

A review of *Minilimosina* Roháček (Diptera: Sphaeroceridae) from China

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Abstract

A review of the genus *Minilimosina* Roháček, 1983 of China, comprising 16 species, is given, with data about types, published descriptions and figures, and distributions. A key to the Chinese species of the genus *Minilimosina* is provided and three new species are described and illustrated: *M. gracilenta* Su sp. nov., *M. parafanta* Su sp. nov. and *M. tapiehella* Su sp. nov.. The male of *M. archboldi* Marshall, 1985 is redescribed. Females of *M. luteola* Su, 2011 and *M. cornigera* Roháček & Marshall, 1988 are described and illustrated for the first time. Phylogenetic relationships of *M. cerciseta* Su, 2011, *M. luteola* Su, 2011, *M. obtusispina* Su, 2013, *M. quadrispinosa* Su, 2011, *M. gracilenta* Su sp. nov., *M. parafanta* Su sp. nov. and *M. tapiehella* Su sp. nov. are discussed.

Key words: Diptera, Sphaeroceridae, *Minilimosina*, 3 new species, China

Introduction

The genus *Minilimosina* was erected by Roháček (1983), recognizing three subgenera: *Allolimosina* Roháček, 1983, *Minilimosina* Roháček, 1983 and *Svarciella* Roháček, 1983. Since then Marshall (1985) added a new subgenus from the New World: *Amputella* Marshall, 1983 and Papp (2008) described two new subgenera respectively from the Afrotropical and the Oriental: *Amediella* Papp, 2008 and *Sagittaliseta* Papp, 2008. Three of known subgenera, *Allolimosina*, *Minilimosina*, and *Svarciella*, are recorded here for China.

Presently, 77 species of the genus *Minilimosina* are known worldwide (Carles-Tolrá, 2001; Marshall, 1985; Marshall *et al.*, 2011; Marshall & Winchester, 1999; Papp, 2008; Roháček, 1982, 1983, 1988, 1992, 1993, 2001, 2010; Roháček & Marshall, 1988; Roháček *et al.*, 2001; Su, 2011; Su *et al.*, 2013), of which 34 from the Palaearctic, 13 from the Oriental, 24 from the Nearctic, 1 from the Afrotropical, 11 from the Neotropical and 3 from the Australasian/Oceanian. Seven of the known species are distributed in China: *M. cerciseta* Su, 2011, *M. fungicola* (Haliday, 1836), *M. quadrispinosa* Su, 2011, *M. fanta* Roháček & Marshall, 1988, *M. luteola* Su, 2011, *M. obtusispina* Su, 2013, and *M. vitripennis* (Zettersted, 1847).

The present review forms a continuation and supplement to the work of the Chinese *Minilimosina* (Su, 2011; Su *et al.*, 2013), including a number of new records, supplement to descriptions of females of *M. luteola* Su, 2011 and *M. cornigera* Roháček & Marshall, 1988, redescription for male of *M. archboldi* Marshall, 1985 and descriptions of three new species. Currently, sixteen species of *Minilimosina* are recognized in the Chinese fauna of Limosininae. They are keyed and phylogenetic relationships of *M. cerciseta*, *M. luteola*, *M. obtusispina*, *M. quadrispinosa*, *M. gracilenta* sp. nov., *M. parafanta* sp. nov. and *M. tapiehella* sp. nov. discussed below.

Material and methods

The studied specimens were collected with sweep net and Malaise trap from mountains in China, and preserved in glass vials in alcohol. Genitalia of male and female were examined after dissecting and detaching of the whole abdomen. After examining, their dissected parts were kept in small plastic tubes with glycerine, then sealed tubes