

## HELMINTHS OF MUSKRAT (*ONDATRA ZIBETHICUS*) IN LITHUANIA

VYTAUTAS MAŽEIKA

Klaipėda university, H. Manto str. 84 LT- 92294 Klaipėda Lithuania;  
e-mail: mazeika@gmf.ku.lt

The muskrat (*Ondatra zibethicus*) is semi-aquatic rodent native for North America; in twentieth century it was introduced in Europe. The aim of the study was to examine helminths of muskrats in Lithuania.

Material for the investigation was collected in 2001–2006. Nine muskrats, hunted in Šilutė district, were examined for helminths.

Six helminth species were found: three trematode species, *Echinostoma revolutum*, *Skrjabinoplaijorchis ondatrae* and *Plaijorchis maculosus* and larvae of three cestode species, *Hydatigera taeniaeformis*, *Echinococcus multilocularis* and *Tetratirotaenia polyacantha*.

Characteristic definitive hosts of *E. revolutum* are waterfowl, though this trematode is also found in some mammals. The first intermediate hosts are molluscs (Planorbidae) and the second intermediate ones the same molluscs or frog tadpoles. The life cycle of *S. ondatrae* should be similar to that of other plaijorchids. *P. maculosus* parasitizes birds and rodents. Its life cycle includes two intermediate host molluscs (Lymnaeidae) and insects.

One muskrat was infected with larvae of the cestode *E. multilocularis*. Adult form of this cestode parasitizes predatory mammals. Its intermediate hosts are rodents, especially voles, including the muskrat. *H. taeniaeformis* larvae were found in the liver of one muskrat. It is a widespread cestode found in all continents. Its adult form parasitizes predatory mammals, most often cats. Major intermediate hosts are rodents. *T. polyacantha* was recorded in the abdominal cavity of one muskrat. The sexually mature forms of this cestode parasitize canids' intestines and its intermediate hosts are rodents. From the literature, 22 helminths are recorded for the muskrat in Lithuania: *Hydatigera taeniaeformis*, *Plaijorchis arvicolae*, *P. elegans*, *P. maculosus*, *P. multiglandularis*, *P. laticola*, *Skrjabinoplaijorchis ondatrae*, *Psilotrema marki*, *P. simillimum*, *P. spiculigerum*. *Psilotrema* sp., *Stichorchis subtriquetrus*, *Ouinqueserialis quinqueserialis*, *Echinochasmus amphibolus*, *Neoacanthoparyphium echinatoides*, *Isthmiophora melis*, *Echinostoma armigerum*, *E. coalitum*, *E. revolutum*, *Pachytrema skrjabini*, *Metacercaria* sp., *Nematoda* sp.

Trematodes specific for waterfowl, but also infecting mammals living in the same habitats, dominate helminth fauna of muskrats. Some helminths such as *Ouinqueserialis quinqueserialis* have been introduced from North America.