

A new species of *Gastrozona Bezzi* (Diptera: Tephritidae: Dacinae: Gastrozonini) with an updated key to species from India

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Abstract

Gastrozona nigrifemur **sp. nov.**, is described from India. Postabdominal structures of *G. fasciventris* (both male and female), *G. soror* (female) and *G. montana* (male) are described and illustrated. An updated key to Indian species of *Gastrozona* is provided.

Key words: Tephritidae, *Gastrozona*, bamboo feeder, India

Introduction

The Gastrozonini are primarily tropical, with the largest number of species in the Oriental Region and a few in the Afrotropical, southeastern Palearctic and Australasian Regions (Kovac *et al.*, 2006). Though there are no definitive morphological synapomorphies to support the monophyly of the tribe Gastrozonini, they are considered so based on its association with plants (primarily bamboo) belonging to family Poaceae. Fruit flies of Acanthonevrini (subfamily Phytalmiinae) are also associated with bamboo but they are saprophytic (Dohm *et al.*, 2014) and are attracted to decaying shoots of bamboo. 137 species in 27 genera have been included in Gastrozonini (Kovac *et al.*, 2006; Dohm *et al.*, 2014). Hancock and Drew (1999) recorded 86 species in 17 genera from Asia and 38 species in 14 genera were recorded from India (Agarwal & Sueyoshi, 2005; David & Ramani, 2011; David *et al.*, 2014). *Gastrozona* is predominantly Oriental in distribution with ten described species (Hancock & Drew, 1999; Kovac *et al.*, 2006), of which seven were reported from India (Radhakrishnan, 1984; Hancock & Drew, 1999; Agarwal & Sueyoshi, 2005; David & Ramani, 2011). Species of this genus exhibit sexual dimorphism with respect to scutal colouration and femoral markings (Hancock & Drew, 1999) and their larval microhabitat is usually wall tissue of dead/felled shoots of several species of bamboo (Dohm *et al.*, 2014). A previously unknown species of *Gastrozona* collected by the first author in Karnataka, India, is described here as *G. nigrifemur* **sp.nov.**, along with an updated key to species recorded from India.

Material and methods

Specimens deposited in the following museums were examined for the present study:

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Specimens were collected in Bangalore (Karnataka, India) by luring the flies to chopped tender bamboo shoots kept near the base of the bamboo thickets. Images (habitus, head, thorax, abdomen and wings) of the specimens were taken using a Leica DFC 420 camera mounted on a Leica M205A stereozoom microscope. The male and female terminalia were imaged using a Leica DFC 425 camera mounted on a Leica DMLB 1000S microscope. Measurements of male and female genitalia were taken using a calibrated ocular micrometer fixed on