Studies on the Prevalence and Determination of Associated Risk Factors of Babesia in Goats of District Toba Tek Singh, Punjab, Pakistan

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Abstract : Babesiosis is an infection due to the multiplication of tick borne parasite, Babesia sp., in erythrocytes of host (variety of vertebrates) including small ruminants and is responsible for decreased livestock output and hence economic losses. A cross-sectional study was designed in order to evaluate the prevalence of Babesia and its relation with various associated factors in district Toba Tek Singh, Central Punjab, Pakistan in 2009-2010. A total 10.84% (50/461) out of 461 examined cases for Babesia were found positive for Babesia infection. Month-wise peak prevalence was observed in July (17.95%), while no positive case was recorded in Dec-2009 and Jan-2010. The prevalence of infection in different goat breeds was found as non-significant ($P < 0.05$) for Babesia infection. The prevalence of Babesia was found significantly ($P < 0.05$) dependent to the goat age and sex. The feeding system, housing system, floor type and herd size revealed strong correlation with Babesia prevalence, while watering system and body conditions were found to be non-significant ($P < 0.05$), and hence it is suggested that with the improvement of management precautions Babesiosis can be avoided.

Keywords : Babesia, goat, prevalence, Pakistan, risk factors
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