

Beach Flies (Diptera: Tethinidae: Tethininae) From Australia and Papua New Guinea, with Descriptions of Two New Genera and Ten New Species

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ABSTRACT. This paper deals with the subfamily Tethininae of the Beach Flies Tethinidae from Australia and Papua New Guinea. Two new genera and ten new species are described: *Sigaloethina phaia* n.gen. and n.sp., *Thitena cadaverina* n.gen. and n.sp., *Dasyrhicnoessa atripes* n.sp., *D. ciliata* n.sp., *D. humilis* n.sp., *D. longisetosa* n.sp., *D. macalpinei* n.sp., *D. ostentatrix* n.sp., *D. pallida* n.sp., and *D. priapus* n.sp. A new species group, the *Dasyrhicnoessa ciliata*-group, is proposed. It differs from congeners primarily in its long-haired arista, slender body and legs, and peculiarities in the male terminalia. New records for Australia and Papua New Guinea are also given for species previously described. The recently described *Dasyrhicnoessa clandestina* Munari, 2002 is recorded for the second time from Fiji where it was found in association with *D. insularis* (Aldrich, 1931). A key is proposed to all genera and species of Tethininae known from Australia and Papua New Guinea. An updated checklist to the world species of *Dasyrhicnoessa* as well as a catalogue of the Tethininae of Australia and Papua New Guinea are also given.

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Tethinids are small flies chiefly inhabiting the temperate and tropical shores of all seas and oceans of the world. Some species are also found inland, associated with saline environments, in particular continental salt lakes and alkaline hot springs. Within the family, many species seem to be strictly dependent on proximity to the sea, i.e. true thalassophilous flies mostly inhabiting the intertidal zone, wrack heaps, salt marshes, dune vegetation, lagoon-litoriparian zones, mangroves (particularly species of *Dasyrhicnoessa* Hendel), and salty soils or bare sand. Other species are more widely halophilous, and are commonly found on various types of saline biotopes, irrespective of the presence of littoral environments. Some species in the subfamily Pelomyiinae are associated with meadows that occur in mountain passes, forests, and desert oases. In the

subfamily Apetaeninae, a few subantarctic species occur on seabird guano and are strictly associated with colonies of penguins and other shorebirds. Tethinids are also recorded from habitats that have been adversely modified by human activity, such as meadows polluted by industrial emissions (Bährmann, 1982) or slaughterhouses and poultry farms (Zuska & Laštovka, 1969). These synanthropic habitats are usually sites of salt accumulation and enrichment. The biology and immature stages of this family are poorly known (for a brief synopsis see Mathis & Munari, 1996). Often sites where tethinids occur have numerous individuals of only a few species.

The family is subdivided into five subfamilies that include 15 genera with approximately 160 species (including the new taxa described in the present work).