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 Motas & Tanasachi, 1947, Axonopsis (Hexaxonopsis) romijni Viets, 1923, A. (Navinaxonopsis) persica Pešić, 2004 and A. (Paraxonopsis) vietsi Motas & 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) matula (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 the fauna of Turkey and 5 species new for the fauna of Turkey. The genera Albaxona Sza- lay, 1944, Javalbia K. Viets, 1935, Barbaxonella Lundblad, 1954 and subgenera Navinaxonopsis Cook, 1967 and Paragonopsis Motas & 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, Elazig, 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.