

Lord Howe Island Psocoptera (Insecta)

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ABSTRACT. A brief history of collecting Psocoptera on Lord Howe Island is given. One new genus, *Mauropsocus* (Pseudocaeciliidae: Zelandopsocinae), and three new species, *Mauropsocus monteithi*, *Lepolepis trifasciata* (Lepidopsocidae) and *Nimbopsocus huttoni* (Myopsocidae) are described. An additional new genus and species is noted but not formally described and named because adult material has not yet been found. Twentyseven species of Psocoptera are now known from Lord Howe of which fourteen are probably endemic to the island. Of the thirteen non-endemic species eight have widespread distributions beyond the island (some being found in domestic situations); three occur otherwise only in Australia and one is known only from Norfolk Island. One species occurs in Australia, New Caledonia, Norfolk Island and New Zealand. It is anticipated that the fauna is not yet completely known but most of the endemic species are members of the related families Pseudocaeciliidae, Philotarsidae and Elipsocidae. Distribution of the species is summarized in a table.

SMITHERS, C.N., 2007. Lord Howe Island Psocoptera (Insecta). *Records of the Australian Museum* 59(1): 9–26.

The first recorded psocopteran from Lord Howe Island, a female specimen of *Aaroniella howensis* Smithers & Thornton, was collected by Ms Zenta Liepa in 1955 and described in 1975. This and material collected by the author in November 1969, February 1971 and August 1971 and by Geoffrey Holloway in September 1971 and March 1974 formed the basis of the first paper on the Psocoptera of Lord Howe Island (Smithers & Thornton, 1975). The author visited the island again in February 1977 (Smithers, 1979). Between September 1978 and October 1979 Tim Kingston collected Psocoptera as part of a general insect survey and in 1979 Geoff. Monteith, of the Queensland Museum, made what was then the most comprehensive collection of Psocoptera from Lord Howe. Kingston made a small collection in 1980 and Patrick Huber, in 1992–1993, collected a few specimens during a survey of insects associated with the inflorescences of the economically important Thatch Palm, *Howea forsteriana* (C. Moore and F. Muell.) Becc. (Smithers, 1995). The biggest collection to date is that made during the Lord Howe Island Invertebrate Biodiversity Survey in which several collectors, based at the Australian Museum, using

a variety of collecting techniques, amassed a substantial amount of material during several visits. Since then Ian Hutton has provided additional material collected between 2000 and 2003. Some of the material from the Lord Howe Invertebrate Biodiversity Survey has no designated individual collector; in the lists of material studied in this paper these specimens are referred to as being collected by LHis.

Except where indicated otherwise specimens collected by Monteith will be returned to the Queensland Museum. Other material is in the Australian Museum. Nymphs are not designated as type material.

Full synonymies and references to the species can be found in Smithers (1967, 1996) and Lienhard and Smithers (2002) or other references given in this paper. Plant names used are as in Wilson (1994), with later amendments where necessary. Vegetation types mentioned in association with some of the material collected by Monteith are described by Pickard (1983); these are referred to as Pickard veg on the specimen labels and hence in the text of this paper.

In the species descriptions the following abbreviations are used: F = length of hind femur; T = length of hind tibia; t1,