



<http://dx.doi.org/10.11646/zootaxa.3955.4.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:A7FC4495-C767-47E1-82D3-5899CE58B8BA>

## Taxonomy of the genus *Bolitogyrus* Chevrolat (Coleoptera: Staphylinidae: Staphylinini: Quediina) from China with description of seven new species

YAN-PENG CAI, ZONG-YI ZHAO & HONG-ZHANG ZHOU<sup>1</sup>

Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, University of Chinese Academy of Sciences, 1 Beichen West Rd., Chaoyang District, Beijing 100101, P. R. China

<sup>1</sup>Corresponding author. E-mail: [zhouhz@ioz.ac.cn](mailto:zhouhz@ioz.ac.cn)

### Abstract

Seven new species of the genus *Bolitogyrus* Chevrolat, 1842 are described based on specimens collected in China, namely *B. depressus* **sp. nov.** from Guangdong, *B. hainanensis* **sp. nov.** and *B. magnimaculosus* **sp. nov.** from Hainan, *B. metallicus* **sp. nov.** from Hubei, and *B. locus* **sp. nov.**, *B. profundus* **sp. nov.** and *B. uncus* **sp. nov.** from Yunnan. The number of *Bolitogyrus* species is thus increased to 59. Line drawings and color illustrations of adults and genitalia of the new species and some others are given. A key to species known from China is provided, with the exception of *B. fukienensis* Scheerpeltz, 1974, which is only known from females. A geographical distribution map of all Chinese species is also compiled.

**Key words:** Coleoptera, Staphylinidae, Quediina, *Bolitogyrus*, new species, China

### Introduction

The genus *Bolitogyrus* Chevrolat, 1842 belongs to the subtribe Quediina (Staphylininae, Staphylinini). Even though there was a long history of debating about the erection of the genus *Bolitogyrus*, the authorship of this name is now attributed to Chevrolat (1842) (Herman, 2001).

Prior to this study, a total of 52 species of this genus were described and they displayed a disjunct geographical pattern (Brunke & Solodovnikov, 2014), with 28 species in the Neotropical region and 24 species in the Oriental region. The Neotropical fauna was well studied and revised in a recently published work (Brunke & Solodovnikov, 2014). The Oriental fauna had also been studied by many researchers (e.g. Fauvel, 1878; Cameron, 1932, 1937, 1942; Scheerpeltz, 1974; Smetana, 1988; Rougemont, 2001), yet a complete revision is still absent.

Before this study, 12 species were recorded from China. A detailed history of exploration of the Chinese *Bolitogyrus* fauna was summarized in Table 1. Here we describe seven new species from China, namely *B. depressus* **sp. nov.** from Guangdong, *B. hainanensis* **sp. nov.** and *B. magnimaculosus* **sp. nov.** from Hainan, *B. metallicus* **sp. nov.** from Hubei, and *B. locus* **sp. nov.**, *B. profundus* **sp. nov.** and *B. uncus* **sp. nov.** from Yunnan. The total number of *Bolitogyrus* species is thus increased to 59, with 19 distributed in China. Line drawings or color illustrations of the new species and some others are provided. A key to the species known from China is provided, except *B. fukienensis* Scheerpeltz, 1974, which is only known from females (Smetana & Zheng, 2000a). A geographical distribution map of all Chinese species was also compiled (Fig. 12).

### Material and methods

Specimens were relaxed in warm water (60°C) for 5–8 hours for dissection of the abdominal segments VIII–X and the genitalia. After examination, the dissected body parts were glued back to the mounting cards for future study. Observation, dissection and measurement were performed using a stereo microscope (Zeiss SteREO Discovery V20). Images of the adults and genitalia were captured with an AxioCam MRc 5 camera attached to a Zeiss Axio