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Article



A new genus and species of Chamaemyiidae (Diptera: Lauxanioidea) from South America feeding on *Ceroplastes* wax scales (Hemiptera: Coccidae), and status of the genus *Ortalidina* as a chamaemyiid

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Abstract

A new genus and species of Chamaemyiidae (Diptera: Lauxanioidea) is described and illustrated, namely *Chamaeleucopis*, gen. nov. (type species *Chamaeleucopis trevas*, sp. nov.), a predator of *Ceroplastes* wax scales on guava from Brazil. In addition, the previously unrecognized genus *Ortalidina* Blanchard 1852 (type species *Ortalidina cellularis* Blanchard 1852), mainly from the Neotropics, is recognized as a chamaemyiid, and is the senior synonym of *Toropamecia* Cogan 1978, syn. nov. (type species *Acrometopia punctata* Coquillett 1902). The species *Toropamecia grossa* Cogan 1978, syn. nov., is synonymized under *Ortalidina cellularis*. All species therein become new combinations within *Ortalidina*, including (in their original combinations) *Acrometopa australis* Malloch 1933, comb. nov., *Acrometopia maculata* Coquillett 1902, comb. nov., *Acrometopia punctata* Coquillett, comb. nov., *Toropamecia apaxa* Cogan 1978, comb. nov., *Toropamecia caribbea* Cogan 1978, comb. nov., *Toropamecia hendeli* Cogan 1978, comb. nov., *Toropamecia macalpinei* Cogan 1978, comb. nov., *Toropamecia macalpinei* Cogan 1978, comb. nov., *Toropamecia nigripalpis* Cogan 1978, comb. nov., *Toropamecia nigripalpis* Cogan 1978, comb. nov., *Toropamecia reducta* Cogan 1978, comb. nov., *Toropamecia smithi* Cogan 1978, comb. nov., *Toropamecia veenota* Cogan 1978, comb. nov., *Toropamecia smithi* Cogan 1978, comb. nov., *Toropamecia veenota* Cogan 1978, comb. nov., *Toropamecia smithi* Cogan 1978, comb. nov., *Toropamecia veenota* Cogan 1978, comb. nov., *Toropamecia smithi* Cogan 1978, comb. nov., *Toropamecia veenota* Cogan 1978, comb. nov., *Trigonometopus reticulatus* Johnson 1913, comb. nov. A habitus photo of the primary type for each species of *Ortalidina* is provided.

Keywords: Chamaemyiidae, Toropamecia, new genus, new species, new synonyms, new combinations

Introduction

Chamaemyiidae (Diptera), or silver flies, represent a group of larval predators attacking sternorrhynchus Hemiptera such as aphids, adelgids, scales and mealybugs. Although the species of some chamaemyiid genera are quite general in their feeding habits, many genera are restricted to a particular sternorrhynchan host taxon. There are currently 28 described extant genera and subgenera with more than 335 valid species. The Chamaemyiidae chapter (Gaimari 2010) in the second volume of the *Manual of Central American Diptera* includes a key to all 16 described (and 4 undescribed) New World genera and subgenera. This paper serves to make available one of the recognized new genera from that work, and to provide a generic synonymy that was alluded to (without enumerating the many new combinations) for a widespread Neotropical genus.

Materials and methods

Specimens of the new taxon were obtained from the Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZSP), and two paratypes were placed in the California State Collection of Arthropods, Sacramento, California, USA (CSCA). The primary types of the species of *Ortalidina* are housed in the Natural History Museum, London, United Kingdom (BMNH); Canadian National Collection of Insects, Ottawa, Ontario, Canada (CNC); Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA (MCZ); Naturhistorisches Museum, Wien, Austria (NHMW); and National Museum of Natural History, Washington, DC,