



Two new bamboo-feeding species of the genus *Neocarpia* Tsaur & Hsu (Hemiptera: Fulgoromorpha: Cixiidae: Eucarpiini) from Guizhou Province, China

PEI ZHANG^{1,2,3} & XIANG-SHENG CHEN^{1,2,4}

¹The Provincial Key Laboratory for Agricultural Pest Management of Mountainous Region, Guizhou University, Guiyang, Guizhou 550025, P. R. China

²Institute of Entomology, Guizhou University, Guiyang, Guizhou 550025, P. R. China

³Xingyi Normal University for Nationalities, Xingyi, Guizhou 562400, P. R. China

⁴Corresponding author. E-mail: chenxs3218@163.com

Abstract

Two new bamboo-feeding species of the cixiid planthopper genus *Neocarpia* Tsaur & Hsu, 2003 (Hemiptera: Fulgoromorpha: Cixiidae: Eucarpiini), *N. bidentata* **sp. nov.** (Guizhou: Xishui) and *N. hamata* **sp. nov.** (Guizhou, Yanhe), from southwest China, are described and illustrated. The generic characteristics are redefined. A key and a checklist to the known species of this genus in the world are provided.

Key words: bamboo pests, Fulgoroidea, Oriental region, planthopper, taxonomy

Introduction

The cixiid planthopper genus *Neocarpia* was established by Tsaur and Hsu (2003) for *N. maai* Tsaur & Hsu, 2003, and belongs to the tribe Eucarpiini in the family Cixiidae. Emeljanov and Hayashi (2007) described one new species and Löcker *et al.* (2010) described another new species. To date, three species, *N. maai* Tsaur & Hsu, 2003, *N. okinawana* Emeljanov & Hayashi, 2007 and *N. rhizophorae* Löcker, 2010, were recorded in this genus which occurs in the Oriental and Australian regions (China, Japan and Australia) (Tsaur and Hsu, 2003; Emeljanov and Hayashi, 2007; Löcker *et al.*, 2010).

While sorting and identifying Cixiidae from material in the Institute of Entomology, Guizhou University (IEGU), we found two new species of *Neocarpia*, which are herein described and illustrated. The purpose of this paper is to describe these two new species and to provide an identification key to the known species of this genus.

Material and methods

Morphological terminology follows Tsaur *et al.* (1988) and Löcker *et al.* (2006). Dry specimens were used for the description and illustration. External morphology was observed under a stereoscopic microscope and characters were measured with an ocular micrometer. The genital segments of the examined specimens were macerated in 10% KOH and drawn from preparations in glycerin jelly with the aid of a Leica MZ 12.5 stereomicroscope. Illustrations were scanned with CanoScan LiDE 200 and imported into Adobe Photoshop CS3 for labeling and plate composition. Specimens examined are deposited in the Institute of Entomology, Guizhou University, Guiyang, Guizhou Province, China (IEGU).