



Two nematode species of the family Tobrilidae (Enoplida) De Coninck, 1965 from Lake Baikal, Russia

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Abstract

Two nematode species found in Lake Baikal, Gorevoi Utes (Russia) are presented. *Eutobrilus mirandus* sp. n. differs from all other species of the genus *Eutobrilus* by the markedly anterior position of the vulva (V=26–31%). The new species is similar to *E. andrassyi* Altherr, 1963 in body size and stoma structure but differs in the comparatively thicker body (males, $a = 32\text{--}45$ versus $a = 60\text{--}75$), shorter stoma (males, 26–27 μm long versus 35–40 μm long), longer spicules (48–53 μm versus 40 μm), and absence of crystalloids. A redescription and new illustrations of *Paratrilobus delicatus* (Shoshin, 1988) Andr ssy, 2007, including a description of the previously unknown females, are also given.

Key words: Lake Baikal, descriptions, *Eutobrilus mirandus*, free-living freshwater nematodes, new species, *Paratrilobus delicatus*, taxonomy

Introduction

Lake Baikal in Russia, the deepest lake on Earth, is a unique freshwater body inhabited by endemic fauna. Recently, 68 nematode species representing 27 genera have been reported from this lake (Gagarin, 2003; Gagarin & Naumova, 2010 a, b, c, d, 2011; Shoshin, 2010; Shoshin & Tsalolikhin, 2001; Shoshina, 2003; Tsalolikhin, 1980). Among these, 30 species from 9 genera belong to the family Tobrilidae. Eight species of the genus *Eutobrilus* have been described from Lake Baikal, most of them found in the littoral zone (Shoshin & Tsalolikhin, 2001). Prof. T.Ya. Sitnikova (Khlystov *et al.*, 2009) discovered a bitumen-associated biotope, where new nematode species were found confined to oil seepage localities—*Monhystera naphthera* Gagarin & Naumova, 2010 and *Eutobrilus mirandus* sp. n., described here. *Paratrilobus delicatus* was originally described on the basis of three males from Peschanaya Bay, Baikal (Shoshin, 1988). Females of this species, not present in the original population, are described herein.

Material and methods

Nematodes were collected by Prof. T.Ya. Sitnikova and Dr. T.V. Naumova (Limnological Institute of Siberian Branch of the Russian Academy of Sciences, Irkutsk, Russia) in Lake Baikal, Cape Gorevoi Utes, on 19–20 August 2009. Two samples were collected using submersible “MIR-2”, at 884 m and 897 m depth respectively, both consisting of bitumen (Khlystov *et al.*, 2009). One additional sand sample was collected by bottom-dredge “Ocean” 2 km from the coast and at 20 m depth. The samples contained numerous free-living nematodes, including the two species described herein. Nematodes were fixed by standard methods, and mounted in glycerin-jelly on permanent slides (Tsalolikhin, 1980). All observations were made using an Olympus CX-21 light microscope. Photographs were taken using an Axiovert 200 ZEISS light microscope fitted with a Pixera Penguin 600CL camera, located in the Collective Instrumental Center of the Limnological Institute, Siberian Branch of the Russian Academy of Sciences.