

A new genus of the leafhopper tribe Erythroneurini (Hemiptera: Cicadellidae: Typhlocybinae) from China

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Abstract: A remarkable new genus of the microleafhopper tribe Erythroneurini with extremely long subgenital plate, *Dolichoplax* **gen. nov.**, is described based on a new species *Dolichoplax baihuensis* **sp. nov.** from China. Habitus photos and illustrations of the male genitalia are provided.

Key words: Auchenorrhyncha; Membracoidea; taxonomy

中国斑叶蝉族一新属（半翅目：叶蝉科：小叶蝉亚科）

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摘要：基于新种百花长板斑叶蝉 *Dolichoplax baihuensis* **sp. nov.** 建立中国斑叶蝉族 1 新属：长板斑叶蝉属 *Dolichoplax* **gen. nov.**，该属下生殖板极度延长。文中还提供了新种外部形态及雄性外生殖器特征图。

关键词：头喙亚目；角蝉总科；分类

Introduction

The leafhopper tribe Erythroneurini is the largest group of Typhlocybinae, with 209 genera 2045 species described so far (Dmitriev *et al.* 2022 onward). It is distributed worldwide except for Antarctica and shows the highest generic and species richness in the Oriental region. Several genera in this tribe have very distinctive pitted body surface, including *Eldama* Dworakowska, 1972, *Musbrnoia* Dworakowska, 1972, *Otbatara* Dworakowska, 1984, *Pettya* Kirkaldy, 1906, *Ska* Dworakowska, 1976 and *Variolosa* Cao & Zhang, 2013. Most of these genera were reported from the Oriental region, except *Pettya* was described from the Australian region. Here we described the second genus from China that has such conspicuous pits on the body surface. In addition, this genus has extremely long subgenital plates which is unusual in Erythroneurini.

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Material and methods

Morphological terminology follows Young (1952). Habitus photos were taken using a Scientific Digital micrography system equipped with an Auto-montage imaging system and a Q-IMAGING Retiga 2000R digital camera (CCD). Multiple photographs were compressed into final images. The body length was measured from the vertex to the tip of wings. Abdomens and genitalia were cleared in a 10% KOH solution heated for 1–2 minutes, then rinsed in purified water and stored in glycerine. A Leica ZOOM 2000 dissecting microscope was used for viewing and an Olympus BH-2 stereoscopic microscope for drawing. The type specimens are deposited at the Entomological Museum of Northwest A&F university, Yangling, China.

Taxonomy

Dolichoplax gen. nov.

Type species: *Dolichoplax baihuensis* sp. nov.

Description. Body robust, with numerous pits on thorax, basal 1/3 of forewing and abdomen. Head narrower than pronotum, anterior margin subparallel to posterior margin. Forewing with first and fourth apical cells broad, second and third cells narrow, fourth cell approximately same length as third, AA and AP veins absent.

Male genitalia cylindrical, pygofer side with some pits dorsobasally, distal half membranous; pygofer dorsal appendage tubular, articulated to pygofer side. Subgenital plate narrow and long, far exceeding caudal margin of pygofer side, with row of small setae on dorsal margin, without macrosetae. Style slim and long, exceeding caudal margin of pygofer side, apical part with small teeth on dorsal margin, without preapical lobe. Connective large, Y-shaped. Aedeagus tubular, without process, dorsal apodeme Y-shaped in caudal view, preatrium indistinct.

Etymology. The generic name is a combination of Greek words “dolichos” (long) and “plax” (plate), which refers to the extremely long subgenital plate. The gender is feminine.

Remarks. The new genus is mostly similar to *Musbrnoia* in view of the appearance, long subgenital plate and elongated style (Dworakowska 1972, 1979; Cao & Zhang 2014; Dmitriev 2016). In the new genus, however, the pygofer dorsal appendage is tubular rather than lamellate, the subgenital plate lacks the subapical angulate projection on the lateral margin and central macrosetae, the style is teeth-like apically on the dorsal margin, which artificially resemble female terminalia.

Dolichoplax baihuensis sp. nov. (Fig. 1)

Description. Head and thorax yellow-whitish, eyes and basal triangles black (Figs 1A–C). Face with a pair of black patches between eyes (Fig. 1D). Forewing with basal 2/3 smoky and distal 1/3 light brown (Figs 1A, 1B).

Pygofer side nearly tribangular, posterior margin rounded, sclerotized basally, with a few small setae on distal lobe (Fig. 1G); pygofer dorsal appendage long, curved ventrad (Figs 1G, 1H). Subgenital plate curved dorsad, about twice as long as pygofer side (Fig. 1G). Style strongly elongated, extended out of pygofer side and curved dorsad, slightly shorter than

subgenital plate, with one stout seta apically (Figs 1G, 1I, 1J). Aedeagal shaft robust, bent dorsad, with furrows on distal half; gonopore large, subapically on ventral margin (Figs 1L–N).

Holotype. ♂, **China**, Yunnan, Baoshan, Baihua Mountain, 25°18'16"N, 98°48'01"E, 1,615 m, 12-V-2012, light trap, coll. Yanghui CAO. **Paratype.** 1♂, same data as holotype.

Measurement. Male: body length (including wings) 5.7–5.8 mm.

Etymology. The new species is named after its type locality.

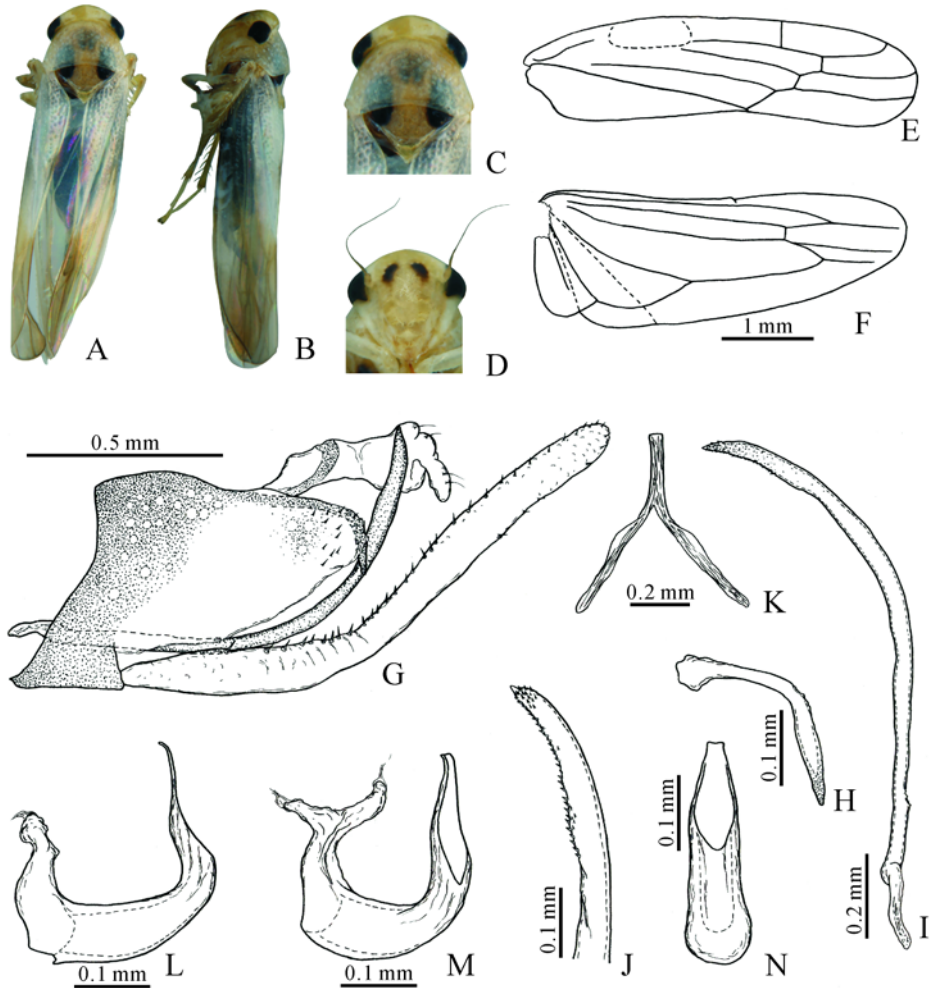


Figure 1. *Dolichoplax baihuensis* sp. nov. A–D. Habitus photos: A. Dorsal view; B. Lateral view; C. Crown, pronotum and mesonotum; D. Face; E. Forwing; F. Hind wing; G. Genital capsule; H. Pygofer dorsal appendage; I. Style, lateral view; J. Apical part of style, lateral view; K. Connective; L, M. Aedeagus, lateral and laterocaudal views; N. Aedeagal shaft, caudal view.

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