



Water mites of the family Aturidae Thor, 1900 from Turkey (Acari: Hydrachnidia), with description of two new species

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Abstract

This paper deals with the water mite species of the family Aturidae Thor, collected from running waters in Bingöl Province, Turkey. *Javalbia (Javalbicula) turcica* **sp. nov.** and *Barbaxonella bingolensis* **sp. nov.** are described as new species; *Axonopsis armata* Chaudonneret & Angelier, 1949 is synonymized with *A. romijni* Viets, 1923; *Kongsbergia (Kongsbergia) persica* Pešić, 2005, *Albaxona lundbladi* Motaş & Tanasachi, 1947, *Axonopsis (Hexaxonopsis) romijni* Viets, 1923, *A. (Navinaxonopsis) persica* Pešić, 2004 and *A. (Paraxonopsis) vietsi* Motaş & Tanasachi, 1947 are reported for the first time for Turkey.

Key words: Water mites, running waters, Bingöl Province, Turkey, Aturidae

Introduction

The family Aturidae Thor, 1900 contains the most diverse group of mites of any of the water mite families, and occurs on every continent except Antarctica (Cook 1974). So far, only 11 species of the Aturidae are known from Turkey (Aşçı & Özkan 2009, Erman *et al.* 2010): *Albia (Albia) stationis* Thon, 1899, *Aturus (Aturus) crinitus* Thor, 1902, *A. (Aturus) intermedius* Protz, 1900, *A. (Aturus) natangensis* Protz, 1900, *A. (Aturus) scaber* Kramer, 1875, *Kongsbergia (Kongsbergia) materna* Thor, 1899, *Axonopsis (Hexaxonopsis) serrata* Walter, 1928, *Brachypoda (Hemibrachypoda) mutila* (Walter, 1928), *Ljania bipapillata* Thor, 1898, *L. macilenta* Koenike, 1908 and *Woolastookia rotundifrons* (K. Viets, 1922).

During a survey of the freshwater fauna of Bingöl Province of Turkey, several species of the Aturidae were collected, including two species new to science and 5 species new for the fauna of Turkey. The genera *Albaxona* Szalay, 1944, *Javalbia* K. Viets, 1935, *Barbaxonella* Lundblad, 1954 and subgenera *Navinaxonopsis* Cook, 1967 and *Paraxonopsis* Motaş & Tanasachi, 1947, are reported for the first time from Turkey. This paper aims to describe this material and contribute to our knowledge of aturid water mite distribution in Turkey.

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 holotypes 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 Podgorica (Montenegro). All material was collected by the first author.

The composition of the material is given as: (males/females/deutonymphs). All measurements are given in µm. The following abbreviations are used: dL = dorsal length, L = length, W = width, %L = relative length (given as % of total L), I-L-6 = Leg 1, sixth segment (tarsus), P-1 = palp, first segment.