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A revision of the subgenus *Pedionis* (*Pedionis*) Hamilton from China, with description of two new species (Hemiptera: Cicadellidae)

BIN ZHANG¹ & RUILING ZHANG²

¹College of Life Sciences & Technology, Inner Mongolia Normal University, Hohhot 010022, P.R. China.

E-mail: zhangbinmg@gmail.com

²Department of Basic Medical Science, Liaoning Medical University, Jinzhou, Liaoning, 121000 P.R. China

Abstract

Twenty species of the subgenus *Pedionis* occurring in the Chinese fauna are recognized, including two new species, *P. aculeata* sp. nov., *P. papillata* sp. nov. from Guizhou Prov., China. And, *P. nankunshanensis* Li, Dai & Li, 2011 is here considered as a junior synonym of *P. yunnana* Zhang & Viraktamath, 2010. A key to Chinese species of subgenus *Pedionis* is also provided as well as a checklist.

Key words: Auchenorrhyncha, Macropsinae, new synonym, China

Introduction

The genus *Pedionis* belongs to the subfamily Macropsinae, which is divided into two subgenera based on the number of antepical cell and structure of male genitalia. In contrast to the subgenus *P. (Thyia)*, the members of subgenus *P. (Pedionis)* have two antepical cells on forewing, and male pygofer elongate with tiny apical spine or acute tip or serrate caudal margin, dorsal connectives elongate, slender and sinuate. The genus *Pedionis* including 31 previously described species distributed from Palaearctic, Oriental to Australian regions, mainly in Chinese, Indian and Japanese fauna (Viraktamath 1981, 1996; Kuoh 1987; Huang & Viraktamath 1993; Liu & Zhang 2003; Okudera 2009; Zhang & Viraktamath 2010; Dai *et al.* 2011; Li *et al.* 2011, 2013; Dai & Li, 2012; Yang & Zhang, 2014), of which, 30 species in the subgenus *P. (Pedionis)* feeding on shrubs or trees mainly, and 1 species belongs to *P. (Thyia)* was only known from Northern Australia (Hamilton 1980).

In the present study, two new species, *Pedionis (Pedionis) aculeata* sp. nov. and *P. (P.) papillata* sp. nov. are described from Guizhou province, China. The following synonymy is proposed: *P. (P.) yunnana* Zhang & Viraktamath, 2010 = *P. (P.) nankunshanensis* Li, Dai & Li, 2011. An identification key to the 20 Chinese species of subgenus *Pedionis* is also provided along with a species checklist.

Material and methods

Morphological terminology follows mainly Hamilton (1980) and Dietrich (2005). Techniques for the preparation of genital structures of both sexes follow Oman (1949). The type specimens are deposited in the College of Life Sciences & Technology, Inner Mongolia Normal University, China.

Subgenus *Pedionis* (*Pedionis*) Hamilton

Pedionis (Pedionis) Hamilton, 1980: 894.

Type species: *Pediopsis garuda* Distant, 1916.

Distribution. China: Yunnan (Zhengyuan), Guangdong (Nankunshan).

Material examined. Holotype: 2 ♂♂, 1 ♀, China: Yunnan province, Zhenyuan county, 24 August 2009, collected by Zhang Bin.

Remarks. Li *et al.* (2011) reported *Pedionis nankunshanensis* as a new species based on the serrated apical processes of the aedeagal shaft, the subapical processes reflexed in ventral aspect, and the apical digitations. We re-examined the types of *P. yunnana* Zhang & Viraktamath, 2010 and observed some characters that were omitted in past descriptions. All above mentioned characters used to distinguish *Pedionis nankunshanensis* were also observed in *P. yunnana*. Although the types of *nankunshanensis* were not available for study, both the original descriptions and illustrations clearly showed that *P. nankunshanensis* should be considered a junior synonym of *P. yunnana*.

This species externally resembles *Pedionis rufoscutellata* Huang & Viraktamath, 1993 in coloration and structure, but it differs in having the caudodorsal angle of the pygophore produced into an acutely angled process.

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