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## Review of the genus *Dolichosciara* Tuomikoski (Diptera, Sciaridae) from China

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### Abstract

The genus *Dolichosciara* from China is reviewed and 17 species are recognized. Among them, eight new species, *D. sparsula* sp. nov., *D. gracilentata* sp. nov., *D. oxyacantha* sp. nov., *D. scrobiculata* sp. nov., *D. tumidula* sp. nov., *D. rectospinosa* sp. nov., *D. multisetosa* sp. nov. and *D. qingliangfengana* sp. nov. are described and seven species, *D. ninae* (Antonova, 1977), *D. megumiae* (Sasakawa, 1994), *D. orcina* (Tuomikoski, 1960), *D. semiferruginea* (Menzel, 1995), *D. hippai* Komarova & Vilkamaa, 2006, *D. subornata* (Mohrig & Menzel, 1994) and *D. ornata* (Winnertz, 1867) are reported for the first time from China. In addition, geographical distribution of 17 Chinese species are provided, as well as a key to all these Chinese species. This study raises the number of the species of Chinese *Dolichosciara* from 2 to 17.

**Key words:** Diptera, Sciaridae, new species, new record, China

### Introduction

*Dolichosciara* Tuomikoski, 1960 was originally described as a subgenus of *Phytosciara sensu* Tuomikoski and *Sciara flavipes* Meigen, 1804 was designated as the type species. Tuomikoski proposed the concept that genus *Phytosciara sensu* Tuomikoski and included three subgenera, *Phytosciara s. str.*, *Prosciara* Frey and *Dolichosciara* Tuomikoski. The concept of subgenus was later defended by Mohrig and Menzel (1994) and Menzel and Mohrig (2000). However, Hippa and Vilkamaa (1991) and Vilkamaa and Hippa (1996) regarded these subgenera as genera, which was supported by the morphological phylogenetic work on *Prosciara* Frey and related genera (Vilkamaa, 2000). Additionally, Shin *et al.* (2012) reconstructed the phylogeny of Sciaridae, based on 4809 bp from two mitochondrial and two nuclear genes. The result indicated that *Dolichosciara* has a close relationship to *Bradysia* Winnertz, 1867.

Here we follow Vilkamaa's (2000) concept of *Dolichosciara* as a genus. The group is diagnosed by a combination of characteristics: bodies of antennal flagellomeres slightly curved, necks of flagellomeres slightly elongated; first segment of maxillary palp with many setae, with sensillae scattered; wing veins M and Cu dorsally setose; legs long, fore tibia with subapical comb-like row of strong setae, tarsal claws with strong teeth; gonocoxites with two or more elongated setae at apicoventral corner, gonostylus usually slender.

The genus from China has never been systematically studied. The only two records were *Dolichosciara intermedialis* Antonova, 1977 and *Dolichosciara flavipes* (Meigen, 1804) from Taiwan (Menzel & Mohrig, 1991; Mohrig & Menzel, 1994; Lin & Chen, 1999). In this study, we taxonomically revise the genus based on specimens collected from China. Detailed illustrations, differential diagnosis, distributional information of all the species are provided, as well as a key to Chinese species.

### Material and methods

All of the specimens were collected by sweeping or Malaise traps and preserved in 75% ethanol. All of them were

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