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# A checklist of the water mites (Acari: Hydrachnidia) of Iran

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## Abstract

Using published records and original data from recent research, a checklist was compiled of the water mite (Acari: Hydrachnidia) fauna of Iran. The checklist contains 145 species, in 38 genera and 25 families of water mites. Seven of these species (4.8%) are Holarctic, 31 (21.4%) are Palaearctic, 23 (15.9%) are W-Palaearctic, 20 (13.8%) are SW-Palaearctic, and 15 (10.4%) are "Middle East" in their distribution. Moreover, 46 (31.7%) of these species are endemic to Iran. Seven species are new to Iranian fauna. *Atractides baderi* Schwoerbel & Sepasgozarian is replaced with *Atractides bal-neatoris* **nov. nom.** 

Key words: water mites, taxonomy, new records, new species, Iran

### Introduction

Sepasgosarian (1999) pointed out that, considering the geographical location of Iran, a rich fauna of water mites could be expected. A high level of endemism and a diverse mixture of Palaearctic and Paleotropical elements are characteristic of the Iranian freshwater fauna (Sepasgosarian 1999). Sepasgosarian (1999) summarized the water mite fauna of Iran until that time, but since then many new publications have added considerably to the knowledge of Iranian water mites. However, our knowledge of many areas of Iran remains scanty. Furthermore, despite this growing number of data, records for the freshwater mites in Iran remain dispersed, which complicates broader data analysis. The aim of this paper is to compile data on Iranian water mites and their current geographic distribution in Iran. Species lists are important because they are needed to successfully document and understand the causes and consequences of biodiversity. They should facilitate access to all previous data, provide new records, and assist better organization of future research (Gerecke & Lehmann 2005).

### Material and methods

The checklist of the water mite fauna of Iran was compiled using published records and original data. The data from all publications were brought to the presently accepted state of taxonomy following the catalogue of Viets (1987) and all papers published thereafter. Species referred to in postgraduate theses and scientific meetings are not formal publications and are consequently not considered herein. For new records, 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 1991). The material will be deposited in the Museum of the Natural History of Podgorica or Naturhistorisches Museum Basel.