

MICROSCOPIC DETECTION OF COCCIDIOSIS IN SMALL RUMINANTS IN WASIT PROVINCE, IRAQ

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Abstract

Background and aim: Coccidiosis is a host-specific protozoan disease caused by several species of Eimeria genus, resulting in variable economic drawbacks due to loss in performance and even mortality. The current study investigated the prevalence rate of coccidiosis in goats and sheep in Wasit province (Iraq), morphological detection of the main Eimeria species found in these animals, and identification of the relation between positive infections and specific epidemiological risk factors. Materials and methods: Fresh fecal samples of 300 animals involving 150 goats and 150 sheep of various ages and sexes were collected during January-December (2022), prepared, and examined microscopically. Results: The overall prevalence rate of coccidiosis among study animals was 32.33%, including 38.67% in goats and 26% in sheep. Based on their morphology, 7 and 4 Eimeria species were identified in goats and sheep, respectively, with a significant prevalence of E. arloingi in goats and E. ahsata in sheep. Mixed infection patterns appeared significantly in goats and sheep compared to single and bilateral patterns. An insignificant association between body temperature, pulse, and respiratory rates of infected and non-infected animals was observed, while values of body condition score were recorded as poor scores in goats and medium scores in sheep. Age, sex, region, and season showed a significant association with coccidiosis. Conclusion: Coccidiosis remains highly prevalent, subclinical

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