

Article

New records of the water mite family Hydryphantidae (Acari: Hydrachnidia) from Turkey, with the description of a new species

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Abstract

In this study, *Trichothyas anatolica* **sp. nov.** of the family Hydryphantidae Piersig 1896 is described. Also, the first record for Turkey is given of *Iranothyas alhajarica* Pešić, Gerecke & Smit, 2009, a species previously known only from northern Oman.

Key words: Hydryphantidae, *Trichothyas*, *Iranothyas*, new species, new record, Turkey

Introduction

The family Hydryphantidae Piersig, 1896 is a large and morphologically diverse group of water mites, with 329 species in 51 genera worldwide (Zhang *et al.* 2011). It is characterised by the pointed dorsodistal projection of the fourth palp segment (P-4) that does not reach the tip of P-5 and is not curved dorsally (Di Sabatino *et al.* 2010).

A recent checklist of the water mite fauna of Turkey includes 25 species of Hydryphantidae (Erman *et al.* 2010). It includes two species of the genus *Trichothyas* Viets, 1926, i.e., *T. (Lundbladia) petrophila* (Michael, 1895) and *T. (Kashmirothyas) akguli* Özkan & Boyaci, 1992 (Erman *et al.* 2010). The genus *Iranothyas* Bader, 1984 has not until now been recorded in Turkey. Among the material collected during a survey of water mites in water bodies of the lakes region in southwestern Turkey, two interesting hydryphantid species were found. The new species *T. (L.) anatolica* **sp. nov.** is described here, while *I. alhajarica* is a new genus and species record for Turkey.

Materials and methods

Water mites were collected by hand netting and sorted on the spot from other living material. They were then preserved in Koenike's fluid (50% glycerin, 20% acetic acid, 30% distilled water) and dissected for slide mounting in Hoyer's medium.

All measurements are given in micrometres (µm). The following abbreviations are used: SDU = Süleyman Demirel University, Ac-I–III = first–third acetabulum, Cx-I–IV = first–fourth coxae, Dl-1–4 = dorsolateralia 1–4, Dc-1–4 = dorsocentralia 1–4, Dgl-1 = dorsoglandulare 1, H = height, L = length, W = width, N = number of specimens examined, P-1–5 = palp segment 1–5, Vgl-2 = ventroglandulare 2, V-1–4 = ventralia 1–4, IV-L = fourth leg. Terminology is demonstrated in Figures 8-75 & 76 of Di Sabatino *et al.* (2010).