Two new Cryptophagidae (Coleoptera) from Qinghai (China)

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Abstract: One new species of Cryptophagus Herbst, 1792 and one new species of Micrambe Thomson, 1868 from Qinghai (China) were described.

Key words: Cryptophagidae, Cryptophagus, Micrambe, Palearctic Region, China, new species.

Introduction

Studying further Cryptophagidae from China results two undescribed species each one of Cryptophagus Herbst, 1792 and Micrambe Thomson, 1863. Both species were collected in high altitudes in mountain ranges of China, province Qinghai (2200-2600 m). They are wingless and small species living in litter. Their distribution seems to be not wide and restricted on the mountains of eastern Qinghai. Esser (2017a) studied Micrambe from China and revalidated one and described three related with Micrambe bimaculata (Panzer, 1798). The species described in the present paper is lacking membranous wings and has with small eyes and is quite tiny (1.7 mm).

Material and methods

The material examined is deposited in the following collections:
MFNB...........Museum für Naturkunde, Berlin, Germany
cES...............author’s private collection, Berlin, Germany

The morphological studies were conducted using a Euromex DZ 1605 and Euromex BB.1153.PLI. Photographs were created with a ToupCam 14MP (ToupTek).

Body length was measured from the head to the apex of the elytra, length of pronotum in the middle, broadness on the broadest part.

Description of new species

Cryptophagus hongguanus nov.sp.

Type material: Holotype /H20040: "China, Qinghai Prov. [CH11-20], road 301 km 140, 63 km ESE Men Yuan, 37°07'41.0''N, 102°16'04.7''E, 2558 m, creek valley with pasture and forest remnants, litter sifted, 5.VII.2011, leg. M. Schülke" [MFNB].
Paratypes: 1 ♀ with the same data than the holotype [MFNB]; 1 ♀: "China, Qinghai Prov. [CH11-08], Daban Shan, 60 km NW Honggu, creek valley, Picea, Populus, Betula forest, 36°49'30.7''N, 102°31'22.8''E; 2366-2400 m, mixed forest (Betula, Populus, Picea) dead wood, litter sifted, 11.VII.2011, leg. M. Schülke" [MFNB].

Etymology: Named after the Chinese Qinghai province, where all specimens were found.

Description: Male, hind wings absent, 1.7 mm. Reddish-brown, shining (fig. 3). Eyes small but convex with only a small number of ommatidia. Pronotum 1.3 times broader than long, broadest nearly in the middle, margin straight between middle and anterior angles (callosities) and between middle and posterior angles, strictly narrowed, strongly and moderately dense punctate, margin with a few teeth (8-9), teeth in middle more prominent, anterior callosities moderately developed, without tooth. Elytra elongate, nearly oviform, with long and decumbent hairs, no humeral callos developed, strongly

Micrambe qinghaiensis nov.sp.

Type material: Holotype ♀: "China, Qinghai Prov. [CH11-08], Daban Shan, 60 km NW Honggu, creek valley, Picea, Populus, Betula forest, 36°49'30.7''N, 102°31'22.8''E; 2366-2400 m, mixed forest (Betula, Populus, Picea) dead wood, litter sifted, 11.VII.2011, leg. M. Schülke" [MFNB].

Paratypes: 1 ♀ with the same data than the holotype [ES]: 1 ♀: "China, Qinghai Prov. [CH11-08a], Daban Shan, 60 km NW Honggu, creek valley, Picea, Populus, Betula forest, 36°49'10.7''N, 102°31'22.8''E; 2366-2400 m, mixed forest (Betula, Populus, Picea) dead wood, litter sifted, 11.VII.2011, leg. M. Schülke" [MFNB].

Etymology: Named after the Chinese Qinghai province, where all specimens were found.

Description: Male, hind wings absent, 1.7 mm. Reddish-brown, shining (fig. 3). Eyes small but convex with only a small number of ommatidia. Pronotum 1.3 times broader than long, broadest nearly in the middle, margin straight between middle and anterior angles (callosities) and between middle and posterior angles, strictly narrowed, strongly and moderately dense punctate, margin with a few teeth (8-9), teeth in middle more prominent, anterior callosities moderately developed, without tooth. Elytra elongate, nearly oviform, with long and decumbent hairs, no humeral callos developed, strongly

Cryptophagus hongguanus nov.sp. resembles to Micrambe qinghaiensis nov.sp. (fig. 3) from the same locality in general shape. But the latter is well distinguished by the margin of the pronotum with a few small teeth.
Fig. 1-2: (1) Cryptophagus hongguanus nov.sp., paratype, female; (2) C. hongguanus nov.sp., holotype, parameres.

Fig. 3: Micrombe qinghaiensis nov.sp., paratype, female.
punctate in the anterior part, less strong punctate in the posterior part, puncture on elytra more sparse than on pronotum. Legs more stout, tarsi five-segmented, posterior tarsi four-segmented (only in male), anterior tarsomeres 1-4 moderately widened (only in male). Antennae quite stout, club well developed, segments 4-8 more (5-8) or less (4) moniliform, 1-3 longer than broad, 1 asymmetric, 9 and 10 slightly transverse, 11 longer and asymmetric.

Comment: *Micrambe qinghaiensis* nov.sp. is a very small species without hind wings. It resembles *Micrambe alatauensis* Lyubarsky, 2000 from Middle Asia by lacking membranous wings and humeral callus. *Micrambe alatauensis* is also small species (1,7-1,8 mm).

*Micrambe qinghaiensis* nov.sp. resembles also to *Cryptophagus hongguanus* nov.sp. (fig. 3) from the same locality. But the latter is well distinguished by the margin of the pronotum with only one tooth.

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References


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