Water mites from Pacific Islands (Acari: Hydrachnidia)

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Abstract
The results are given of water mite collections from Hawaii, Western Samoa, Fiji and Vanuatu. Four new species are described, viz. Aspidiobates vanuaticus, A. pacificus, Unionicola pacifica and Arrenurus nausoriensis. New records are given for Limnochares australica Lundblad from Fiji, Oxus orientalis Walter from Vanuatu and Arrenurus multicornutus from Western Samoa.

Key words: Hydrachnidia, Hawaii, Western Samoa, Fiji and Vanuatu

Introduction
Data on water mites from Pacific Islands are scarce. Viets (1939) mentioned the occurrence of Arrenurus larvae on Hawaii, but Imamura (1981) failed to collect any water mites there, and my own field work in 2003 on Kaua‘i and Hawai‘i ("Big Island") was also without success. However, water mites must be present, as recently damselflies have been collected with mite larvae (Ron Englund, Bishop Museum, pers. comm.). Unfortunately, the location where the damselflies were collected is very difficult to access, and could not be visited. Very recently, Smith & Cook (2004) described a new Piona species from Hawaii. Very likely, this is an introduced species.

From the past, water mites have been reported from the Micronesian islands Palau and Yap (Uchida 1935, 1939; Cook 1957; Cook & Bright 1983). Gerecke et al. (1995) were unable to collect any water mites on the Galapagos Archipelago. Smit (2003a) published water mites from Fiji.

In this paper the results will be given from collections made in Western Samoa, Fiji and Vanuatu.