



<http://dx.doi.org/10.11646/zootaxa.3666.2.10>

<http://zoobank.org/urn:lsid:zoobank.org:pub:AA797A22-2EB1-4447-B4C5-1784B5FDB748>

## Review of *Michalowskiya* Dworakowska (Hemiptera: Cicadellidae: Typhlocybinae: Dikraneurini) with description of six new species from China

JUXIA KANG<sup>1,2</sup> & YALIN ZHANG<sup>1,3</sup>

<sup>1</sup>Key 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

<sup>2</sup>Yangling Vocational & Technical College, Yangling, Shaanxi 712100, China. E-mail: kangjuxia123@yahoo.com.cn

<sup>3</sup>Corresponding author. E-mail: yalinzh@nwsuaf.edu.cn

### Abstract

A key to known species of the subgenus *Michalowskiya* (*Michalowskiya*) Dworakowska is provided. Detailed morphological descriptions and illustrations of six new species, *Michalowskiya* (*Michalowskiya*) *aurantiaca*, *M. (M.) biprocessa*, *M. (M.) breviprocessa*, *M. (M.) brownistriata*, *M. (M.) longiprocessa*, and *M. (M.) pedata* spp. nov. from China are provided.

**Key words:** Hemiptera, Auchenorrhyncha, morphology, taxonomy, distribution

### Introduction

The leafhopper genus *Michalowskiya* Dworakowska (1972) belongs to the tribe Dikraneurini of Typhlocybinae with *Michalowskiya lutea* Dworakowska, 1972 as its type species. Species of the genus are recorded only from the Oriental region. The host plants are unknown. Two subgenera, *M. (Michalowskiya)* and *M. (Burunra)*, were established by Dworakowska (1993). The nominotypical subgenus previously included 6 known species: *M. (M.) lutea*, *M. (M.) variabilis*, *M. (M.) minuta*, *M. (M.) quadrispina*, *M. (M.) sikkimensis* and *M. (M.) taiwana*. Only one species, *M. (Burunra) sordida* is included in *M. (Burunra)*. In this paper, six new species of the subgenus *M. (Michalowskiya)* are described and illustrated, and keys to males of this subgenus and its species are provided.

### Material and methods

Specimens examined are deposited in the Entomological Museum, Northwest A&F University, Yangling, Shaanxi, China (NWAUFU) and in the China Agricultural University (CAU). The morphological terminology used in this description follows Zhang (1990) except for the nomenclature of the wing venation, for which we follow Dworakowska (1993) and leg chaetotaxy, which follows Rakitov (1998). Habitus photos were taken by using a Scientific Digital micrography system equipped with an Auto-montage imaging system and a Q-IMAGING Retiga 2000R digital camera (CCD) and compressed into final images. The body measurements are from apex of vertex to tip of forewing. Abdomens and genitalia were removed from specimens and cleared in 10% NaOH solution heated for 1–2 minutes. Cleared material was then rinsed in water and stored in glycerine. A Nikon SMZ1500 compound microscope was used for viewing and an Olympus BH-2 stereoscopic microscope for drawing.

### *Michalowskiya* Dworakowska, 1972

*Michalowskiya* Dworakowska, 1972; Dworakowska, 1980; Dworakowska, 1993; Mann et Sohi 1990; Zhang et Xiao 2000

**Type species:** *Michalowskiya lutea* Dworakowska, 1972