

Study on frequency of *Eimeria* species among sheep and goats of Urmia city, Iran

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Abstract

Coccidiosis is an economically important disease caused by a variety of *Eimeria* spp. In this study, the frequency of *Eimeria* species in sheep and goats of Urmia city in different seasons of the year was investigated. For this purpose, 280 sheep and goats were studied from February 2020 to February 2021. Fecal culture method with potassium bicromate (2%) was performed for identification of *Eimeria* spp. Out of 280 small ruminants studied, 48 (17.14%) were infected with *Eimeria* spp. From the studied sheep, six *Eimeria* species including *E. intricata* (40.54%), *E. parva* (18.91%), *E. faurei* (16.21%), *E. ovina* (10.81%), *E. ahsata* (8.10%), and *E. pallida* (5.4%) were identified. From the studied goats, three *Eimeria* species including *E. arloingi* (54.54%), *E. christensenii* (27.27%) and *E. palida* (18.18%) were also identified. The results of this study showed that there are different types of *Eimeria* spp., including pathogenic *Eimeria* in sheep and goats in Urmia. According to the importance of sheep and goat breeding industry in the northwest of Iran, preventive and periodic treatments against coccidiosis can prevent the effects of this parasite, including reduced production and growth rate especially in younger species and thus help the economics of the region.

Keywords: Coccidiosis, *Eimeria*, Sheep, Goat, Urmia

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