

Contribution to the study of some water mites (Acari, Hydrachnidia) from Hungary

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ABSTRACT: A new records of water mites from Hungary is based on the material collected by T. Kovács et al., from the investigated area. Six species are identified, one of which (*Lebertia insignis* Neuman, 1880) are new for the fauna of Hungary. *Tiphys convexipalpis* L. Panyi, 1956, are synonymized with *Tiphys ornatus* Koch, 1836. The ecological significance of the new records is briefly discussed.

Introduction

In 1964, László Szalay published his comprehensive work on fauna of water mites of Hungary (Vízitkák Hydracarina – *Fauna Hungariae*). However, until recent times the valid interpretation of his results was hampered by the lost of preparations from the collection of L. Szalay.

In this paper, new records of water mites (Acari, Hydrachnidia) from Hungary are reported. For each of the 6 species collected, the global pattern of distribution is given, followed by the new locality records. In addition, for some species information on habitat preference or taxonomic notes are provided.

The complete material is labelled and available in the collection, V. M. Pešić, Podgorica. In the section 'Material examined' collecting site abbreviations derive from the geographical database T. Kovács. The composition of the material is given as: (males/females/deutonymphs), and the following further abbreviations are used: I-Leg-6 = Leg 1, sixth segment, P-1 = palp, first segment.

Results

Hydrachna globosa (De Geer, 1778)

Distribution: Palearctic.

Material examined: HUNGARY, 2002-76. Lipót: most protected area, Lipóti-csatorna, 20.06.2002, leg. A. Ambrus, T. Kovács (1/0/0).

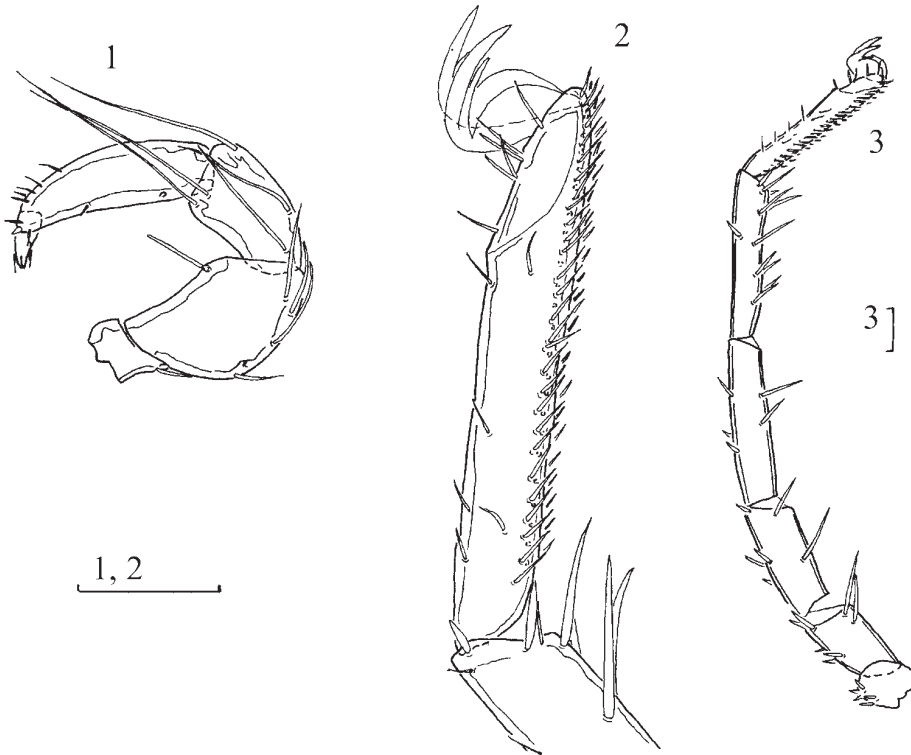
Remarks: The species was found in a large number of water types, except in fast flowing streams and springs.

Lebertia insignis Neuman, 1880 (Fig. 1)

Distribution: W-Palearctic.

Material examined: HUNGARY, 2002-84. Tiszabecs: lido, Tisza, 24.06.2002, leg. T. Kovács (0/1/0).

Remarks: The species inhabits larger lowland streams and rivers. New for water mite fauna of Hungary. Dorsal lengths (in μm) of palp segments of the illustrated female (Fig. 1): P-1 36.5, P-2 119.0, P-3 106.0, P-4 145.2, P-5 40.4.



Figs. 1-3. 1 *Lebertia insignis* Neuman, 1880, Tiszabecs, female: 1 = palp. 2-3 *Tiphys ornatus* Koch, 1836, Kishódos, female: 2 = first leg; 3 = I-Leg-6. Scale bars = 0.1 mm.

***Limnesia fulgida* Koch, 1836**

Distribution: Holarctic.

Material examined: HUNGARY, 2002-76. Lipót: most protected area, Lipóti-csatorna, 20.06.2002, leg. A. Ambrus, T. Kovács (1/0/0).

Remarks: The species was found in a large number of water types, but most records are from ditches.

***Tiphys ornatus* Koch, 1836** (Figs. 2-3)

Tiphys convexipalpis L. Ponyi, 1956 nov. syn

Distribution: Palearctic.

Material examined: HUNGARY: E-279. Keszthely: Fenékpuszta, flooding with water from entrance of the Diás-sziget towards NE 50 m, 07.05.1997, leg. A. Ambrus, K. Bánkúti, T. Kovács (0/1/0); 2002-64. Kishódos: Klastrom-földek, marsh, 24.05.2002, leg. P. Juhász, T. Kovács (0/1/0).

Remarks: Since the first description, based on a three female, the only further record of *Tiphys convexipalpis* L. Ponyi, 1956, came from Macedonia (PEŠIĆ, in press.) and Crna Gora (PEŠIĆ, 2002), with remark on large variability of praegenital sclerite, and the male sex remained unknown. In original description, PONYI (1956) mentioned that *T. convexipalpis* is rather close to *Tiphys americanus* (Marshall, 1937) and *Tiphys ornatus* Koch, 1836, obviously because

of the similar shape (P-2 ventral margin convexely) and setation of palp. Instead, this taxon is closely related to *T. ornatus*, and the only remarkable difference regards the idiosoma dimensions and shape of praegenital sclerite. Our study on large numbers of specimens of *T. ornatus* from Macedonia and Crna Gora (published under name *T. convexipalpis*) as well as from Hungary the shows a variability of the latter character (see PEŠIĆ, 2002). Additionally all other available morphological details of the examined specimens from Hungary: the shape of first leg (Fig. 2) with ventral setae on I-Leg-6 arranged in two rows (Fig. 3), as in typical specimens of *T. ornatus* (not mentioned in description of Ponyi), as well as shape and measurements of palp of the specimens from the original description of PONYI (1956) and specimens of *T. ornatus* from wide geographical area, indicate that *T. convexipalpis* is a synonym of *T. ornatus*.

***Unionicola crassipes* (Müller, 1776)**

Distribution: Palearctic.

Material examined: HUNGARY, 2002-101. Győrzámoly: Zámolyi-csatorna, 10.08.2002, leg. T. Kovács (0/1/0).

Remarks: The species has a preference for larger water bodies, like canals and lakes.

***Arrenurus radiatus* Piersig, 1894**

Distribution: Palearctic.

Material examined: HUNGARY, Szigliget: Kétöles-patak, 16.06.1997, leg. B. Csányi, P. Juhász (1/0/0).

Remarks: The species has a preference for larger water bodies, like canals and lakes.

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