

## Diversity of *Manota* Williston (Diptera: Mycetophilidae) in a Malaysian rainforest: description of twenty-seven new sympatric species

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## Abstract

The following 27 strictly sympatric, new species of *Manota* are described from Malaysia: *M. acutangula*, *M. angustata*, *M. biloba*, *M. calcarata*, *M. cerciflex*, *M. clausa*, *M. curvata*, *M. duplex*, *M. fera*, *M. ferrata*, *M. globigera*, *M. heptacantha*, *M. horrida*, *M. oligochaeta*, *M. ovata*, *M. pappi*, *M. pectinata*, *M. perpusilla*, *M. plusiochaeta*, *M. pollex*, *M. procera*, *M. roslii*, *M. simplex*, *M. spadix*, *M. transversa*, *M. ulu*, and *M. yongi*. A key for the identification of all the Oriental and Palaearctic species of *Manota* is given.

**Key words:** Mycetophilidae, *Manota*, morphology, new species, Oriental region, taxonomy

## Introduction

In recent years, the Manotinae (Mycetophilidae) have been the subject of intensive study and the true diversity of this previously species-poor group is now becoming evident. Of the four included genera, *Paramanota* Tuomikoski (with 4 species) and *Promanota* Tuomikoski (2 species) are restricted to the Oriental Region, and *Eumanota* Edwards (7 species) is Oriental–Australian. These genera were recently revised and reviewed by Papp (2004) and Hippa & al. (2005). The fourth genus, *Manota* Williston (1896), is worldwide in distribution. Bechev (2000) gave the number of 27 species, divided between the biogeographical regions as follows: Afrotropical 18, Australian 3, Nearctic 1, Neotropical 3, Oriental 1, and Palaearctic 1. The Nearctic species is the unnamed species mentioned by Sherman (1920) and later, for example, by Vockeroth (1981). The two described species from New Caledonia (Matile 1993) were not included in Bechev's (2000) enumeration (Bechev in litt.). Ševćík (2002) subsequently described a second Palaearctic species and Papp (2004) a third one together with two additional Oriental species. Jaschhof & Hippa (2005) doubled the number of known species of *Manota* by describing 27 species from Costa Rica.

The Oriental fauna of *Manota* is extremely poorly known, with only Senior-White's (1922) *M. orientalis* from Sri Lanka and Papp's (2004) *M. bilobata* and *M. meilingae* from Taiwan being known to date. In addition, an unnamed species from Sulawesi similar to *M.*