



Species of the subgenus *Acutipula* Alexander from Henan, east-central China (Diptera, Tipulidae)

YAN LI & DING YANG¹

Department of Entomology, China Agricultural University, Beijing 100193, China

¹Corresponding author. E-mail: dyangcau@yahoo.com.cn

Abstract

The subgenus *Tipula* (*Acutipula*) Alexander, 1924 is recorded from Henan, east-central China, for the first time. One species, *T. henanensis* sp. nov., is described as new to science. The following four species are redescribed: *T. pseudacanthophora* Yang and Yang, *T. pseudocockerelliana* Yang and Yang, *T. gansuensis* Yang and Yang and *T. buboda* Yang and Yang. A key to the species of the subgenus *Acutipula* from Henan is presented.

Key words: Diptera, Tipulidae, *Tipula*, *Acutipula*, new species, Henan, China

Introduction

The subgenus *Acutipula* Alexander, 1924 is a large subgenus of the genus *Tipula*. It is characterized by the following characters: Rostrum long, with elongate simple nasus; antenna short, flagellum with verticals nearly as long as corresponding segments or longer; tibial spurs 1–2–2; claws of male toothed; wing usually with a darker spot at midlength of cell CuA₂; R₁₊₂ entire; Rs short, nearly as long as basal section of CuA₁; CuA₁ meeting M₃ at a point or confluent for short distance; calypter with setae; tergite 9 conspicuously produced into a depressed or cylindrical median lobe, with simple or bilobed apex, bearing microscopic spicules (Alexander 1924, 1935). It is distributed widely with 195 known species and subspecies, of which 82 species are from the Palearctic Region, 44 species and subspecies from the Oriental Region, 71 species and subspecies from the Afrotropical Region and 3 species from the Australasian/Oceanian Region (Oosterbroek 2010). Forty-eight species are known to occur in China, most in southern China.

Henan is a province of east-central China, which has a warm temperate to subtropical, humid to sub-humid monsoon climate. In the present paper, the subgenus *Acutipula* is newly recorded from Henan. Five species including one new species are described.

Material and methods

The specimens were studied and illustrated with ZEISS Stemi 2000-c. Genitalic preparations were made by macerating the apical portion of the abdomen in cold 10% NaOH for 12–15 h. After examination it was transferred to fresh glycerine and stored in a microvial pinned below the specimen. Type specimens examined are deposited in the Entomological Museum of China Agricultural University (CAU), Beijing.

Morphological terminology follows McAlpine (1981), terminology of male terminalia changes according to Ribeiro (2006): lobe of gonostylus = outer gonostylus, clasper of gonostylus = inner gonostylus.