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Two new species of *Hemielimaea* Brunner von Wattenwyl from China

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Abstract

Two new species *Hemielimaea* (*Hemielimaea*) *paracari* sp. nov. and *H. (H.) parva* sp. nov. from southwestern China are described. Characteristics of the stridulatory file on underside of male left tegmen, male stridulatory area on left and right tegmen, and abdominal apex of male are provided. Important and necessary illustrations of the new species are presented. Materials come from the following two depositories: Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS), and China Agricultural University, Beijing, China (CAU).

Key words: new species; *Hemielimaea*; katydid; China

Introduction

Hemielimaea Brunner, 1878 is distributed in Indo-China Peninsula and southern China, with 2 subgenera and 15 species, among which 7 species are distributed in China (Song *et al.* 2012, Eades *et al.* 2013). Here we describe 2 new species from Guangxi Province, southwestern China. The terminology of the male stridulatory apparatus and measurements follows Gorochov (2004) and Ingrish & Gorochov (2007: figs. 5, 8).

Hemielimaea (*Hemielimaea*) *parva* Liu, Wang *et* Ma, sp. nov.

Fig. 1a–g

Holotype. Male. China: Guangxi Prov., Longzhou, Sanlian, 350m, 1999.VI.14, Coll. Zhu Caodong (IZCAS).

Description. Male. Stridulatory vein 2.7 mm long (Fig. 1a), shorter than greatest width of pronotal disc in posterior area (3.0 mm). Stridulatory vein on underside of left tegmen with about 350 densely arranged narrow teeth, which becoming smaller from centre to both ends (Fig. 1c). Mirror of right tegmen slightly wider than longer (2.0 against 1.7 mm); distance between proximal heavily sclerotized vein and apex of mirror 2.2 mm; maximal width of dorsal tegminal part behind mirror 1.7 mm (Fig. 1b). Epiproct approximately rectangular, longer than wide (Fig. 1d). Cerci 3.5 mm long (Fig. 1d), with straight, rounded basal quarter, remaining basal quarter slightly descending and slightly narrowed mediad; curved mediad in apical half, slightly swollen in apical 5/6 part, and then gradually narrowed forming a cone with acute tip. Subgenital plate curved in an about 30° angle (Fig. 1g); upcurved area with slightly contracted lateral margins, apical half with a distinct narrow angular notch and slightly deviating apex (Fig. 1e). Basal 1/3 part of phallic complex tubercular; short, stout, bifurcate sclerite in apical 2/3 part with sinuate, serrate dorsal margin (Fig. 1f); similar to those of other species in the subgenus *Hemielimaea*.

Female unknown.

Measurements of male (mm). Length of body with wings: 51.0; length of body without wings: 30.0; length of pronotum: 5.1; length of tegmen: 38.5; tegmen width: 5.3; length of hind wing: 44.0; length of hind femur: 25.1.

Coloration. Bluish green, with contrasting dark brown markings. Face with frons, genae, and mandibles yellow. Compound eyes dark brown. Vertex dark brown, with yellow fastigium and a pair of yellow lateral lines which is lying behind fastigium and deviating backward. Base of antennae with dark brown exterior margin and medium brown interior

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