



Revision of the genus *Dohrniphora* Dahl (Diptera: Phoridae) from China

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Abstract

The Chinese species of *Dohrniphora* are revised, with 27 recognised species from both Oriental and Palaeartic China. The following 14 species are described as new to science: *D. rectangularis* sp. nov., *D. capillais* sp. nov., *D. proxima* sp. nov., *D. longisetalis* sp. nov., *D. infrequens* sp. nov., *D. dentiretusa* sp. nov., *D. aspinula* sp. nov., *D. separata* sp. nov., *D. microtrichina* sp. nov., *D. dilatata* sp. nov., *D. disparilis* sp. nov., *D. carinata* sp. nov., *D. cespitula* sp. nov., *D. triangula* sp. nov. *D. microspinosa* Shen & Liu, 2009 is regarded as a junior subjective synonym of *D. prescherweberae* Liu, 2001 and *D. rectilinearis* Liu, 2001 is a junior subjective synonym of *D. malaysiae* Green, 1997. Most known species were re-identified, re-described and illustrated. A revised key to Chinese male species is presented.

Key words: Diptera, Phoridae, *Dohrniphora*, China, taxonomy

Introduction

The genus *Dohrniphora* Dahl is one of the largest phorid genera, with more than 320 species, and found worldwide, and concentrated mainly in tropics and subtropics. The species of the genus are usually medium- to large-sized scuttle flies. Its females are frequently associated with termites and some are important as pollinators (Disney 1990a). The larvae of the genus include scavengers, fungivores, kleptoparasites, facultative predators and parasitoids. The taxonomic and natural history literature of the genus was reviewed by Disney (1994).

Most species are apparently restricted to a single hemisphere or smaller biogeographical region, except one species, *D. cornuta* (Bigot), is nearly cosmopolitan, spread by human activity (Brown and Kung 2007). The Oriental species are keyed by Disney (1990a), supplemented by Disney & Kistner (1997, 1999), Green (1997), Mostovski (2000), Disney (2001, 2005). Of the Palaeartic species, two native species, *D. modesta* Disney & Michailovskaya (2000) and *D. leei* Disney (2005) were reported separately from the far east of Russia and South Korea. *D. papuana* (Brues), a second tramp species, except *D. cornuta*, was reported from Europe (Disney & Blasco-Zumeta 2004).

China, belonging geographically to both the Palaeartic and Oriental Regions, is important in zoological distribution. However, our knowledge of scuttle flies is still limited, especially the genus *Dohrniphora* is little known to this region. At beginning of last century, the cosmopolitan species, *D. cornuta* (Bigot), was firstly found in Taiwan (Brues 1911, 1924). Afterwards, no further additions had been received for more than seventy years. In 1990's, I began to study the Chinese scuttle flies and finished my thesis in 1993 (Liu 1993), which was partly published in 2001. Of which 9 species of *Dohrniphora* were covered. Recently two other species were added to the Chinese *Dohrniphora* list by Shen & Liu (2009) and Yang & Liu (2012). In present paper, 27 species from China are described, of which 14 are new to science. Most species published in my book were re-identified, re-described and illustrated. A revised key to Chinese male species is presented.

Material and methods

Most specimens were collected into 80% ethanol by using sweep nets and Malaise trap. The head, legs, wing and terminalia, palp and hind coxal lobe when necessary, were detached and made slides according to the method of Disney (1994).