

The genus *Ctenosciara* Tuomikoski in China, with descriptions of three new species (Diptera, Sciaridae)

HONG WU¹, SU-JIONG ZHANG & JUNHAO HUANG

Institute of Forest Protection, Zhejiang A & F University, Lin'an, Zhejiang 311300, China

¹Corresponding author. E-mail: wuh8977@sohu.com

Abstract

The taxonomy of the genus *Ctenosciara* Tuomikoski in China was studied. Six species were recognized, including three new species that are described and illustrated: *Ctenosciara mutisetosa* Wu & Zhang sp. nov., *Ctenosciara pseudoinsolita* Wu & Zhang sp. nov., and *Ctenosciara xijingensis* Wu & Zhang sp. nov. Additionally, *Ctenosciara japonica* Sutou & Ito, 2003 and *Ctenosciara rufulenta* (Edwards, 1927) are reported for the first time from China. A key to the Chinese species is also provided.

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

Introduction

The genus *Ctenosciara* Tuomikoski is a small genus. The species are similar to each other in having an unmodified gonostylus and are difficult to distinguish. Since it was established by Tuomikoski (1960) for *Sciara hyalipennis* Meigen, 1804, the number of species in the genus has increased slowly. Hardy (1956) described one species from Hawaii. Steffan (1969) described one species from Micronesia. Amorim (1992) recorded two species from the Neotropical region. Sasakawa (1994) described one species from Japan. Mohrig and Jaschhof (1999) described six species from New Zealand. Menzel and Mohrig (2000) recorded four species from the Palaearctic region and described *Ctenosciara hyalipennis* (Meigen, 1804) as a common, widespread species in Palaearctic coniferous forest. Sutou (2003) recorded seven species from Japan and described four new species. Vilkamaa (2005) described one new species from Finland. Consequently, 19 species have been described to date, mostly from the Asia-Oceania region.

Previously, only *C. hyalipennis* have been recorded from China (Taiwan) (Rudzinski 2004). In an investigation of Chinese Sciaridae, we found a number of specimens of *Ctenosciara* from various localities, including three species new to science.

Material and methods

All of the specimens were collected by sweeping or Malaise trap in the field and were preserved in 75% ethanol. They were mounted on glass slides in xylol-based Canada balsam after clearing in creosote. The specimens were observed and measured under a Nikon SMZ1500 stereoscopic microscope, with a Nikon DS-L1 Digital Sight Camera System attached. Illustrations were prepared under a Nikon Eclipse 50i optical microscope, with an attached drawing tube. The terminology follows Salmela and Vilkamaa (2005). The wing measurements follow method of Hippa *et al.* (1998). The length of the 4th flagellomere was taken from the apex of the neck to the base of the body. The body length was the straight distance between the apex of the head and the 8th sternite. All of the type specimens in this study were deposited at the Laboratory of Forest Protection, Zhejiang A & F University, Hangzhou, Zhejiang province, China [ZAFU].