



New records of water mites (Acari: Hydrachnidia) from southern Iran, with description of one new genus and three new species

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Abstract

This paper deals with a collection of epigeal water mites from southern Iran. One new genus, *Iranobates*, and three new species are described: *Iranobates hesabii*, *Arrenurus iranicus* and *A. kermanensis*. The following species are reported for the first time for Iran: *Limnesia pinguipalpis* Cook, 1967, *Atractides omanensis* Smit & Pešić, 2010, *Neumania indentata* Smit & Pešić 2010, and *N. maharashtra* Cook, 1967.

Key words: Acari, water mites, taxonomy, Palaearctic, Oriental, Iran

Introduction

The southwest Asian fauna (Arabian peninsula and southern Iran) is transitional between the Palaearctic, Oriental and Afrotropical region, and a hot belt in the south of Iran is often regarded as a part of the Oriental region. Coad (1987) found that the Sistan basin contains Oriental species and species derived from the Hindu Kush in Afghanistan, while both Oriental and Afrotropical species are found in the streams draining into the Persian Gulf and Gulf of Oman. Scott (1989) found that the birds of southern Persian Baluchistan and the southern Persian Gulf coast are predominantly Oriental.

Smit & Pešić (2010) showed that some typical Oriental water mite genera (e.g. *Bharatvolzia* Cook and *Tiramideopsis* Cook) penetrate into the northern part of Oman (locations north of 23°N). Recently, Asadi *et al.* (2010) studied a small collection of water mites collected in southern Kerman (area of Manoojan city) and found some species with affinities to Oriental species; one of this species, *Limnesia kochi* was recently described from Oman. New data based on a collection of water mites from southern Kerman and Seistan (SW Iran) reveal the presence of a water mite fauna with strong affinities to the Oriental region. Most of these species were collected in the most southern part of the Kerman province (around Manoojan city which lies close to the narrow coastal lowland plain along the Gulf of Oman), indicating that the boundary between the Palaearctic and the Oriental region should be drawn south of the Central Plateau. The average elevation of this plateau is about 900 metres and includes most of the Kerman Province, and contains a typical Palaearctic water mite fauna (see: Pestic & Saboori 2007).

The present study is the result of a collection trip in 2010 by the junior author. Three species are described new to science, while three species are reported new for the fauna of Iran.

Material and methods

During field work, water mites were collected by hand netting, sorted on the spot from the other living material, fixed in Koenike's fluid and dissected as described elsewhere (e.g. Gerecke *et al.* 2007). The holotypes of the new