



## New water mite species of the genus *Arrenurus* Dugs, 1834 (Acariformes, Hydrachnidia, Arrenuridae) from the Far East of Russia

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### Abstract

Illustrated descriptions of six water mite species, *Arrenurus mucropetiolatus* sp. n., *Arrenurus crenatiformis* sp. n., *Arrenurus primoryensis* sp. n., *Arrenurus hebraeus* sp. n., *Arrenurus neodaubihensis* sp. n., *Arrenurus amurensis* sp. n., from running and standing waters of the Far East of Russia are presented.

**Key words:** water mites, Hydrachnidia, Arrenuridae, *Arrenurus*, new species, Far East of Russia

### Introduction

The genus *Arrenurus* Dugs, 1834 comprises about 800 species (Smit 2010). At present, more than 70 species of this genus are known from Russia and 14 from the Far East of Russia (Sokolow 1940; Tuzovskij 1997; Semenchenko 2008, 2010).

Investigations of the water mite fauna of the Russian Far East have yielded five new species from the subgenus *Arrenurus* and one species from the subgenus *Micruracarus*, described below.

### Material and methods

The material was sampled with a common hand net with 250 µm mesh size. Specimens were preserved in modified Koenike's solution and mounted on slides using Hoyer's medium and glycerine-gelatine jelly. The descriptions are based on the type series, deposited in the research collections of the Institute for Biology of Inland Waters, Borok, Russia (IBIW) and the Institute of Biology and Soil Science, Vladivostok, Russia (IBSS).

Idiosomal setae and lyriform organs terminology follows Tuzovskij (1987): *Fch*—frontales chelicerae, *Fp*—frontales pedipalporum, *Vi*—verticales internae, *Ve*—verticales externae, *Oi*—occipitales internae, *Oe*—occipitales externae, *Hi*—humerales internae, *He*—humerales externae, *Hv*—humerales ventralia, *Sci*—scapulares internae, *Sce*—scapulares externae, *Li*—lumbales internae, *Le*—lumbales externae, *Si*—sacrales internae, *Se*—sacrales externae, *Ci*—caudales internae, *Pi*—praeanales internae, *Pe*—praeanales externae (Figs. 1–2).

Furthermore, the following abbreviations are used: P-1–5, pedipalp segments (trochanter, femur, genu, tibia and tarsus); I-Leg 1–6, first leg, segments 1–6 (trochanter, basifemur, telofemur, genu, tibia and tarsus) i.e. III-Leg 4 = genu of third leg; ac. 1–3, genital acetabula (anterior, median, posterior), s—solenidion; L—length, W—width; n = number of specimens measured. The length of the segments was measured along their dorsal margin; all measurements are given in µm.