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(Hemiptera: Coccoidea) and some related taxa based on
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A review of the Margarodidae *sensu* Morrison (Hemiptera: Coccoidea) and some related taxa based on the morphology of adult males

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Abstract

This paper outlines the history of the family name Margarodidae (Hemiptera: Coccoidea) and of the higher classification within Margarodidae *sensu* Morrison, and reviews the use of males in diagnosing the higher taxonomy within this group. An overview of the general morphology of adult males is provided as an introduction to the terms and structures used in the descriptive section that follows. The adult males of 31 species of Coccoidea are described, covering all the families in Margarodidae *sensu* Morrison plus some additional taxa which have either been included in Margarodidae *sensu lato* in the past or which show close affinities to it. Based on the structure of the adult males described here and also on an earlier cladistic analyses, these 31 taxa are divided into three groups: Ortheziidae (containing just ortheziids), a group here referred to as "margarodoid taxa" (which includes all the taxa in Margarodidae *sensu* Morrison (1928) except *Steingelia*; this group includes the following nine families: Matsucoccidae, Margarodidae, Xylococcidae; Stigmacoccidae fam. nov.; Kuwaniidae; Callipappidae; Marchalinidae; Monophlebidae and Coelostomidiidae); and a third group referred to here as "non-margarodoid taxa", which includes the remaining taxa considered in this paper (*Steingelia*, *Stomacoccus*, *Phenacoleachia*, *Puto* and *Pityococcus*). The present higher taxonomic status of each taxon is summarised in a Table and a key to identify each family based on adult male morphology is included; this key also diagnoses the above three groups based on adult male characters. Keys are also provided under each family to identify the species described herein.

Key words: Margarodidae, Ortheziidae, adult males, descriptions, new family, keys, archaeococcoids, abdominal segmentation, homologies