



Revision of the leafhopper genus *Reticulum* (Hemiptera: Cicadellidae: Deltocephalinae)

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Abstract

The leafhopper genus *Reticulum* from China is reviewed and refined. Two new species, *R. trispinosum* **sp. nov.** and *R. lanceolatum* **sp. nov.**, are described. A detailed morphological description and illustrations of the new species are provided. A key to species of *Reticulum* is also provided.

Key word: Homoptera, Auchenorrhyncha, Cicadina, morphology, China, key, identification

Introduction

Leafhoppers (Insecta: Hemiptera: Auchenorrhyncha) are some of the commonest insects in temperate and tropical ecosystems and their feeding habits (plant sap feeders) are an influential component in forests and agricultural areas. The largest and most economically important leafhopper subfamily is Deltocephalinae. This group, which is universally distributed with nearly 6000 species, is well represented in Southeast Asia and adjacent areas, particularly on grasses. One genus of this subfamily, *Reticulum* Dai *et al.* (Athysanini), forms the subject of the present work. This genus *Reticulum* was established by Dai *et al.* (2006) with *R. transvittatum* Dai, Li & Chen, as the type species from China.

During the course of study on the Chinese Deltocephalinae, we found two new species of *Reticulum*, in addition to the type species. Reference to the original description of the genus and examination of the additional material showed the following diagnostic features of the genus: 1) tegmina hyaline with variable brown irroration; 2) the male pygofer with a branched process on inner surface arising on dorsal margin; 3) male style apical process acute and curved laterally, and 4) aedeagal shaft with lateral processes at base. In this paper, we review the type species and describe two new species.

Materials and methods

In this study, species were collected from throughout China. Descriptions are based on specimens deposited in the Entomological Museum, Northwest A&F University, Yangling, Shaanxi, China (NWSUAF).

All specimens were examined with a Leica ZOOM2000 stereomicroscope, hand-drawing of male genitalia was carried out with OLYMPUS PM-10AD microscope with drawing, and external morphological characters figured out under Nikon AFX-II stereomicroscope fitted with drawing tube.

The morphological terminology used in the descriptions mainly followed Zhang (1990). Absolute measurements, in millimeters (mm), are used for body.