



Water mite species of the genus *Hydrodroma* Koch (Acari: Hydrachnidia, Hydrodromidae) from Australia. Part II

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Abstract

Two new water mite species of the genus *Hydrodroma* Koch (Acari: Hydrachnidia, Hydrodromidae), characterized by single or absence of swimming setae on II-L-5, are reported from Australia: *Hydrodroma wilesi* sp. nov. and *H. cooki* sp. nov. New information is provided for *H. tonapii* Cook from India.

Key words: aquatic mites, new species, taxonomy

Introduction

Hydrodromidae (K.Viets) is a cosmopolitan family of water mites. However, the taxonomy and systematics of the Hydrodromidae is difficult (Wiles 1985). According to Wiles (1985, 1986), adult and nymphal stages are characterized primarily by the number and distribution of swimming setae, body colour and morphology and chaetotaxy of the genital field.

During recent surveys of the water mite fauna of Australia and New Caledonia, many specimens of the water mite genus *Hydrodroma* Koch were collected. Pesic & Smit (2007) reported three new species, characterized by more than two swimming setae on II-L-5: *Hydrodroma kununurra*, *H. australis* and *H. kakadu*. This paper deals with the species that are characterized by a single or without swimming setae on II-L-5. The Australian material of this group contained two species new to science, which are described here.

Material and methods

Water mites were collected by hand netting, sorted in the field from living material, preserved in Koenike's fluid and dissected as described by Gerecke (1991). Holotypes are deposited in the Museum and Art Gallery of the Northern Territory (NTM). Paratypes are deposited at the NTM, Zoological Museum of the University of Amsterdam (ZMAN) and the Museum of the Natural History of Podgorica (MNHP). Non-type material are deposited in ZMAN, MNHP and relevant Australian state museums. Unless stated otherwise, all material has been collected by the junior author and this is not repeated in the text.

For a detailed description and discussion of the characteristics of the Hydrodromidae, and a detailed methodological introduction see Wiles (1985).

The following abbreviations are used: FMNH = Field Museum of Natural History, I-L-6 = Leg 1, segment six; IV-L-5a = anterior surface of leg IV, segment 5; IV-L-5p = posterior surface of leg IV, segment 5; P-1 =