

# **Article**



http://dx.doi.org/10.11646/zootaxa.3700.4.3 http://zoobank.org/urn:lsid:zoobank.org:pub:2F98121F-D791-48D6-9B61-503CC65EC306

## New water mite species (Acari, Hydrachnidia) from Vietnam

PETR V. TUZOVSKIJ

Institute for Biology of Inland Waters, Russian Academy of Sciences, Borok, Yaroslavl Province, 152742, Russia. E-mail: tuz@ibiw.yaroslavl.ru

#### **Abstract**

Descriptions of four new water mite species, *Torrenticola vietnamica* **sp. nov.** (female), *Limnesia vietnamensis* **sp. nov.** (female, deutonymph), *Hygrobates gusakovi* **sp. nov.** (male), *Albaxona gusevi* **sp. nov.** (female) from running waters of Vietnam are presented.

**Key words:** water mites, *Torrenticola vietnamica*, *Limnesia vietnamensis*, *Hygrobates gusakovi*, *Albaxona gusevi*, running waters

#### Introduction

The water mite fauna of Vietnam is very poorly known. From running waters of Vietnam the following species are described: *Hygrobates forcipifer* Goldschmidt & Koehler, 2007, *H. ancistrophorus* Goldschmidt & Koehler, 2007, *Acucapito vietnamensis* Tuzovskij, 2009 and *Monatractides vietnamensis* Tuzovskij, 2009 (Goldschmidt & Koehler 2007; Tuzovskij 2009a, 2009b respectively). The purpose of this paper is to describe four new species, i.e. *Torrenticola vietnamica* (female), *Limnesia vietnamensis* (female, deutonymph), *Hygrobates gusakovi* (male) and *Albaxona gusevi* (female). Three of these species are recorded as *Hygrobates* sp., *Torrenticola* sp. and Axonopsinae gen. sp. are recorded in Gusakov *et al.* (2011).

### Material and methods

The material was collected by Gusev in 2008 and Gusakov in 2012 in running waters of Vietnam. Meiobenthos samples were collected with a microbenthometer S-1, with corer diameter 34 mm (about 9 cm<sup>2</sup>) (for methods see Gusakov *et al.* 2011). Each sample included three columns of sediment and near-bottom water (5–10 cm each) and was fixed in 4% formalin. In the laboratory the samples were filtered through a sieve with a mesh size of  $82 \times 82 \mu m$  and stained with Rose Bengal by the known method (Williams & Williams 1974).

Idiosomal setae and lyriform organs are named according to Tuzovskij (1987): Fch—frontales chelicerarum, 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, Se—scapulares externae, Ee—lumbales externae, Ee—sacrales internae, Ee—praeanales externae, Ee—praeanale

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 1–3; exp—excretory pore; n = number of specimens measured, L, length, W, width. All measurements are in  $\mu m$ ; length of appendage segments is dorsal length.

The type material is deposited in the collection of the Institute for Biology of Inland Waters (Borok, Russia).