



Synonymy, new species and new combinations in the leafhopper genus *Matsumurina* Dworakowska (Hemiptera: Cicadellidae: Typhlocybinae: Erythroneurini)

YANGHUI CAO¹, MEIXIA YANG^{1,2} & YALIN ZHANG^{1,3}

¹Key Laboratory of Plant Protection Resources and Pest Management, National Ministry of Education, Entomological Museum, P. O. Box 55#, Northwest A&F University, Yangling, Shaanxi 712100, China

²Shaanxi Institute of Zoology, No. 88 Xing Qing Ave, Xi'an, Shaanxi 710032, China

E-mail: caoyh2023@gmail.com, yangmeixia0914@yahoo.com.cn, yalinzh@nwsuaf.edu.cn

³Corresponding author

Abstract

The leafhopper genus *Takama* Dworakowska & Viraktamath, 1975 is considered a junior synonym of *Matsumurina* Dworakowska, 1972, with seven known species all transferred to the latter. Another new combination is proposed: *Matsumurina macra* (Kuoh, 1982) **n. comb.** Seven additional species: *Matsumurina abbreviata*, *M. angusta*, *M. furcata*, *M. longa*, *M. longissima*, *M. qini* and *M. serriformis* **spp. nov.** are newly described and illustrated. A key for identification of adult males of *Matsumurina* is provided.

Key words: Homoptera, Auchenorrhyncha, morphology, taxonomy, China, Thailand

Introduction

Genus *Matsumurina* was established by Dworakowska in 1972 with a relatively simple description and the most distinctive characters of the aedeagus were largely ignored. So far, the genus was only known from the type species *Zygina kagina* Matsumura, 1932. Later, Dworakowska and Viraktamath (1975) established genus *Takama* based on the type species *Takama magna* Dworakowska & Viraktamath, 1975 from India. The type species, together with six species subsequently included in *Takama*, served to characterize this genus by the following features: subgenital plate with distinct angulate protrusion subapically, connective fused with aedeagus, aedeagal shaft surrounded by upper atrial appendage and ventral appendage well developed. Following careful examination and comparison, the genera *Matsumurina* Dworakowska and *Takama* Dworakowska & Viraktamath are here considered synonyms based on their similar genitalia structure. Another species, *Parathaia macra* Kuoh, is transferred to *Matsumurina*. Seven new species from China and Thailand were studied. *Matsumurina* now contains sixteen species which are mainly distributed in China, India, Thailand and other Oriental countries. Host plants remain unknown according to available references and information accompanying the specimens examined.

Material and methods

Morphological terminology follows Young (1952), nomenclature of the wing follows Dworakowska (1993). Habitus photos were taken using a Canon PSSX40HS camera equipped with a Canon MP-E 65mm lens. Multiple photographs were combined into final images using CombineZP. The body measurements are from the apex of the vertex to the tip of forewing. Abdomens and genitalia were removed from specimens and cleared in a 10% KOH solution heated for 1–2 minutes. Cleared material was then rinsed in water and stored in glycerine. An Olympus SZX12 dissecting microscope was used for viewing and an Olympus BX41 stereoscopic microscope for drawing. Specimens examined are deposited in the following institutions: Entomological Museum, Northwest A&F University (NWAUFU), Yangling, China; Illinois Natural History Survey (INHS), Champaign, Illinois, USA; Queen Sirikit Botanical Garden (QSBG), Chiang Mai, Thailand.

base, with 3-4 macrosetae near lateral margin and row of microsetae on distal disc, marginal microsetae reduced, from midlength to constriction. Style (Fig. 11f) almost straight, apical part short, preapical lobe small but distinct. Connective (Figs 11g, h) with lateral arms short. Aedeagal shaft (Figs 11g–i) tubular, apical processes asymmetrical, directed caudad; branch of upper atrial appendage short, lamellate; ventral process slim, longer than shaft, slightly sinuated in side view, pointed apically.

Measurement. Male length 3.40 mm.

Material examined. Holotype: ♂, THAILAND, Prachuab, Khiri Khan, Khao Sam Roi Yot NP, 200m/S of Checkpoint 1, 12°12.789'N, 99°58.662'E, Malaise trap, 19–26. x. 2008, coll. Yai; Amnad.

Deposition. QSBG, Chiang Mai, Thailand.

Diagnosis. Similar to *M. angusta* sp. nov., but pygofer dorsal appendage serrated apically, paired apical processes of aedeagal shaft asymmetric and preatrial process longer than shaft.

Etymology. The specific epithet is derived from Latin word “*serriformis*” which refers to the serrated form of the apex of the pygofer dorsal appendage.

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