Water mites of the genus *Brachypoda* (Acari: Hydrachnidia: Aturidae) in Turkey

YUNUS ESEN1, VLADIMIR PEŠIĆ2 & ORHAN ERMAN1

1Department of Biology, Faculty of Sciences, Firat University, 23119, Elazığ, Turkey.
E-mail: esenyunus@hotmail.com, oerman@firat.edu.tr
2Department of Biology, Faculty of Sciences, University of Montenegro, 81000 Podgorica, Montenegro.
E-mail: vladipesic@gmail.com

Abstract

In this study, three water mite species of the genus *Brachypoda* (Acari: Hydrachnidia: Aturidae) are reported from Turkey. *Brachypoda* (*Hemibrachypoda*) *orientalis* Pešić & Esen sp. nov. is characterized by the digitiform ventral extension of IV-L-4 apically bearing three peg-like setae. Populations from Russia and Turkey previously recorded under the name *Brachypoda* (*Hemibrachypoda*) *mutila* Walter, 1928 belong to this species. *Brachypoda* (*Hemibrachypoda*) *baderi* Di Sabatino & Cicolani, 1991 and *Brachypoda* (*Parabrachypoda*) *montii* Maglio, 1924 are reported as new for the fauna of Turkey, while *Brachypoda* (*Hemibrachypoda*) *mutila* Walter, 1928 is excluded from the Turkish fauna.

Key words: Acari, water mites, running waters, *Brachypoda*, Turkey

Introduction

Water mites of the genus *Brachypoda* are known from the Holarctic, Oriental and Neotropical regions. The genus currently includes four subgenera (Cook 1974): *Brachypoda* s. str., *Hemibrachypoda* K.Viets, 1937, *Ocybrachypoda* Cook, 1974 and *Parabrachypoda* K.Viets, 1929. At present, six species of the genus *Brachypoda*, i.e., *B.* (s. str.) *versicolor* (Müller, 1776), *B.* (*Ocybrachypoda*) *celeripes* K.Viets, 1910, *B.* (*Hemibrachypoda*) *modesta* Koenike, 1911, *B.* (*Hemibrachypoda*) *baderi* Di Sabatino & Cicolani, 1991, *B.* (*Hemibrachypoda*) *mutila* Walter, 1928 and *B.* (*Parabrachypoda*) *montii* Maglio, 1924, are known from the Western Palaearctic (Di Sabatino & Cicolani, 1991). The previous records from Turkey under the name *B.* (*Hemibrachypoda*) *mutila* (Boyacı & Özkan 2004; Pešić et al. 2006; Esen et al. 2011) are considered as *B.* (*Hemibrachypoda*) *orientalis* in this study. During a survey of the water mite fauna of Turkey, three species of the genus *Brachypoda* were collected, one of which is new to science. Descriptions of these species are given in this paper.

Material and methods

During field work, water mites were collected by hand netting, sorted on the spot from the living material, conserved in Koenike’s fluid and dissected as described elsewhere (e.g. Gerecke et al. 2007). The holotype and some paratypes of the new species are deposited in the research collection of the Biology Department, Firat University, Elazığ, Turkey; other paratypes are deposited in the Museum of Natural History of Montenegro. Specimens examined in this study were collected by the first author.

The composition of the material is given as: males/females/deutonymphs. All measurements are given in micrometers. The following abbreviations are used: a.s.l. = above sea level; Ac-1–3 = acetabulum 1–3; Cx-IV = fourth coxae; H = height; L = length; I-L-6 = first leg, sixth segment (tarsus); L = length; P-1 = palp, first segment; vL = ventral length; W = width.