



## First record of the cicada genus *Karenia* Distant, 1888 (Hemiptera: Cicadidae) from Vietnam, with description of a new species

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### Abstract

The first record of the genus *Karenia* Distant, 1888 from Vietnam is presented. *Karenia hoanglienensis* **sp. nov.** (Hemiptera: Cicadidae) is described from Lao Cai Province, northern Vietnam. Photographs of an adult male, illustrations of the male genitalia, a distribution map and biological data for *K. hoanglienensis* **sp. nov.** are provided.

**Key words:** new record, *Karenia hoanglienensis*, Cicadettinae, Sinosenini, distribution

### Introduction

The cicada genus *Karenia* was erected by Distant (1888) for *Karenia ravidata* Distant from Burma. The genus *Karenia* belongs to the tribe Sinosenini of the subfamily Cicadettinae (Moulds 2005; Wei *et al.* 2009). The second species, *K. caelatata* Distant, was described by Distant (1890) from Chia Kou Ho, China. Chou *et al.* (1997) described a third species, *K. sulcata* Lei & Chou, which is distributed in Yunnan Province, southwestern China. Recently, Wei *et al.* (2009) described the fourth species, *K. chama* Wei & Zhang, from Yunnan Province, China. According to Wei *et al.* (2009), the genus *Karenia* is distributed in central and southern China and Burma. Here we describe the fifth species of *Karenia*, *K. hoanglienensis* **sp. nov.**, from Lao Cai Province, northern Vietnam, and provide information on its biology. We revised the species key provided by Wei *et al.* (2009) by including the new species.

### Material and methods

Ten males of the new *Karenia* species were collected from Phan Xi Pang (Fansipan), Hoang Lien Son Range, Lao Cai Province in northern Vietnam. The holotype and eight paratypes are deposited in the Netherlands Centre of Biodiversity Naturalis, Leiden, The Netherlands (NCB), and one paratype in the Institute of Ecology and Biological Resources (IEBR), Vietnam.

Morphological terminology follows that of Moulds (2005). The genitalia of all male specimens of *K. hoanglienensis* have been examined. The male genitalia of the holotype was examined and photographed using a dissecting microscope (Leica MZ7 5). Images of the genitalia were enhanced using Photoshop 7.0 software to increase the depth of field. A distribution map was produced using the software CFF 2.0 (Barbier & Rasmont 2000) and habitus photos are provided. The key to males of the genus *Karenia* is a modification of the key given in Wei *et al.* (2009) by the inclusion of the new species.