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Water mites delineating the Oriental and Palaearctic regions—the unique fauna of southern Iran, with description of one new genus, one new subgenus and 14 new species (Acari: Hydrachnidia)

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Abstract

This paper deals with a collection of epigeal and hypogean water mites from the Hormozgan and Sistan va Baluchestan provinces in southern Iran. One new genus, *Haloaxonopsis*, is described, characterized by the presence of so-called wheel-like acetabula, a unique character so far known only in marine mites of the family Pontarachnidae. One new subgenus, *Halolimnesia*, and fourteen new species are described: *Hydrachna sistanica*, *Nilotonia hormozgana*, *Torrenticola asadiae*, *T. hormozganensis*, *Monatractides martini*, *Neotractides calidus*, *Limnesia diversipes*, *Atractides hormozganus*, *Javalbia persica*, *Axonopsis gloeri*, *A. interstitialis*, *A. hyporheica*, *Haloaxonopsis salina* and *Albia hyporheica*. The first descriptions of the female are given for *Neumania cf. maharashtris* Cook, 1967 and *Arrenurus bharatensis* Cook, 1967. The following species are reported for the first time in Iran: *Hydrachna cf. vaillanti* K. Viets 1951, *H. globosa lacerata* Lundblad, 1969, *Diplodontus silvestrii* (Daday, 1898), *Hygrobates hamatus* K. Viets, 1935, *Atractides biscutatus* Cook, 1967 and *Arrenurus bharatensis* Cook, 1967. The zoogeographical and ecological characteristics of the water mite fauna of southern Iran are discussed. The fauna of SE Iran is of Oriental character, and no typical Palaearctic species were found. Our study shows that this fauna is not transitional, suggesting a rather 'sharp' boundary between the Palaearctic and Oriental regions in southern Iran.

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