

A new species of the Clytini Mulsant, 1839 (Coleoptera, Cerambycidae, Cerambycinae) from China

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Abstract. *Demonax xiaozhaizigouensis* sp. nov. from China (Sichuan, Shaanxi) is described and illustrated. The new species is compared to the two related species, which are also illustrated.

INTRODUCTION

The genus *Demonax* J. Thomson, 1861 was erected by J. Thomson for *D. nigrofasciatus* from eastern Indonesia. Meantime, about 400 species of this very diverse genus distributed especially in the east and southeast of Asia have been described. Holzschuh (2006, 2013, 2016), Li, Tian & Chen (2013) and Viktora (2016) recently studied the genus and described new species from China. In the present paper, we describe a new species of the genus *Demonax* from materials which were recently collected in Xiao-Zhaizigou National Nature Reserve (Sichuan, China).

Demonax xiaozhaizigouensis sp. nov. from China (Sichuan, Shaanxi) is described and illustrated. The new species is compared to the two related species (*Demonax palleolus* Holzschuh, 2006 and *Demonax parilis* Holzschuh, 1995), which are also illustrated.

MATERIAL AND METHODS

All material of the new species (with the exception of a single male specimen from Shaanxi Province) was recently collected in Xiao-Zhaizigou National Nature Reserve (Sichuan, China), thanks to members of the Czech-Chinese expedition within the framework of "Investigation and Researches of Long-horned Beetle in Xiao-Zhaizigou National Nature Reserve" from June 22, 2017 to July 08, 2017.

The material examined during the study of the new species is deposited especially in the private collection of the first author. Some other private collections were studied as well.

The type material will be deposited in the collections with the following acronyms:

- BITS Bin Insect Taxonomy Studio, Beijing, China (B. Liu);
- CPV private collection of Ondřej Konvička, Zlín, Czech Republic;
- CPK private collection of Petr Kabátek, Praha, Czech Republic;
- CPV private collection of Petr Viktora, Kutná Hora, Czech Republic;
- SCU collection of Sichuan University, Chengdu, China.

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

The photographs of the habitus of all species were taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Microstructures of dissected parts were observed under the DNT DigiMicro Profi USB microscope. Composite images were created using the software Image Stacking Software Combine ZP. The photographs were modified using Adobe Photoshop CC if needed.

TAXONOMY

Tribe Clytini Mulsant, 1839

(Coleoptera: Cerambycidae: Cerambycinae)

Genus *Demonax* J. Thomson, 1861

Type species. *Demonax nigrofasciatus* Thomson, 1861

Demonax xiaozhaizigouensis sp. nov.

(Figs. 1-2)

Type locality. China, N Sichuan, Xiao-Zhaizigou National Nature Reserve, 7 km W of Qingpianxiang, Xiaozhaizigou.

Type material. Holotype (♂): 'CHINA, N Sichuan' / 'Xiao-Zhaizigou National Nature Reserve' / '7 km W of Qingpianxiang' / 'Xiaozhaizigou' / '32°1'25''N, 103°56'21''E' / '27.vi.-1.vii.2017, 1560-1700m' / 'P. Viktora lgt.' (SCU); Paratypes: (2 ♂♂, 1 ♀): same data as holotype; (1 ♂, 4 ♀♀): 'CHINA, N Sichuan' / 'Xiao-Zhaizigou National Nature Reserve' / '4 km NNE of Qingpianxiang' / 'Zhenghecun' / '32°3'27''N, 103°59'37''E' / '23.-26.vi.2017, 1350-1850m' / 'P. Viktora lgt.'; (1 ♂): 'CHINA-SHAANXI' / 'Lueyang' / '29.v.-2.vi.2005' / 'lgt. E. Kučera'; (2 ♀♀): 'China, N Sichuan, Xiao-Zhaizigou' / 'National Nature Reserve' / '7 km W of Qingpianxiang' / 'Xiao-zhaizigou Nat.' / '32°1'25''N' / '103°56'21''E, 27.vi.-1.vii.2017' / '1560-1700m, lgt. Petr Kabátek'; (1 ♂, 2 ♀♀): 'China, N Sichuan, Xiao-Zhaizigou Nat.' / 'Nature Reserve' / '7 km W of' / 'Qingpianxiang, Xiaozhaizigou' / '32°1'25''N 103°56'21''E' / '27.vi.-1.vii.2017, 1560-1700m' / 'lgt. Ondřej Konvička'; (1 ♂, 1 ♀): 'CHINA, Sichuan prov.' / 'Xiaozhaizigou National Natural Reserve' / 'Erbaya Zu, Zhenghe Village, Qingpian Township' / 'Beichuan Qiang Autonomous County, Mianyang City' / '27-vi-2017, 1830m, 32°4'0.08''N, 103°59'6.08''E' / 'coll. Jiguang HE'; (5 ♂♂, 2 ♀♀): 'CHINA, Sichuan prov.' / 'Xiaozhaizigou National Natural Reserve' / 'Zhenghe Village, Qingpian Township' / 'Beichuan Qiang Autonomous County, Mianyang City' / '26-vi-2017, 1462m, 32°43'33.01''N, 103°59'35.18''E' / 'sweep flower, coll. Jiguang HE'; (3 ♂♂, 9 ♀♀): 'CHINA, Sichuan prov.' / 'Xiaozhaizigou National Natural Reserve' / 'Chawan Village, Qingpian Township' / 'Beichuan Qiang Autonomous County, Mianyang City' / '28-vi-2017, 1414m, 32°0'59.23''N, 103°58'38.99''E' / 'sweep flower, coll. Bin LIU'; (1 ♂, 2 ♀♀): 'CHINA, Sichuan prov.' / 'Xiaozhaizigou National Natural Reserve' / 'Chawan Village, Qingpian Township' / 'Beichuan Qiang Autonomous County, Mianyang City' / '28-vi-2017, 1414m, 32°0'59.23''N, 103°58'38.99''E' / 'sweep flower, coll. Jiguang HE'; (4 ♀♀): 'CHINA, Sichuan prov.' / 'Xiaozhaizigou National Natural Reserve' / 'Shangwu Village, Qingpian Township' / 'Beichuan Qiang Autonomous County, Mianyang City' / '30-vi-2017, 1630m, 32°0'16.85''N, 103°55'11.94''E' / 'sweep flower - *Castanea* sp., coll. Bin LIU' (BITS, COK, CPK, CPV, SCU).

The types are provided with a printed red label: '*Demonax xiaozhaizigouensis* sp. nov.' / 'HOLOTYPE (respective PARATYPE)' / 'P. Viktora, B. Liu et T. Zhang det., 2017'.

Description of holotype. Habitus of male holotype as in Fig. 1a. Body black, elongate, narrow, parallel, punctuate, with pubescence. Body length 5.9 mm (male paratypes 5.2-6.6 mm), widest in humeral part of elytra (1.35 mm), 4.37 times longer than wide.

Head black, short, broadest across the eyes, slightly narrower than pronotum, with long and dense white pubescence. Dorsal surface with very fine and dense punctuation. Clypeus brown, distinctly paler than anterior part of head. Eyes distinctly longitudinally emarginate. Maxillary palpus pale brown. Ultimate palpomere longest, evenly broadened, widest at apex.

Antennae longer, brown, filiform, with very small punctuation and short white pubescence. Antennomere 2 shortest, antennomere 3 longest. Antennomere 4 with sharp apex in inner side

with long setae. Antennae reaching six sevenths of elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.50 : 0.37 : 1.00 : 0.72 : 0.78 : 0.85 : 0.83 : 0.72 : 0.72 : 0.68 : 0.85.

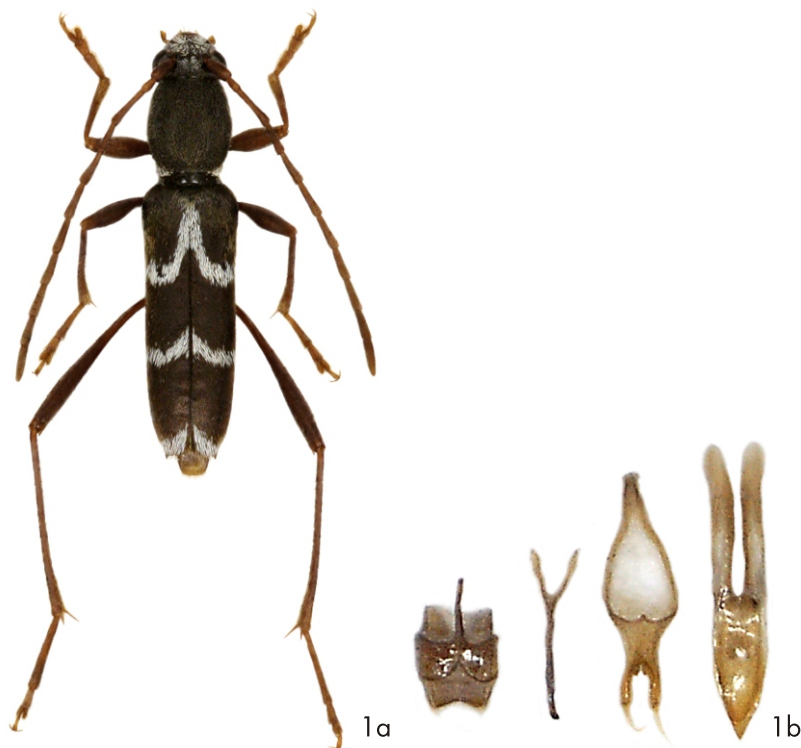


Fig. 1: *Demonax xiaozhaizigouensis* sp. nov.: a- male holotype; a- male genitalia.

Pronotum black, roundly elongate, 1.55 times longer than wide at the base and 1.17 times longer than wide at the widest point (middle of the pronotum); with dense fine punctuation, covered by short and sparse pale pubescence. Lateral margins arcuate, before posterior angles with two long dark setae. Anterior margin and base almost straight, posterior angles with dense white pubescence.

Scutellum black, semielliptical, with sparse and short pale pubescence.

Elytra 3.87 mm long and 1.35 mm wide; narrow, elongate, matte, with distinct small-sized punctuation, covered by black and goldenish pubescence and stripes of white pubescence (as in Fig. 1a). Each elytron terminated by distinct thorns on outer side of apex, apex of elytra straight.

Legs long and narrow, brown, meso- and metafemora distinctly darker, with short and dense pale pubescence, each apical half of tibia and tarsus with distinctly longer pale pubescence. Metatibia and metafemora distinctly longer than pro- and mesotibia and pro- and mesofemora. Metatarsomere 1 2.4 times longer than metatarsomeres 2 and 3 together.

Ventral side of body black, partly covered by stripes of white pubescence and sparse yellowish pubescence. Elytral epipleura developed, dark brown, relatively narrow.

Male genitalia as in Fig. 1b.

Female. Habitus of female paratype as in Fig. 2. Body length (female paratypes) 5.2-7.1 mm. Colour of female the same as in male. Female without distinct differences, only pronotum slightly wider and shorter, antennae shorter, and head with distinctly sparser white pubescence than in male, especially at the frons (as in Figs. 1-2).



Fig. 2: *Demonax xiaozhaizigouensis* sp. nov.: female paratype.

Differential diagnosis. The most similar species are Chinese species *Demonax palleolus* Holzschuh, 2006, described from Sichuan and Shaanxi (Figs. 3-4) and *Demonax parilis* Holzschuh, 1995, described from Yunnan (Figs. 5-6).

All three species: *Demonax xiaozhaizigouensis* sp. nov., *D. parilis* and *D. palleolus* are distinctly different in the pubescence of fronts in males and females (significantly denser and longer white pubescence in the male).

D. xiaozhaizigouensis sp. nov. distinctly differs from the species *D. palleolus* mainly by its wider pronotum, more arcuate lateral margins of pronotum, pronotum with very sparse pale pubescence and by distinctly shorter antennomeres; while *D. palleolus* has narrower pronotum, lateral margins of pronotum only slightly arcuate, pronotum with distinctly denser ashy pubescence and antennomeres distinctly longer than in *D. xiaozhaizigouensis* sp. nov.

D. xiaozhaizigouensis sp. nov. distinctly differs from the species *D. parilis* mainly by its pronotum widest near the middle with dorsal surface covered by sparse pale pubescence; while *D. parilis* has pronotum widest in one third from base to apex and dorsal surface with distinctly denser ashy pubescence.



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Figs. 3-4. *Demonax palleolus* Holzschuh, 2006: 3- male (China, Sichuan, Jiuzhaigou; CPV); 4- female (China, Sichuan, Jiuzhaigou; CPV).



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Figs. 5-6. *Demonax parilis* Holzschuh, 1995: 5- male (China, Yunnan, Diaolin Nature Reserve; CPV); 6- female (China, Yunnan, Diaolin Nature Reserve; CPV).

Etymology. Named after the type locality, Xiao-Zhaizigou National Nature Reserve.

Distribution. China (Sichuan, Shaanxi).

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