

Article



Phaneroptera Serville and Anormalous gen. nov. (Orthoptera: Tettigoniidae: Phaneropterinae) from China, with description of two new species

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Abstract

A list of and key to *Phaneroptera* from China is provided. One new species with comparatively short hind wings, *Phaneroptera brevicauda* sp. nov. is described. And a new small-sized genus and new species *Anormalous zhangi* sp. gen. & nov. is also described here. The new genus most resembles the genera in the tribe Ducetiini in shape of lateral lobe of pronotum, structure of the tympana, shape of fore tibiae, and male subgenital plate without styli, but differs by the special tegminal structure. Both new species are distributed in southwestern China. Necessary illustrations are provided.

Introduction

Ragge (1956) provided an excellent revision of the genus *Phaneroptera* Serville, 1831, including a detailed introduction about its complicated history. At present, this genus includes a few widespread and numerous local species described by many authors (e.g., Poda 1761; Burmeister 1838; Fieber 1853; Brunner von Wattenwyl 1878; Ragge 1956, 1957). There record two subgenera and thirty-nine species in the world (Eades et al. 2011), and about six species in China (Jin & Xia 1994). Insects of this genus are small-sized, and possess open tibial tympana. They are distributed almost in the whole of the Old World south of about 55°N, and range westward as far as the Azores, southward up to the coast of Cape Province and Northern Australia, and eastwards as far as the Solomon Island (Ragge 1956).

When examining our collections, I found two new species, among which one belongs to *Phaneroptera*, but another can not be placed in any present genus, or tribe. Here I describe them new to science. I also give a list of *Phaneroptera* species from China, providing information about their male stridulatory file.

All specimens were examined with a Leica MZ12.5 microscope. A camera lucida fixed on Leica Mz12.5 microscope was used to make drawings. Photographs of the male stridulatory area were taken with a Canon Powershot 50 digital camera fixed on Leica MZ12.5 microscope.

Material comes from the following two depositories, i.e., Insect Collection of Institute of Zoology, the Chinese Academy of Sciences, Beijing, China (IZAS); and Institute of Entomology, the Chinese Academy of Sciences, Shanghai, China (MSIE).

Phaneroptera Serville, 1831

Phaneroptera Serville, 1831, Ann. Sci. Nat. 22, 158. Type species: *Gryllus falcata* Poda,1761; by subsequent designation. *Dannfeltia* Sjostedt, 1901, Bih. K. Svenska Vet.-Akad. Handl. 27 (4, 3): 19. Type species: *Dannfeltia amplectens* Sjöstedt, by original monotypy; Ragge, 1980, Bulletin Br. Mus. nat. Hist. (Ent.) 40(2): 135 (syn.)

Anerota Caudell, 1921, Jour. Wash. Acad. Sci. 11: 488. Type species: *Gryllus falcatus* [sic] Poda, 1761; by original designation. *Paranerota* Karny, 1926, Jour. Fed. Malay States Mus. 13(2–3): 105. Type species: *Phaneroptera gracilis* Burmeister, 1838; by original designation.