

Prevalence of Bovine Babesiosis and its Effect on PCV in Jimma Town and its Surrounding, South Western Ethiopia

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Babesiosis is caused by intraerythrocytic protozoan parasites of the genus *Babesia* that infect a wide range of domestic and wild animals and occasionally man. A cross-sectional study was conducted in Jimma town and its surrounding veterinary clinics beginning from November 2015 to April 2016. The objectives of the study were to detect Bovine Babesiosis and to assess its effect on PCV. The Giemsa staining technique was used for the detection of parasites and hematocrit centrifugation to find out the effect of the parasite on the packed cell volume of host animals in the study area. A total of 384 blood samples were collected from randomly selected cattle and examined. Parasitological findings revealed that the overall prevalence of Bovine Babesiosis was 6.8% (26/384). Of the total infected cattle, 6.5% and 0.3% was *B. bovis* and *B. bigimina*, respectively. The prevalence of the disease was assessed within major risk factors like age groups, sexes, body condition, tick infestation and PCV. But, statistically significant difference was observed ($P < 0.05$) only in body condition, tick infestation and PCV. In conclusion, the results of this study have indicated that Bovine Babesiosis was light in the study area. Nevertheless, the finding of the current study recommends and encourages applying proper tick control and prevention so that to drop off the current challenges in the study area.

Keywords: Babesia, Cattle, Erythrocyte, Thin smear, PCV, Anemia