

Article



A taxonomic study of the genus *Longchuanacris* Zheng *et* Fu (Orthoptera: Acrididae: Catantopinae), with descriptions of two new species from Yunnan, China

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Abstract

All types of *Longchuanacris* Zheng *et* Fu, 1989 are examined. *Longchuanacris guangxiensis* Zheng *et* Ren, 2007 is synonymized with *Caryanda neoelegans* Otte, D. 1995, and *Longchuanacris bilobata* Mao, Ren *et* Ou, 2007 is synonymized with *L. macrofurcula* Zheng *et* Fu, 1989; seventy three topotypes are designated for *L. macrofurcula*. *Longchuanacris lobata* Niu *et* Ou, **sp. nov.** and *L. microfurcula* Niu *et* Zheng, **sp. nov.** are described as new species. Six *Longchuanacris* species are keyed and their distributions are stated. These species are distributed in southwestern Yunnan, China. Type specimens are deposited in the Faculty of Conservation Biology, Southwest Forestry University (SWFU), Yunnan Province, China and in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS).

Key words: Orthoptera, Acrididae, Longchuanacris, new synonymy, new species

Introduction

The genus Longchuanacris Zheng et Fu, 1989 was proposed to include the type species L. macrofurcula Zheng et Fu, 1989, a species described based on a single male specimen from Ruili County, southwest Yunnan, China. Since then, Longchuanacris has undergone recent taxonomic revisions and the addition of new species. Mao, Ren & Ou (2007) reviewed the generic diagnosis of Longchuanacris; described the new species L. bilobata Mao, Ren et Ou, 2007, L. curvifurcula Mao, Ren et Ou, 2007, and the male of Caryanda bidentata Zheng et Liang, 1985; transferred Caryanda bidentata and Caryanda macrofurcula Mao et Ou, 2000 to Longchuanacris; and replaced the name of C. macrofurcula with Longchuanacris virida Mao et Ou, 2007. Zheng & Ren (2007) described the new species L. guangxiensis Zheng et Ren, 2007, a species described based on two male specimens collected from Guangxi Province, China that were placed in an alcohol - glycerine solution before being pinned (Mr. Yi-bin Ba, collector, pers. comm., 2010). The genus previously included six species: L. macrofurcula Zheng et Fu, 1989, L. bilobata Mao, Ren et Ou, 2007, L. bidentata (Zheng et Liang, 1985), L. virida Mao et Ou, 2007, L. curvifurcula Mao, Ren et Ou, 2007 and L. guangxiensis Zheng et Ren, 2007. The genus was listed under the Catantopinae within Acrididae (Eades et al., 2011).

However, after an examination of all primary types, we found evidence that *L. guangxiensis* was conspecific with *Caryanda neoelegans* Otte, D. 1995, while *L. bilobata* showed similarities to *L. macrofurcula*. The similarities seemed to imply that *L. bilobata* and *L. macrofurcula* may be the same taxon. However, as the only type specimen of *L. macrofurcula* was partially damaged during mounting, and confirmation of individual variation within the species is necessary, more specimens were required from the type locality. Therefore, we

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