

Study the frequency of blood parasites of sheep in Dezful suburb, southwest Iran

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Received: 10.02.2018

Accepted: 23.07.2018

Abstract

Blood parasites including *Theileria*, *Babesia* and *Anaplasma* are responsible for the tremendous economic loss to sheep farming industry worldwide. Dezful city in the south-west of Iran has warm and humid climate and parasitic diseases including Haemoparasites is expected to be prevalent among herds in this area. The purpose of this study was to evaluate the frequency of blood parasites in sheep of Dezful suburb using direct microscopy and PCR methods. For this reason, in August 2016, in a cluster sampling, a total of 200 blood samples from sheep of 4 regions of Dezful were collected randomly. Blood films were prepared and evaluated by microscopy. PCR was performed on 112 randomly selected samples. Frequency of *Babesia*, *Theileria* and *Anaplasma* was 1.5%, 26% and 33% using microscopy, respectively while 71.4% and 0% of sheep were PCR positive for *Theileria* spp. and *Babesia* spp., respectively. No other blood parasite was observed in microscopy. The results of this study indicate a high frequency of *Anaplasma* and *Theileria* and low frequency of *Babesia* among sheep of Dezful suburb. Regarding the results of this study, measures such as promoting knowledge of breeders regarding parasitic diseases of livestock, and in particular *blood parasites* and raising awareness of economic loss from these diseases through decrement in livestock production and increment in the costs of treatment, insecticide spraying of livestock places and bathing of animals against ectoparasites are necessary for reduction of this parasitic infection.

Key words: *Theileria*, *Anaplasma*, *Babesia*, sheep, Dezful

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