МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РФ ТОМСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ БИОЛОГИЧЕСКИЙ ИНСТИТУТ

СТАРТ В НАУКУ

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DETECTION OF TREMATODE OPISTHORCHIS FELINEUS (METACERCARIAE) IN CARP FISH SUCH AS ABRAMIS BRAMA (L.) AND ALBURNUS ALBURNUS (L.)

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Alien fish can be part of the parasite systems of recipient communities. One of the most devastating diseases affecting mammals in West Siberia is opisthorchiasis. Opisthorchiasis is caused by the parasite known as *Opistorchis felineus*. Mammals are affected after eating infected fish. Bream and bleak are not indigenous species of the Tomsk region. Bream (*Abramis brama* L.) was introduced in the region as a species for commercial fishery while bleak (*Alburnus alburnus* L.) appeared as a species for amateur fisheries. It was established, that in these fish's native places infective rate of these types of carp fish is higher in comparison to places where they have never lived before. Higher level of infected breams (36,2–55,5 %) were found in the lower part of Irtysh while in the Novosibirsk reservoir the amount of infected breams is lower and does not exceed 3.4 %. However, in the Middle Ob' river basin there were no cases of fish infected by the metacercaria *Opisthorhis felineus* (Rivolta, 1884).

In total, 302 fish (198 bleaks and 104 breams) have been investigated in this research. Our study was carried out from 2016 (February) to 2018 (October). All procedures were conducted following the compressor standard method. The fish muscular system was completely examined. The trematode identification was done with the help of the following literature «The parasite determination of river fish».

In these fish species, we detected the metacercaria *O. felineus*. The infection rate of bream was 2,9 % and of bleak was 2,5 %. The infected by metacercariae individuals were five bleaks (1 female and 4 males) and three breams (all males). From one to two larvae were found in the respective bodies of each infected specimen. This is the first research conducted in the Tomsk region that identifies alien carp fish, bream and bleak, as carriers of metacercariae *O. felineus*, as well as the role they play in the distribution and support of the disease, potentially creating a hotbed for it in the middle of the Ob' basin.

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