

The cicada genus *Karenia* Distant, 1888 (Hemiptera: Cicadidae), with description of a new species

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Abstract

The cicadas of the genus *Karenia* are reviewed, and *Karenia tibetensis* sp.nov. (Hemiptera: Cicadidae) is described from Tibet, China. Pictures of the male adult and illustrations of the male genitalia are provided. A key to the species of *Karenia* is presented and the distribution of the *Karenia* species is discussed.

Key words: Tibet, *Karenia tibetensis*, Cicadettinae, morphology, distribution

Introduction

The cicada genus *Karenia* was erected by Distant (1888) for *Karenia raviga* Distant, 1888 from Burma. The genus *Karenia* belongs to the tribe Sinosenini of the subfamily Cicadettinae. The second species, *K. caelatata*, was described by Distant (1890) from Chia Kou Ho, China. Chou *et al.* (1997) described a third species, *Karenia sulcata* Lei & Chou, which is distributed in Yunnan Province, southern China. Wei *et al.* (2009) described a fourth species, *K. chama* Wei & Zhang, 2009, also from Yunnan Province, southern China. According to Wei *et al.* (2009), the genus *Karenia* is distributed in central and southern China and Burma. Recently, Pham & Yang (2012) described a fifth species, *K. hoanglienensis* Pham & Yang, 2012, from Lao Cai Province, northern Vietnam. Here we describe a new species, *Karenia tibetensis* sp. nov., from Tibet, China.

Materials and methods

Ten males of the new species *Karenia tibetensis* sp.nov. were collected from Fa-Mu-Dui, Linzhin, Tibet, China. The holotype and eight paratypes are deposited in the Royal Belgian Institute of Natural Sciences (RBINS), and one paratype in the Vietnam National Museum of Nature (VNMN), Vietnam.

Morphological terminology follows that of Moulds (2005). The genitalia of all the male specimens have been examined. The male genitalia of the holotype was examined and photographed using a dissecting microscope (Leica MZ7 5). Images of the genitalia and habitus photos were enhanced using Photoshop 7.0 software to increase the depth of field.

distinguishable from *K. sulcata* by the different structure of the cruciform elevation. *Karenia tibetensis* closely resembles *K. hoanglienensis* in the markings of the fore wing, with the brown infuscations on r, r-m, m, m-cu and CuA2 and on apices of RA2, RP, M1, M2, M3, M4, and CuA1, but it differs from *K. hoanglienensis* in the distinctly prominent apical part of the basal pygofer lobe.

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