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***Chrysotus* Meigen (Diptera: Dolichopodidae) from Tibet with descriptions of four new species**

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Abstract

The genus *Chrysotus* Meigen is reported from Tibet for the first time. Five species are recorded. The following four species are described as new to science: *Chrysotus altavaginas* sp. nov., *C. motuoensis* sp. nov., *C. namaicunensis* sp. nov. and *C. tibetensis* sp. nov. *Chrysotus biprojicienus* Wei & Zhang is recorded from Tibet for the first time. A key to the species of *Chrysotus* from Tibet is presented.

Key words: Diptera, Dolichopodidae, *Chrysotus*, Tibet, China, new species

Introduction

The genus *Chrysotus* Meigen, 1824 is the largest genus of the subfamily Diaphorinae, with more than 300 species distributed worldwide. Sixty-five species are known from the Palearctic, 19 species from the Afrotropical, 40 species from the Oriental, 20 species from the Australasian and Oceanian, 109 species from the Nearctic and 98 species from Neotropical regions (Yang *et al.* 2011; Wei & Zhang 2010; Wei 2012a). Some of these species are known to occur in more than one biogeographical regions. So far as known 58 species occur in China (Yang *et al.* 2011; Wei & Zhang 2010; Wei 2012a).

The major references dealing with this genus are as follows: Becker (1922); Hollis (1964); Meuffels & Grootaert (1996); Negrobov (1980); Negrobov & Maslova (1995); Negrobov & Tsurikov (1986); Negrobov *et al.* (2000); Olejníček (1999); Parent (1923); Pärnu (1995); Robinson (1964); Yang *et al.* (2006); Wang & Yang (2009); Wei & Zhang (2010); Yang *et al.* (2011) and Wei (2012a).

Tibet with plateau climate is located in southwest China. The territory belongs mostly to the Palearctic Region, although the southeast part has Oriental elements. All the specimens in this study were collected from the Oriental Region. Four new species are described and a species is recorded from Tibet for the first time. A key to the species of *Chrysotus* from Tibet is presented.

Material and methods

The specimens on which this study is based were collected mainly in 2012 from Tibet outskirts using sweep nets and deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

Morphological terminology for adult structures mainly follows McAlpine (1981). Terms for the structures of the male genitalia follow Cumming and Wood (2009). The following abbreviations are used: acr—acrostichal bristle, ad—anterodorsal bristle, av—anteroventral bristle, d—dorsal bristle, dc—dorsocentral bristle, LI—fore leg, LII—mid leg, LIII—hind leg, pd—posterodorsal bristle, v—ventral bristle, CuAx ratio—length of m-cu / length of distal portion of CuA.