

## **Abstract**

Tissue blood protozoa, *Babesia* which in the body of vertebrate hosts will reproduce, makes a lot of damages and losses in hosts. In order to control and prevent infection with the protozoan, accurate and rapid identification of pathogens in samples is essential. Microscopy, serological and molecular techniques has its own benefits for diagnosis of these infections. So that microscopy technique is a routine diagnostic testing and molecular technique is a sensitive and accurate test to identify this contamination.

This study aimed to determine the prevalence of *Babesia bovis* and *Babesia bigemina* in native cattle with anemia in Sistan district veterinary clinics.

A total of 246 cattle with anemia of various city area in all seasons of the year were randomly selected. The blood inside the tubes containing the anticoagulant and also on the slide (blood smears) were sampled. After being sent to the laboratory, tubes for testing the PCR were frozen and blood smear samples for the presence of parasite *Babesia* using microscopic methods were evaluated so if the sample contains *Babesia* parasites or suspected was observed. For definitive review and determination of parasite species, PCR test used. Despite accurate survey, result microscopic examination all samples were negative and study not to reach PCR test stage.

Finally, this study showed that no cases of cattle infected with *Babesia* parasites and even suspect this parasite in the area is not available.

**Key words:** *Babesia bovis*, *Babesia bigemina*, native cattle, Sistan zone



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**Study of the prevalence of *babesia bigemina*  
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anemia in veterinary clinics of sistan zone.**

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