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Notes on the genus *Acosmetura* Liu, 2000 (Orthoptera: Tettigoniidae: Meconematinae)

XUN BIAN, XIAO-YAN KOU & FU-MING SHI¹

College of Life Sciences, Hebei University, Baoding, 071002, P. R. China

¹Corresponding author. E-mail: shif_m@126.com

Abstract

This paper deals with one new species, *Acosmetura mabianensis* Bian & Shi **sp. nov.**, one new combination, *Acosmetura jinyunensis* (Shi & Zheng, 1994) **com. nov.**, and the first record of female of *Acosmetura nigrogeniculata* (Liu & Wang, 1998). Photographs of two known species, a key to the species, male stridulatory files and a distribution map are provided. We also observe the male stridulatory files and left tegmina for four known species of the genus. The material is deposited in the Museum of Hebei University.

Key words: *Acosmetura*, Meconematinae, new species, new combination, China

Introduction

Liu (2000) erected the genus *Acosmetura*, described 2 new species, namely *Acosmetura brevicerca* Liu, 2000 (type locality: Mao'ershan, Xing'an, Guangxi, China), *Acosmetura emarginata* Liu, 2000 (type locality: Zhougongshan, Ya'an, Sichuan, China) and transferred *Cosmetura nigrovittata* Liu & Bi, 1994 and *Cosmetura nigrogeniculata* Liu & Bi, 1998 to the genus. Shi & Du (2006) reported 1 new species from Fanjingshan, Guizhou, China. Liu (2007) and Liu *et al.* (2008) studied the genus again, described 5 new species and transferred *Thaumaspis yachowensis* (Tinkham, 1994) and *Phlugiolopsis platycata* Shi & Zheng, 1994 to the genus. However, 4 species were transferred to other genera (Liu *et al.*, 2010; Shi & Bian, 2012; Wang *et al.*, 2012; Wang, Cao *et al.* 2013; Wang, Liu *et al.*, 2013).

We examined some specimens of *Phlugiolopsis jinyunensis* (Shi & Zheng, 1994) from the type locality and indicated that it has similar characters with *Acosmetura*, but differs from *Phlugiolopsis* in: male left stridulatory area large, stridulatory file approximately straight without 1 digitated process at basal area, male genitalia sclerotized and shorter (Bian *et al.*, 2012a, 2012b, 2013). Based on these characters, we transferred *Phlugiolopsis jinyunensis* (Shi & Zheng, 1994) to *Acosmetura*. To date, *Acosmetura* comprises 7 species, all of which are distributed in China (Eades *et al.*, 2014).

The study deals with one new species, one new combination, namely, *Acosmetura mabianensis* Bian & Shi **sp. nov.** and *Acosmetura jinyunensis* (Shi & Zheng, 1994) **com. nov.**. A key to all known species, distribution, male stridulatory files of four known species and a description of female sex for *Acosmetura nigrogeniculata* (Liu & Wang, 1998) are provided. All material examined (including the type specimens) are deposited in the Museum of Hebei University.

The measuring method follows previous convention (Bian *et al.*, 2012a), except female body length, the distance of which is from apex of fastigium verticis to the apex of ovipositor.

Key to known species of *Acosmetura*

1. Dorsal surface of abdomen without a longitudinal brown stripe*Acosmetura emeica* Liu & Zhou, 2007

males and 3 females, Wudangshan, Hubei, China, 24 July, 2002, coll. by Fu-Ming Shi; 1 male, Wudangshan, Hubei, China, 5 August, 1999, coll. by Chao-Ming Wei; 1 male, Wudangshan, Hubei, China, 11 September, 2011, coll. by Jian-Feng Li.

Measurements (mm). Body: ♂10.5–11.5, ♀18.4–19.1; pronotum: ♂5.4–5.5, ♀5.1–5.2; tegmen: ♂3.5–4.0, ♀2.5–3.0; postfemur: ♂12.5–13.0, ♀18.0–18.3; ovipositor: 9.0–9.5.

Distribution. China (Henan, Hubei).

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