



Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE
FACULTY OF VETERINARY MEDICINE - SKOPJE

BOOK OF ABSTRACTS

**“Days Of Veterinary Medicine”
10th International Scientific Meeting
and
2nd European Conference on
Veterinary and Medical Education 2024**

22-25 September 2024,
Republic of North Macedonia

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O23**INTESTINAL PARASITOFUNA OF RED FOXES IN NORTH MACEDONIA**

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The epidemiological relevance of wild canids is very important, keeping in mind that they are carriers of many pathogens transmissible to humans and livestock. The red fox (*Vulpes vulpes*) is the most widespread wild carnivore throughout the world, and plays an important role as a reservoir for vector-borne and other diseases. To detect intestinal parasites, we tested fecal samples from foxes that were hunt down to test the effectiveness of a rabies vaccine from January to March 2024. The feces was collected directly from ampulla recti, stored at -80°C for five days as previously recommended for safe handling and examined with fecal flotation (with 33% zinc sulphate used as flotation solution) and sedimentation. Parasitic elements were detected in all samples. Eggs of *Toxocara* spp. (prevalence 13.33%, 4/30), *Toxascaris* spp. (6.66%, 2/30), *Trichuris* spp. (13.33%, 4/30), and *Ancylostoma* spp. (detected as mixed infection in one sample), oocysts of *Cystoisospora* spp. (6.66%, 2/30), and sporocysts of *Sarcocystis* spp. (detected as mixed infection with 10% prevalence, 3/30) were identified. Mixed infections were detected in 16 samples (53%). All fecal samples were negative for *Taenia* spp. eggs. These results confirmed the presence of certain intestinal parasites in the population of red foxes and, indicating the existing risk for transmission from wildlife to domestic animals. The presence of zoonotic parasites calls for public health attention. Surveillance of the parasitic fauna in wildlife is necessary in all different regions in North Macedonia.

Keywords: intestinal parasites, wild canids, *Vulpes vulpes*