



Article

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Paramononchus orientalis sp. n. and *Ethmolaimus maximus* sp. n. (Nematoda) from Lake Baikal, Russia

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Abstract

Two nematode species found in Lake Baikal, Russia are described. *Paramononchus orientalis* sp. n. is morphologically close to *P. arcticus* Mulvey, 1978, but differs from it in the shorter body ($L = 3.08\text{--}3.78$ mm vs $L = 3.5\text{--}4.0$ mm), larger buccal cavity ($64\text{--}68 \times 30\text{--}32$ μm vs $44\text{--}48 \times 19\text{--}21$ μm), larger eggs ($140\text{--}155 \times 80\text{--}87$ μm vs $105\text{--}110 \times 60\text{--}80$ μm), less slender tail in females ($c' = 4.2\text{--}5.0$ vs $c' = 5.7\text{--}6.5$), longer spicules ($208\text{--}238$ μm long vs 70 μm long) and shape of gubernaculum. A key for the identification of valid species of the genus *Paramononchus* is given. *Ethmolaimus maximus* sp. n. is the largest species yet described in the genus *Ethmolaimus*. It differs from *E. pratensis* de Man, 1880 in the longer body ($L = 1.65\text{--}2.09$ mm vs $L = 0.6\text{--}1.2$ mm), comparatively shorter pharynx ($b = 8.0\text{--}9.6$ vs $b = 4.8\text{--}7.0$), comparatively longer cephalic setae ($45\text{--}55$ % of labial region diameter vs $30\text{--}35$ % of labial region diameter) and longer spicules ($52\text{--}56$ μm long vs $38\text{--}48$ μm long). *Ethmolaimus intermedius* Jensen, 1994 is synonymized with *Ethmolaimus pratensis* de Man, 1880.

Key words: free-living freshwater nematodes, taxonomy, *Ethmolaimus maximus* sp. n., *Paramononchus orientalis* sp. n., Lake Baikal, new species

Introduction

The nematode fauna of Lake Baikal is extremely diverse and abundant. As of today, approximately 80 species of baikalian free-living nematodes have been described. The genus *Paramononchus* Mulvey, 1978 includes 5 valid species: *P. arcticus*, Mulvey, 1978, *P. alimovi* Tsalolikhin, 1990, *P. thiocrenobius* (Soós, 1943) Loof, 1999, *P. baikalensis* Gagarin & Naumova, 2010 and *P. orientalis* sp. n. We considered *P. thiocrenobius* according Zullini & Peneva (2005), Andrassy (2009), although it does not mentioned in monograph Ahmad & Jairajpuri (2010), but *P. thiocrenobius* was not transferred at the *species inquirenda* status. Two species are found in Lake Baikal: *P. baikalensis* and *P. orientalis* sp. n. The genus *Ethmolaimus* has five baikalian representatives, four of which are endemic: *E. pratensis* de Man, 1880, *E. derisorius* Shoshin, 1998, *E. lanatus* Shoshin, 1998, *E. pilosus* Shoshin, 1998, and *E. maximus* sp.n.

Material and methods

Nematodes were collected in Lake Baikal, Bay Bolshie Koty near Dva Brata (Two Brothers) rock on 10 June 2008 (at 3–4 m depth), from sand. 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.