



A new Oriental genus of Deltocephalinae (Hemiptera: Cicadellidae) from China and Thailand

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Abstract

A new deltocephaline leafhopper genus *Hamulotettix* is described and illustrated based on a large, distinctly patterned species, *Hamulotettix ungulatus* **sp. nov.**, from China and Thailand, and is tentatively placed in the tribe Athysanini. Detailed morphological description and illustrations are provided. The genus is similar to *Abrus* Dai & Zhang in external body form, and also bears a superficial resemblance to *Oxycephalotettix* Zahniser, in having segment X of the male abdomen with a falcate ventral process.

Key words: Auchenorrhyncha, Deltocephalinae, Athysanini, new species, taxonomy

Introduction

Leafhoppers constitute one of the largest families of insects, with more than 22,000 described species (Oman *et al.*, 1990; Dietrich, 2005). The subfamily Deltocephalinae, the largest of 30 major subfamilies of leafhoppers, is diverse, complex, and cosmopolitan taxon, with over 6200 described species placed in nearly 800 genera (Oman *et al.*, 1990; Zahniser & Dietrich, 2008, 2010). Deltocephalines are diverse and abundant components of tropical, subtropical and temperate forest ecosystems, and are economically important because many species transmit pathogens to agriculturally important plants. This subfamily is difficult to define based on a few diagnostic morphological characters, but almost all deltocephalines have some very characteristic structures of the male genitalia, including: pygofer with basolateral membranous lateral cleft; valve produced medially and posteriorly; valve articulated with pygofer at a single point; subgenital plates triangular and relatively dorsoventrally flattened; subgenital plate with a dorsolateral fold articulating closely with style; style broadly bilobed basally, with median anterior lobe pronounced; connective Y-shaped or with anterior arms closely appressed and without median anterior or ventral lobe (Zahniser & Dietrich, 2010). Comprehensive genus- and species-level revisions are needed in nearly every tribe of Deltocephalinae, although considerable efforts have been made during the past half century to describe the leafhopper faunas of various parts of the world.

The Chinese deltocephaline fauna comprises a diverse and poorly known assemblage of leafhoppers currently classified in 14 tribes. Kuoh (1966) published a comprehensive review of the leafhopper fauna including Deltocephalinae. Zhang (1990) made a taxonomic study of the Chinese Cicadellidae, but many new genera and species of Deltocephalinae have been described since then (Zhang & Dai, 2004).

Xishuangbanna, located in the south of Yunnan Province and representing the northernmost edge of the tropics, harbors valuable tropical rainforests with abundant biodiversity. As part of a large study to catalogue the Chinese cicadellid fauna, we examined some specimens from Xishuangbanna and found they differ considerably from the other deltocephalines in the structure of male genitalia. Study of material from Thailand housed at the Natural History Museum, London, also revealed the presence of this distinctive species. This article provides new morphological and distributional data for a new genus and species from Xishuangbanna, *Hamulotettix ungulatus* gen. and **sp. nov.**, tentatively placed in Athysanini.