



Taxonomic study of the leafhopper genera *Gredzinskiya* Dworakowska and *Musbrnoia* Dworakowska (Hemiptera: Cicadellidae: Typhlocybinae: Erythroneurini) with descriptions of seven new species

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Abstract

The genera *Gredzinskiya* Dworakowska and *Musbrnoia* Dworakowska are revised and seven new species are described: *Gredzinskiya lamellaris*, *G. serrata*, *G. spinalis*, *G. zhangae*, *Musbrnoia angusta*, *M. corollaris* and *M. lata* **spp. nov.**. Habitus photos, illustrations of male genitalia and keys to adult males for both genera are provided.

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

Introduction

The erythroneurine genera *Gredzinskiya* and *Musbrnoia* were established by Dworakowska in 1972 with type species *Gredzinskiya lipcowa* Dworakowska from Vietnam and *Aidola fumistriga* Melichar from Java respectively. Up to the present, each genus included two species. In the present study, these two genera are reviewed and seven new species from China and Thailand are described and illustrated: *Gredzinskiya lamellaris*, *G. serrata*, *G. spinalis*, *G. zhangae*, *Musbrnoia angusta*, *M. corollaris* and *M. lata* **spp. nov.**. Examination of newly available specimens suggests that a connective central lobe is not present in *Musbrnoia* as previously reported (Dworakowska 1972b). Keys for identification of adult males are provided.

Material and methods

Morphological terminology used follows Young (1952), except nomenclature of the wing follows Dworakowska (1993). Habitus photos were taken using Canon EOS 5D equipped with Canon MP-E 1–5x 65mm lens. Multiple photographs were compressed into final images by 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. All the specimens examined were preserved in alcohol originally, therefore their natural shapes and colors were changed after drying. Depositions include: Entomological Museum, Northwest A&F University (NWAFU), Yangling, China; Illinois Natural History Survey (INHS), Champaign, USA and Queen Sirikit Botanical Garden (QSBG), Chiang Mai, Thailand.

Gredzinskiya Dworakowska, 1972

Type species: *Gredzinskiya lipcowa* Dworakowska, 1972

Gredzinskiya Dworakowska, 1972j: 113; Chiang & Knight 1990a: 213

Deposition. QSBG, Chiang Mai, Thailand.

Diagnosis. Male genitalia similar to those of *M. angusta* **sp. nov.**, but pygofer side with dorso-caudal angle expanded, ventral process of aedeagus broad basally and angulate ventrally.

Etymology. This new specific epithet is derived from Latin word “*latus*”, meaning broad, in view of pygofer side with dorso-caudal angle expanded.

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