



A taxonomic revision of the genus *Metadrinomyia* Shima (Diptera: Tachinidae) with descriptions of two new species

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Abstract

A little known tachinid genus, *Metadrinomyia* Shima, is revised based on four East Asian species including two new to science: *M. flavifrons* **sp. nov.** and *M. xanthokolos* **sp. nov.** The majority of the specimens used in this study were collected from low vegetation in the foothills of mountains in South Korea. The new species can be clearly distinguished from their congeners by their pruinosity, chaetotaxy and genitalic structures. A key, descriptions, photographs, and illustrations of the male genitalic structures are provided and the phylogenetic relationships among the species are investigated.

Key words: Diptera, Tachinidae, Exoristinae, Blondeliini, *Metadrinomyia*, revision, East Asia

Introduction

The genus *Metadrinomyia* Shima, 1980 (Exoristinae: Blondeliini) was erected for two new species: *M. proclinata* from Japan and South Korea, and *M. argentea* from Nepal. Shima (1980) distinguished this genus from the closely resembling genus, *Drinomyia* Mesnil, by the weak anepimeral seta, absence of the discal seta on abdominal tergite 5, and the hook-like piercing ovipositor. However, he also mentioned that *Metadrinomyia* was more closely related to the genus *Blondelia* by sharing a similar female postabdominal structure, but did not specify any synapomorphies. In the present study we recognize two new *Metadrinomyia* species from South Korea and provide diagnoses, descriptions, photographs, and illustrations of the male genitalia. A key to all four known species of *Metadrinomyia* is given. The phylogenetic relationships among the four species are analyzed using cladistic methods.

Materials and Methods

The terminology and morphological interpretations used in this study follow McAlpine (1981). In addition, the following eight ratios were used (modified from Han and Norrbom, 2005): frons-head ratio (frons / head width); eye ratio (shortest eye diameter / longest eye diameter); gena-eye ratio (genal height [the distance between the ventral eye margin and the ventral genal margin anterior to genal seta] / longest eye diameter); arista-antenna ratio (length of arista / length of antenna excluding arista); vein R_{4+5} ratio (distance along vein R_{4+5} between crossvein r-m and vein R_{4+5} apex / distance between crossvein r-m and basal node of vein R_{4+5}); vein M ratio (distance along vein M between crossvein r-m and dm-cu / distance between crossvein r-m and bm-cu); subcosta-costa ratio (length of pterostigma / length of costal cell); wing-thorax ratio (wing length / thorax length).