Title: Molecular Prevalence of Canine Hepatozoonosis in Owned-Dogs in Central Part of Turkey

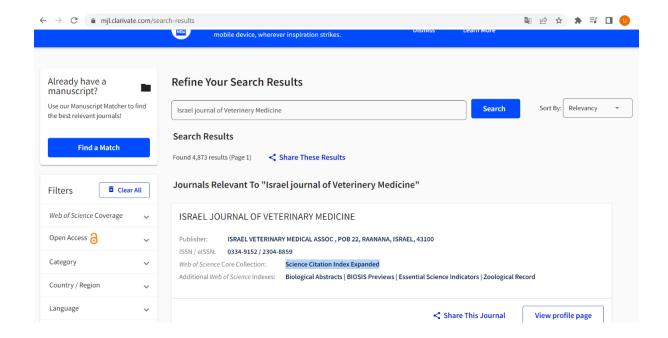
Erol, U., 1* Altay, K., 1 Atas, A.D., 2 Ozkan, E. 3 and Sahin, O.F. 1

- 1 Department of Parasitology, Faculty of Veterinary Medicine, University of Sivas Cumhuriyet, 58140 Sivas, Turkey.
- 2 Department of Parasitology, Faculty of Medicine, University of Sivas Cumhuriyet, 58140 Sivas, Turkey.
- 3 Department of Parasitology, Faculty of Veterinary Medicine, University of Aksaray, 68100, Aksaray, Turkey.

Abstract

Canine hepatozoonosis is a tick-borne disease caused by Hepotozoon canis and Hepotozoon americanum. H. canis is widespread almost all over the world, while H. americanum exists only in the continental of America. The aim of this study was to determine the prevalence of canine hepatozoonosis from blood samples of 150 owned-dogs in central part of Turkey using polymerase chain reaction (PCR). Sixty seven out of 150 (44.67%) samples were PCR positive for Hepatozoon spp. Five out of 67 positive PCR products were sequenced to determine Hepatozoon species. Partial nucleotide sequences of 18S small subunit ribosomal RNA gene were compared to Hepatozoon spp. sequences registered in GenBank. Nucleotide sequencing resulted in three samples of the Hepatozoon spp.; two samples were determined to be H. canis. Five nucleotide sequences detected in this study were deposited in GenBank under accession numbers MW350127, MW350128 (Hepatozoon canis), MW350129- MW350131 (Hepatozoon spp.). In this study, canine epatozoonosis infection rate was found to be very high (44.67%), resulting in a high rate of infection among the owned-dog populations in the study areas. To the best of our knowledge, it is the first study on the etiology and epidemiology canine hepatozoonosis in Sivas province in Turkey.

Derginin SCI-E olduğuna dair erkan görüntüsü ve internet sitesi adresi: https://mjl.clarivate.com/search-results



Derginin WoS'daki Quarter'ını gösteren kanıtlayıcı ekran görüntüsü ve site adresi: https://avesis.cumhuriyet.edu.tr/researcher/journal/search

