



Taxonomy of the subgenus *Euleptarthrus* Jakobson (Coleoptera, Staphylinidae, Osoriinae, *Priochirus*) of China with descriptions of three new species

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Abstract

Three new species of subgenus *Euleptarthrus* Jakobson, 1908 of the genus *Priochirus* Sharp, 1887 are described from China: *P. (E.) trifurcus* Wu & Zhou **sp. nov.** from Xizang, *P. (E.) deltodontus* Wu & Zhou **sp. nov.** from Yunnan and *P. (E.) curtidentatus* Wu & Zhou **sp. nov.** from Xizang and Yunnan. Diagnoses are also given for two species previously described from China, *P. (E.) chinensis* Bernhauer, 1933 and *P. (E.) subbrevicornis* Bernhauer, 1934. An updated version of the key to all Chinese species of the subgenus *Euleptarthrus* is provided. Important morphological characters are illustrated.

Key words: Staphylinidae, *Priochirus*, *Euleptarthrus*, new species, China

Introduction

The genus *Priochirus* Sharp, 1887, of the subfamily Osoriinae (Coleoptera: Staphylinidae), is a successful group well adapted to habitats associated with dead wood in tropical and subtropical forest, and shows remarkable specialization and high diversity in external morphology (Greenslade 1971; Wu & Zhou 2007). In *Priochirus*, the subgenus *Euleptarthrus* is characterized by having at least one pair of blunt and short lateral teeth on head. Greenslade (1971) included in this subgenus 10 species and divided it into three species-groups: 1) *japonicus*-group containing *P. (E.) japonicus* Sharp, 1889, *P. (E.) freyi* Bernhauer, 1941, *P. (E.) formosae* Greenslade, 1971 and *P. (E.) quadrioveatus* Greenslade, 1971; 2) *longicornis*-group including *P. (E.) longicornis* (Fauvel, 1864), *P. (E.) micrognathus* Fauvel, 1902, *P. (E.) chinensis* Bernhauer, 1933, *P. (E.) subbrevicornis* Bernhauer, 1934 and *P. (E.) brevidenticulatus* Scheerpeltz, 1965; 3) *malayanus*-group including only *P. (E.) malayanus* Cameron, 1936. Later, Naomi (1996) found that *P. (E.) freyi* was a junior synonym of *P. (E.) japonicus* and described an additional species, *P. (E.) masahiroi* Naomi, 1996. Among these species, five were recorded from China: two from *longicornis*-group: *P. (E.) chinensis* and *P. (E.) subbrevicornis*, both from the mainland China; and three from *japonicus*-group: *P. (E.) japonicus*, *P. (E.) formosae* and *P. (E.) quadrioveatus*, all from Taiwan.

In a recently published morphology-based phylogenetic analysis of *Priochirus sensu lato*, Wu and Zhou (2007) found *Euleptarthrus* to be polyphyletic. The *japonicus*-group was found to be phylogenetically remote from the two other groups and was placed in a separate subgenus *Sinumandibulus* Wu & Zhou, 2007. In that paper, five new *Euleptarthrus* species were described from the mainland China: *P. (E.) amblyodontus* Wu & Zhou, 2007, *P. (E.) baotingensis* Wu & Zhou, 2007, *P. (E.) elongatus* Wu & Zhou, 2007, *P. (E.) parvicornis* Wu & Zhou, 2007 and *P. (E.) oxygenus* Wu & Zhou, 2007. Thus, prior to this study, excluding the now separate *japonicus*-group, a total of seven *Euleptarthrus* species were recorded from China.

In this paper, three new species of *Euleptarthrus* are described from China: *P. (E.) trifurcus* Wu & Zhou **sp. nov.** from Xizang, *P. (E.) deltodontus* Wu & Zhou **sp. nov.** from Yunnan and *P. (E.) curtidentatus* Wu & Zhou **sp. nov.** from Yunnan and Xizang. Two species previously known to occur in China, *P. (E.) chinensis* and *P. (E.)*