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Illustrated checklist of mileewine leafhoppers (Hemiptera: Cicadellidae: Mileewinae) of China, with descriptions of four new species

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Abstract

Four new species of Mileewini, *Mileewa houhensis* Yang, Meng & He, **sp. nov.**, *M. xiaofeiae* Yang, Meng & He, **sp. nov.**, *M. yangi* Yang, Meng & He, **sp. nov.** and *Ujna liangae* Yang, Meng & He, **sp. nov.** are described and illustrated. *Mileewa nigricauda* Yang & Li, 1999 is placed as a junior synonym of *M. dorsimaculata* (Melichar, 1902); three of the previously described Chinese *Mileewa* are transferred to the genus *Ujna*. These are *Ujna harpa* (Yang & Li, 2004) **comb. nov.**, *U. nigrimaculata* (Yang & Li, 2004) **comb. nov.**, and *U. puerana* (Yang & Meng, 2010) **comb. nov.** *M. lynchi* (Distant, 1918) is recorded as new for China. A checklist of Mileewini leafhoppers of China along with photograph of their dorsal habitus is provided.

Key words: Auchenorrhyncha, leafhopper, Mileewini, new synonymy, taxonomy

Introduction

The leafhopper subfamily Mileewinae comprises small to medium-sized, slender, usually darkly pigmented species that inhabit montane cloud forests where they occur on herbaceous vegetation in the understory. The group was redescribed recently by Dietrich (2011) based on phylogenetic analyses (Dietrich 2004, Dietrich *et al.* 2001, 2005). Mileewinae (*sensu* Dietrich 2011) presently includes four tribes: Makilingiini (Phillippines, Thailand), Tungurahualini (Neotropical region), Tinteromini (Costa Rica, Colombia and Peru) and Mileewini (Ethiopian, Oriental and Neotropical regions) (Krishnankutty & Dietrich 2011). Mileewini (Mileewinae *sensu* Krishnankutty & Dietrich 2011) comprises four genera: *Amahuaka* Melichar, *Mileewa* Distant, *Ujna* Distant and *Processina* Yang, Deitz & Li. Three genera of the tribe have been recorded in China, *Mileewa*, *Ujna* and *Processina*, with the great majority of the species placed in *Mileewa*.

Mileewa Distant (type species, *Mileewa margheritae* Distant) comprises eighty-two previously described species. In China, this genus was represented by forty-one valid species described by several authors (Kuoh 1966; Zhang 1990; Chiang & Knight 1991; Li & Wang 1992; Liang *et al.* 1997; Yang & Li 1998, 1999a, 1999b, 2000b, 2002a, 2002b, 2004, 2005, 2006a, 2006b; Cai & He 2002; Yang & Song 2005; Yang *et al.* 2005, 2007, 2009, 2010; Meng & Yang 2008, 2010; Yang 2009; Yang & Meng 2010). The present study revealed three new species from China based on external and genitalia characters. *M. lynchi* (Distant, 1918) is recorded as new for China and *M. nigricauda* Yang & Li, 1999 is regarded as a junior synonym of *M. dorsimaculata* (Melichar, 1902). In addition, three of the previously described Chinese *Mileewa*, *M. harpa* Yang & Li, 2004, *M. nigrimaculata* Yang & Li, 2004, and *M. puerana* Yang & Meng, 2010 are reassigned to *Ujna* based on the definitions of these genera provided by Krishnankutty & Dietrich (2011). Previously, only one species of the genus *Ujna* Distant (type species, *Ujna delicatula* Distant), *Ujna maolanana* Yang & Li, 2000 was recorded in China, and this paper adds a new Chinese species, *U. liangae* Yang, Meng & He, **sp. nov.** The genus *Processina* Yang, Deitz & Li (type species, *Processina dashahensis* Yang & Li) comprises two known species, *P. dashahensis* Yang & Li, 2005 and *P. taiwanana* Yang, Deitz & Li, 2005. The current study also presents an illustrated checklist of mileewine leafhoppers of China.

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