

***Paraclytus mengi* sp. nov. from China**
(Coleoptera: Cerambycidae: Cerambycinae: Anaglyptini)

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Taxonomy, new species, Coleoptera, Cerambycidae, Anaglyptini, *Paraclytus*, China

Abstract. *Paraclytus mengi* sp. nov. from China (Yunnan) is described. The habitus and male genitalia are illustrated.

INTRODUCTION

The genus *Paraclytus* Bates, 1884 was established by Bates (1884) with a type species *Paraclytus excultus* Bates, 1884. Recently this genus contains twenty-five species in the Palaearctic and Oriental Regions (Hubweber et al., 2010; Tavakilian & Chevillotte, 2021).

In the present paper, we describe a new species of the genus *Paraclytus* from the comprehensive material that was recently collected in Ailao Mountains (Yunnan, China).

Paraclytus mengi sp. nov. from China (Yunnan) is described and illustrated. The new species is compared to the congeners *Paraclytus excellens* Miroshnikov & Lin, 2012, *Paraclytus thibetanus* (Pic, 1914) and *Paraclytus xiongi* Huang, Yan & Zhang, 2020.

MATERIAL AND METHODS

Observation and photography. The habitus of the holotype and paratype specimens was 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× Macro lens on belows 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.

In total of 329 specimens were caught in flight interception traps (FIT) at eleven nearby trap sides at altitudes between 2377 m and 2707 m a. s. l. (Figs. 1-3). The traps were installed at different trees as well as at the lower trunk area and higher canopy.

Type material is deposited in the following collections:

- | | |
|------|---|
| CAS | collection of André Skale, Gera, Germany; |
| CAW | collection of Andreas Weigel, Wernburg, Germany; |
| CLD | collection of Luboš Dembický, Brno, Czech Republic; |
| CPV | collection of Petr Viktora, Kutná Hora, Czech Republic; |
| HU | Honghe University, Mengzi, Yunnan, China; |
| IZAS | Institute of Zoology, Chinese Academy of Science, Beijing, China; |
| NME | Naturkundemuseum Erfurt, Germany. |
- Slash (/) separates data in different lines on locality and determination labels.



Fig. 1. Ailaoshan range (China, Yunnan) from trap location sides around 2600 m a. s. l. (photograph: L. Meng, April 2019).



Fig. 2. Ailaoshan range (China, Yunnan) from trap location sides around 2600 m a. s. l.
(photograph: L. Meng, November 2019).



Fig. 3. Mountain forest view at the Ailaoshan range (China, Yunnan) of about 2600 m a. s. l.
(photograph: L. Meng, May 2019).

TAXONOMY

Tribe Anaglyptini Lacordaire, 1869

Genus *Paraclytus* Bates, 1884

Type species. *Paraclytus excultus* Bates, 1884: 234.

***Paraclytus mengi* sp. nov.**

(Figs. 4-5)

Type locality. China, Yunnan, Pchu-er Prefecture, Jingdong Yi Autonomous County, Ailaoshan, 24°32'26.2"N, 101°1'49.7"E.

Type material. Holotype (♂): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'26.2"N, 101°1'49.7"E' / '01. v. 2019, 2690m' / 'leg. F. Luo & LZ. Meng FIT5' (IZAS); 328 Paratypes: (1 ♂): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'1.31"N, 101°0'44.19"E' / '18. v. 2018, 2374m' / 'leg. F. Luo & LZ. Meng FIT2' (HU); (3 ♂♂, 1 ♀♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'53.10"N, 101°0'55.77"E' / '18. v. 2018, 2518m' / 'leg. F. Luo & LZ. Meng FIT1' (HU); (1 ♂): same data, 30.v.2018 (HU); (2 ♂♂, 1 ♀): same data, 01.v.2019 (CLD); (1 ♂): same data, 21.iv.2019 (HU); (3 ♂♂): same data, 21.v.2019 (HU); (1 ♂, 1 ♀): same data, 31.v.2019 (HU); (4 ♀♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'54.19"N, 101°0'55.62"E' / '18. v. 2018, 2499m' / 'leg. F. Luo & LZ. Meng FIT2' (HU); (1 ♂): same data, 31.v.2018 (HU); (1 ♀): same data, 22.iv.2019 (HU); (4 ♂♂, 1 ♀): same data, 01.v.2019 (HU); (11 ♂♂, 3 ♀♀): same data, 11.v.2019 (CPV, CAW, NME); (10 ♂♂): same data, 21.v.2019 (HU); (2 ♂♂): same data, 31.v.2019 (HU); (1 ♂): same data, 11.vi.2019 (HU); (7 ♂♂, 2 ♀♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'55.43"N, 101°0'54.04"E 101°E' / '08. v. 2018, 2501m' / 'leg. F. Luo & LZ. Meng FIT3' (HU); (9 ♂♂): same data, 18.v.2018 (HU); (3 ♂♂): same data, 30.v.2018 (HU); (1 ♂, 3 ♀♀): same data, 22.iv.2019 (HU); (1 ♀): same data, 01.v.2019 (HU); (4 ♂♂): same data, 11.v.2019 (CPV); (3 ♂♂, 1 ♀): same data, 21.v.2019 (HU); (5 ♂♂): same data, 31.v.2019 (HU); (1 ♂): same data, 11.vi.2019 (HU); (1 ♂, 1 ♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'54.48"N, 101°0'52.22"E' / '18. v. 2018, 2497m' / 'leg. F. Luo & LZ. Meng FIT4' (HU); (2 ♂♂): same data, 30.v.2018 (HU); (1 ♂, 2 ♀♀): same data, 22.iv.2019 (HU); (3 ♂♂, 1 ♀): same data, 01.v.2019 (HU); (6 ♂♂): same data, 21.v.2019 (HU); (7 ♂♂, 1 ♀): same data, 31.v.2019 (HU); (4 ♂♂): same data, 11.vi.2019 (HU); (2 ♂♂): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°31'49.20"N, 101°0'52.20"E' / '18. v. 2018, 2493m' / 'leg. F. Luo & LZ. Meng FIT5' (HU); (3 ♂♂): same data, 30.v.2018 (HU); (1 ♂): same data, 22.iv.2019 (HU); (3 ♂♂, 2 ♀♀): same data, 01.v.2019 (HU); (2 ♂♂, 2 ♀♀): same data, 11.v.2019 (CAW); (5 ♂♂): same data, 21.v.2019 (HU); (4 ♂♂): same data, 31.v.2019 (HU); (2 ♀♀): same data, 11.vi.2019 (HU); (1 ♂): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'20.95"N, 101°1'50.96"E' / '08. v. 2018, 2707m' / 'leg. F. Luo & LZ. Meng FIT1' (HU); (2 ♂♂): same data, 18.v.2018 (HU); (2 ♂♂, 1 ♀): same data, 30.v.2018 (IZAS); (6 ♂♂, 4 ♀♀): same data, 01.v.2019 (HU); (3 ♂♂): same data, 31.v.2019 (HU); (1 ♂): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'22.42"N, 101°1'49.29"E' / '19. vii. 2018, 2700m' / 'leg. F. Luo & LZ. Meng FIT2' (HU); (3 ♂♂): same data, 01.v.2019 (HU); (2 ♂♂, 2 ♀♀): same data, 21.v.2019 (HU); (1 ♂, 1 ♀): same data, 31.v.2019 (HU); (1 ♂): same data, 11.vi.2019 (HU); (5 ♂♂, 2 ♀♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'23.71"N, 101°1'48.98"E' / '18. v. 2018, 2683m' / 'leg. F. Luo & LZ. Meng FIT3' (HU); (3 ♂♂): same data, 30.v.2018 (HU); (1 ♂): same data, 09.vi.2018 (HU); (15 ♂♂, 2 ♀♀): same data, 01.v.2019 (HU); (4 ♂♂, 4 ♀♀): same data, 11.v.2019 (CPV); (6 ♂♂, 2 ♀♀): same data, 21.v.2019 (HU); (5 ♂♂): same data, 31.v.2019 (HU); (2 ♂♂, 1 ♀): same data, 11.vi.2019 (HU); (4 ♂♂): same data, 21.vi.2019 (HU); (1 ♂, 1 ♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'26.17"N, 101°1'49.74"E' / '08. v. 2018, 2682m' / 'leg. F. Luo & LZ. Meng FIT4' (HU); (5 ♂♂): same data, 18.v.2019 (HU); (2 ♂♂): same data, 09.vi.2018 (HU); (6 ♂♂, 2 ♀♀): same data, 30.v.2019 (HU); (1 ♂, 1 ♀): same data, 22.iv.2019 (HU); (4 ♂♂, 1 ♂): same data, 01.v.2019 (HU); (12 ♂♂, 2 ♀♀): same data, 21.v.2019 (HU); (10 ♂♂, 1 ♀): same data, 31.v.2019 (HU); (11 ♂♂): same data, 11.vi.2019 (HU); (1 ♂): same data, 21.vi.2019 (HU); (4 ♂♂, 1 ♀): 'CHINA: Yunnan/Puer' / 'Jingdong, Ailaoshan' / '24°32'26.2"N, 101°1'49.7"E' / '18. v. 2018, 2690m' / 'leg. F. Luo & LZ. Meng FIT5' (HU); (1 ♂): same data, 30.v.2018 (HU); (2 ♂♂): same data, 09.vi.2018 (HU); (1 ♂, 1 ♀): same data, 01.v.2019 (HU); (6 ♂♂, 1 ♀): same data, 21.v.2019 (HU); (6 ♂♂, 7 ♀♀): same data, 31.v.2019 (HU, CPV, CAS, CAW); (4 ♂♂): same data, 11.vi.2019 (HU). The types are provided with a printed red label: '*Paraclytus mengi* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora et A. Weigel det., 2021'.

Description. Habitus of male holotype as in Fig. 4a. Body from pale brown to black, elongate, punctate, with pubescence (all type specimens relatively similar and stable in shape and colour of pubescence). Body length from head to elytral apex 13.3 mm (male paratypes from 12.8 to

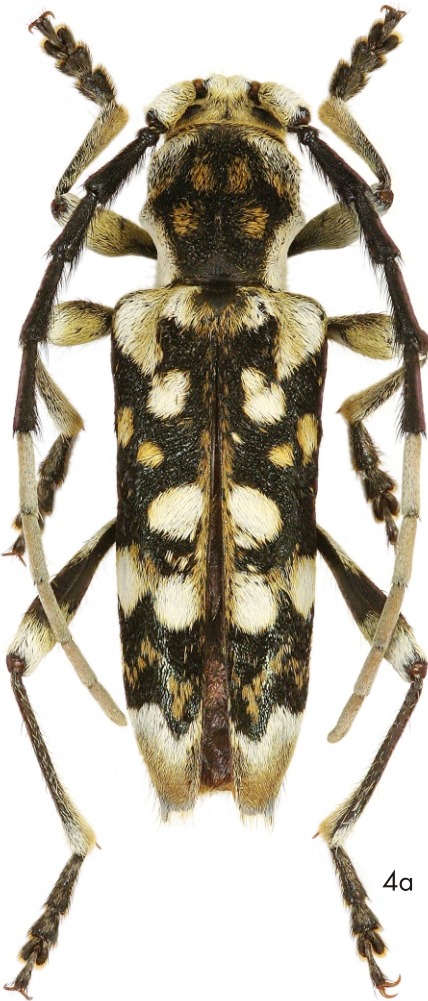


Fig. 4. *Paraclytus mengi* sp. nov.: a- male holotype; b- male genitalia.
Fig. 5. *Paraclytus mengi* sp. nov.: female paratype.

15.8 mm), widest in humeral part of elytra (3.84 mm), 3.45 times longer than wide.

Head black, slightly longer than wide, narrower than pronotum, widest through the eyes, punctured by irregular granulate punctation, in frons with dense small-sized irregular punctation. Head covered by dense whitish pubescence (pubescence ochre yellowish narrowly in base and around eyes). Antennal insertions close together, surface between eyes with two very distinct tubercles. Eyes goldenish brown, very deeply emarginate on inner side. Clypeus and labrum pale brown, shiny, clypeus with goldenish setation. Mandibles black, shiny, with whitish pubescence and long yellowish setae in edges.

Maxillary palpus dark brown with indistinct punctation and yellowish setation. Last palpomere longest, axe-shaped, blackish brown, widest at apex, apical angles rounded.

Antennae long (not reaching elytral apex), from brown to black (last five antennomeres paler), antennomeres widened apically. Antennomeres punctured by distinct small-sized punctation, apices of antennomeres 1-6 glabrous. Antennomeres 1-2 rounded at inner side of apex, without spines at inner side of apex. Antennomere 1 covered by long dense whitish and ochre yellowish pubescence, antennomere 2 covered by dark setation (with small tuft of pale pubescence in base), antennomeres 3-6 completely covered by blackish pubescence, 7-11 completely covered by dense short whitish pubescence. Antennomere 1 with a few erect colorless setae at top side and long dark setation at bottom side, antennomeres 2-6 with very long blackish setation (inner side in full length, outer side in apex only), 7-8 with a few long setae in inner side, apices of antennomeres 7-10 with bicoloured (pale and blackish) sparser setation. Antennomere 2 the shortest, and 6 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.87 : 0.27 : 1.00 : 0.98 : 1.18 : 1.24 : 1.13 : 0.92 : 0.89 : 0.70 : 0.75.

Pronotum black, narrowest at anterior margin, narrower than elytra at humeri, 1.3 times longer than wide at base and as long as wide at widest point (lateral tubercles in two fifths pronotal length from base to apex). Surface with coarse irregular punctation (punctures with microgranulation inside). Pronotum covered by whitish, ochre yellow and black pubescence (as in Fig. 4a), black pubescence very short and indistinct. Dorsal surface with sparse erect pale setation. Pronotal base slightly excised and undulate in angles, anterior margin indistinctly arcuate (almost straight). Pronotal disc slightly convex, with distinct small elevation at one third of length from base to apex, lateral margins with large tubercles.

Scutellum black, triangular, dull, with very dense and small-sized punctures, covered by dense (but indistinct) short dark pubescence.

Elytra 9.5 mm long and 3.84 mm wide (2.47 times longer than wide); slightly narrowing apically, black with brown elytral apex, with dense coarse irregular punctation, semi shiny, covered by long recumbent whitish and ochre yellow pubescence and short sparse black indistinct pubescence (as in Fig. 4a). Basal half with distinct tubercles on lateral edge and between suture and lateral edge. Basal third with very long dark goldenish setation, apical part with a few long erect black setae near suture. Elytral apex slightly undulate, each elytron shorter in arcuate sutural angle and prolonged to sharp lateral angle. Apical margin covered by long bicoloured setation.

Legs long and narrow, with shallow punctation, from blackish brown to black, claws brown. Legs covered by whitish, ochre yellowish and blackish pubescence (as in Fig. 4a). Pubescence in femora and tibiae denser in apical parts. Tarsi blackish brown, wide, with dense punctation, covered by long goldenish and blackish pubescence and setation. Metatibiae and metafemora longer than pro- and mesotibiae and pro- and mesofemora. Metatarsomere 1 approximately as long as metatarsomeres 2 and 3 together.



Fig. 6. *Paraclytus xiongi* Huang, Yan & Zhang, 2020:
male (CPV) from Mt. Dabingshan (Yunnan, China);
a- habitus; b- genitalia.

Fig. 7. *Paraclytus excellens* Miroshnikov & Lin, 2012: female holotype.



Ventral side of body from dark brown to black, with dense small-sized punctation, almost completely covered by dense whitish pubescence and some pale yellowish spots (particularly on ventrites). Elytral epipleura black, narrow, covered by ochre yellowish pubescence.

Male genitalia as in Fig. 4b.

Female. Habitus of female paratype as in Fig. 5. Body length from head to elytral apex (female paratypes) from 11.0 to 15.3 mm. Colour of female similar to male. Female without distinct differences, protarsi slightly narrower and antennae shorter than in male (distinctly not reaching to elytral apex).

Differential diagnosis. The most similar species are *Paraclytus thibetanus* (Pic, 1914), described from Xizang (Tibet), *Paraclytus excellens* Miroshnikov & Lin, 2012 (Fig. 7), described from Yunnan (Nujiang Prefecture) and *Paraclytus xiongi* Huang, Yan & Zhang, 2020 (Fig. 6), described from Yunnan (Lincang Prefecture).

Paraclytus mengi sp. nov. distinctly differs from the similar species *P. thibetanus* mainly by different antennae. *P. mengi* has antennomeres 3-6 completely covered by blackish pubescence; while *P. thibetanus* has antennae completely covered by pale pubescence. *P. mengi* has significantly wider, less elongate antennomeres (especially antennomeres 3-6).

Paraclytus mengi sp. nov. can be easily distinguished from the similar species *P. excellens* mainly by different antennae. *P. mengi* has antennomeres 3-6 completely covered by blackish pubescence; while *P. excellens* has antennomere 6 in basal two thirds covered by whitish pubescence. Based on a comparison of female paratype of *P. mengi* and female holotype of *P. excellens* can find following additional characters. Female of *P. mengi* is less robust with more elongate elytra, there are also some differences in pubescence, *P. mengi* has wider pale stripe in elytral apex and to a greater extent meso- and metafemurs covered by pale pubescence on the inner and upper sides. *P. mengi* has distinctly wider protarsi than *P. excellens*. Miroshnikov & Lin (2012) have described *P. excellens* after a female only, and the male is still unknown.

Paraclytus mengi sp. nov. distinctly differs from the similar species *P. xiongi* mainly by different antennae. *P. mengi* has antennomeres 3-6 completely covered by blackish pubescence; while *P. xiongi* has antennomeres 3-6 distinctly annulate (covered by long dense whitish pubescence except distinct apices with sparser blackish setation). Antennae reaching to elytral apex in *P. mengi*; while antennae exceeding elytral apex in *P. xiongi*. Furthermore the pubescence of tarsomeres in *P. mengi* are distinctly darker than in *P. xiongi* (Figs. 4a and 6a).

Etymology. The name is dedicated to Lingzeng Meng (Honghe University in Yunnan, China), one of the collectors of this new species.

Distribution. China (Yunnan).

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Finally we also sincerely thank to Miloslav Rakovič (Dobřichovice, Czech Republic) for the English language revision of the text and Vladimír Novák (Prague, Czech Republic) for suggestions made to the manuscript.

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