax transversalis* Aurivillius, 1910 (as you can see in comparision of Fig. 6 with Figs. 12, 18 and 20). *Demonax belumensis* sp. nov. distinctly differs from similar species *Demonax annamensis* Pic, 1943 (Fig. 2) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.40 against pronotal ratio 1.27 in *D. annamensis*), by less elongate elytra (ratio elytral length / elytral width 2.77 against elytral ratio 2.93 in *D. annamensis*), by different shape of whitish stripe in basal third of elytra, by longer spines in apex of antennomeres 3 and 4, and by different shape of tergite 8, tegmen and median lobe (as in Figs. 6b and 2b).

Demonax belumensis sp. nov. distinctly differs from similar species *Demonax argopurensis* sp. nov. (Fig. 4) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.40 against pronotal ratio 1.47 in *D. argopurensis*), by less elongate elytra (ratio elytral length / elytral width 2.77 against elytral ratio 2.98 in *D. argopurensis*), by shorter protarsi, by distinctly arcuate lateral angle in elytral apex (sharp in *D. argopurensis*), and by different shape of tegmen and median lobe (as in Figs. 6b and 4b).

Demonax belumensis sp. nov. distinctly differs from similar species *Demonax cambodgensis* sp. nov. (Fig. 8) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.40 against pronotal ratio 1.32 in *D. cambodgensis*), by shorter tarsi, by different shape of whitish stripe in basal third of elytra, by different colour of pubescence in elytral apical half (grayish in *D. belumensis* against ginger pubescence in *D. cambodgensis*), by distinctly longer spines in apex of antennomeres 3 and 4, and by different shape of sternite 8, tegmen and median lobe (as in Figs. 6b and 8b).

Demonax belumensis sp. nov. distinctly differs from similar species *Demonax exemplaris* sp. nov. (Fig. 10) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.40 against pronotal ratio 1.25 in *D. exemplaris*), by more elongate elytra (ratio elytral length / elytral width 2.77 against elytral ratio 2.52 in *D. exemplaris*), by different shape of whitish stripe in basal third of elytra, by distinctly longer spines in apex of antennomeres 3 and 4, and by different shape of sternite 8, tegmen and median lobe (as in Figs. 6b and 10b).

Demonax belumensis sp. nov. distinctly differs from similar species *Demonax polyzonus* Pascoe, 1869 (Fig. 14) mainly by less elongate elytra (ratio elytral length / elytral width 2.77 against elytral ratio 2.89 in *D. polyzonus*), by distinctly shorter protarsi and by distinctly different shape of tegmen and median lobe (as in Figs. 6b and 14b).

Demonax belumensis sp. nov. distinctly differs from similar species *Demonax sanggulensis* sp. nov. (Fig. 16) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.40 against pronotal ratio 1.35 in *D. sanggulensis*), by less elongate elytra (ratio elytral length / elytral width 2.77 against elytral ratio 3.0 in *D. sanggulensis*), by different shape of whitish stripe in basal third of elytra, by elytral apex distinctly arcuate in lateral angles (lateral angles angled - indistinctly arcuate respectively in *D. sanggulensis*), and by distinctly different shape of tegmen and median lobe (as in Figs. 6b and 16b).

Etymology. Named after the type locality, Belum Forest of Perak State, Malaysia.

Distribution. Malaysia (Pahang, Perak).

Demonax cambodgensis sp. nov. (Figs. 8-9)

Type locality. E Cambodia, Mondulkiri province, 25 km SE of Sen Monorom.

Type material. Holotype (\mathcal{J}): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093', E 107°17.59453'' / '840 m, 13. v. 2019' / 'P. Viktora lgt.', (CPV); Paratypes: ($\mathcal{J} \otimes \mathcal{J}$, 1 \mathcal{Q}): same data as holotype, (CPV); (1 \mathcal{J} , 1 \mathcal{Q}): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093', E 107°17.59453'' / '840 m, 19. - 21. v. 2019' / 'P. Viktora lgt.', (CPV); (1 \mathcal{Q}): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093', E 107°17.59453'' / '840 m, 19. - 21. v. 2019' / 'P. Viktora lgt.', (CPV); (1 \mathcal{Q}): 'E Cambodia' / '25 km SE of Sen Monorom' / 'N 12°21.23093', E 107°17.59453'' / '840 m, 7. - 8. v. 2019' / 'P. Viktora lgt.', (CPV); (1 \mathcal{J}): 'E Cambodia' / '13 km N of Sen Monorom' / 'N 12°31.17117', E 107°15.23450'' / '600 m, 9. - 10. v. 2019' / 'P. Viktora lgt.', (CPV); (2 $\mathcal{J} \otimes \mathcal{J}$, 1 \mathcal{Q}): 'E Cambodia, 25 km SE of ' Sen Monorom, 840 m, N 12°' / '21.23093' E 107°17.59453'' / '7. - 13. and 19. - 21. v.' / '2019, leg. P. Kabátek', (CPK). The types are provided with a printed red label: 'Demonax cambodgensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 8a. Body from brown to black, elongate, punctuate, with pubescence. Body length from head to elytral apex 11.42 mm (male paratypes from 10.45 to 12.65 mm), widest in humeral part of elytra (2.70 mm), 4.22 times longer than wide.

Head black (blackish brown in anterior part), relatively short, widest through the eyes, only slightly narrower than pronotum at widest point, posterior part with coarse granulate punctation, frons and anterior part with irregular punctation. Head with longitudinal furrows between antennal insertions. Head covered by long recumbent gray pubescence and long pale erect setation in lateral margins and anterior part of head. Eyes blackish brown, longitudinally emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, with long yellowish setation in edges.

Maxillary palpus brown, punctate by indistinct punctation, palpomeres widened apically, covered by short sparse yellowish setation. Ultimate palpomere longest, widened apically, apex narrowly paler, rounded.

Antennae black, narrow, filiform, reaching three quarters elytral length, punctured (antennomeres 1-4 with sparse medium-sized punctuation, antennomeres 5-11 with dense small-sized punctuation). Antennomeres 1-4 and 6-7 covered by whitish pubescence in full length, antennomere 5 with whitish pubescence only in basal third, rest of antennomere 5 with dark pubescence. Antennomeres 8-11 covered by short pale and dark pubescence. Antennomeres 3-4 with short sharp spine on inner side of apex. Antennomeres 3-4 with short sharp spine on inner side of apex. Antennomeres 3-7 with pale setation in inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.45 : 0.18 : 1.00 : 0.81 : 0.95 : 0.88 : 0.81 : 0.61 : 0.59 : 0.53 : 0.55.

Pronotum black, elongate, narrow, distinctly narrower than elytra, granulate by dense granulation, disc in middle longitudinally with coarser granulation. Shape of pronotum as in Fig. 8a, 1.65 times longer than wide at base and 1.32 times longer than wide at widest point (middle of pronotum). Lateral margins only slightly arcuate, anterior margin arcuate, base undulate. Pronotum partly covered by yellowish, whitish and short black pubescence, whitish pubescence denser in basal angles (as in Fig. 8a). Pronotum with long erect pale setation, setation denser in basal half.

Scutellum black, punctate, roundly triangular, covered by whitish pubescence.

Elytra 7.34 mm long and 2.70 mm wide (2.71 times longer than wide); narrowing apically, black with brown apical quarter, suture black in full length. Elytra with dense medium-sized granulate punctation in basal third, with small-sized granulate punctation in second third and with dense small-sized punctation in apical third. Elytra covered by yellowish gray, whitish, ginger and short black pubescence (as in Fig. 8a). Elytral apex angled, covered by dense long yellowish setation.

Legs long and narrow, from blackish brown to black, punctured by shallow large-sized punctuation, covered by yellowish gray pubescence and long pale erect setation. Femora with dense yellowish setation in apical part. Tarsi relatively short and wide, punctate by dense punctation, covered by dense yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.33 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black (ultimate ventrites brown), punctured. Metepisternum almost completely covered by dense white pubescence (except apex), metasternum covered by sparse whitish pubescence and dense white pubescence in apical part. Ventrites 1-2 covered by dense white pubescence, ventrites 3-5 covered by ginger pubescence. Ventral side of body with long pale erect setation. Elytral epipleura blackish brown, covered by yellowish gray pubescence.

Genitalia as in Fig. 8b.

Female. Habitus of female paratype as in Fig. 9. Body length from head to elytral apex (female paratypes) from 11.85 to 14.0 mm. Colour of female similar to male, but with less distinct ginger pubescence in elytra (only with yellowish gray pubescence in elytral apex). Female with wider pronotum, shorter antennae and more robust body than in male.

Differential diagnosis. Distinctly different species are *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950 and *Demonax transversalis* Aurivillius, 1910 (as you can see in comparision of Fig. 8 with Figs.12, 18 and 20).

Demonax cambodgensis sp. nov. distinctly differs from similar species *Demonax annamensis* Pic, 1943 (Fig. 2) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.32 against pronotal ratio 1.27 in *D. annamensis*), by less elongate elytra (ratio elytral length / elytral width 2.71 against elytral ratio 2.93 in *D. annamensis*), by different shape of whitish stripe in basal third of elytra, by ginger pubescence in apical half of elytra, and by distinctly different shape of sternite 8, tergite 8, tegmen and median lobe (as in Figs. 8b and 2b).

Demonax cambodgensis sp. nov. distinctly differs from similar species *Demonax argopurensis* sp. nov. (Fig. 4) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.32 against pronotal ratio 1.47 in *D. argopurensis*), by less elongate elytra (ratio elytral length / elytral width 2.71 against elytral ratio 2.98 in *D. argopurensis*), by different shape of whitish stripe in basal third of elytra, by ginger pubescence in apical half of elytra, and by different shape of tegmen and median lobe (as in Figs. 8b and 4b).

Demonax cambodgensis sp. nov. distinctly differs from similar species Demonax belumensis





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

Fig. 9. Demonax cambodgensis sp. nov.: female paratype.

sp. nov. (Fig. 6) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.32 against pronotal ratio 1.40 in *D. belumensis*), by longer tarsi, by different shape of whitish stripe in basal third of elytra, by different colour of pubescence in elytral apical half (ginger pubescence in *D. cambodgensis* against grayish in *D. belumensis*), by distinctly shorter spines in apex of antennomeres 3 and 4, and by different shape of sternite 8, tegmen and median lobe (as in Figs. 8b and 6b).

Demonax cambodgensis sp. nov. distinctly differs from similar species *Demonax exemplaris* sp. nov. (Fig. 10) mainly by more elongate pronotum (ratio pronotal

length / pronotal width 1.32 against pronotal ratio 1.25 in *D. exemplaris*), by more elongate elytra (ratio elytral length / elytral width 2.71 against elytral ratio 2.52 in *D. exemplaris*), by different shape of whitish stripe in basal third of elytra, by different colour of pubescence in elytral apical half (ginger pubescence in *D. cambodgensis* against grayish in *D. exemplaris*), and by different shape of tergite 8, tegmen and median lobe (as in Figs. 8b and 10b).

Demonax cambodgensis sp. nov. distinctly differs from similar species *Demonax polyzonus* Pascoe, 1869 (Fig. 14) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.32 against pronotal ratio 1.44 in *D. polyzonus*), by less elongate elytra (ratio elytral length / elytral width 2.71 against elytral ratio 2.89 in *D. polyzonus*), by different shape of whitish stripe in basal third of elytra, by shorter protarsi and by distinctly different shape of tegmen and median lobe (as in Figs. 8b and 14b).

Demonax cambodgensis sp. nov. distinctly differs from similar species *Demonax sanggulensis* sp. nov. (Fig. 16) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.32 against pronotal ratio 1.35 in *D. sanggulensis*), by less elongate elytra (ratio elytral length / elytral width 2.71 against elytral ratio 3.0 in *D. sanggulensis*), by different shape of whitish stripe in basal third of elytra, by distinctly longer tarsi and by distinctly different shape of tegmen and median lobe (as in Figs. 8b and 16b).

Etymology. Named after the type locality, Kingdom of Cambodia.

Distribution. Cambodia (Mondulkiri).

Demonax exemplaris sp. nov.

(Figs. 10-11)

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

Type material. Holotype (\mathcal{J}): 'Vietnam' / 'Kon Tum' / 'Ngoc Linh' / '6/2017', (CPV); Paratypes: (1 \mathcal{Q}): same data as holotype, (CPV); (1 \mathcal{Q}): 'LAOS C., Bolikhamsai pr.,' / 'BAN NAPE env.' / '7. - 16. v. 2004, alt. 400±100 m,' / '18°20'N, 105°08'E,' / 'E. Jendek & O. Šauša leg.', (CPV); (3 $\mathcal{J}\mathcal{J}$, 4 $\mathcal{Q}\mathcal{Q}$): 'LAOS, Attapeu prov.' / 'Annam Highlands Mts., Dong Amphan' / 'NBCA, ca 1160 m, NONG FA (crater lake) env.' / '15° 05 9 'N, 107° 25 6' E' / 'St. Jákl lgt., 30. iv. - 6. v. 2010', (CPV, CRH); (1 \mathcal{J}): 'VIETNAM-N, Tuyen Quang pr.' / 'SE - E env. of Na Hang,' / '22°17'30''-22'30''N' / '105°26'-28'E, 200-700m' / 'L. Dembický leg., 1.-12.v.2010', (CLD). The types are provided with a printed red label: 'Demonax exemplaris sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 10a. Body from brown to black, elongate, punctate, with pubescence. Body length from head to elytral apex 11.27 mm (male paratypes from 11.6 to 13.05 mm), widest in humeral part of elytra (2.70 mm), 4.17 times longer than wide.

Head black (blackish brown in anterior part), relatively short, widest through the eyes, distinctly narrower than pronotum at widest point, posterior part with coarse granulate punctation, frons and anterior part with irregular punctation. Head with longitudinal furrows between antennal insertions. Head covered by long recumbent whitish pubescence and long pale erect setation in lateral margins and anterior part of head. Eyes goldenish, longitudinally emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles blackish brown with black tip, shiny, with long yellowish setation on edges.

Maxillary palpus brown, punctured by indistinct punctuation, palpomeres widened apically, covered by short sparse yellowish setation. Ultimate palpomere longest, widened apically, apex narrowly paler, rounded.

Antennae black, narrow, filiform, reaching six sevenths elytral length, punctate (antennomeres 1-4 with sparse medium-sized punctation, antennomeres 5-11 with dense small-sized punctation). Antennomeres 1-4 with whitish pubescence in full length, antennomere 5 with whitish pubescence in basal half and dark pubescence in apical half. Antennomeres 6-7 covered by whitish pubescence (narrowly darker in apex). Antennomeres 8-11 covered by short paler and dark pubescence. Antennomeres widened apically, antennomeres 7-10 serrate on outer side of apex. Antennomeres 3-4 with short sharp spine on inner side of apex. Antennomeres 3-7 with pale setation on inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.55 : 0.18 : 1.00 : 0.82 : 0.90 : 0.85 : 0.74 : 0.65 : 0.62 : 0.50 : 0.64.

Pronotum black, slightly elongate, narrower than elytra, granulated by dense granulation, disc in middle longitudinally with coarser granulation. Shape of pronotum as in Fig. 10a, 1.6 longer than wide at base and 1.25 times longer than wide at widest point (before middle from base to apex). Lateral margins distinctly arcuate, anterior margin arcuate, base undulate. Pronotum partly covered by yellowish, whitish and short black pubescence, whitish pubescence denser in basal angles (as in Fig. 10a). Pronotum with long erect pale setation, setation denser in basal half.

Scutellum black, roundly triangular, covered by whitish pubescence.

Elytra 6.81 mm long and 2.70 mm wide (2.52 times longer than wide); narrowing apically, black with brown apical quarter, suture black in full length. Elytra with dense medium-sized granulated punctation in basal third, with small-sized granulate punctation in second third and with dense small-sized punctation in apical third. Elytra covered by yellowish gray, whitish and short black pubescence (as in Fig. 10a). Elytral apex angled, covered by dense long yellowish setation.

Legs long and narrow, from blackish brown to black, punctate by shallow large-sized punctation, covered by yellowish gray pubescence and long pale erect setation. Femora with dense yellowish setation in apical part. Tarsi relatively short and wide, punctured by dense punctation, covered by dense yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.39 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black (ultimate ventrites brown), punctured. Metepisternum almost completely covered by dense white pubescence, metasternum covered by sparse whitish pubescence and dense white pubescence in apex, mesepisternum with coarse large-sized punctation, covered by dense white pubescence in apical part. Ventrites 1-2 almost completely covered by dense white pubescence, ventrites 3-5 covered by sparser gray pubescence. Ventral side of body with long pale erect setation. Elytral epipleura blackish brown, covered by yellowish gray pubescence.

Genitalia as in Fig. 10b.

Female. Habitus of female paratype as in Fig. 11. Body length from head to elytral apex (female paratypes) from 11.7 to 14.3 mm. Colour of female similar to male. Female without



10b

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

Fig. 11. Demonax exemplaris sp. nov.: female paratype.

distinct differences except distinctly shorter antennae than in male.

Differential diagnosis. Distinctly different species are *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950 and *Demonax transversalis* Aurivillius, 1910 (as you can see in comparision of Fig. 10 with Figs. 12, 18 and 20). *Demonax exemplaris* sp. nov. distinctly differs from similar species *Demonax annamensis* Pic, 1943 (Fig. 2) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.25 against pronotal ratio 1.27 in *D. annamensis*), by less

elongate elytra (ratio elytral length / elytral width 2.52 against elytral ratio 2.93 in *D. annamensis*), by different shape of whitish stripe in basal third of elytra, and by distinctly different shape of tergite 8, tegmen and median lobe (as in Figs. 10b and 2b).

Demonax exemplaris sp. nov. distinctly differs from similar species *Demonax argopurensis* sp. nov. (Fig. 4) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.25 against pronotal ratio 1.47 in *D. argopurensis*), by less elongate elytra (ratio elytral length / elytral width 2.52 against elytral ratio 2.98 in *D. argopurensis*), by different shape of whitish stripe in basal third of elytra, by distinctly shorter spines in apex of antennomeres 3 and 4, and by different shape of tegmen and median lobe (as in Figs. 10b and 4b).

Demonax exemplaris sp. nov. distinctly differs from similar species *Demonax belumensis* sp. nov. (Fig. 6) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.25 against pronotal ratio 1.40 in *D. belumensis*), by less elongate elytra (ratio elytral length / elytral width 2.52 against elytral ratio 2.77 in *D. belumensis*), by different shape of whitish stripe in basal third of elytra, by distinctly shorter spines in apex of antennomeres 3 and 4, and by different shape of sternite 8, tegmen and median lobe (as in Figs. 10b and 6b).

Demonax exemplaris sp. nov. distinctly differs from similar species *Demonax polyzonus* Pascoe, 1869 (Fig. 14) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.25 against pronotal ratio 1.44 in *D. polyzonus*), by less elongate elytra (ratio elytral length / elytral width 2.52 against elytral ratio 2.89 in *D. polyzonus*), by different shape of whitish stripe in basal third of elytra, and by distinctly different shape of tegmen and median lobe (as in Figs. 10b and 14b).

Demonax exemplaris sp. nov. distinctly differs from similar species *Demonax sanggulensis* sp. nov. (Fig. 16) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.25 against pronotal ratio 1.35 in *D. sanggulensis*), by less elongate elytra (ratio elytral length / elytral width 2.52 against elytral ratio 3.0 in *D. sanggulensis*), by different shape of whitish stripe in basal third of elytra, by distinctly longer tarsi and by distinctly different shape of tegmen and median lobe (as in Figs. 10b and 16b).

Etymology. From Latin exemplaris (it means "transcribed").

Distribution. Vietnam (Kon Tum, Tuyen Quang), Laos (Attapeu, Bolikhamsai).

Demonax perroti Pic, 1950 (Figs. 12-13)

Demonax perroti Pic, 1950: 13.

Type material. Type specimen from Vietnam in MNHN: 'TAM DAO' / 'TONKIN' / 'H. PERROT'.

Additional material. (1 ♂): 'N Vietnam 900 m' / 'Tamdao 3.vi-11.vi' / 'A. Olexa 1985', (CPV); (1 ♀): 'VIETNAM 6.-14.vi.2000' / 'FanSiPan 1600m' / 'B. + K. Martini lgt', (CPV).

Distribution. Vietnam.





Fig. 12. *Demonax perroti* Pic, 1950: male from Vietnam (Vinh Phuc), (CPV); b- male genitalia. Fig. 13. *Demonax perroti* Pic, 1950: female from Vietnam (Lao Cai), (CPV).



Fig. 14. *Demonax polyzonus* Pascoe, 1869: amale from Malaysia (Sabah), (CPV); b- male genitalia.

Fig. 15. *Demonax polyzonus* Pascoe, 1869: female from Malaysia (Sabah), (CPV).

Distribution. ? Indonesia (West Java), Malaysia (Sabah, Sarawak).

Demonax sanggulensis sp. nov. (Figs. 16-17)

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

Type material. Holotype (δ): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250m alt.' / 'Landai vill. env., v. - vi. 2012' / 'St. Jákl Igt.', (CPV); Paratypes: (2 $\delta \delta$, 5 $\varphi \varphi$): same data as holotype, (CPV); (1 δ): 'Indonesia, West Sumatra' / 'ANNAI VALLEY env., 400-600 m' / 'slopes of MT SINGGALANG' / 'St. Jákl Igt., v.2006', (CPV); (4 $\delta \delta$): 'Indonesia, West Sumatra' / 'MT. SANGGUL, 1250 m alt.' / 'Landai vill env., vi. 2013' / 'St. Jákl Igt.', (CPV); (1 φ): 'Indonesia, West Sumatra' / 'MT. SANGGUL, 1200-1900 m alt.' / 'Landai vill env., viii. 2012' / 'St. Jákl Igt.', (CPV); (1 φ): 'Indonesia, West Sumatra' / 'MT. SANGGUL, 1200-1900 m alt.' / 'Landai vill env., viii. 2012' / 'St. Jákl Igt.', (CPV); (1 φ): 'Sumatra' / 'Jambi' / 'x. 2014', (CPV); (1 φ): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250-1400m,' / 'cca 35 km N of Payakumbuh,' / 'vii. 2007, Landai vill. env. / 'St. Jákl Igt.', (CPV); (1 φ): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250 m, / 'Cca 30 km N of Payakumbuh,' / 'vi. 2007, St. Jákl Igt.', (CPV); (2 $\varphi \varphi$): 'INDONESIA: W SUMATRA' / 'MT. SANGGUL, 1250 m alt.' / 'Landai vill. env., vi. 2012' / 'St. Jákl Igt.', (CPV); (3 $\delta \delta$): 'Indonesia, West Sumatra' / 'MARAU VALLEY env, 20km' / N of Payakumbuh, G00m' / 'iv.-v. 2006, St. Jákl Igt.', (CPV); (3 $\delta \delta$): 'Indonesia, W. Sumatra' / 'HARAU valley env, 600m' / '25 km N of Payakumbuh' / 'v.2007, St. Jákl Igt.', (CPV); (1 $\delta \delta$): 'Indonesia, W. Sumatra / 'HARAU valley env, 600m' / '25 km N of Payakumbuh' / 'v.2007, St. Jákl Igt.', (CPV): The types are provided with a printed red label: 'Demonax sanggulensis sp. nov.' / 'HOLOTYPUS [respective PARATYPUS]' / 'P. Viktora det., 2019'.

Description. Habitus of male holotype as in Fig. 16a. Body from pale brown to black, elongate, relatively narrow, punctate, with pubescence. Body length from head to elytral apex 10.90 mm (male paratypes from 10.1 to 13.2 mm), widest in humeral part of elytra (2.33 mm), 4.67 times longer than wide.

Head black (blackish brown in anterior part), relatively short, widest through the eyes, only slightly narrower than pronotum at widest point, posterior part with dense, relatively coarse granulation, frons with less coarse granulation, anterior part with irregular punctation. Head with indistinct longitudinal furrows between antennal insertions and in middle of frons. Head covered by sparse recumbent yellowish gray pubescence and long pale erect setation in lateral margins and anterior part of head. Eyes goldenish, longitudinally emarginate. Clypeus and labrum pale brown, shiny, with yellowish setation. Mandibles blackish brown, shiny, with long yellowish setation in edges.

Maxillary palpus dark brown, punctate by indistinct punctation, palpomeres widened apically, covered by pale setation. Ultimate palpomere longest, distinctly widened apically.

Antennae blackish brown, narrow, filiform, reaching four sevenths elytral length, punctured by dense punctuation (scape with sparser and coarser punctuation). Antennomeres 1-7 covered by whitish pubescence (pubescence denser in antennomeres 5-7), antennomeres 8-11 covered by short dark pubescence. Antennomeres widened apically, antennomeres 7-8 serrate on outer side of apex. Antennomeres 3-4 with distinct sharp spine on inner side of apex. Antennomeres 3-5 with short pale setation on inner side. Antennomere 2 shortest, antennomere 3 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.49 : 0.21 : 1.00 : 0.65 : 0.78 : 0.71 : 0.60 : 0.43 : 0.45 : 0.36 : 0.34.

Pronotum black, elongate, narrow, distinctly narrower than elytra, granulated by dense granulation, disc in middle longitudinally with coarser granulation. Shape of pronotum as in Fig. 16a, 1.68 times longer than wide at base and 1.35 times longer than wide at widest point (middle of pronotum). Anterior margin arcuate, base undulate. Pronotum partly covered by grayish recumbent pubescence and shorter dark pubescence, pale pubescence denser in margins, dense in basal angles (as in Fig. 16a). Pronotum with long erect pale setation.





Fig. 16. *Demonax sanggulensis* sp. nov.: a- male holotype; b- male genitalia.

Fig. 17. Demonax sanggulensis sp. nov.: female paratype

Scutellum black, wide, semielliptical, covered by relatively dense whitish pubescence.

Elytra 6.98 mm long and 2.33 mm wide (3 times longer than wide); distinctly narrowing apically, black with pale brown apical quarter, suture black in full length. Elytra with dense granulate punctation in basal third, rest of elytra punctured by dense small-sized punctation. Elytra covered by grayish, white and short black pubescence (as in Fig. 16a). Elytral apex angled in sutural angles, lateral angles angled (indistinctly arcuate respectively). Apical margin with long yellowish setation.

Pygidium pale brown, punctate by shallow punctation, covered by long yellowish setation, apex rounded.

Legs long and narrow, from blackish brown to black, punctured by coarse granulate punctation, covered by sparse yellowish gray pubescence and long pale erect setation. Proand mesofemora with dense yellowish setation in apical part. Tarsi relatively short and wide, punctured by dense punctuation, covered by yellowish pubescence and setation. Metatibiae and metafemora distinctly longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 1.19 times longer than metatarsomeres 2 and 3 together.

Ventral side of body from dark brown to black (ultimate ventrites distinctly paler), punctured. Metepisternum almost completely covered by dense white pubescence, metasternum covered by sparser whitish pubescence and dense white pubescence in apex, mesepisternum covered by dense white pubescence in apical part, ventrites 1-2 almost completely covered by dense recumbent white pubescence, ventrites 3-5 covered by sparser yellowish pubescence. Ventral side of body with long pale erect setation. Elytral epipleura blackish brown with short indistinct pubescence.

Genitalia as in Fig. 16b.

Female. Habitus of female paratype as in Fig. 17. Body length from head to elytral apex (female paratypes) from 11.7 to 14.0 mm. Colour of female similar to male. Female without distinct differences, body more robust, protarsi narrower and shorter than in male.

Differential diagnosis. Distinctly different species are *Demonax nawatai* Hayashi, 1975, *Demonax perroti* Pic, 1950 and *Demonax transversalis* Aurivillius, 1910 (as you can see in comparision of Fig. 16 with Figs. 12, 18 and 20).

Demonax sanggulensis sp. nov. distinctly differs from similar species *Demonax annamensis* Pic, 1943 (Fig. 2) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.27 in *D. annamensis*), by more elongate elytra (ratio elytral length / elytral width 3.0 against elytral ratio 2.93 in *D. annamensis*), by different shape of whitish stripe in basal third of elytra, by longer spines in apex of antennomeres 3 and 4, and by different shape of sternite 8, tergite 8, tegmen and median lobe (as in Figs. 16b and 2b). *Demonax sanggulensis* sp. nov. distinctly differs from similar species *Demonax argopurensis* sp. nov. (Fig. 4) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.47 in *D. argopurensis*), by shorter protarsi, by different shape of whitish stripe in basal third of elytra, langle in elytral apex (sharp in *D. argopurensis*), by shorter antennae (reaching four sevenths elytral length against three quarters in *D. argopurensis*), and by different shape of sternite 8, tegmen and median lobe (as in Figs. 16b and 2b).

Demonax sanggulensis sp. nov. distinctly differs from similar species *Demonax belumensis* sp. nov. (Fig. 6) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.40 in *D. belumensis*), by more elongate elytra (ratio elytral length / elytral width 3.0 against elytral ratio 2.77 in *D. belumensis*), by different shape of whitish stripe in basal third of elytra, by elytral apex angled - indistinctly arcuate in lateral angles (distinctly arcuate lateral angles in *D. belumensis*), and by distinctly different shape of tegmen and median lobe (as in Figs. 16b and 6b).

Demonax sanggulensis sp. nov. distinctly differs from similar species *Demonax cambodgensis* sp. nov. (Fig. 8) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.32 in *D. cambodgensis*), by more elongate elytra (ratio elytral length / elytral width 3.0 against elytral ratio 2.71 in *D. cambodgensis*), by different shape of whitish stripe in basal third of elytra, by distinctly shorter tarsi, by apical elytral half covered by grayish pubescence (ginger pubescence in *D. cambodgensis*), and by distinctly different shape of tegmen and median lobe (as in Figs. 16b and 8b).

Demonax sanggulensis sp. nov. distinctly differs from similar species *Demonax exemplaris* sp. nov. (Fig. 10) mainly by more elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.25 in *D. exemplaris*), by more elongate elytra (ratio elytral length / elytral width 3.0 against elytral ratio 2.52 in *D. exemplaris*), by different shape of whitish stripe in basal third of elytra, by distinctly shorter tarsi and by distinctly different shape of tegmen and median lobe (as in Figs. 16b and 10b).

Demonax sanggulensis sp. nov. distinctly differs from similar species *Demonax polyzonus* Pascoe, 1869 (Fig. 14) mainly by less elongate pronotum (ratio pronotal length / pronotal width 1.35 against pronotal ratio 1.44 in *D. exemplaris*), by more elongate elytra (ratio elytral length / elytral width 3.0 against elytral ratio 2.89 in *D. polyzonus*), by distinctly shorter protarsi, by different shape of whitish stripe in basal third of elytra and by distinctly different shape of tergite 8, tegmen and median lobe (as in Figs. 16b and 14b).

Etymology. Named after the type locality, Mt. Sanggul.

Distribution. Indonesia (Sumatra).

Demonax transversalis Aurivillius, 1910

(Figs. 18-19)

Demonax transversalis Aurivillius, 1910: 161.

Type material. Type specimen from Borneo in NRSS.

Additional material. $(1 \ 3, 1 \ 2)$: 'INDONESIA, Kalimantan Barat Pr.' / 'SW Kalimantan, 1000 - 1500 m alt.' / 'Singkawang region, v. 2018' / 'MT. BAWANG, Madi vill. env.' / 'local collector leg.', (CPV); $(1 \ 2)$: 'Malaysia, Borneo-Sabah' / 'Crocker Range' / '10. iv. 2009' / 'local collector', (CPV).

Distribution. Indonesia (Kalimantan), Malaysia (Sabah, Sarawak).





Fig. 18. *Demonax transversalis* Aurivillius, 1910: a- male from Indonesia (Kalimantan), (CPV); b- male genitalia. Fig. 19. *Demonax transversalis* Aurivillius, 1910: female from Malaysia (Sabah), (CPV).



Fig. 20. Demonax nawatai Hayashi, 1975: male from Indonesia (Kalimantan), (CPV). Fig. 21. Demonax nawatai Hayashi, 1975: female from Malaysia (Sabah), (CPV).

Demonax nawatai Hayashi, 1975

(Figs. 20-21)

Demonax nawatai Hayashi, 1975: 182.

Type material. Holotype female from Borneo (Sarawak, Kayu Kapur Camp) in OMNH.

Additional material. (1 \Im): 'INDONESIA, Kalimantan Barat Pr.' / 'SW Kalimantan, 1000 - 1500 m alt.' / 'Singkawang region, vi. 2018' / 'MT. BAWANG, Madi vill. env.' / 'local collector leg.', (CPV); (1 \updownarrow): 'Malaysia, Sabah' / 'Tawau' / 'v-1-2016' / 'local coll', (CPV).

Distribution. Indonesia (Kalimantan), Malaysia (Sabah, Sarawak).

LIST OF RELATED SPECIES TO DEMONAX POLYZONUS PASCOE, 1869

Demonax annamensis Pic, 1943	China (Yunnan), Laos, Thailand, Vietnam
= Demonax diversefasciatus Pic, 1937 (pr	reoccupied name)
Demonax argopurensis sp. nov.	Indonesia (Java)
Demonax belumensis sp. nov.	Malaysia (Pahang, Perak)
Demonax cambodgensis sp. nov.	Cambodia (Mondulkiri)
Demonax exemplaris sp. nov.	Laos (Bolikhamsai, Attapeu), Vietnam (Kon Tum)
Demonax nawatai Hayashi, 1975	Indonesia (Kalimantan), Malaysia (Sabah, Sarawak)
Demonax perroti Pic, 1950	Vietnam
Demonax polyzonus Pascoe, 1869 = Demonax carinatus Aurivillius, 1922	? Indonesia (West Java)*, Malaysia (Sabah, Sarawak)
Demonax sanggulensis sp. nov.	Indonesia (Sumatra)
Demonax transversalis Aurivillius 19	10 Indonesia (Kalimantan) Malaysia (Sabah Sarawak)

* Note. Makihara et al, 2002: 193, Pl. 3, Fig. 26 report one female of *D. polyzonus* from Gunung Halimun National Park in the West Java. Based photo, the determination may be incorrect and it should be reviewed.

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