



Three new species of *Dinera* Robineau-Desvoidy from China (Diptera: Tachinidae)

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Abstract

Three species of the genus *Dinera* Robineau-Desvoidy (Diptera: Tachinidae) are described from China as new to science: *D. borealis* **sp. nov.**, *D. guangxiensis* **sp. nov.** and *D. nigrisquama* **sp. nov.** Illustrations of the head and male terminalia are given as well as a modified key.

Key words: Tachinidae, *Dinera*, new species, China

Introduction

The genus *Dinera* Robineau-Desvoidy is known from the Nearctic, Palaearctic, Oriental and Afrotropical regions. Eight species have been recorded from the Palaearctic Region and ten from the Oriental Region (Zhang & Shima 2006), one of which also occurs in the Nearctic Region (O'Hara & Wood 2004). There are seven species known from the Afrotropical Region (Crosskey 1980).

Dinera is close to *Billaea* Robineau-Desvoidy in morphological characters including those of the male terminalia. These genera are sometimes difficult to separate, especially in female specimens, and some species appear to have rather intermediate characters, such as a developed or undeveloped facial carina, and hind tibia with a row of dense and regular-sized anterodorsal setae. The definition of these two genera needs much more study in the future.

We here treat *Dinera* as differing from *Billaea* in having a narrow vertex in male, fronto-orbital plate bare or sparsely with minute hairs, fore tarsi distinctly longer than head height, and anterodorsal setae irregular in length on the hind tibia. We describe three new species of *Dinera* from China. Illustrations of the head and male terminalia are provided.

Material and methods

Specimens examined during this study are from the collections of the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS) and the Insect Collection, Shenyang Normal University, Shenyang, China (SYNU).

Terminology of the male terminalia follows Sinclair (2000) and that of other structures follows McAlpine (1981). The dissection of male terminalia was carried out following the method described in detail by O'Hara (2002).

Dissected male terminalia were preserved in glycerine in small plastic tubes pinned together with the specimens. Drawings were prepared using an Olympus SZX7 stereoscopic microscope equipped with an ocular micrometer.