New species of Clytini Mulsant, 1839 from China (Coleoptera: Cerambycidae: Cerambycinae)

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Abstract. Demonax matyasi sp. nov., Demonax petrae sp. nov. from China (Yunnan) and Perissus jiuzhaigouensis sp. nov. from China (Sichuan) are described and illustrated.

INTRODUCTION

Tribus Clytini Mulsant, 1839 is one of the most numerous - in terms of species - tribus of Cerambycidae. Species of tribus Clytini are known from all biogeographic zones of the Earth except the Antarctic Region. Tribus Clytini is currently divided into approximately 70 genera. From the Palaearctic, Oriental and Australian biogeographic Regions (which are areas of my interest) about 1300 species have been described so far. Within these regions, the most numerous genera are *Demonax* Thomson, 1861 with about 400 known species, *Chlorophorus* Chevrolat, 1863 with about 260 known species, *Xylotrechus* Chevrolat, 1860 with about 210 known species and *Rhaphuma* Pascoe, 1858 with about 180 known species. Twenty-six new species of Clytini were described by Viktora (2014, 2015a-c, 2016a-b).

Demonax matyasi sp. nov., Demonax petrae sp. nov. from China (Yunnan) and Perissus jiuzhaigouensis sp. nov. from China (Sichuan) are described and illustrated.

MATERIAL AND METHODS

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

CPK private collection of Petr Kabátek, Praha, Czech Republic;

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

CTT private collection of Tomáš Tichý, Opava, Czech Republic.

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

TAXONOMY

Tribe Clytini Mulsant, 1839

Genus Demonax Thomson, 1861

Demonax matyasi sp. nov.

(Fig. 1)

Type locality. China, Yunnan prov., Gaoligong Shan Mts., Guquancun SW of Fugong.

Type material. Holotype (3): 'SW China, Yunnan prov.' / 'Gaoligong Shan mts.' / 'Guquancun SW of Fugong' / '26°52'N 98°51'E, 1600m, 25. - 27. v. 2016' / 'P. Viktora lgt.' (CPV). The type is provided with a printed red label: 'Demonax matyasi sp. nov.' / 'HOLOTYPUS' / 'P. Viktora det., 2016'.

Description of holotype. Habitus of male holotype as in Fig. 1a. Body from ochre yellow to black, elongate, narrow, parallel, punctuate, with pubescence. Body length 10.53 mm, widest in humeral part of elytra (2.35 mm), 4.5 times longer than wide.

Head black, relatively short, widest through the eyes, only slightly narrower than pronotum, with fine punctuation, with dense yellow pubescence. Clypeus reddish brown with a few long pale setae. Eyes distinctly longitudinally emarginate.

Maxillary palpus reddish brown, palpomeres short. Ultimate palpomere longest, apically widest, axe shaped.

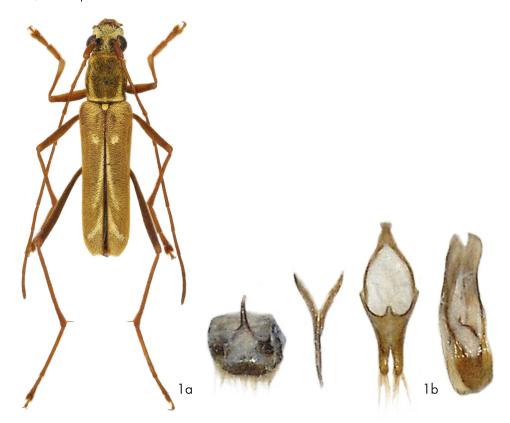


Fig. 1: Demonax matyasi sp. nov.: a- ♂ holotype; b- ♂ genitalia.

Antennae filiform, narrow, slightly longer than body length, reddish brown, with very fine punctuation. Punctuation of antennomere 1 larger and coarser than punctuation of antennomeres 2-11. Antennomere 2 shortest. Antennae covered by reddish brown pubescence. Antennomeres 2-6 with long pale brown setae on inner side. Antennomere 1 with a few long pale brown setae on outer side. Antennomere 3 with distinct spine at apex of inner side. Ratios of relative lengths of antennomeres 1-11 equal to: 0.73:0.35:1.00:1.15:1.31:1.30:1.26:1.05:1.00:0.91:1.08.

Pronotum black, with slightly arcuate lateral margins; 1.22 times longer than wide at the base and 1.09 times longer than wide at the widest point (near the middle of pronotum). Dorsal surface

with distinct dense punctuation and with dense yellow pubescence. Lateral margins near basal angles with a few long setae.

Scutellum semielliptical, covered by dense yellow pubescence.

Elytra 6.95 mm long and 2.35 mm wide; ochre yellow, narrow, parallel, elongate, with dense punctuation, with yellow pubescence (as in Fig. 1a). Each elytron angularly terminated on outer side of apex.

Legs long and narrow, reddish brown, with dense pale brown pubescence. Pro- and mesotarsomeres, apical parts of pro- and mesotibia with partly denser pale brown pubescence. Metatibia and metafemora longer than pro- and mesotibia and pro- and mesofemora. Metafemora slightly darker than pro- and mesofemora. Metatarsomere 1 1.92 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by dense whitish yellow pubescence. Genitalia as in Fig. 1b.

Female. Unknown.

Differential diagnosis. Demonax matyasi sp. nov. is visually similar to the species of the genus Rhaphuma Pascoe, 1858: Rhaphuma seminuda Viktora, 2016, Rhaphuma aranea Holzschuh, 1984, Rhaphuma nishidai Hayashi & Makihara, 1981 and Rhaphuma bicolor Pic, 1927, but the new species obviously belongs to the genus Demonax Thomson, 1861 because it has antennomere 3 with distinct spine at apex on inner side. D. matyasi sp. nov. is an unique species in the genus Demonax, clearly differs from a relatively similar species Demonax ferrugatus Holzschuh, 2013 mainly by different shape of pronotum and longer antennae.

Etymology. Dedicated to Matyáš Kabátek, son of my good friend and specialist in Cerambycidae Petr Kabátek (Praha, Czech Republic).

Distribution. China (Yunnan).

Demonax petrae sp. nov.

(Figs. 2-3)

Type locality. China, Yunnan prov., Gaoligong Shan Mts., road from Liuku to Pianma.

Type material. Holotype (3): 'SW China, Yunnan prov.' / 'Gaoligong Shan mts.' / 'road from Liuku to Pianma, 2200 m' / '25°58'N 98°46'E, 1. - 4. vi. 2016' / 'P. Viktora lgt.' (CPV); Paratype: $(2 \ 3 \ 5 \ 9 \ 9)$: same data as holotype (CPV); $(1 \ 3 \ 9 \ 9)$: 'SW China, Yunnan prov.' / 'Gaoligong Shan mts.' / 'road from Liuku to Pianma, $(2200 \ m)$ / '25°58'N 98°46'E, 1. - 4. vi. (2016) / 'P. Kabátek lgt.' (CPK). The types are provided with a printed red label: 'Demonax petrae sp. nov.' / 'HOLOTYPUS (respective PARATYPUS)' / 'P. Viktora det., (2016)'.

Description of holotype. Habitus of male holotype as in Fig. 2a. Body black, elongate, narrow, parallel, punctuate, with pubescence. Body length 16.17 mm (male paratypes from 12.72 to 18.32 mm), widest in humeral part of elytra (3.45 mm), 4.68 times longer than wide.

Head black, relatively short, widest through the eyes, distinctly narrower than pronotum, with very fine punctuation, with short and dense whitish grey pubescence. Clypeus partly pale reddish brown with a few long pale setae. Eyes distinctly longitudinally emarginate.

Maxillary palpus dark brown, palpomeres short. Ultimate palpomere longest, apically widest, with very fine punctuation.



Fig. 2: Demonax petrae sp. nov.: a-3 holotype; b-3 genitalia.

Antennae filiform, with distinct very fine punctuation. Antennomere 2 shortest. Antennae covered by whitish grey pubescence. Antennomeres 1-7 black, antennomeres 8-11 brown. Antennomeres 2-6 with long pale setae in inner side. Antennomeres 3 and 5 with short distinct spines in apex of inner side, antennomere 4 with longer spine in apex of inner side. Antennomeres 3-6 slightly serrate. Antennae slightly longer than body length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.65: 0.24: 1.00: 0.92: 1.19: 1.22: 1.25: 1.14: 1.13: 0.99: 0.90.

Pronotum black, with very slightly arcuate lateral margins; 1.76 times longer than wide at the base and 1.35 times longer than wide at the widest point (in one third of pronotal length from base to apex). Dorsal surface with fine and dense punctuation, with short and dense yellowish grey pubescence. Disc of pronotum with three glabrous tubercles, two of them smaller near middle of lateral margins, one larger in middle near base. Base almost straight, anterior margin slightly arcuate.

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

Elytra 11.05 mm long and 3.45 mm wide; black, narrow, parallel, elongate, with fine dense punctuation, covered by yellowish grey and black pubescence (as in Fig. 2a). Each elytron terminated by thorn on outer side of apex.

Legs long and narrow, black, with punctuation, with very short dense grey pubescence. Pro- and mesotarsomeres, apical parts of pro- and mesotibia with partly denser pale pubescence. Tibia and femora with a few long setae. Metatibia and metafemora distinctly longer than pro- and mesotibia and pro- and mesofemora. Protarsomeres distinctly wider than meso- and metatarsomeres. Metatarsomere 1 2.06 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by yellowish grey pubescence. Elytral epipleura black, narrow.

Genitalia as in Fig. 2b.



Fig. 3: Demonax petrae sp. nov.: ♀ paratype.

Female. Habitus of female paratype as in Fig. 3. Body length (female paratypes) from 15.42 to 18.95 mm. Female without distinct differences. Body slightly wider, protarsomeres distinctly narrower than in male, antennae slightly shorter than body length.

Measurements of one female paratype: Body length 17.79 mm, widest in humeral part of elytra (3.84 mm), 4.63 times longer than wide. Pronotum 1.59 times longer than wide at base and 1.30 times longer than wide at widest point (in one third of pronotal length from base to apex). Ratios of relative lengths of antennomeres 1-11 equal to: 0.58: 0.19: 1.00: 0.91: 1.14: 1.10: 1.06: 0.90: 0.88: 0.71: 0.65. Metatarsomere 1.1.93 times longer than metatarsomeres 2 and 3 together.

Differential diagnosis. The most similar species is *Demonax macilentus* (Chevrolat, 1858), described from Singapore. Males of *Demonax petrae* sp. nov. clearly differs from males of *D. macilentus* by shorter and wider antennomeres (slightly longer than body length) and by distinctly wider protarsi than mesotarsi; while males of *D. macilentus* have antennomeres long and narrow (distinctly exceeding body length, approximately 1.3 times longer than body length) and protarsi and mesotarsi similarly widened, protarsi distinctly narrower than those in *D. petrae*. Both species have also different shapes of spots on elytra.

Etymology. Dedicated to my daughter Petra.

Distribution. China (Yunnan).

Genus Perissus Chevrolat, 1863

Remark. The genus *Perissus* Chevrolat, 1863 presently comprises many different species. New species *Perissus jiuzhaigouensis* sp. nov. after the present view belongs to the genus *Perissus*. The species newly described below comes from naturally rich area of Jiuzhaigou in Minshan, mountain range of Sichuan and Gansu (China), and can be compared to *Perissus multifenestratus* (Pic, 1926), which is known from the same area.

Perissus jiuzhaigouensis sp. nov.

(Figs. 4-5)

Type locality. China, Sichuan prov., 56 km W Jiuzhaigou, Zhongcha vill.

Type material. Holotype (♂): 'C China, Sichuan prov.' / '56 km W Jiuzhaigou' / '33°16,648' N, 103°48,900' E' / '2433 m, Zhongcha vill.' / '2., 6., 7. vii. 2012' / 'P. Kabátek lgt.' (CPV); Paratype: (6 ♂♂, 1 ♀): same data as holotype (CPK, CPV); (1 ♂): 'CHINA - SICHUAN' / 'Juizhaigou' / '7. vii. - 8. vii. 2011' (CPV); (1 ♀): '15.+17.vii.2014; China' / 'Jiuzhaigou' / 'Zhongcha' / '2300-3200m' / 'Sichuan' (CTT). The types are provided with a printed red label: 'Perissus jiuzhaigouensis sp. nov.' / 'HOLOTYPUS (respective PARATYPUS)' / 'P. Viktora det., 2016'.

Description of holotype. Habitus of male holotype as in Fig. 4a. Body black, elongate, narrow, parallel, punctuate, matte, with pubescence. Body length 11.95 mm (male paratypes from 7.92 to 10.15 mm), widest in humeral part of elytra (2.82 mm), 4.23 times longer than wide.

Head black, relatively short, widest through the eyes, only slightly narrower than pronotum. Basal part with large and coarse punctures and distinct microgranulation, anterior part with smaller punctures and microrugosities. Head partly covered by yellowish pubescence and a few long pale setae near eyes and on frons. Clypeus brown, shiny, glabrous, short. Eyes distinctly longitudinally emarginate.

Maxillary palpus brown, shiny, palpomeres short. Ultimate palpomere longest.

Antennae relatively short, approximately reaching half of body length. Antennomere 1 blackish brown, antennomeres 2-11 reddish brown. Antennomeres 1-5 with more distinct punctuation compared to antennomeres 6-11. Antennomeres 1-6 with long yellowish pubescence, antennomeres 7-11 with short yellowish pubescence. Antennomere 2 shortest, antennomere 5 longest. Antennomeres without spines. Ratios of relative lengths of antennomeres 1-11 equal to: 0.72:0.48:1.00:0.91:1.07:0.91:0.83:0.69:0.69:0.56:0.65.

Pronotum black, distinctly arcuate in lateral margins, convex, 1.48 times longer than wide at

the base and 1.06 times longer than wide at the widest point (near the middle of pronotum). Dorsal surface with distinct dense punctuation, punctures relatively small. Posterior margin almost straight, anterior margin slightly arcuate. Disc with yellowish pubescence (as in Fig. 4a) and long pale setae.



Fig. 4: Perissus jiuzhaigouensis sp. nov.: a-3 holotype; b-3 genitalia.

Scutellum black, large, semielliptical, covered by dense yellowish pubescence.

Elytra 8.14 mm long and 3.45 mm wide; black, narrow, parallel, elongate, with dense punctuation, with yellowish pubescence (as in Fig. 4a). Apex of elytra with dense and long yellowish pubescence.

Legs long and narrow, blackish brown, with punctuation and with long yellowish pubescence. Metatibia and metafemora longer than pro- and mesotibia and pro- and mesofemora. Mesotibia and mesofemora distinctly longer than protibia and profemora. Protarsomeres shorter and wider than meso- and metatarsomeres. Metatarsomere 1 1.59 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, almost completely covered by dense yellowish pubescence. Genitalia as in Fig. 4b.

Female. Habitus of female paratype as in Fig. 5. Female slightly wider, it has shorter antennae and narrower protarsi than male. Measurements of a female paratype: Body length 10.67 mm (second female paratype 10.84 mm), widest in humeral part of elytra (2.75 mm), 3.88 times longer than wide. Pronotum 1.76 times longer than wide at base and 1.37 times longer than wide at widest point (near the middle of pronotum). Ratios of relative lengths of antennomeres 1-11 equal to: 0.94 : 0.44 : 1.00 : 0.86 : 0.90 : 0.79 : 0.74 : 0.57 : 0.56 : 0.47 : 0.69. Metatarsomere 1 1.75 times longer than metatarsomeres 2 and 3 together.



Fig. 5: *Perissus jiuzhaigouensis* sp. nov.: ♀ paratype.

Differential diagnosis. The most similar species is *Perissus multifenestratus* (Pic, 1926) (Fig. 6). *Perissus jiuzhaigouensis* sp. nov. clearly differs from *P. multifenestratus* by its different shape of colour pattern of dorsal surface of elytra and by longer and narrower antennomeres.

Etymology. Named after the place of discovery, Jiuzhaigou Valley.

Distribution. China (Sichuan).



Fig. 6: Perissus multifenestratus (Pic, 1926): (China, Sichuan prov., 31 km NW Jiuzhaigou; CPV).

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