



Species of *Hemipenthes* Loew, 1869 from Palaeartic China (Diptera: Bombyliidae)

GANG YAO¹, DING YANG^{1,3} & NEAL L. EVENHUIS²

¹Department of Entomology, China Agricultural University, Beijing 100193, China. E-mail: likygang@gmail.com;
dyangcau@yahoo.com.cn

²Department of Natural Science, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i 96817-2704, USA

³Correspondence author

Abstract

The species of the genus *Hemipenthes* Loew from Palaeartic China are reviewed. The following six species are described as new to science: *Hemipenthes apiculata* sp. nov., *H. beijingensis* sp. nov., *H. cheni* sp. nov., *H. hebeiensis* sp. nov., *H. neimengguensis* sp. nov., *H. ningxiaensis* sp. nov. One species, *H. nitidofasciata* Portschinsky, is recorded from China for the first time.

A key to the species of the genus from Palaeartic China is presented.

Key words. Diptera, Bombyliidae, *Hemipenthes*, new species, China

Introduction

The genus *Hemipenthes* Loew belongs to the tribe Villini of subfamily Anthracinae (Hull, 1973). It is easily identified by the following characters: wing with extensive infuscate patterning reaching hind margin basally and at least half as long as wing; antennal flagellum onion-shaped and not segmented; fore tibia smooth or with a few weak bristles (Greathead and Evenhuis, 1997; Yao and Yang, 2008). *Hemipenthes* with 79 known species, of which 25 species are from the Palaeartic Region and eight species are from the Oriental Region (Evenhuis and Greathead, 1999; Yao and Yang, 2008). The following 11 species are known to occur in Palaeartic China: *H. exoprosopoides* Paramonov, 1928, *H. gaudanica* Paramonov, 1927, *H. hamifera* (Loew, 1854), *H. maura* (Linnaeus, 1758), *H. montanorum* (Austen, 1936), *H. morio* (Linnaeus, 1758), *H. noscibilis* (Austen, 1936), *H. praecisa* (Loew, 1869), *H. robusta* Zaitzev, 1966, and *H. subvelutina* Zaitzev, 1966, *H. velutina* (Wiedemann, 1818).

Despite the review of immature bombyliids by Yeates & Greathead (1997), the biology of *Hemipenthes* species remains poorly known. Making observations in Beijing in August 2007, the first author found that adults of *Hemipenthes* congregated around flowers of the umbelliferous *Petroselinum crispum*, and also noted that adults prefer to rest in open places on the ground on the border between sunshine and shadow.

In the present paper ten species (including six new species and one new species record for China) are described. A key to the species from Palaeartic China is presented.

Material and methods

The specimens were studied and illustrated with ZEISS Stemi 2000-c. Genitalic preparations were made by macerating the apical portion of the abdomen in cold 10% NaOH for 12–15 h, after examination it was trans-