

A new species of *Picolistrus* MAJER (Coleoptera: Dasytidae) from China

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Abstract

A new species of the genus *Picolistrus* MAJER, 1990 (Dasytidae: Listrinae) is described: *Picolistrus gemmatus* sp.n. from Yunnan, China.

Key words: Coleoptera, Melyridae s.l., Dasytidae, *Picolistrus*, new species, China.

Zusammenfassung

Eine neue Art der Gattung *Picolistrus* MAJER, 1990 (Dasytidae: Listrinae) wird beschrieben: *Picolistrus gemmatus* sp.n. aus Yunnan, China.

Introduction

The genus *Picolistrus* was erected by MAJER (1990) for *Dasytiscus inhirsutus* PIC, 1922, from Yunnan in southern China and three new species from Tanintharyi in Myanmar. The same author placed the new genus in the tribe Listrini, which is now of subfamilial rank (MAJER 1994). According to MAJER (1990) the adelphotaxon of *Picolistrus* is the currently monotypic genus *Sinolistrus* MAJER, 1990. One could think that both taxa would form a well-delimited and monophyletic subgroup of the subfamily Listrinae, which is endemic to the Indochinese subregion, but in fact the relationship to other taxa occurring in North and South America needs to be studied in more detail, and some New World taxa also seem to occur in Southeast Asia (Plonski, unpubl. obs.; data on female singletons).

Material and methods

The types of *P. gemmatus* sp.n. are deposited in the collections of the Natural History Museum of Vienna (NMW) and of the author (cIP). The dissections of the males and one female were carried out in 2004. For comparison the following type material housed in NMW was examined: two paratypes of *Picolistrus helferi* MAJER, 1990 and two paratypes of *P. palleatus* MAJER, 1990.

Descriptive analyses were performed using a Leica MZ6 stereomicroscope, and measurements were taken with a Leica MZ10 stereomicroscope. Illustrations of the terminalia were produced by hand with a drawing tube mounted on an Olympus BX 40 microscope.

Acronyms of measurements and ratios:

- TL Total length. Measured from anterior margin of clypeus to tip of elytra in dorsal view.
- HW Head width. Maximum width of head including eyes, measured in dorsal view.
- IOW Interocular width. Maximum width of interspace between eyes, measured in dorsal view.
- PL Pronotal length. Median length of pronotum, measured in dorsal view.
- PW Pronotal width. Maximum width of pronotum, measured in dorsal view.
- EL Elytral length. Median length of elytra, including the scutellum, measured along the suture in dorsal view.
- EW Elytral width. Maximum width of elytra, measured in dorsal view.
- PW/PL Ratio of pronotal width and pronotal length.
- EL/EW Ratio of elytral length and elytral width.

Terminology of microsculpture follows EADY (1968).

The iconotypes for the habitus photograph and the semi-schematic illustrations of the male and female terminalia are the holotype and the allotype respectively. The imaging method has been described by SCHILLHAMMER (2004: 252).

Taxonomy

Picolistrus gemmatus sp.n. (Figs. 1–8)

Type locality: Heishui village, Lijiang county, Yunnan province, China.

Type material: Holotype (male, NMW) and allotype (female, NMW): “China Yunnan 1.-19. VII. \ HEISHUI, 35 km N Lijiang \ 27° 13' N 100° 19' E \ E. Jendek leg. 1992”. – Paratypes (5 exs.): 2 males, 1 female (NMW, cIP): same label data as holotype; 1 male (NMW): “CHINA: Yunnan 1992 \ 50 km N Lijiang, Daju \ 27° 21' N 100° 19' E \ 27.-28.6., leg. Jendek”; 1 female (NMW): “CHINA-Yunnan 24.-28.6. \ 50 km N Lijiang. 1993 \ Yulongshan Nat. Res. \ E. Jendek & O. Sausa leg.”.

Description: Measurements and ratios: Body length: 2.23–2.63 mm. Males (n = 4): HW: 0.56–0.60 mm; IOW: 0.40–0.41 mm; PL: 0.50–0.57 mm; PW: 0.72–0.77 mm; EL: 1.30–1.35 mm; EW: 0.85–0.89 mm; PW/PL = 1.35–1.45; EL/EW = 1.52–1.53. Females (n = 3): HW: 0.56–0.60 mm; IOW: 0.37–0.41 mm; PL: 0.55–0.57 mm; PW: 0.77–0.84 mm; EL: 1.55–1.57 mm; EW: 0.90–1.00 mm; PW/PL = 1.41–1.46; EL/EW = 1.57–1.72.

Colouration (Fig. 1): Body black, without metallic reflexions; all extremities and mouthparts testaceous, often infuscated at apex. Decumbent pubescence yellowish.

Structures: Head more slender than pronotum, puncturation and pubescence similar to that on pronotum, but finer. Antenna without distinct sexual dimorphism; antennomere III and IV elongate, V–VII rounded and broadened, VIII–X transverse and XI oviform; antennomere VII larger than the adjoining segments. Pronotum transverse, broadest at middle, sides arcuate and finely denticulate; puncturation regular, punctures with distinct margins, their distances about 1–2(–3) times larger than their diameters; interspaces lustrous, with granular microsculpture; pubescence directed towards a point near base. Elytra subparallel; sides distinctly bordered; puncturation dense, regular, and without



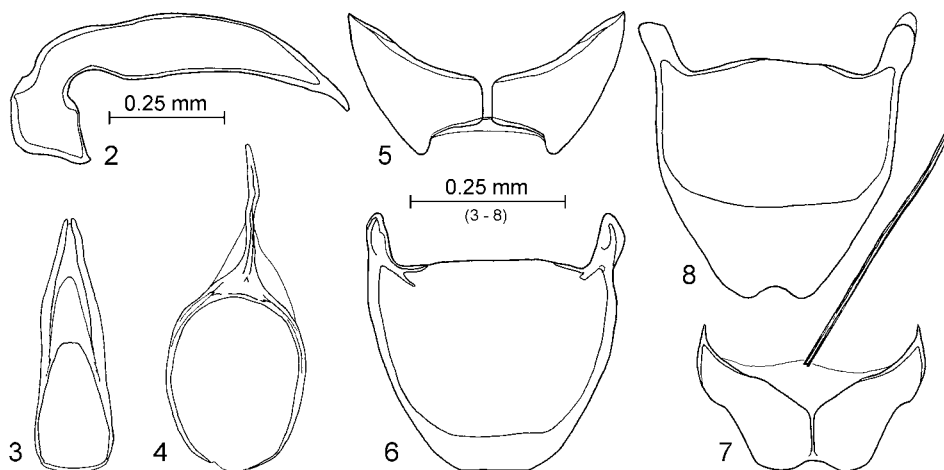
Fig. 1: Habitus of *Picolistrus gemmatus* sp.n., male (holotype).

sharp margins at base, becoming finer towards apex, where it is similar to that on pronotum; interspaces smooth. Female with two ordinary apical spurs on all tibiae; male with concave lamellate spurs on mesotibia (Fig. 1). All abdominal sternites and pygidium with alutaceous microsculpture in both sexes.

Male terminalia: Sternum VIII (Fig. 5) bipartite (median process totally reduced) and emarginate at apex; the two halves connected by a membrane and by a small sclerotized “bridge” (missing in one paratype). Pygidium as in Figure 6. Spicular fork elongate (Fig. 4). Tegmen elongate, with distinct tegminal struts and membranous parameroid plate (Fig. 3). Median lobe (Fig. 2) in lateral view slightly incurved in apical half, without sharp angles or bend; internal sac with numerous hardly visible spinules and two lateral rows of large conical-thornlike sclerites.

Female terminalia: Tripartite sternum VIII as in Figure 7. Pygidium (Fig. 8) emarginate at apex. Ovipositor and membranous internal copulatory organs not studied in detail.

Diagnosis: *Picolistrus gemmatus* sp.n. is easily recognized by its general appearance without strong metallic reflexions when only considering the described species, and by the morphology of the terminalia of both sexes. The best diagnostic characteristic is found in the shape of the gently curved median lobe. For a comparison with the heretofore known species see MAJER (1990).



Figs. 2–8: Terminalia of *Picolistrus gemmatus* sp.n., (2–6) male (holotype); (7–8) female (allotype): (2) median lobe, lateral; (3) tegmen; (4) spicular fork; (5, 7) sternum VIII; (6, 8) pygidium.

Distribution: So far known only from Lijiang County in northwestern Yunnan.

Etymology: The Latin species epithet means “decorated with jewels” and refers to the expressive pubescence.

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