



Studies on water mites (Acari, Hydrachnidia) from the Himalayas, I. The water mite genus *Feltria* Koenike, with descriptions of eight new species

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Abstract

New information about the distribution of species of the water mite genus *Feltria* Koenike (Acari: Hydrachnidia, Feltridae) in the Indian Himalayas is presented. Eight species (*Feltria indica*, *F. tuzovskyi*, *F. schwoerbeli*, *F. himachali*, *F. kulluis*, *F. balneatoris*, *F. sannae* and *F. gereckeii*) are described as new to science; *F. rubra* Piersig, 1898 and *F. longipalpis* (Lundblad, 1941) are new to the Indian water mite fauna and for the latter species the first description of the female is provided.

Key words: Acari, water mites, new species, running waters, India

Introduction

Water mites of the genus *Feltria* Koenike are particularly diversified in the northern hemisphere, and not reported from Afrotropical and Australasian regions (Di Sabatino et al. 2008). However there are no records of this genus from India (Cook 1967). During a survey of the freshwater fauna in the Indian part of the Himalayas, carried out by the second author (Panesar 2004), the first undescribed Indian representative of this genus was found. Descriptions of interesting new species are given in this paper. Most of the taxa discussed here are important dwellers of the moss fauna of Himalayan streams, and therefore their further study can provide valuable informations for understanding and monitoring natural changes and human impacts in these habitats.

Material and methods

Water mites were collected by hand netting and a drift net (see Panesar 2004), sorted on the spot from the living material, preserved in Koenike's fluid and later dissected for slide mounting. The holotype and some paratypes will be deposited in the Naturhistorisches Museum Basel (NHMB). Other paratypes will be deposited in the Museum of the Zoological Survey of India (ZSI, Calcutta) and the Museum of the Natural History of Podgorica (MNHP). Unless stated otherwise, all material was collected by Arne Panesar. In the section "New records" collecting sample abbreviations derive from the geographical database of Arne Panesar.

The abbreviation and numbering system for study sites involving new records are explained in Appendix 1 at the end of the paper. The composition of the material is given as: (males/females/nymphs). All measurements are given in μm . The following abbreviations are used: Ac-1 = first acetabulum, Cx-1 = first coxae, Cxgl-2 = coxoglandulare 2, D = dorsalia, Dc-1-4 = dorsocentralia 1-4, Dgl-1-7 = dorsoglandulare 1-7, dL =