Concavocorona, a new genus of the leafhopper subfamily Evacanthinae (Hemiptera: Cicadellidae), with description of a new species

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Abstract

Concavocorona, gen. n., is described and illustrated based on a new species C. supercilia sp. n. from Thailand. In addition, C. abbreviata (Jacobi, 1944), n. comb. from China is transferred to this genus from Cunedda Distant, and its male genitalia is described for the first time.

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

Introduction

The leafhopper subfamily Evacanthinae is a relatively small subfamily previously often considered as a tribe in the subfamily Cicadellinae (Oman et al., 1990). Evacanthinae was redefined by Dietrich (2004), who included the tribes Evacanthini, Nirvanini, Balbillini and Pagaroniini in this subfamily. Recently, a new species was found in loaned leafhopper material from Thailand, having several peculiar features worthy of considering to establish a new genus. In addition, C. abbreviata (Jacobi), n. comb. from China is transferred to this genus from Cunedda based on a paratype. Herein, Concavocorona gen. n., C. supercilia sp. nov. and C. abbreviata (Jacobi) n. comb. are described and illustrated, and a key to males is provided.

Material and methods

External morphology was observed using a Motic SMZ 168-BL microscope. The male genitalia were treated with 10% NaOH solution at 100°C for several minutes, rinsed with water, immersed in droplet of glycerol and dissected following standard procedure. They were observed under a compound light microscope (Nikon Eclipse 50i). Photos were taken using a Scientific Digital Micrography System equipped with an Auto-montage imaging system and a QIMAGING Retiga 4000R digital camera (CCD). The terminology of setal rows on legs follows Rakitov (1997). Material examined is deposited in the following institutions and their abbreviations used in the text are as follows:

INHS Illinois Natural History Survey, Illinois, USA.
NWAFU The Entomological Museum, Northwest A&F University, Yangling, China.
NMS Naturmuseum Senckenberg, Dresden, Germany
QSBG Queen Sirikit Botanical Garden, Chiang Mai, Thailand.

Taxonomy

Concavocorona gen. n.
(Figs 1–21)

Type species: C. supercilia sp. n.
References

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