



***Tetrigimyia minor*, a new genus and species of Tachinidae (Diptera) parasitic on *Formosatettix larvatus* (Orthoptera: Tetrigidae) in Japan**

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Abstract

A new genus and species of blondeliine tachinid, *Tetrigimyia minor* **gen. et sp. nov.**, is described from Japan. This is a small oviparous tachinid parasitic on adults and larvae of a pygmy grasshopper, *Formosatettix larvatus* (Orthoptera, Tetrigidae). A brief biological note on this species is added.

Key words: taxonomy, parasitoid, percentage parasitism, Blondeliini, Tetrigidae

Introduction

Orthopterans serve as hosts of some groups of Tachinidae. Acrididae and Eumasticidae are known to be parasitized by members of tachinid tribes Acemyini and Ethillini (Iwata & Nagatomi 1954; Herting 1960; Léonide 1968, 1969, 1971, 1973; Crosskey 1973a,b 1984). Gryllidae are mainly attacked by Ormiini (Cade 1975) and Tettigoniidae by Ormiini, Ethillini and Exoristini (Crosskey 1963; Kanmiya 1987; Shima 2006), while Tetrigidae are known to be parasitized only by a blondeliine tachinid, *Leiophora innoxia* (Meigen), in Europe and Japan (Belshaw 1993; Tschorsnig & Herting 1994; Shima 2006).

In the course of a study of the pygmy grasshopper *Formosatettix larvatus* Bei-Bienko (Orthoptera, Tetrigidae) in Japan, a small unknown tachinid was obtained from larvae and adults of this host. This tachinid is similar in general appearance to members of the Central and South American genus *Calodexia* Wulp, of which females are attendants of the swarm raid of doryline army ants to parasitize orthopteroids (Rettenmeyer 1961). It differs from *Calodexia* in the head and female abdominal structures and reproductive habit. It runs to *Paracraspedothrix* Ville-neuve in the key to Palaearctic Tachinidae (Tschorsnig & Richter 1998), but is different from that genus in many characters, such as short and slender antenna with slender arista, larger eye, and female abdomen conical and downcurved apically. We describe it here as a new genus and species of the tribe Blondeliini.

Material and methods

Material was studied from the collection of Takahashi, now preserved in the Biosystematics Laboratory, Faculty of Social & Cultural Studies, Kyushu University, Fukuoka (BLKU) and Kyushu University Museum, Hakozaki, Fukuoka (KUM).

Terminology used in descriptions follows McAlpine (1981) except for those of the male terminalia. The terms phallus, pregonite and postgonite are adopted following Sinclair (2000) instead of aedeagus, gonopod and paramere as used by McAlpine (1981). Measurements were made in a similar manner to those of Shima (1996). Specimens were examined with a Leica MZ12 stereoscopic microscope. Consecutive digital images of adult female (Fig. 7) at different focal planes (20 images per figure) were taken with a Canon EOS Kiss XII and images