A new genus and species from southwestern China in the Frankliniella genus-group (Thysanoptera: Thripidae)

HONGRUI ZHANG1,2, LAURENCE A. MOUND3 & YONGHUI XIE1,2
1 Ministry of Education Key Laboratory of Agriculture Biodiversity and Pest Management, Kunming, 650201, China
2 Plant Protection College, Yunnan Agricultural University, Kunming, 650201, China. E-mail: hongruizh@yahoo.com.cn
3CSIRO Ecosystem Sciences, P.O.Box 1700, Canberra, ACT 2601, Australia. E-mail: laurence.mound@csiro.au

Abstract

A new genus and species, Yaobinthrips yangtzei, are described from Southwestern China sharing many character states with the Austro-Oriental genus Parabaliothrips within the Frankliniella genus-group. Within this group the new species is distinguished by the presence of tergal craspeda, a pair of uniquely bulbous modified setae on the fore tibiae, enlarged fore femora with a basal tooth, and paired small pore plates on sternum VI of females.

Key words: Yaobinthrips yangtzei new genus, new species, Frankliniella, China

Introduction

Ctenidia are structures found laterally on the posterior abdominal terga of thrips species in a few genera in the subfamily Thripinae (Mound, 2002). Each ctenidium comprises a discrete and regular row of microtrichia, and each pair of ctenidia has a precise position laterally on the terga that differs between genera. In members of the Thrips genus-group the ctenidia on terga VI–VII terminate laterally at tergal seta S3, and on VIII they occur posteromesad of the spiracles. In members of the Frankliniella genus-group the ctenidia on terga VI–VII terminate laterally just anterior to tergal seta S3, and on VIII they occur anterolateral to the spiracles (Mound, 2002). However, in the species of Parabaliothrips, a genus of the Frankliniella genus-group from Southeast Asia and Australia (Gillespie et al., 2002), the ctenidia on VIII are anterolateral to the spiracles as in Frankliniella, but those on VI–VII terminate laterally in a more anterior position, at the midlateral seta on the tergal margin. The purpose of this paper is to describe a new genus and species of Thripinae, found recently in Sichuan, Southwestern China, with ctenidia essentially similar to those of Parabaliothrips species, but with a posteromarginal craspedum on terga V–VIII. Tergal craspeda do not occur on any other member of Frankliniella genus-group. In contrast, tergal craspeda occur in several genera of Thrips genus-group, such as Microcephalothrips and Ernotrhiips (see key to genera in Mound & Ng, 2009). The new species described below is also remarkable for the two short, uniquely bulbous, modified setae on the inner margin of the fore tibiae, and for the presence in females of a pair of pore plates on the sixth sternum.

Yaobinthrips gen. n.

Macropterous Thripinae, with paired ctenidia on posterior abdominal terga. Antennae 8-segmented, sensoria on III–IV forked (Fig. 3), segment I without dorso-apical setae. Head with 3 pairs of ocellar setae, pair III posterior to tangent joining posterior margins of hind ocelli (Fig. 2); maxillary palps 3-segmented. Pronotum trapezoidal, with no sculpture medially, median setae close to posterior margin. Mesonotum reticulate medially, median setae at anterior margin, campaniform sensilla present (Fig. 5). Fore wing first vein with setal row almost complete but distal four setae widely spaced (Fig. 9); second vein setal row complete; clavus with five marginal and one discal setae; posterior cilia wavy. Fore femora slightly swollen, inner margin angulate medially, with pointed tubercle near base (Fig. 6); fore tibiae each with two short, broadly rounded,