



<http://dx.doi.org/10.11646/zootaxa.3915.3.10>

<http://zoobank.org/urn:lsid:zoobank.org:pub:79599AEE-8F41-4ABE-B918-320148B62161>

## Description of two new species of the leafhopper genus *Karachiota* (Hemiptera: Cicadellidae: Typhlocybinae: Dikraneurini) from China

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### Abstract

Two new species of the dikraneurine leafhopper genus *Karachiota* Ahmed are reported from China: *Karachiota recurva* sp. nov. and *Karachiota aristata* sp. nov.. A key of all species of the genus is provided.

**Key words:** Auchenorrhyncha, leafhopper, taxonomy, morphology

### Introduction

The Dikraneurini genus *Karachiota* was established by Ahmed in 1969 based on the type species *K. azadirachtae* Ahmed. Subsequently, Dworakowska (1971, 1993) described two species: *K. marcowa* Dworakowska (Taiwan) and *K. longispina* Dworakowska (Thailand). Another species from Taiwan has also been described: *K. scottia* Chiang, Hsu & Knight (1990). Here we describe two new species from China and provide a key. The examined specimens in this study are deposited in the Institute of Entomology, Guizhou University, Guiyang, Guizhou, P. R. China (GUGC).

### Material and methods

Dry specimens were used for preparing descriptions and illustrations. External morphology was observed under a stereoscopic microscope. Body length was measured with an ocular micrometer, in millimeters, from the apex of the head to the apex of the forewing in repose. The genital segments of the specimens examined were macerated in 10% NaOH, washed in water and transferred to glycerine. Male specimens were dissected under a MOTIC B1 SMS-168 Series microscope. Figures were made using an OLYMPUS CX41 compound microscope. Photographs were taken with Keyence VHX-1000 and an Olympus E-520 digital camera. SEM photos were taken with JEOL JCM-6000 scanning electron microscope. The digital images were then imported into Adobe Photoshop CS6 for labeling and plate composition.

### Taxonomy

#### The key of the genus *Karachiota*

- |    |   |                        |
|----|---|------------------------|
| 1. | Aedeagus with two pairs of processes. ....                  | 2                      |
| -  | Aedeagus with one pair of processes . . . . .               | 3                      |
| 2. | Apical processes of aedeagus with denticulation . . . . .   | <i>K. longispina</i>   |
| -  | Apical processes of aedeagus without denticulation. . . . . | <i>K. azadirachtae</i> |

yellowish, lateral margin whity. Scutellum yellowish, two small white patches near the central, the side angle white. Face (Fig. 19) compressed in lateral view. Anteclypeus (Fig.20) slender, lorum broad.

Forewing (Fig. 21) slightly yellowish, with a small black spot on the basal part of the first apical cell, the first apical cell nearly parallel with the second apical cell. Hindwing (Fig. 22) semitransparent, anal vein branched.

Male abdomen (Fig. 23) with apodemes of sternum II well developed. Pygofer (Figs 24, 25) very slender, sclerotised, distal part of pygofer with transverse striations. Subgenital plates triangular, greatly reduced and without setae. Paramere (Fig. 26) curved, scimitar-like. Connective V-shaped. Aedeagus (Figs 27, 28) shaft with pair of subapical lateral processes not symmetrical, one process with aristate branch basally. Gonopore subapical.

**Type material.** Holotype, ♂, Jianfengling, Hainan, 3. April. 2013, coll. by Meng Jiao.

**Etymology.** The species name refers to the aristate process on the aedeagus.

**Remarks.** The new species is similar to *Karachiota recurva* sp. nov., but it differs from the latter in having the aedeagus processes asymmetrical and extended basad rather than distad.

## Acknowledgements

We are very grateful to Prof. Zizhong Li (Institute of Entomology, Guizhou University, China) for collecting materials and offering valuable literature. We also thank Xiaofei Yu (Institute of Entomology, Guizhou University, China) for suggesting improvements to the manuscript, and Dr. Christopher H. Dietrich (Illinois Natural History Survey, Prairie Research Institute, University of Illinois) for reviewing this paper. This project was supported by the Program of Science and Technology Innovation Talents Team, Guizhou Province (20144001).

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