

The prevalence of *Cryptosporidium* spp. in sheep and goats in Urmia, Iran

Behnam Ghorbani¹, Vahid Najarneshad^{2*} and Farnaz Malekifard³

¹ DVM Graduated, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran

² Associated Professor, Department of Internal Medicine, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran

³ Associated Professor, Department of Pathobiology, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran

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Abstract

Cryptosporidiosis, a zoonotic disease caused by *Cryptosporidium* spp., affects both domestic animals and humans. In newborn ruminants, it often manifests as outbreaks of diarrhea, leading to significant morbidity and economic losses. This study aimed to determine the prevalence of *Cryptosporidium* spp. infection in small ruminants in Urmia, Iran. A total of 560 small ruminants from seven farms located in seven villages around Urmia were examined across four seasons. *Cryptosporidium* oocysts were concentrated using formalin-ether sedimentation method, and oocysts were identified through a modified Ziehl-Neelsen staining procedure. Of the 560 animals, 67 (11.96%) tested positive for *Cryptosporidium* spp. Sheep exhibited a higher prevalence (17.86%) compared to goats (6.07%). Statistical analysis revealed significant associations between infection prevalence and factors such as fecal consistency, age, sex, and season. These findings underscore the potential zoonotic threat of *Cryptosporidium* spp. in the region, indicating the need for public health awareness and effective management strategies in small ruminant farming.

Key words: *Cryptosporidium*, Prevalence, Small ruminants, Urmia, Iran

* **Corresponding Author:** Vahid Najarneshad, Associated Professor, Department of Internal Medicine, Faculty of Veterinary Medicine, Urmia University, Urmia, Iran
E-mail: v.najarneshad@urmia.ac.ir



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