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Stygomomonia (*S*.) *manchurica*, a new species of water mite (Acari: Hydrachnidia: Momoniidae) from the Far East of Russia

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Abstract

Stygomomonia (*S.*) *manchurica* **sp. n.** (Acari: Hydrachnidia: Momoniidae) from the Kedrovaya River, Primory Territory of the Russian Far East is described. The affinity of the new species to its congeners is discussed with emphasis on biogeographical relationships. An annotated checklist of the subgenus *Stygomomonia* and geographical map of the distribution of Palaearctic species of this subgenus is compiled using published records.

Key words: water mites, Stygomomonia, interstitial habitat, Far East, Russia

Introduction

The genus *Stygomomonia* Szalay, 1943 contains two subgenera, the nominate subgenus *Stygomomonia* and the subgenus *Allomomonia*. The subgenus *Stygomomonia* is known from interstitial hyporheic habitats and contains 13 species (Smith 1991). Ten of them are Nearctic widespread from Canada to Mexico (Cook 1968; Smith 1991), two species were described from Japanese Archipelago by Imamura (1956, 1957, 1959) and only was described from Eastern Europe by Szalay (1943). In the present paper, I describe a new species of the genus *Stygomomonia* (s. str.) from interstitial waters of the Kedrovaya River. It is the first report of the subfamily Stygomomoniae from Russia.

The Kedrovaya River is situated in a relatively undisturbed area on an east spur of the East-Manchurian Mountains and belongs to the protected territories of Kedrovaya Pad National Nature Biosphere Reserve.

Material and methods

The material was sampled by bottom sampler $(0.25 \times 0.25 \text{ m}^2)$ with 250 µm mesh with Prof. V.Y. Levanidov modification, used for the quantitative registration of bottom dwellers to study their composition and dynamics (Tiunova 2003).

Specimens were preserved in modified Koenike's solution and mounted on slides using Hoyers medium (Barr 1973; Smith *et al.* 2001). All illustrations were made using a Carl Zeiss NU-2 compound microscope equipped with a drawing device of Gorodkov's modification (Gorodkov 1961). All measurements were made with a stereomicroscope with a scaled micrometer eyepiece and are expressed as ranges in microns (μ m). The following abbreviations are used: I–L–6 – first leg, sixth segment; P–5 – pedipalp, segment 5. The following description is based on the type series. The holotype is deposited in the research collection of the Institute of Biology and Soil Science (IBSS), Vladivostok and paratypes are deposited in the Zoological Museum of Moscow State University (ZMMU).