



## Taxonomy of the genus *Craspedomerus* Bernhauer, 1911 (Coleoptera: Staphylinidae: Philonthina) from China

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### Abstract

Three new species of the genus *Craspedomerus* from China are described and illustrated: *C. giganteus* Li & Zhou **sp. n.** from Sichuan, *C. gongshanus* Li & Zhou **sp. n.** from Yunnan and *C. zhangii* Li & Zhou **sp. n.** from Tibet. Four species are reported for the first time from China: *C. sinetuber* (Coiffait, 1977a) from Tibet, *C. cyanipennis* Scheerpeltz, 1976b, *C. ganeshensis* Coiffait, 1983 and *C. glenoides* (Schubert, 1908) from Yunnan. These four and two additional species previously recorded from China (*C. beckeri* Bernhauer, 1934 and *C. violaceipennis* Cameron, 1928) are redescribed and illustrated. Sensory peg setae located on the underside of the paramere of the aedeagus of all nine Chinese species are compared using scanning electron microscopy (SEM) and the result shows that this character is useful for species identification. A key to the Chinese species of *Craspedomerus* is presented and geographical distribution of all sixteen species of *Craspedomerus* is mapped.

**Key words:** Coleoptera, Staphylinidae, Staphylininae, Philonthina, *Craspedomerus*, new species, China

### Introduction

Bernhauer (1911) established the genus *Craspedomerus* and designated *Philonthus glenoides* Schubert, 1908 from India as the type species. For this genus, he erected the subtribe Craspedomerina (originally spelled as Craspedomeri) in the tribe Staphylinini of the subfamily Staphylininae. The genus, as well as the subtribe, was established based on the presence of an additional oblique line connecting the superior and inferior lines of the pronotal hypomeron (Bernhauer 1911, 1927; Cameron 1932; Moore 1960; Scheerpeltz 1976a; Newton & Thayer 1992; Smetana 1995). This line, however, was considered recently as a ventral-deflected part of the superior line rather than a separate line. Based on that, *Craspedomerus* was moved to the subtribe Philonthina Kirby, 1837 (Smetana & Davies 2000), as originally suggested by Hayashi (1997), and the subtribe Craspedomerina was synonymized with Philonthina (Smetana & Davies 2000). Herman (2001) and Smetana (2004) accepted this taxonomic treatment, which we follow in this paper.

The genus *Craspedomerus* is a poorly studied group and until now a taxonomic revision was lacking. The aedeagi of different species are strikingly similar to each other, often showing only proportional differences (Schillhammer 1998); thus, species identification is very difficult, especially for some closely related species. Until now, 13 species of *Craspedomerus* have been reported from the Palaearctic and Oriental Regions (Bernhauer 1911, 1934; Cameron 1926, 1928, 1932; Coiffait 1976, 1977ab, 1982ab, 1983; Scheerpeltz 1965, 1976ab; Schillhammer 1992; Herman 2001; Smetana 2004). Of all the known species, only two have been reported from China: *C. beckeri* Bernhauer, 1934 from Sichuan and *C. violaceipennis* Cameron, 1928 from Tibet.

In this paper, three new species of *Craspedomerus* from China are described and illustrated: *C. giganteus* Li & Zhou **sp. n.** from Sichuan, *C. gongshanus* Li & Zhou **sp. n.** from Yunnan and *C. zhangii* Li & Zhou **sp. n.**