



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,
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O33**PREVALENCE AND DISTRIBUTION OF INTESTINAL PROTOZOA IN SHELTER DOGS IN NORTH MACEDONIA**

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Protozoan intestinal parasites are a major health concern in dogs compromising their gastrointestinal system and overall health. These parasites can cause a range of clinical signs, from mild gastrointestinal signs to a severe disease, especially in young dogs. In addition, several protozoan parasites are zoonotic and pose a significant public health risk. This study aimed to assess the prevalence and distribution of intestinal protozoans among sheltered dogs in North Macedonia. To detect the parasites, we tested 120 faecal samples from dogs kept in five distinct shelters in six different regions of the country by the zinc sulfate centrifugal flotation technique. Ten percent of the samples were taken from the Vardar region, 37.5% (45/120) from the Skopje region, 38.3% (46/120) from the Southeastern region, 9.1% (11/120) from Pelagonia region, 3.3% (4/120) from the Eastern region and 2.5% (3/120) from the Northeastern region. Intestinal protozoans were detected in 47 samples (39.16%). Single infection was detected in 89.36% of the dogs (42/47), while the rest 10.63% (5/47) had mixed infections. *Giardia spp.* was the most prevalent parasite, with 59.57% of the dogs (28/47) tested positive. *Cystoisospora spp.* was found in all five shelters in 25.53% of the dogs (12/47). *Sarcocystis spp.* had a lower prevalence and was only found in one shelter, with 14.89% positive dogs (7/47). Three dogs had mixed infections with both *Giardia spp.* and *Cystoisospora spp.*, and two dogs had mixed infections with *Giardia spp.* and *Sarcocystis spp.* The presence of zoonotic *Giardia spp.* and *Sarcocystis spp.* among sheltered dogs highlights the importance of preventive measures in shelters, such as regular faecal testing and deworming protocols.

Keywords: protozoa, dog, *Giardia*, *Cystoisospora*, *Sarcocystis*