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The genus *Manota* Williston (Diptera: Mycetophilidae) in Melanesia and Oceania

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Abstract

The following new species of *Manota* are described: *M. biunculata* (Papua New Guinea), *M. evexa* (Papua New Guinea), *M. explicans* (Papua New Guinea), *M. gemella* (Ambon, Maluku Utara, Indonesia), *M. hirsuta* (Papua New Guinea), *M. orthacantha* (Papua New Guinea), *M. parilis* (Papua New Guinea), *M. pentacantha* (Solomon Islands), *M. perissochaeta* (Papua New Guinea and Solomon Islands), *M. serawei* (Papua New Guinea), *M. sicula* (Papua New Guinea), *M. spathula* (Papua New Guinea), *M. subspathula* (Papua New Guinea) and *M. tricuspis* (Fiji). *Manota ctenophora* Matile (New Caledonia), *M. maorica* Edwards (New Zealand) and *M. taedia* Matile (New Caledonia) are redescribed. *Manota hamulata* Colless, previously known from Palau, is redescribed and recorded from Papua New Guinea. *Manota pacifica* Edwards from Samoa is discussed and compared with the other species of the region. A key to the Melanesian and Oceanian species of *Manota* is given.

Key words: Mycetophilidae, *Manota*, morphology, taxonomy, new species, Melanesia, Oceania

Introduction

Knowledge of the species diversity of the Mycetophilidae genus *Manota* Williston (type species *M. defecta* Williston) has increased rapidly in recent years. Bechev (2000) gave a total of 27 known species in the world fauna. He missed two Oceanian species and included an unnamed Nearctic species (Sherman 1920) (Bechev in litt.) so that the number of described species at that time was 28, divided between the zoogeographic regions as follows: Afrotropical 18, Australasian 5, Neotropical 3, Oriental 1 and Palaearctic 1. Since then, 27 new species have been described from the Neotropical region (Jaschhof and Hippa 2005), 35 from the Oriental region (Hippa 2006, Hippa and Papp 2007, and Papp 2004), two from Afrotropical region (Jaschhof and Mostovski 2006) and 2 from the Palaearctic region (Ševčík 2002 and Papp 2004), increasing the number of described *Manota* species to 94 prior to the present paper.

The five previously known Oceanian *Manota* are all from South Pacific islands: *M. ctenophora* Matile and *M. taedia* Matile from New Caledonia, *M. hamulata* Colless from Palau, *M. maorica* Edwards from New Zealand and *M. pacifica* Edwards from Samoa. The present work was initiated by my discovery of several species of *Manota* in Malaise trap samples from Papua New Guinea. I have also had the opportunity of studying specimens from some further Melanesian and Oceanian localities: Ambon (Maluku Utara, Indonesia), Fiji, New Caledonia and the Solomon Islands. The aim of this work is to review all the described Melanesian and Oceanian *Manota* and to describe the fourteen new species, which I have recognised from this area.

Material and methods

The material from Papua New Guinea was preserved in ethanol, whilst that from other sources was dry, either pinned or glued on pieces of card or celluloid. Most of the specimens from New Caledonia are still dry with the macerated abdomen placed in glycerol in a microvial on the same pin as the specimen. I have mounted other specimens in Euparal after maceration in 10% potassium hydroxide and step-wise dehydration in ethanol. In some cases I have made mounts of the hypopygium and other parts of abdomen between two pieces of cover glass, which enables the specimen to be studied from both sides under a compound microscope. Such preparations are now attached to glass slides by a couple of strips of adhesive tape across their edges and are easily detached when needed. With the dry holotype of *Manota maorica* Edwards, I have detached the abdomen and the existing basal part of the right side maxillary palpus and have slide-mounted them as described above; the rest of the specimen is still pinned with one of the wings and hind legs glued on the same piece of celluloid through which the type is pinned.