



## Taxonomy of the *Quedius mukuensis* group (Coleoptera: Staphylinidae: Staphylinini: Quediina) with descriptions of four new species from China

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### Abstract

Four new species of the subgenus *Microsaurus* Dejean, 1833 of the genus *Quedius* Stephens, 1829 are described based on specimens collected from China: *Q. (Microsaurus) indigestus* sp. nov., *Q. (Microsaurus) purus* sp. nov. and *Q. (Microsaurus) rectus* sp. nov. from Sichuan, and *Q. (Microsaurus) medius* sp. nov. from Hubei. The new species all belong to the *Quedius mukuensis* group, which is now increased to a total of 16 species. Line drawings and color illustrations of the adults, and the genitalia of the new species and some other ones are given. A key to all the species of this group is provided.

**Key words:** Coleoptera, Staphylinidae, Quediina, *Quedius*, *Microsaurus*, *mukuensis* group, new species, China

### Introduction

*Microsaurus* Dejean, 1833 is the largest subgenus of the genus *Quedius* Stephens, 1829 in the subtribe Quediina (Coleoptera: Staphylinidae, Staphylininae, Staphylinini) and mainly occurs in the Holarctic and Oriental regions. Before this study, more than 300 species were described, of which 133 were recorded to occur in China. The Chinese *Microsaurus* species are generally categorized into 16 species groups (Smetana, 1995b, 2001). Of them, the *Quedius mukuensis* group was endemic to China and relatively small, with 12 species described before this study. In Table 1, we provided a detailed history of taxonomic exploration of this group.

**TABLE 1.** A detailed taxonomic history of the *Quedius euryalus* group.

Year	Taxonomic History	Species Described	Total Species
1933	Bernhauer described one species: <i>mukuensis</i>	1	1
1995a	Smetana described four species: <i>antoni</i> ; <i>epytus</i> ; <i>haemon</i> ; <i>nireus</i>	4	5
1997	Smetana described one species: <i>kabateki</i>	1	6
2002	Smetana described two species: <i>raan</i> ; <i>tzwu</i>	2	8
2006	Smetana described two species: <i>gongga</i> ; <i>haan</i>	2	10
2006	Zheng & Zheng described one species: <i>guoi</i>	1	11
2007	Zheng <i>et al.</i> described one species: <i>xiaoe</i>	1	12

This Chinese-endemic species group is well characterized by the following character combination (Smetana, 2001): head with variable number of additional setiferous punctures ('e' in Fig. 1A) at least posteriomedial of posterior frontal setiferous puncture ('g' in Fig. 1A), in some species extended to mediad or even anterior of posterior frontal puncture ('g' in Fig. 1A), with one additional setiferous puncture ('f' in Fig. 1A) at the posterior margin of eye ('c' in Fig. 1A); pronotum with posterior setiferous puncture of sublateral rows ('l' in Fig. 1B)