



The genus *Psalidothrips* Priesner in China (Thysanoptera: Phlaeothripidae) with three new species

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Abstract

A key to, and distributional information concerning, the nine *Psalidothrips* species known from China are given, including the descriptions of three new species. *P. elagatus* **sp. n.** can be distinguished from *P. chebalingicus* Zhang & Tong by the presence of three sense cones on antennal segment IV, and the shuttle-shaped glandular area on abdominal sternite VIII of the male. *P. bicoloratus* **sp. n.** differs from the other species of the genus in having the head dark brown but the body straw yellow, and in the cheeks not constricted behind the eyes. *P. longidens* **sp. n.** differs from *P. armatus* in the brown tube and in having antennal segment VIII longer than segment VII. Comments are made on the thrips diversity of leaf litter in southern China.

Key words: Thysanoptera, Phlaeothripidae, Psalidothrips, new species, China

Introduction

In recent years, we conducted a series of investigations by quantitative sampling methods to survey the species diversity of leaf-litter thrips in southern China. We found these fungus-feeding thrips to be a common group of litter macro-invertebrates, with high species diversity and relative abundance in the warmer regions of South China. For example, the numbers of these thrips accounted for 3% to 13.5% of total litter macro-invertebrate individuals caught in 4 different forest types of two natural reserves of Guangdong Province (Li, et al., 2004a, 2004b). In an urban forest remnant at Guangzhou, 25 species of 19 genera of leaf-litter thrips were collected, and these constituted 6.5% of total litter macro-invertebrate individuals caught (original totals 1413 thrips out of 21817 individual macro-invertebrates). Among these litter thrips, *Psalidothrips ascitus* was the dominant species, accounting for more than 40% of total litter thrips individuals. In this paper, three new species are described that have been collected from these surveys.

Species of the Phlaeothripinae genus *Psalidothrips* Priesner are probably all fungus-feeders. The genus is widely distributed in the warmer parts of the world (Mound & Marullo, 1996; Zhang & Tong, 1997; Okajima, 2006), and six species have previously been recorded from China (Zhang & Tong, 1997). The genus *Psalidothrips* was established for a single species from Java (Priesner, 1932), but Okajima (1983) recognized, and provided a key to, 17 species worldwide, listing *Callothrips* Ananthakrishnan as a junior synonym. Subsequently, Mound & Marullo (1996) included *Hennigithrips* as a further synonym, and currently 26 species are listed in the genus (Mound, 2007). All of the specimens discussed here, including the type specimens, are deposited at the Insect Collection, Department of Entomology, South China Agricultural University (SCAU). The type specimens are mounted on slides in Canada balsam.