



Review of the Old World leafhopper genus *Mimotettix* Matsumura (Hemiptera: Cicadellidae: Deltocephalinae) with description of new species

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Abstract

The species of the Old World leafhopper genus *Mimotettix* Matsumura are treated in the present paper. Among them, four species, *M. distiflangentus* **sp. nov.**, *M. robustistylus* **sp. nov.**, *M. dorsocavatus* **sp. nov.**, and *M. tibetensis* **sp. nov.** are described as new from China, *M. brevicornis* **sp. nov.** and *M. dietrichi* **sp. nov.** are described as new from Thailand, and *M. rectatus* **sp. nov.** is described as new from Zambia. One new combination, *Mimotettix alboguttulatus* (Melichar) **comb. nov.** (from *Thamnotettix*) is proposed and five new synonyms are revealed, *Mimotettix albomaculatus* (Distant, 1908), *Mimotettix kawamurae* Matsumura, 1914, *Mimotettix lefroyi* (Distant, 1918) and *Mimotettix apicalis* Li & Wang, 2005 are junior synonyms of *Mimotettix alboguttulatus* (Melichar, 1903) **syn. nov.** and *Mimotettix albiguttatis* Li & Wang, 2005 is a junior synonym of *Mimotettix curticeps* Kwon & Lee, 1979 **syn. nov.** A key to the species of the genus based on males is given and their male genital structures are illustrated. The biogeography of the genus is discussed.

Key words: Auchenorrhyncha, morphology, taxonomy, redescription, biogeography

Introduction

Deltocephaline leafhoppers (Hemiptera: Cicadellidae) are common and abundant phytophagous insects that play an important ecological role in many ecosystems. One of the more distinctively marked deltocephaline genera from the Old World tropics is *Mimotettix* Matsumura. Members of this genus are mainly brown in colour with a series of cream and brown transverse bands on the anterior margin of the head and unpigmented spots on the forewings (see Fig. 1). The genus was erected for a single species, *M. kawamurae* Matsumura from Taiwan. Subsequently, Kwon & Lee (1979) described another species, *M. curticeps* from South Korea and five species from India were transferred to *Mimotettix* from other genera by Webb & Heller (1990). However, the latter species were not studied critically and no information on to their identities was provided at that time. More recently, Li & Wang (2005) described two new species, *M. albiguttatis* and *M. apicalis* from China and Li & Xing (2010) described another new species, *M. spinosus*, from China. As our examination of further material has revealed various problems of species identity, a revision of the genus seems appropriate. In the current paper we examine the types of most of the above species, give a checklist and key and describe and figure the fifteen valid species recognized, including seven new species. We also propose five new synonyms and one new combination. Nothing is known about the biology of these leafhoppers.

Material and methods

The specimens examined are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing (IZAS), Entomological Museum, Northwest A&F University, Yangling (NWAUFU), Guizhou University,