

**TRANSMISSIBLE PARASITIC ZOOSES OF THE SPECIES
APODEMUS URALENSIS (Pallas, 1771)**

Chihai O.¹, Nistreanu V.¹, Larion A.¹, Talambuta N.², Rusu S.¹, Zamornea M.¹,
Melnic G.¹, Kolodrevski O.³

¹*Institute of Zoology, Republic of Moldova*

²*Free International University of Moldova, Republic of Moldova*

³*Theoretical High School Public Institution „Alecu Russo”, Orhei, Republic of Moldova*

e-mail: olegchihai@yahoo.com

CZU:574.3:599.323.4

<https://doi.org/10.52757/imb22.60>

Zoonoses are contagious diseases caused by various pathogens (prions, viruses, bacteria, fungi, protozoa, helminths, arachnids, insects), common to humans and animals, and represent a major public health problem.

Pygmy field mouse inhabits the forest edge and open-type biotopes: meadows, grasslands, agrocoenoses, fallow ground. It is a species with a lower frequency compared to other small rodents and has accessorial ecological significance.

The aim of the study was to describe the epidemiological characteristic of the parasite fauna in *Apodemus uralensis* (Pallas, 1771).

The research was conducted in the laboratory of Parasitology and Helminthology of the Institute of Zoology, on *A. uralensis* captured from various biotopes of the Republic of Moldova. Laboratory parasitological investigations were performed by total dissection of previously euthanized rodents, with microscopic examination of the muscles (masseter muscles, arms, diaphragm) and internal organs (trachea, lungs, heart, tongue, esophagus, stomach, small intestine, large intestine, liver, spleen, kidney, bladder) in order to establish the structure of the helminthofauna and to determine the parasitological indices. The identification of the species was performed according to morphological criterion according to standard methods.

The taxonomic structure of the identified parasitic species falls into 3 classes, 7 orders, 13 families, 14 genera and 15 species.

There are 3 species (*Syphacia stroma*, *Syphacia obvelata*, *Strongyloides ratti*) in the category of parasitoses with zoonotic impact (parasitozoonoses), in the one with mixed impact (zoonotic + epizootic) there are 3 species (*Hydatigera taeniaformis larvae*, *Capillaria hepatica*), and in the category of rodent invasions there are 7 species (*Paranoplocephala omphaloides*, *Catenotaenia cricetorum*, *Skrjabinotaenia lobata*, *Rodentolipis straminea*, *Heligmosomoides polygirus*, *Mastophorus muris*, *Trichuris muris*).

The nosological characteristics of helminthoses includes 2 categories: Cestodoses teniosis - 10.0%, mesocestoidosis, paranoplocephalosis - 10.0%, catenoteniosis - 5.0%, cryabinoteniosis - 10.0%, hydatigeriosis - 10.0%); Nematodes (syphacioosis - 20.0%, strongyloidosis - 15.0%, capillaries -15.0%, heligmosomiasis - 5.0%, trichurosis - 15.0%, rodentolepiosis-5.0, mastophoresis - 20.0%). The epidemiological feature includes 3 categories of parasitic species.

The small rodents parasitofauna monitoring in different areas has a biomedical and epidemiological importance, in order to prevent the transmission of invasive forms to humans and other mammals involved in the biological cycles of parasites with zoonotic and epizootic role. Therefore, there are necessary measures to decrease the level of infestation in wild animals.

The studies were performed within the State Program projects: 20.80009.7007.12 „Diversity of hematophagous arthropods, zoo- and phytohelminths, vulnerability, strategies for tolerating climatic factors and elaboration of innovative procedures for integrated control of species of socio-economic interest” and 20.80009.7007.02 “Evolutive changes of economically important terrestrial fauna, of rare and protected species in the conditions of anthropic and climatic modifications”.