



<http://dx.doi.org/10.11646/zootaxa.3972.2.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:082231A1-5C14-4183-8A3C-7AEC46D87297>

Catalogue of genera and their type species in the mite Suborder Uropodina (Acari: Mesostigmata)

R. B. HALLIDAY

Australian National Insect Collection, CSIRO, GPO Box 1700, Canberra ACT 2601, Australia. E-mail Bruce.Halliday@csiro.au

Abstract

This paper provides details of 300 genus-group names in the suborder Uropodina, including the superfamilies Microgynioidea, Thinozerconoidea, Uropodoidea, and Diarthrophalloidea. For each name, the information provided includes a reference to the original description of the genus, the type species and its method of designation, and details of nomenclatural and taxonomic anomalies where necessary. Twenty of these names are excluded from use because they are *nomina nuda*, junior homonyms, or objective junior synonyms. The remaining 280 available names appear to include a very high level of subjective synonymy, which will need to be resolved in a future comprehensive revision of the Uropodina.

Key words: Acari, Mesostigmata, Uropodina, generic names, type species

Introduction

Mites in the Suborder Uropodina are very abundant in forest litter, but can also be found in large numbers in moss, under stones, in ant nests, in the nests and burrows made by vertebrates, and in dung and carrion. Most appear to be predators that feed on nematodes or other small invertebrates, but others may feed on living and dead fungi and plant tissue (Lindquist *et al.*, 2009). None are known to be of direct economic importance, except for a few species that contaminate earthworm cultures and stored food. The higher classification of the group is not stable, and the number of family names used by recent authors varies from 13 (Lindquist *et al.*, 2009) to 35 (Beaulieu *et al.*, 2011). Wiśniewski & Hirschmann (1993) catalogued over 2000 species, and the number of known species has increased significantly since then.

The Uropodina offer a series of significant challenges to the taxonomist. Many species demonstrate bizarre morphological specialisations that obscure their underlying taxonomic relationships. The life cycle of many species includes a specialised deutonymph that is phoretic on some insect or other host. These deutonymphs remain attached when their host is killed. They can often be found attached to insects preserved in collections, where they can easily be collected. The result is that many species are known only from the deutonymph, while others were described from the free-living adults, and relatively few are known from all stages of the life cycle. But most importantly, the taxonomist who tries to study these mites must confront the work of Werner Hirschmann and his colleagues, which dominated Uropodina systematics for almost 40 years.

Most of the work of Hirschmann and his school was privately published in *Acarologie, Schriftenreihe für Vergleichende Milbenkunde* (Hirschmann-Verlag, Fürth or Nürnberg, Germany, ISSN 0567-672X), which was issued in 40 volumes from 1957 to 1993. The papers in this journal, mostly under the general heading of Gangsystematik der Parasitiformes, are extraordinarily complicated and difficult to use. Information about a single taxon is often scattered over multiple papers. Several identification keys are often provided for the same set of taxa, each using a different set of characters. Cross-references from one paper to another are complex; and some of its bibliographic conventions are very difficult to follow.

Hirschmann developed his own distinctive style of taxonomy, using a technique that he called *Gangsystematik*, which may be translated as developmental systematics, or ontogenetic systematics. The term is derived from the