



# 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 ( $64\text{--}68 \times 30\text{--}32$   $\mu\text{m}$  vs  $44\text{--}48 \times 19\text{--}21$   $\mu\text{m}$ ), larger eggs ( $140\text{--}155 \times 80\text{--}87$   $\mu\text{m}$  vs  $105\text{--}110 \times 60\text{--}80$   $\mu\text{m}$ ), less slender tail in females ( $c' = 4.2\text{--}5.0$  vs  $c' = 5.7\text{--}6.5$ ), longer spicules ( $208\text{--}238$   $\mu\text{m}$  long vs  $70$   $\mu\text{m}$  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 ( $52\text{--}56$   $\mu\text{m}$  long vs  $38\text{--}48$   $\mu\text{m}$  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.