



## Studies on water mites (Acari, Hydrachnidia) from the Himalayas, II. New records and descriptions of seven new species from India

VLADIMIR PESIC<sup>1</sup> & ARNE PANESAR<sup>2</sup>

<sup>1</sup>Department of Biology, University of Montenegro, Cetinjski put b.b., 81000 Podgorica, Serbia and Montenegro.  
E-mail: pesicv@t-com.me

<sup>2</sup>Walter-Gropius-Str. 22, 79100 Freiburg i. Brsg. Germany

### Abstract

New records of water mites (Acari: Hydrachnidia) from the Indian Himalayas are reported. Seven species new to science: *Sperchon schwoerbeli* sp. nov., *S. bakeri* sp. nov., *Atractides lahauli* sp. nov., *A. himachali* sp. nov., *A. acetabulensis* sp. nov., *A. davecooki* sp. nov. and *Aturus indicus* sp. nov., are described from the western Himalayas (Himachal Pradesh State, India).

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

### Introduction

The water mite fauna of the Himalayas and their associated ranges, the Karakoram, Hindu Kush, Pamir, Tien Shan, Kun Lun and Altai are still poorly known (Pesic & Smit 2007). The first records of water mites from the Indian Himalayas were made by Walter (1928) who reported six species from the Kangra Valley (Himachal Pradesh State) and Darjeeling (West Bengal). Subsequent papers on water mites from the Indian Himalayas were published by Lundblad (1934) and Vitzthum (1942), based on the material collected by the Yale North India Expedition to Kashmir, while Cook (1967) in his comprehensive work on Indian water mites, reported only one new species from Himachal Pradesh. Later, papers with records of water mite species from the Indian Himalayas were published by Kumar & Dobrigyal (1992), Panesar & Gerecke (1994), Panesar (2004), Kumar et al. (2006, 2007), Pesic et al. (2007a, b), Pesic & Panesar (2008), Pesic & Gerecke (2008) and Smit & Pesic (2008).

In this paper, seven species new to science are described, based mainly on the discovery of unstudied material of water mites from the western Himalayas (Himachal Pradesh) in the collection of Jürgen Schwoerbel.

### 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 holotypes will be deposited in the Naturhistorisches Museum Basel (NHMB). Paratypes will be deposited in the Museum of the Zoological Survey of India (ZSI, Kolkata).

All measurements are given in  $\mu\text{m}$ . For a detailed description and discussion of the characteristics of the genus *Atractides*, and a detailed methodological introduction, see Gerecke (2003). The following abbreviations are used: Ac-1 = first acetabulum, asl = above sea level, Cx-1 = first coxae, Cxgl-2 =