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## A review of the South Pacific *Manota* Williston (Diptera, Mycetophilidae), with the description of thirteen new species

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### Abstract

The genus *Manota* is found to consist of 37 species in the South Pacific region. The following 13 species are described as new: *M. acris* sp. n. (Papua New Guinea (PNG)), *M. alulata* sp. n. (PNG), *M. apentachaeta* sp. n. (PNG), *M. clivicola* sp. n. (PNG), *M. cordata* sp. n. (PNG), *M. feminea* sp. n. (PNG), *M. kaindiensis* sp. n. (PNG), *M. lunata* sp. n. (PNG), *M. nimia* sp. n. (Solomon Is.), *M. pentachaeta* sp. n. (PNG), *M. siciliculata* sp. n. (PNG), *M. sigma* sp. n. (PNG) and *M. unisetata* sp. n. (Solomon Is.). New records of the following 11 species are presented: *M. bicuspis* Hippa, 2007 (PNG, Solomon Is.), *M. biunculata* Hippa, 2007 (PNG), *M. evexa* Hippa, 2007 (PNG), *M. explicans* Hippa, 2007 (PNG), *M. hamulata* Colless, 1966 (PNG), *M. pacifica* Edwards, 1928 (Samoa), *M. parilis* Hippa, 2007 (PNG, Vanuatu), *M. perisochaeta* Hippa, 2007 (PNG), *M. serawai* Hippa, 2007 (PNG), *M. spathula* Hippa, 2007 (PNG) and *M. subspathula* Hippa, 2007 (Australia). The latter is the first described species of *Manota* recorded from continental Australia. A redescription of *M. pacifica* Edwards, 1928 is given.

**Key words:** Diptera, Mycetophilidae, *Manota*, new species, Oceania, New Guinea, Australia

### Introduction

The term “open-ended taxa” was introduced by Bickel (2009) to describe taxa with an extreme diversity and a currently unpredictable number of species. These taxa are often cosmopolitan or occur in several biogeographical realms. The genus *Manota* Williston (type species *M. deflecta* Williston) was used as an example illustrating this situation (Bickel 2009). Indeed, the number of described *Manota* species has increased during the last decade by more than eight times, from 28 (Bechev 2000) to 245 (Hippa & Kurina 2013 and references therein, Hippa & Ševčík 2013, Kurina & Hippa 2014, Ševčík & Hippa 2014). The diversity of species is highest in tropical areas, where there are a high number of sympatric species. Nearly 30 species are recorded from small plots of rainforest in both the Oriental (Hippa 2006) and Afrotropical (Hippa & Kurina 2012) regions. In contrast, a considerably lower number of *Manota* species are known from temperate areas (cf. Hippa *et al.* 2011, Jaschhof *et al.* 2011) that otherwise hold a great diversity of fungus gnats (e.g. Kjærandsen *et al.* 2007).

Concerning the Oceanian fauna, the first species of *Manota*, *M. maorica* Edwards, was described from New Zealand (Tonnoir & Edwards 1927). Between 1928 and 1993 four other species were described: *M. pacifica* Edwards (1928) from Samoa, *M. hamulata* Colless (1966) from Palau, and *M. ctenophora* Matile and *M. taedia* Matile (1993) from New Caledonia. Hippa (2007) described 13 new species from New Guinea, one common to both New Guinea and the Solomon Islands, and one from North Maluku (Maluku Utara), Indonesia. He also recorded *M. hamulata* in New Guinea, redescribed *M. maorica*, *M. hamulata*, *M. ctenophora* and *M. taedia* and gave a key to all the Oceanian *Manota* known at that time. Later Jaschhof & Jaschhof (2010) added four species from New Zealand and mentioned an unnamed *Manota* species from Queensland, Australia. One of the species described from New Guinea, *M. biunculata* Hippa, was also found in Thailand (Hippa & Papp 2007).

We studied a collection of *Manota* from the Bernice P. Bishop Museum, Honolulu. The material is mostly from