

MOLECULAR IDENTIFICATION OF TICK-BORNE ZONOTIC BACTERIA IN ONE HUMPED CAMEL (*Camelus dromedarius*)

G. Erbaş, U. Parın, Ş. Kırkan, S. Savaşan, H.T. Yüksel and G. Balat

Department of Microbiology Faculty of Veterinary Medicine, University of Adnan Menderes, 09016, Aydın, Turkey

ABSTRACT

In this study, the presence of tick-borne zoonotic bacteria (*Borrelia* spp., *Coxiella burnetii* and *Rickettsiae* spp.) in camel blood samples were examined using by PCR. A total of 50 blood samples were collected from one humped dromedary camels found in western side of Aegean region which had tick infestation in their anamnesis. Three pathogens, viz *Borrelia burgdorferi*, *C. burnetii* and *Rickettsiae* spp. were detected in camel blood samples. A single PCR was performed for the *C. burnetii* and multiplex PCR for the *Rickettsiae* spp. and *Borrelia burgdorferi*. At the end of PCR study, *C. burnetii* was identified at the rate of 4% out of 50 blood samples. *Borrelia burgdorferi* and *Rickettsiae* spp. were not detected from all blood samples. The results showed that tick-borne zoonotic pathogens may come up with risk factors for *Camelus dromedarius* population. For this reason, it is important to increase microbiological studies for *Camelus dromedarius* populations.

Key words: Bacteria, *Camelus dromedarius*, PCR, Tick-borne, zoonotic diseases