

New Anaglyptini from China (Coleoptera, Cerambycidae, Cerambycinae)

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Abstract. *Anaglyptus petrae* sp. nov., *Anaglyptus qijuni* sp. nov. and *Paraclytus gongshanus* sp. nov. from China (Yunnan) are described. All the habitus and male genitalia are illustrated.

INTRODUCTION

The genus *Anaglyptus* Mulsant, 1839 was established by Mulsant (1839) with a type species *Anaglyptus mysticus* (Linnaeus, 1758), originally described as *Leptura*. This genus currently contains fifty-five species and subspecies in the Palaearctic and Oriental Region (Tavakilian & Chevillotte, 2016).

The genus *Paraclytus* Bates, 1884 was established by Bates (1884) with its type species *Paraclytus excultus* Bates, 1884. This genus currently contains twenty-three species in the Palaearctic and Oriental Regions (Tavakilian & Chevillotte, 2016).

In the present paper, we describe two new species of the genus *Anaglyptus* from materials which were recently collected in Jianchuan County (Yunnan, China) and Yingjiang County (Yunnan, China), and a new species of the genus *Paraclytus* from materials which were recently collected in Gongshan County (Yunnan, China) last year herein.

Anaglyptus petrae sp. nov., *Anaglyptus qijuni* sp. nov. and *Paraclytus gongshanus* sp. nov. from China (Yunnan) are described and illustrated. The new species are compared to the congeners (*Anaglyptus confusus* Holzschuh, 1999, *Anaglyptus longispinis* Gardner, 1939 and *Paraclytus irenae* Holzschuh, 1993).

MATERIAL AND METHODS

Observation and photography. The habitus photos of all specimens 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.

Types depository. The type specimens designated herein will be deposited in following private collections, of which abbreviations are shown in the text: collection of Bin Insect Taxonomy Studio, Beijing, China (BITS); collection of Petr Viktora, Kutná Hora, Czech Republic (CPV).

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

TAXONOMY

Tribe Anaglyptini Lacordaire, 1869

Genus *Anaglyptus* Mulsant, 1839

Type species. *Anaglyptus mysticus* (Linné, 1758).

Anaglyptus petrae sp. nov.

(Figs. 1-2)

Type locality. China, Yunnan, Yangcen Township, Jianchuan County, Yueliangping, Mt. Laojunshan.

Type material. Holotype (♂): 'Yunnan, CHINA' / 'Mt. Laojunshan, Yueliangping' / 'Yangcen Township, Jianchuan County' / '26-VII-2017, 2970 m' / '26°35'28.34''N, 99°40'44.99''E, coll. Yingbing Li' (BITS); Paratypes: (1 ♀): same data as holotype; (1 ♂): 'Yunnan, CHINA' / 'Mt. Laojunshan, Yueliangping' / 'Yangcen Township, Jianchuan County' / '25-VII-2017, 2970 m' / '26°35'28.34''N, 99°40'44.99''E, coll. Yingbing Li'; (1 ♂): 'Yunnan, CHINA' / 'Mt. Laojunshan, Yueliangping' / 'Yangcen Township, Jianchuan County' / '24-VII-2017, 2960 m' / '26°35'23.95''N, 99°40'44.58''E, coll. Yingbing Li'; (1 ♀): 'CHINA, Yunnan prov.' / 'Mt. Laojunshan, Yueliangping, Yangjia Village' / 'Yangcen Township, Jianchuan County' / 'Dali Bai Autonomous Region, 24-VII-2017' / '2960m, 26°35'23.95''N, 99°40'44.58''E' / 'dead wood, coll. Yingbing Li' (BITS, CPV). The types are provided with a printed red label: '*Anaglyptus petrae* sp. nov.' / 'HOLOTYPUS (respective PARATYPUS)' / 'P. Viktora et B. Liu det., 2018'.

Description. Habitus of male holotype as in Fig. 1a. Body elongate, narrow, punctuate, from reddish brown to black, with pubescence. Body length 10.85 mm (male paratypes from 10.6 to 10.7 mm), widest in humeral part of elytra (2.75 mm), almost 4 times longer than wide.

Head black with reddish brown antennal insertions and partly apex of anterior part of head, with dense white pubescence and dense punctuation, clypeus pale reddish brown with longer pale setae, mandibles reddish brown with black apices. Head slightly longer than wide, slightly narrower than pronotum in widest place. Widest through eyes. Eyes relatively large, distinctly emarginate in the middle of inner side.

Maxillary palpus pale brown, ultimate palpomere largest, with rounded apex, basal part brown, apical part ochre yellow.

Antennae black, filiform. Antennomeres 1-5 with longer and sparser whitish gray pubescence. Antennae with very small and relatively sparse punctures. Antennomeres 1-7 with longer pale setae on inner side. Antennomeres 3-5 with short spines on inner side of apex. Antennomere 2 shortest, antennomere 3 longest. Antennae reaching seven eighths of elytral length. Ratios of relative lengths of antennomeres 1-11 equal to: 0.50 : 0.23 : 1.00 : 0.59 : 0.73 : 0.76 : 0.77 : 0.66 : 0.64 : 0.53 : 0.63.

Pronotum black with short and dense yellowish pubescence, dorsal surface with significant coarse punctuation. Pronotum 1.4 times longer than wide at the base, 1.3 times longer than wide at the apex and as long as wide in the widest point (in two thirds from base to apex). Pronotum rounded apically, base and anterior margin almost straight with distinct margins. Middle of basal half with distinct, slightly reddish brown longitudinal elevation.

Scutellum relatively large, triangular, black, with a few short white setae.

Elytra 7.70 mm long and 2.75 mm wide (2.8 times longer than wide); from pale brown to black, with pubescence (partly white, partly black) (as in Fig. 1a). Elytra slightly narrowing apically, apex of each elytron with distinct spine on outer side. Elytra with distinct humeral tubercles and tubercles on both sides near scutellum.

Legs long and narrow, black with whitish gray pubescence, punctuation very small or not clearly distinct. Basal part of metafemora reddish brown. Pubescence of tibia longer and denser than of femora. Metatarsomere 1 1.4 times longer than metatarsomeres 2 and 3 together.



Fig. 1. *Anaglyptus petrae* sp. nov.: a- male holotype; b- male genitalia.



Fig. 2. *Anaglyptus petrae* sp. nov.: female paratype.

Ventral side of body black, penultimate and ultimate ventrites pale reddish brown, distinctly paler than black ventrites 1-3. Ventral side almost completely covered by white longer pubescence. Elytral epipleura pale reddish brown, almost glabrous with a few white setae in apical half, which is wider than basal half.

Male genitalia as in Fig. 1b.

Female. Habitus of female paratype as in Fig. 2. Body length (female paratypes) from 10.0 to 12.2 mm. Dorsal surface without distinct differences from male, only antennae slightly shorter (reaching three quarters of elytral length) and pronotum narrower than in male.

Differential diagnosis. The most similar species is *Anaglyptus confusus* Holzschuh, 1999 described from Tibet. *Anaglyptus petrae* sp. nov. distinctly differs from *A. confusus* by unicolored black antennae, by shape of pronotum with short and dense regular yellowish pubescence and black legs, while *A. confusus* has antennomeres annulated and bicolor, pronotum with irregular pubescence and legs (mainly tibia and tarsi) distinctly paler.

Bionomics. All specimens were collected on wooden fence at night time.

Etymology. This new species is dedicated to first author's daughter Petra.

Distribution. China (Yunnan).

Anaglyptus qijuni sp. nov.

(Figs. 3-4)

Type locality. China, Yunnan, Zhanxi Township, Yingjiang County, Dehong dai and jingpo autonomous prefecture.

Type material. Holotype (♂): 'Yunnan, CHINA' / 'Dehong dai and jingpo autonomous prefecture' / 'Zhanxi Township, Yingjiang County' / '14-X-2017(emerged), 800-1200 m' / '24°58'N, 97°58'E, coll. Native Collector' / 'Host: *Alnus cremastogyne*' (BITS); Paratype: (1 ♂): same data as holotype but '1-X-2017' (CPV). The types are provided with a printed red label: '*Anaglyptus qijuni* sp. nov.' / 'HOLOTYPUS (respective PARATYPUS)' / 'P. Viktora et B. Liu det., 2018'.

Description. Habitus of male holotype as in Fig. 3a. Body elongate, narrow, punctuate, from ochre yellow to black, with pubescence. Body length 6.95 mm (male paratype 7.9 mm), widest in humeral part of elytra (1.62 mm), 4.3 times longer than wide.

Head brown with pale brown antennal insertions, with yellowish pubescence and dense punctuation (punctures very small), clypeus brown with long pale setae, mandibles brown with darker apex (blackish brown). Head slightly longer than wide, slightly wider than pronotum in widest place. Widest through eyes. Eyes relatively large, distinctly emarginate in the middle of inner side.

Maxillary palpus pale brown, ultimate palpomere largest, with rounded apex.

Antennae filiform. Antennomeres 1 and 3-11 pale brown, antennomere 2 and apex of antennomeres 3-10 distinctly darker. Antennomeres with indistinct punctuation, antennomere 1 with dense and long pale pubescence, antennomeres 2-4 with sparser pale pubescence, antennomeres 5-11 with short pale pubescence. Antennomeres 2-7 with long setae on inner side. Antennomeres 3-5 with long spines in inner side of apex, spine on antennomere 3 longest. Antennomere 2 shortest, antennomeres 6 and 7 longest. Antennae exceeding elytral length (as in Fig. 3a). Ratios of relative lengths of antennomeres 1-11 equal to: 0.76 : 0.27 : 1.00 : 0.85 :

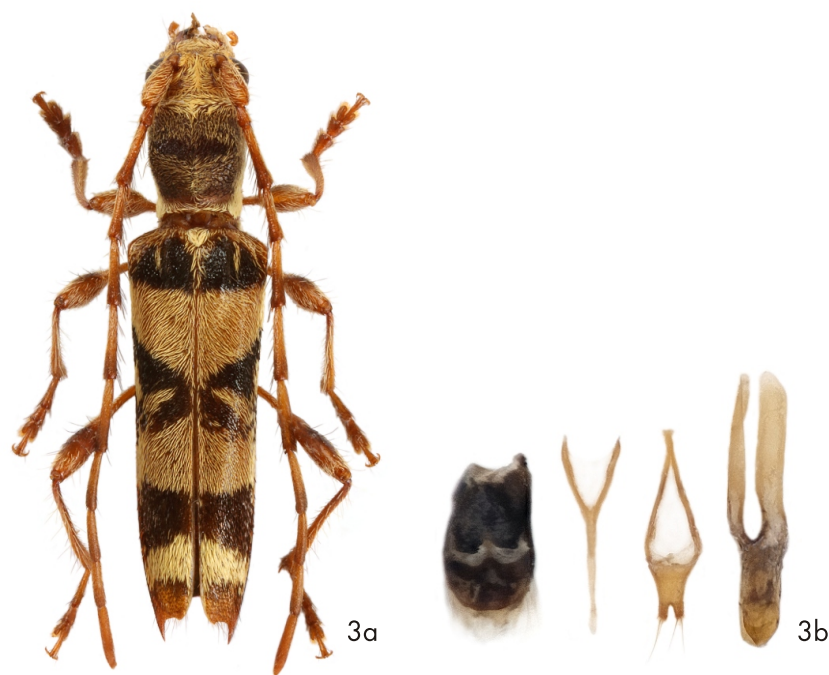


Fig. 3. *Anaglyptus qijuni* sp. nov.: a- male holotype; b- male genitalia.



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Fig. 4. *Anaglyptus qijuni* sp. nov.: live specimen. (Photo taken by Jun Qi)

1.03 : 1.16 : 1.13 : 0.90 : 0.80 : 0.70 : 0.98.

Pronotum blackish brown, in base narrowly distinctly paler. Dorsal surface with dense coarse punctuation. Pronotum 1.47 times longer than wide at the base and 1.23 times longer than wide at the widest point (in two thirds from base to apex). Dorsal surface with yellowish pubescence, in the middle convex and with transverse strip without pubescence (as in Fig. 3a). Pubescence near posterior angles and anterior margin denser. Base roundly excised.

Scutellum pale brown, triangular, completely covered by yellowish pubescence.

Elytra 4.84 mm long and 1.62 mm wide (3 times longer than wide); from ochre yellow to blackish brown, with pubescence (partly yellowish, partly black) (as in Fig. 3a). Elytra slightly narrowing apically, apex of each elytron roundly emarginated, with distinct spine on outer side and long setae. Elytra with distinct humeral tubercles and tubercles from both sides near scutellum.

Legs long and narrow, pale brown with yellowish pubescence. Femora club-shaped with long dark setae, tibia with long pale setae, tarsi with long dark setae. Metatarsomere 1 1.2 times longer than metatarsomeres 2 and 3 together.

Ventral side of body. Prothorax and mesothorax brown, almost completely covered by whitish gray pubescence, metathorax and abdomen black, partly covered by whitish gray pubescence, ultimate ventrite brown. Elytral epipleura ochre yellow with pale setae.

Male genitalia as in Fig. 3b.

Female. Unknown.

Differential diagnosis. The most similar species is *Anaglyptus longispinis* Gardner, 1939 described from Indian Darjeeling. *Anaglyptus qijuni* sp. nov. distinctly differs from *A. longispinis* by antennomeres 3-5 with long spines in inner side of apex, pronotum distinctly longer (ratio elytral length / pronotal length 3.4), while *A. longispinis* has only antennomere 3 with short spine in inner side of apex, antennomeres 4-5 with indistinct spines and pronotum shorter (ratio elytral length / pronotal length 3.95).

Bionomics. All specimens were reared from the dead wood of *Alnus cremastogyne*.

Etymology. This new species is dedicated to Jun Qi (Shanghai, China) who kindly provided us with invaluable materials for this study.

Distribution. China (Yunnan).

Genus *Paraclytus* Bates, 1884

Type species. *Paraclytus excultus* Bates, 1884.

Paraclytus gongshanus sp. nov. (Figs. 5-6)

Type locality. China, Yunnan, Cikai Township, Gongshan County, Mt. Biluoxueshan, Galabo Village.

Type material. Holotype (♂): 'Yunnan, CHINA' / 'Mt. Biluoxueshan, Galabo Village' / 'Cikai Township, Gongshan County' / '6-VI-2017, 2597m' / '27°45'9.66"N, 98°47'13.30"E, coll. Yinghui Li' (BITS); Paratypes: (1 ♀): 'Yunnan, CHINA' / 'Mt. Biluoxueshan, Galabo Village' / 'Cikai Township, Gongshan County' / '23-V-2017, 2733m' / '27°45'40.10"N, 98°48'15.21"E, coll. Yinghui Li' (BITS); (1 ♀): 'CHINA, Yunnan prov.' / 'Mt. GaoLiGong, Galabo

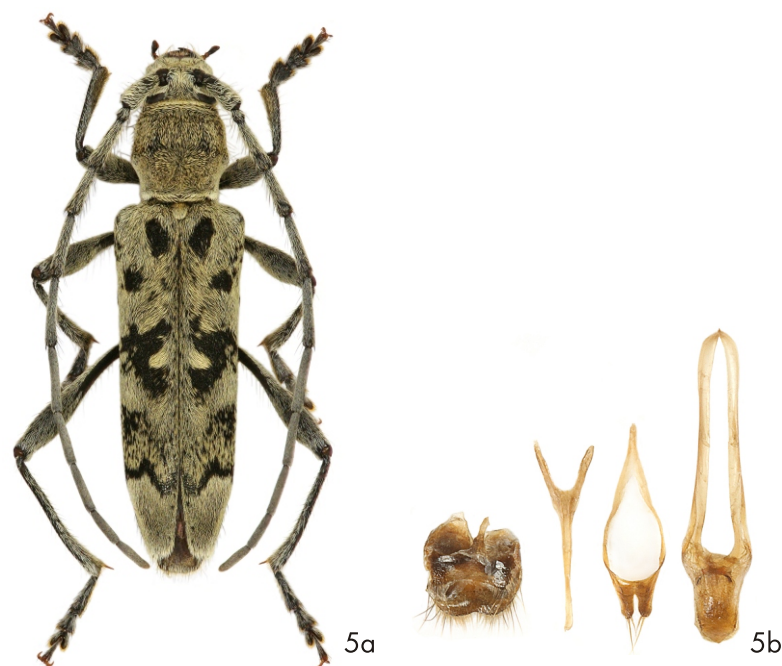


Fig. 5. *Paraclytus gongshanus* sp. nov.: a-male holotype; b-male genitalia.



Fig. 6. *Paraclytus gongshanus* sp. nov.: female paratype.

village' / 'GongShan County, 2597 m' / '27-V-2017, flower' / '27°45'9.68"N, 98°47'3.30"E' / 'Yinghui LI coll.' (CPV). The types are provided with a printed red label: 'Paraclytus gongshanus sp. nov.' / 'HOLOTYPE (respective PARATYPE)' / 'P. Viktora et B. Liu det., 2018'.

Description. Habitus of male holotype as in Fig. 5a. Body elongate, narrow, punctate, black with pubescence. Body length 13.05 mm, widest in humeral part of elytra (3.37 mm), approximately 3.9 times longer than wide.

Head black, approximately as long as wide through the eyes, slightly narrower than pronotum. Head with very small punctation, almost completely covered by yellowish pubescence, anterior part and reddish brown clypeus with a few long pale setae. Antennal tubercles well-developed, glabrous. Eyes deeply emarginate in the middle of inner side. Mandibles blackish brown, slightly shiny, partly glabrous.

Maxillary palpus. Palpomeres 2-3 pale brown, ultimate palpomere blackish brown, widest in apex, axe-shaped, with microgranulation.

Antennae black, filiform, slightly longer than body length (as in Fig. 5a). Antennomeres 1-5 covered by longer yellowish pubescence, antennomeres 6-11 covered by distinctly shorter yellowish pubescence. Antennomeres 1-7 with long setae in inner side. Antennomere 2 shortest, antennomere 6 longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.82 : 0.26 : 1.00 : 0.97 : 1.20 : 1.31 : 1.23 : 1.00 : 0.97 : 0.76 : 0.76.

Pronotum black, with coarse punctation, completely covered by yellowish pubescence and a few long dark and pale setae. Pronotum 1.24 times longer than wide at the base and as long as wide at the widest point (in lateral tubercles near middle). Base slightly excised, anterior margin straight, disc distinctly convex. Lateral margins in basal half strangulated.

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

Elytra 9.22 mm long and 3.37 mm wide (2.7 times longer than wide); black, moderately narrowing to apex. Elytra with distinct coarse punctation, covered by yellowish and sparser black pubescence, with long black setae. Elytra with distinct humeral tubercles and tubercles on both sides near scutellum. Elytral apex with long yellowish pubescence. Actual appearance of color spots and pubescence of elytra as in Fig. 5a.

Legs long and narrow, black, with punctation and yellowish pubescence except inner side near base of pro- and mesofemora and basal half of inner side of metafemora. Sides of tarsomeres with dark setae. Tarsal claws reddish brown. Metatarsomere 1 1.06 times longer than metatarsomeres 2 and 3 together.

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

Male genitalia as in Fig. 5b.

Female. Habitus of female paratype as in Fig. 6. Body length (female paratypes) from 11.4 to 16.9 mm. Dorsal surface without distinct differences from male, only antennae distinctly shorter than body length (as in Fig. 6) and tarsomeres distinctly narrower than those in male (as in Figs. 5a and 6).

Differential diagnosis. The most similar species is *Paraclytus irenae* (Holzschuh, 1993). *Paraclytus gongshanus* sp. nov. distinctly differs from *P. irenae* mainly by its narrower body and antennomeres unicolored, covered by yellowish pubescence; while *P. irenae* has distinctly wider body and antennomeres distinctly wider, antennomeres 2-10 annulated (covered by gray pubescence with black pubescence on apex).

Bionomics. All specimens were collected on flowers of *Castanopsis* tree.

Etymology. Named after the type locality, Gongshan County.

Distribution. China (Yunnan).



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Fig. 7. Mt. Biluoxueshan, type locality of *Paraclytus gongshanus* sp. nov. (Photo taken by Yinghui Li)

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