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New species of the genus *Chydaeus* from China, Nepal, Myanmar, and Thailand, with remarks on species previously described (Coleoptera: Carabidae: Harpalini)

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Abstract

Ten new species of the genus *Chydaeus* Chaudoir, 1854 are described: *C. dissimilis* sp. n. (the *bedeli* species group) from the Doi Inthanon Mountain, Chiang Mai Province, Thailand; *C. shaanxiensis* sp. n. (the *kasaharai* species group) from the Daba Shan Mountain Range, southern Shaanxi, China; *C. kabaki* sp. n. (the *kasaharai* species group) from southern Sichuan, China; *C. weishanensis* sp. n. (the *kasaharai* species group) from the northern part of Wuliang Shan, western Yunnan, China; *C. belousovi* sp. n. (the *kasaharai* species group) from the south-western Yunnan, China; *C. putaensis* sp. n. (the *kasaharai* species group) from the environments of Putao, the northernmost part of Myanmar; *C. ganeshensis* sp. n. (the *irvinei* species group) from the Ganesh Himal, Central Nepal; *C. chuliensis* sp. n. (the *semenowi* species group) from the Manaslu Himal, Central Nepal; *C. wuliangensis* sp. n. (the *semenowi* species group) from the northern part of Wuliang Shan, western Yunnan, China; *C. luxiensis* sp. n. (the *semenowi* species group) from the environments of Luxi, western Yunnan, China. New data about the distribution of the following species are provided: *C. kasaharai* Ito, 2002, *C. shunichii* Ito, 2006, *C. semenowi* (Tschitschérine, 1899), *C. convexus* Ito, 2002, *C. baoshanensis* Kataev & Liang, 2012, and *C. obtusicollis* Schaubberger, 1932. The following taxa are reported for the first time: *Chydaeus semenowi*, *C. obtusicollis* and *C. bedeli interjectus* Kataev & Schmidt, 2002 from the Indian state Arunachal Pradesh, *C. bedeli difficilis* Kataev & Schmidt, 2002 from Myanmar, and *C. similis* Kataev & Schmidt, 2002 from the Chinese provinces Shaanxi and Chongqing.

Key words: Coleoptera, Carabidae, Harpalini, *Chydaeus*, China, India, Myanmar, Nepal, Thailand, taxonomy, new species, new records

Introduction

Chydaeus Chaudoir, 1854 is a moderately diverse genus of the subtribe Anisodactylina with about 50 described species distributed over the mountainous regions from the Himalaya, China and Japan through eastern part of the Oriental Region to New Guinea and Australia. Many species are brachypterous and seem to be local in distribution. In spite of the numerous recent publications concerning the taxonomy and distribution of *Chydaeus* (Ito 1992, 2002, 2003, 2006; Kataev & Schmidt 2002, 2006; Baehr 2004, 2007; Kataev *et al.* 2012; Kataev & Fedorenko 2013), the faunas of many regions are not yet completely known. A major portion of species is represented by one or a few specimens, and many species still wait for description. Seven species groups were recognized within the genus based mainly on the material from the Himalaya and China (Kataev & Schmidt 2002, 2006; Kataev *et al.* 2012), but rather many species particularly from Taiwan, Japan, New Guinea and Australia are not yet assigned to groups and are in need of revision.

The present paper deals with the description of ten new species from China, Nepal, Myanmar and Thailand. Five of these species are included in the *kasaharai* species group, which was established by Kataev *et al.* (2012) for

Wei Bo Shan pass, 2375 m, 24°08'16"N 99°42'53"E, creek valley, devastated secondary deciduous forest, under stones, in litter, 8.IX.2009, D.W. Wrase leg. [35] (cWR).

Remarks. *Chydaeus convexus* was previously known only from the southern parts of the Gaoligong Shan in western Yunnan Province, China (Kataev & Schmidt 2006; Kataev *et al.* 2012). The new material was collected in the southern parts of the Gaoligong Shan and in the north-eastern part of the Laobie Shan, located to the south-east of the Gaoligong Shan (Fig. 70). A single male collected in the Laobie Shan is very similar in the aedeagus structure to the males examined from the Gaoligong Shan, but differs from them in having elytral microsculpture on disc slightly more distinct and pro- and mesotarsi less strongly enlarged; parascutellar setigerous pore is present in each elytron. Additional material from the Laobie Shan is needed to determine the status of this male.

***Chydaeus baoshanensis* Kataev & Liang, 2012**

(Fig. 70)

Chydaeus baoshanensis Kataev & Liang in Kataev *et al.*, 2012: 58

Material examined. China. YUNNAN: 1 ♂, Nujiang Lisu Aut. Pref., Nu Shan, 7 km NNW Coajian, 2420 m, 25°43'29"N 99°07'57"E, secondary pine forest with shrubs, litter, bark sifted, 11.VI.2007, M. Schülke leg. [30] (cWR).

Remarks. *Chydaeus baoshanensis* was described from a single male collected to the north of Baoshan, at elevations of 2265–2530 m, in the western Yunnan Province, China (Kataev *et al.* 2012). The additional examined male was also collected to the north of Baoshan, but about 26 km to the north of the type locality, at elevation of 2420 m (Fig. 70). This specimen is morphologically similar to the holotype, however the basal spiny patches in the internal sac of its median lobe are smaller and isolated from each other.

***Chydaeus obtusicollis* Schaubberger, 1932**

Chydaeus obtusicollis Schaubberger, 1932: 51, 53

Material examined. India. 1 ♀, ARUNACHAL PRADESH: Miri Hills, road from Ziro to Daporijo, 27.V.2006, Guillaume de Rougemont leg. (cWR); 1 ♀, Lumla near Tawang, 2500–3000 m, 23.VI.2008, C. Reuter leg. (cJS). China. XIZANG: 1 ♂, 3 ♀, S-Tibet, ca. 25 km SW of Cona, 2600–2800 m, env. of 27°49'N 91°45'E, 21+22.VII.2009, Tian Mingy leg. (cJS).

Remarks. *Chydaeus obtusicollis* was previously recorded from eastern Nepal, India (West Bengal, Sikkim) and China (southern Tibet and northwestern Yunnan) (Kataev & Schmidt 2006; Kataev *et al.* 2012). The species is recorded here from the Indian state Arunachal Pradesh for the first time. Additional locality from southern Tibet is also given.

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