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PII: S0147-9571(18)30059-6
DOI: https://doi.org/10.1016/j.cimid.2018.08.005
Reference: CIMID 1201

To appear in:

Received date: 26-12-2017
Revised date: 11-5-2018
Accepted date: 29-8-2018

Please cite this article as: Ozubek S, Aktas M, Genetic diversity and prevalence of piroplasm species in equids from Turkey, *Comparative Immunology, Microbiology and Infectious Diseases* (2018), https://doi.org/10.1016/j.cimid.2018.08.005

Genetic diversity and prevalence of piroplasm species in equids from Turkey

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Highlights

- A total of 233 blood samples from 142 horses and 91 donkeys in Turkey were tested for piroplasms by reverse line blotting.
- 47 (%20.2; 95% CI 15.2-25.9) equids were positive for *T. equi*, 9 (%3.9; 95% CI 1.8-7.2) only with the *Theileria* genus-specific probe, and *B. caballi* infection was not detected.
- A and D genotypes of *T. equi* were found by sequencing of the 18S rRNA gene in 9 only with the *Theileria* genus-specific probe samples.
- Also *T. annulata*, *B. ovis,* and *B. canis* species were detected in equids.

Summary

Equine piroplasmosis (EP) is a protozoon disease caused by *Babesia caballi* and *Theileria equi* transmitted by ticks from the Ixodidae family. This study investigated the genetic heterogeneity and diversity of piroplasm genotypes using the Reverse Line Blotting