



Water mites of the genus *Monatractides* Viets (Acari: Hydrachnidia, Torrenticolidae) from New Guinea, with descriptions of nine new species

VLADIMIR PEŠIĆ¹ & HARRY SMIT²

¹Department of Biology, University of Montenegro, Cetinjski put b.b., 81000 Podgorica, Serbia and Montenegro.
E-mail: pesicv@t-com.me

²Zoological Museum, University of Amsterdam, Plantage Middenlaan 64, 1018 DH Amsterdam, The Netherlands.
E-mail: smit.h@wolmail.nl

Abstract

New records of water mites of the genus *Monatractides* Viets, 1926 (Acari: Hydrachnidia, Torrenticolidae) from streams in Papua Province, New Guinea, Indonesia are presented. Nine new species are described: *Monatractides novaeguineae*, *M. papuensis*, *M. nipsanicus*, *M. sentanicus*, *M. abepurus*, *M. bionus*, *M. sahuli*, *M. alticolus* and *M. humilis*. A redescription of *Monatractides papillatus* (Smit, 1996) is given. A key to the species of *Monatractides* from Papua Province is presented.

Key words: Acari, water mites, new species, running waters, New Guinea, Papua

Introduction

New Guinea, the world's second largest island, covering a land area of 786,000 km², is located in the Southwest Pacific. Geologically, together with Australia, it is a part of the continent of Sahul, formed when glacioeustatically lowered sea levels exposed dry land connections between Australia, New Guinea and Tasmania (Ballard 1993).

The water mite fauna of New Guinea is still incompletely known. The first water mites from New Guinea have been described by Daday (1901). A review of the research on water mites from New Guinea is given by Wiles (1997a).

Monatractides species are recorded from all continents except Antarctica. Wiles (1997b) suggested that *Monatractides* may be considered an ancient clade from which other torrenticolid genera and subgenera evolved following the break up of Pangea or a recent clade which has subsequently spread to Australia. *Monatractides* differs from other genera in the Torrenticolinae in the plesiomorphic structure of the palps and the capitulum, which has long dorsal apodemes. The genus includes two subgenera, *Monatractides* s.s. and *Pinquicola* Di Sabatino & Gerecke, 1996, a monotypic subgenus known only from the Mediterranean area (Di Sabatino *et al.* 2010).

At present, one species of the genus *Monatractides* is known from Papua Province, New Guinea (Smit 1996), *M. papillatus* (Smit 1996). According to Wiles (1997b), *Monatractides* species are one of the most common elements in the fauna of fast flowing streams in New Guinea. He mentioned the presence of at least two species in New Guinea, but did not provide their descriptions.

During a recent survey of the water mite fauna of Papua Province (Fig. 1A), many specimens of the genus *Monatractides* were collected. Nine species are identified, all new to science. Descriptions of these species are given in this paper.

Material and methods

Water mites were collected by hand netting, sorted on the spot from the living material, preserved in Koenike fluid and dissected as described elsewhere (e.g. Gerecke *et al.* 2007). All material has been collected by the junior