



The genus *Doryctes* Haliday, 1836 (Hymenoptera: Braconidae, Doryctinae) in China

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Abstract

Thirteen Chinese species of *Doryctes* Haliday, 1836 are recognized. Four new species, *D. flavistigma* **sp. nov.**, *D. hainanensis* **sp. nov.**, *D. mayunae* **sp. nov.**, and *D. yunnanicus* **sp. nov.**, are described and illustrated. Five species, i.e., *D. malayensis* (Fullaway, 1919), *D. petiolatus* Shestakov, 1940, *D. striatellus* (Nees, 1834), *D. undulatus* (Ratzeburg, 1852), and *D. yogoi* Watanabe, 1954, are recorded from China for the first time. A key to Chinese species of the genus *Doryctes* is provided.

Key words: *Doryctes*, Doryctinae, new species, China

Introduction

Doryctes Haliday, 1836 is the typical and widespread genus of the subfamily Doryctinae. To date more than 80 valid species of this genus have been described in the world fauna (Yu *et al.* 2005). Four valid and one doubtful species of *Doryctes* were recorded from China prior to this study (Papp 1988, Belokobylskij 1996, Chen and Shi 2004). Fahringer (1934) described *D. hedinii* (originally in the genus *Wachsmannia*) from Mongolia, but is actually from Gansu Province, China (Papp 1988), although other specimens of this species have never been found. Belokobylskij (1996) studied the Taiwan Doryctinae material and described two species from this island, *D. denticoxa* and *D. henryi*. Chen and Shi (2004) recorded *D. leucogaster* (Nees) for the first time in China and proposed a new species *D. strigosus* Chen et Shi (in both cases from males only). However, Belokobylskij and Maeto (2009) synonymized *D. strigosus* with *D. gyljak* Telenga, 1941 and showed that *D. leucogaster* (Nees) was misidentified and may be a male of *D. malayensis* (Fullaway).

Belokobylskij and Maeto (2009) classified this genus into three subgenera, *Doryctes* s. str., *Neodoryctes* Szépligeti and *Plyctes* Fischer. In spite of these taxa having separate positions on the phylogenetic tree based on molecular data (Zaldivar-Riverón *et al.* 2008), here we follow Belokobylskij and Maeto's (2009) treatment to regard them as subgenera of *Doryctes* in consideration of distinct variation of the main diagnostic characters of external morphology in studied numerous species.

We here describe four new species of *Doryctes* and record five species for the first time for the fauna of China. A key to thirteen Chinese species of *Doryctes* is provided.

Material and methods

This study is based on specimens in the Parasitic Hymenoptera Collection of Institute of Insect Sciences, Zhejiang University (ZJUH), the Institute of Zoology of Chinese Academy of Sciences, China (IZAS), and Zoological Institute RAS, St. Petersburg, Russia (ZISP).