

A Revision of the Australian Cladocera (Crustacea)

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ABSTRACT. The Australian Cladocera are revised on the basis of numerous samples, collections in the Australian Museum and a critical consideration of the literature.

Six families are represented in inland waters of Australia: Sididae, Chydoridae, Macrothricidae, Moinidae, Bosminidae, and Daphniidae. Altogether 125 species in 40 genera were found, 15 species being new: *Pseudosida australiensis* n.sp., *Archepleuroxus baylyi* n. gen., n.sp., *Rak obtusus* n. gen., n.sp., *Rak labrosus* n. gen., n.sp., *Australochydorus aporus* n. gen., n.sp., *Rhynchochydorus australiensis* n. gen., n.sp., *Alona macracantha* n.sp., *Alona investis* n.sp., *Alona setuloides* n.sp., *Biapertura rusticoides* n.sp., *Monospilus diporus* n.sp., *Monospilus elongatus* n.sp., *Echinisca williamsi* n.sp., *Echinisca flagellata* n.sp., and *Simocephalus victoriensis* n.sp. One new subspecies is recognized: *Alona davidi vermiculata* n.subsp. Some 49 species (including the new species) are recorded in Australia for the first time. In addition, the presence of a further 6 species of marine Cladocera in the families Podonidae and Sididae is noted.

The cladoceran fauna of Australia, besides including many cosmopolitan and pantropical forms, also has some species widely distributed in the Holarctic, some Gondwanaland species, and a large number (46) of endemics. Keys to all families and genera of Cladocera are given as well as keys for Australian species. Ecology, community structure, faunal composition and zoogeography are considered. The revision provides a basis for the identification of Australian Cladocera and for further taxonomic studies.

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