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## World Catalog of the Family Canacidae (including Tethinidae) (Diptera), with keys to the supraspecific taxa

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Dedicated to the memory of our friends and colleagues Willis W. Wirth (1914–1994)  
and Silvano Canzoneri (1941–1995)



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## Abstract

All genera and species of the family Canacidae as well as all synonyms and the world distribution for each species are listed to form an updated world catalog. Since McAlpine's (2007) placement of the families Canacidae *sensu stricto* and Tethinidae into a single, inclusive family (Canacidae *sensu lato*, i.e. the older family-group name), a comprehensive world catalog has been needed to include the new taxonomic arrangement and the corpus of new entries published over the last fifteen years, that is since the preceding catalogs (Mathis, 1992; Mathis and Munari, 1996). Identification keys to all supraspecific taxa are also given for each taxonomic section.

**Key words:** Diptera, Canacidae, Tethinidae, world catalog

## A brief premise

Many years have passed since the publication of the two world catalogs of the families Canacidae (Mathis, 1992) and Tethinidae (Mathis and Munari, 1996). In particular, the second catalog is now dramatically out of date, since some new genera and many new species and records have been added, and a few taxonomic changes have been proposed. Additionally, the two families very recently have been merged into a single, inclusive family (McAlpine, 2007, see further). Hence, we have felt the necessity to present a new, updated edition of a world catalog dealing with all genera and species of the previous families Canacidae *sensu stricto* and Tethinidae, joined herein to form a single corpus of data. In this connection, it is opportune to underline that in 1992 catalog (Canacidae) the citations and the references for each species concerned only the most significant entries at the taxonomic/nomenclatural level. Otherwise, in the 1996 catalog (Tethinidae) all citations and references found in the literature known to us were reported under each species. So, the amount of entries between the two previously published world catalogs will appear quantitatively unbalanced to readership. That is because these works were, at first, differently conceived as to the choice of the type of data entries to be published.

## Introduction

True flies of the family Canacidae occur in cool-temperate and tropical zones of the world, primarily on or near seashores with oceanic climates. A few species are found inland, usually in saline or alkaline environments, but occasionally in meadow-like habitats or in freshwater streams of Hawaii. The subfamily Apetaeniinae is endemic in the subantarctic archipelagos. Worldwide there are 307 species in the family (6 subfamilies, 27 genera).

In this catalog the bibliographic section for each name includes references (author, date, and page of the original description and most subsequent citations), as well as distributional and other biotic information, as available in the literature. We have intentionally avoided adding many fragmentary and unchecked citations from the extensive, sometimes redundant, literature on the ecology of halo- and thalassophilous (sea loving) insects, but we primarily recorded from taxonomic and nomenclatural papers or from all basic studies on the ecology of the diptera inhabiting seashores.

The sequence of subfamilies and genera should not be interpreted strictly to represent a phylogenetic scheme, as no comprehensive study is available for the family.

**Format.**—The format we have adopted follows that advocated by systematists from the Systematic Entomology Laboratory (United States Department of Agriculture) (R. W. Hodges, personal communication). Details are illustrated in the following hypothetical examples of generic and species entries (genera *Xus* and *Yus* and species *albus* and *zeus*). All valid generic and species names are indicated in boldfaced type.