



New records of water mites (Acari: Hydrachnidia) from Brunei Darussalam, Borneo, with descriptions of two new species

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Abstract

New records of water mites (Acari: Hydrachnidia) from Brunei Darussalam are presented. Two new species are described: *Hydrodroma bruneiensis* (Hydrodromidae) and *Litarachna bruneiensis* (Pontarachnidae); *Limnesia lembangensis* Piersig, 1906 and *Arrenurus bihamatus* K. Viets, 1935, are reported for the first time from Brunei Darussalam. The water mite fauna of Borneo now tallies 41 species.

Key words: Acari, water mites, new species, taxonomy, Borneo

Introduction

The first records of water mites from Borneo were made by K. Viets (1957) who described two species of the genus *Unionicola*. Since then this group had remained untouched till the 1996's when Wiles described *Acucapito naso* Wiles, 1996 from Brunei Darussalam. Later on, three species of the family Torrenticolidae from Brunei were reported by Wiles (1997). The same author (Wiles, 1999) published the most comprehensive study on the water mites from Borneo recording the presence of 37 species.

During a recent survey of water mite fauna in Brunei Darussalam (Fig. 1), some water mites from marine littoral and one freshwater pond were collected by Dr Tapas Chatterjee and Dr David J. Marshall. Four species are identified, two of them are new to science. Descriptions of these species are given in this paper.

Together with the species described in this paper, the water mite fauna of Borneo now tallies 41 species, which is a low number compared to other parts of the world, so many more species can be expected.

Material and methods

During field work, water mites were collected by hand netting then sorted in the laboratory with the aid of a stereo microscope. The collected specimens were preserved in 70% alcohol, fixed in Koenike-fluid, dissected as described elsewhere (e.g. Gerecke *et al.* 2007) then mounted in Hoyer's medium. The holotypes of the new species and the non-type material are deposited in the Museum of the Natural History of Podgorica (MNHP).

All measurements are given in μm . The following abbreviations are used: Cx-I = first coxae, dL = dorsal length, H = height, L = length, %L = relative length, I/II/III/IV-Leg-1–6 = first to sixth segments of leg I/II/III/IV, P-1 to P-5 = palp segments 1 to 5, n = number of specimens examined, vL = ventral length, W = width.