



Four new species of the genus *Lobrathium* Mulsant & Rey (Coleoptera: Staphylinidae: Paederinae) from China

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Abstract

Four new species of the genus *Lobrathium* Mulsant & Rey, 1878 from the mainland China are described: *L. quadrum* sp. n. from Sichuan, *L. rutilum* sp. n. from Hubei, *L. tortuosum* sp. n. from Zhejiang and *L. zonalis* sp. n. from Sichuan. In addition, the paper reviews the history of the research on the Chinese fauna of the genus. Some important morphological characters are illustrated for the new species.

Key words: New species, *Lobrathium*, Paederinae, Staphylinidae, China

Introduction

The Holarctic genus *Lobrathium* Mulsant & Rey, 1878 forms a very species-rich fauna in the Eastern Palearctic region that is still largely unknown. Especially the fauna of the mainland China requires further investigation (Assing 2012). Recent revisionary studies of the East Palearctic *Lobrathium* (Assing 2010, 2012) that included a revised diagnosis of the genus, descriptions of numerous new species and identification keys, promoted further advances in the study of this genus in China. An obstacle remaining in the study of *Lobrathium* is lack of any sound infrageneric classification or a species-group division for this large genus, that circumstance making a task of comparisons for newly discovered species more difficult. Hopefully such classification can be attempted in the near future when the alpha-taxonomic knowledge of this genus in the poorly studied regions like China becomes more complete.

Before this study, a total of 43 species were recorded in China (Assing 2010, 2012). The first species of *Lobrathium* described from China was *L. hongkongense* (Bernhauer) from Hongkong (Bernhauer 1931, in *Lobrathium* as a subgenus of *Lathrobium*). Later, Koch (1939) described *L. rotundiceps* (Koch) from Zhejiang (as *Lathrobium rotundiceps*). Then a few more species were described from Sichuan by F.K. Zheng: *L. emeiense* Zheng, *L. gladiatum* Zheng, *L. hebeatum* Zheng, *L. sibynium* Zheng (synonymized with *L. hongkongense* Bernhauer in Assing 2012) and *L. tortile* Zheng (Zheng 1988), as well as *L. wui* Zheng from Zhejiang, Tianmushan (Zheng 2001). The last species was moved to the genus *Tetartopeus* (Assing 2012). *Lobrathium bimaclatum* Li, Tang & Zhu was described from Guizhou, Leigongshan (Li et al. 2007), but later was synonymized with *Tetartopeus wui* (Zheng) (Assing 2012). Assing (2010) described 18 additional species from Taiwan, and moved *Lathrobium taiwanense* Watanabe to the genus *Lobrathium*. Finally, another 18 species from the mainland China were described in Assing (2012). *Lobrathium regulare* (Sharp) listed for the fauna of China in Smetana (2004) was transferred to the genus *Pseudolathra* by Assing (2012a).

Here we describe four new species based on the recently collected material accumulated in the collection of the Institute of Zoology, Chinese Academy of Sciences (IZCAS). Thus the total number of the Chinese species of the genus *Lobrathium* increases to 47.