



## New species of the genus *Neurigona* (Diptera: Dolichopodidae) from China

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### Abstract

The following three new species of the genus *Neurigona* are described and illustrated: *Neurigona hainana* **sp. nov.** from Hainan province, *N. sichuana* **sp. nov.** from Sichuan province and *N. yaoi* **sp. nov.** from Neimenggu province. *Neurigona zhangae* Wang, Yang & Grootaert is transferred as *Viridigona zhangae* (Wang, Yang & Grootaert) **comb. nov.** An updated key to 25 known species of *Neurigona* from the Chinese mainland is presented.

**Key words:** Diptera, Dolichopodidae, *Neurigona*, China, new species

### Introduction

The genus *Neurigona* Rondani, 1856 is characterized by the following features: thorax and abdomen usually yellow with black markings; wing vein M weakly or strongly bent apically and convergent with vein R<sub>4+5</sub>; legs long and slender, especially tibiae I–III; abdominal segment 1 remarkably enlarged and abdominal segment 5 in male sometimes with a ventral projection (Parent 1938; Naglis 2003).

Adults of the genus occur on tree trunks and low vegetation (Pollet *et al.* 2004). It is distributed worldwide with 152 known species (Yang *et al.* 2006; Wang *et al.* 2006, 2007), with two species known from the Afrotropical Region, four species from the Australasian Region, 39 species from the Palaearctic Region (Negrobov 1987, 1991; Negrobov & Fursov 1988; Pârnu 1996), 30 species from the Oriental Region (Dyte 1975; Yang & Saigusa 2001a-b), and 40 each from the Nearctic (Pollet *et al.* 2004) and Neotropical (Naglis 2003) regions. There are 23 species known from the Chinese mainland, described mostly in the past decade (Parent 1944; Yang 1999; Yang & Saigusa 2001a-b, 2005; Zhang *et al.* 2003). In the present paper, three new species of *Neurigona* are added to the fauna of the Chinese mainland and an updated key to the species of this genus from this region is provided.

### Material and methods

The specimens in this study were collected by J. Liu in Hainan in 2007, Y. Li in Sichuan in 2009 and G. Yao in Neimenggu in 2009, using sweep nets and are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

Morphological terminology for adult structures mainly follows McAlpine (1981). Terms for structures of male genitalia follow Cumming *et al.* (1995). Abbreviations are as follows: acr—acrostichal, ad—anterodorsal, av—anteroventral, CuAx ratio—length of m-cu / length of distal portion of CuA, dc—dorsocentral, LI—fore leg, LII—mid leg, LIII—hind leg, pd—posterodorsal, v—ventral.