



## Review of the bamboo-feeding species of genus *Scaphoideus* (Hemiptera: Cicadellidae: Deltocephalinae) from China, with description of one new species

LIN YANG<sup>1,2</sup>, XIANG-SHENG CHEN<sup>1,2,3</sup> & ZI-ZHONG LI<sup>1,2</sup>

<sup>1</sup>Institute of Entomology, Guizhou University, Guiyang, Guizhou, 550025, P.R. China

<sup>2</sup>The Provincial Key Laboratory for Agricultural Pest Management of Mountainous Region, Guizhou University, Guiyang, Guizhou, 550025, P.R. China

<sup>3</sup>Corresponding author. E-mail: [chenxs3218@163.com](mailto:chenxs3218@163.com)

### Abstract

The bamboo-feeding species of genus *Scaphoideus* Uhler (Hemiptera: Cicadellidae: Deltocephalinae) from China are reviewed to include 7 species: *S. conicaplateus* Li & Dai, 2004 (China: Guizhou), *S. fanjingensis* Li & Dai, 2004 (China: Guizhou), *S. festivus* Matsumura, 1902 (China: Guizhou, Yunnan, Sichuan, Shaanxi, Ningxia, Hunan, Beijing, Hebei, Henan, Jiangxi, Fujian, Guangdong, Guangxi, Hainan and Taiwan; India; Sri Lanka; Japan; Korea), *S. kumamotoensis* Matsumura, 1914 (China: Guizhou, Yunnan, Tibet, Sichuan, Zhejiang and Henan; Japan), *S. nigrigenatus* Li, 1990 (China: Guizhou, Sichuan and Hubei), *S. nigrivalveus* Li & Wang, 2005 (China: Guizhou and Hubei) and *S. yaanensis* **sp. nov.** (China: Sichuan). All seven species are re-illustrated and photographed. The new species is described. A key to the bamboo-feeding species of *Scaphoideus* is also provided.

**Key words:** Auchenorrhyncha, bamboo leafhopper, Oriental region, species diversity, taxonomy

### Introduction

*Scaphoideus* Uhler (Hemiptera: Cicadellidae: Deltocephalinae) is one of the larger leafhopper genera with over 150 species distributed mainly in North America, Asia and Africa (Webb and Viraktamath, 2007). The species diversity of Chinese *Scaphoideus* is very rich and over 60 species are known from the region (Li *et al.*, 2011). Members of the genus feed and breed on grasses, herbs, shrubs and trees (Viraktamath and Mohan, 2004), however, the knowledge about those leafhoppers infesting bamboo is very limited. *Scaphoideus nigrigenatus* Li was reported to feed on bamboo from Guizhou, China (Li *et al.*, 2011). Recently, four bamboo-feeding species of *Scaphoideus* were redescribed by Yang *et al.* (2012).

During a study of species biodiversity of the bamboo-feeding leafhoppers in China, several species belonging to the genus *Scaphoideus* were identified. The purpose of this paper is to review the bamboo-feeding species of *Scaphoideus*, to describe one new species, to summarize information on host plants of the known species and to provide a key to bamboo-feeding species in the genus.

### Material and methods

The study was carried out from 2001 to 2011 for a minimum of 10 weeks each year (June to October). All the leafhopper specimens collected from bamboo by sweeping net in southern provinces of China were counted and identified in the laboratory using a binocular microscope. A total of 8,000 leafhopper specimens collected from bamboo were examined and a total of 58 different genera and at least 123 species were identified, belonging to 8 subfamilies.

Terminology follows Li *et al.* (2011). Dry specimens were used for the descriptions and illustrations. External morphology was observed under a stereoscopic microscope and characters were measured with an ocular