New data on Palaearctic Ceratocanthinae with description of a new species from China
(Coleoptera: Scarabaeoidea: Hybosoridae)

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Abstract
A new species of *Pterorthochaetes* GESTRO, 1899 (Coleoptera: Scarabaeoidea: Hybosoridae) from Yunnan (China) is described and illustrated. Two Palaearctic (sensu BALLERIO 2006) records for *Pterorthochaetes insularis* GESTRO, 1899 (new for China: Yunnan) and *Madrasostes feae* (GESTRO, 1899) (new locality for India: Uttarakhand) are provided.

Key words: Coleoptera, Scarabaeoidea, Hybosoridae, *Pterorthochaetes*, *Madrasostes*, taxonomy, new species, China, India.

Introduction
After the closing date for the entries of the third volume of the Catalogue of Palaearctic Coleoptera, i.e. January 1, 2004 (BALLERIO 2006) some new species and other novelties have enriched the list of Palaearctic Ceratocanthinae (Coleoptera: Scarabaeoidea: Hybosoridae). The forthcoming second edition of the Catalogue (LÖBL & SMETANA in prep.) will provide a complete update of the former edition and the purpose of this paper is to publish some new distributional data and the description of a new species of *Pterorthochaetes* GESTRO, 1899 from China, to be included in the new edition of the Catalogue.

Methods and acronyms
For methods and terminological conventions I refer to BALLERIO (1999). The habitus photographs were obtained with a Canon Eos D5 MII with a macro objective MP 65 mm. All photos were then mounted with Zerene Stacker software and cleaned and unmasked using a photo processing software.

Acronyms and abbreviations:
EL: maximum elytral length, EW: maximum elytral width, HL: maximum head length, HW: maximum head width, L: length, PL: maximum pronotal length, PW: maximum pronotal width, W: width

ABCB A. Ballerio private collection, Brescia (Italy)
NMW Naturhistorisches Museum Wien, Vienna (Austria)

Taxonomy

*Pterorthochaetes yunnanensis* sp.n.

TYPE LOCALITY: 15 km west of Menglun, Xishuangbanna, Yunnan, China.

TYPE MATERIAL: Holotype ♀ (NMW): “China: Yunnan, Xishuangbanna, ca. 15 km w Menglun, 5.11.1999, ca. 700-800 m a.s.l., leg. Jäch, et al. (CWBS 354).”

DESCRIPTION: HL: 1.0 mm; HW: 2.2 mm; PL: 1.7 mm; PW: 2.7 mm; EL: 3.0 mm; EW: 2.7 mm.
Large sized *Pterorthochaetes* (Figs. 1–2), surface shiny, setose; volant.

Dorsum dark-brown to black, setation yellowish, sternum reddish, antennae reddish.

Head: subpentagonal, wider than long, fore margin finely serrate, tip acute, interocular distance about 9 × the maximum width of dorsal ocular area, dorsal ocular area large, dorsal sculpturing of head distally made of very coarse and deep transverse wrinkles and proximally of impressed small dense horseshoe-shaped punctures, centripetally oriented, each one having a pore in the middle, bearing an erect simple short seta.

Pronotum: wider than long (W/L ratio = 1.5), fore angles normally shaped, pronotal lateral margins fringed with a row of long simple setae, spaced out by an interval about their length or longer, disc of pronotum covered by dense impressed ocellate transverse small punctures larger at sides of disc and becoming horseshoe-shaped large punctures, with opening outwards, towards pronotal base and sides, each puncture with a pore in the middle bearing a gently clavate erect
medium sized setae; punctuation relatively dense, the distance between punctures being subequal to their diameter on disc and inferior to their diameter at sides.

Scutellum: punctures transversely horseshoe-shaped, thick and coarse.

Elytra: shape oval, longer than wide (W/L ratio = 0.9); elytral surface covered by dense punctuation, made of medium sized impressed horseshoe-shaped punctures with opening directed backwards, spaced out by an interval subequal to their diameter mixed with a few simple impressed punctures irregularly distributed. Each horseshoe-shaped puncture containing a pore bearing an erect gently clavate long seta.

Female genitalia: bursal sclerites slightly asymmetrical and shaped as in Fig. 3.

Male: unknown.

**DIAGNOSIS:** This species is characterized by the following combination of characters: a) large size, b) pronotal punctuation made of ocellate, deep small punctures on disc, becoming larger and horseshoe-shaped at sides, c) pronotal lateral margins fringed with a row of long simple setae, spaced out by an interval about their length or longer, d) elytral punctuation made of dense medium sized impressed horseshoe-shaped punctures with opening directed backwards, spaced out by an interval subequal to their diameter, mixed with simple impressed punctures irregularly distributed, e) shape of bursal sclerites. The species closest to it seems to be *Pterorthochaetes insularis* Gestro. The two species share the large size and the overall appearance, however *P. yunnanensis* sp.n. differs from *P. insularis* in having denser and deeper pronotal punctuation, with ocellate punctures at sides of disc, the margins of pronotum with more spaced out setae, whereas in *P. insularis* setae are very dense and adjacent to each other, elytral punctuation denser and deeper, with the horseshoe-shaped punctures around scutellum and near elytral suture, whereas in *P. insularis* punctures around scutellum and elytral suture are longitudinally oriented comma-shaped large punctures, and, finally, the shape of bursal sclerites, which are much shorter and wider than the ones of *P. insularis*.

**ETYMOLOGY:** Latin adjective in the nominative singular, meaning “from Yunnan”. Named after the type locality.

**DISTRIBUTION AND HABITAT:** Known only from the type locality in southern Yunnan. The locality “CWBS loc. 354”, according to Jäch & Ji (2003), is: Yunnan Province, Xishuangbanna Dai Autonomous Prefecture, Mengla County, Menglun Town, near Mangmo Village, road Menglun – Ganlanba, ca. 15 km W Menglun, ca. 700–800 m a.s.l., stream. The area is characterized by the presence of tropical forests and the collecting site was along a stream flowing through degraded primary forest and cultivated land.

**New faunistic records**

*Pterorthochaetes insularis* Gestro, 1899

**MATERIAL EXAMINED:**

CHINA: Yunnan, Xishuangbanna, ca. 15 km w Menglun, 5.XI.1999, ca. 700–800 m a.s.l., leg. Jäch et al. (CWBS 354), 3 ♂♂, 1 ♀ (NMW, ABCB).

**REMARKS:** *Pterorthochaetes insularis* was previously known from Nepal, Thailand, Malaysia and Indonesia (Paulian 1978, Ballerio 1999, Ocampo & Ballerio 2006). This is the first record for China.
Madrasostes feae (GESTRO, 1899)

MATERIAL EXAMINED:

REMARKS: Madrasostes feae was previously known from Nepal, NE India (Meghalaya and Sikkim), Myanmar, Thailand and Cambodia (BALLERIO 1999). New for Uttarakhand. This record is the most northwestern one for a Ceratocanthinae in Asia.

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References


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