

New taxa and records of Phaneropterinae (Orthoptera: Tettigoniidae) from China

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Abstract

Two new genera, *Semicarinata* gen. nov., and *Qinlingea* gen. nov., are described from China, with description of one new species, *S. colorata* sp. nov., and one new combination, *Q. brachystylata* (Liu and Wang, 1998). Two species, i.e., *Tamdaopteron major* Gorochov, 2005, and *Indogneta lata* Ingrisch and Shishodia, 2000, as well as these two genera, are first records for China. We also gave additional descriptions about male stridulatory area of these two genera and the first female description of the species *I. lata*. A key to the genera with open tympana in China is provided.

Key words: new genus, new species, new combination, new distribution records, China

Introduction

The Phaneropterinae is the largest subfamily in the family Tettigoniidae with more than 338 valid genera and 2162 described species in the World (Eades et al 2007). The latest checklist for China records 31 genera and 107 species (Jin & Xia 1994), and recently more species have been described with many specialists working on them.

We have been engaged in the phylogenetic research on the subfamily Phaneropterinae for many years and published many papers. Here we describe two new genera and discuss two other genera as new records in China, with brief remarks on and redescriptions of their taxonomy and morphology. We also provide a key to the phaneropterine genera with open tympana known from China.

Materials and methods

Differentiation of species is based on male stridulatory area of left and right tegmen, and male and female genital structures.

The key to the genera basically uses characters that are easily visible on dried specimens.

All specimens were examined with a Leica MZ12.5 microscope, drawings were made with Leica MZ12.5 with a drawing mirror, and photographs of stridulatory areas were made with a Canon Powershot 40 digital camera fixed on Leica MZ12.5 microscope.

Material comes from the following four depositories: Insect Collection of Institute of Zoology, the Chinese Academy of Sciences, Beijing, China (IZAS); Institute of Entomology, the Chinese Academy of Sciences, Shanghai, China (IEAS); Insect Collection of China Agricultural University, Beijing, China (CAU); and Institute of Entomology, Northwestern A&F University, Yanglin, China (NWAU).