Title: First Parasitological Data on a Wild Grey Wolf in Turkey with Morphological and Molecular Confirmation of the Parasites

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Abstract

Introduction The grey wolf (Canis lupus) is the natural host of many parasites. These animals travel quite long distances to search for prey and nests, causing parasites to spread over large areas; therefore, determination of the parasites carried by grey wolves is important.

Methods In this study, we used both morphological and molecular methods for parasitological identification of helminth species. For this purpose, the material obtained after necropsy was examined by macroscopic, microscopic, and molecular (multiplex PCR and DNA sequencing) methods.

Results No pathological lesions and parasites were detected in the macroscopic examination of the trachea, lungs, heart, liver, spleen, stomach, and kidneys. The parasites collected from the intestines and diaphragm muscles were identified as Taenia hydatigena, Mesocestoides litteratus and Trichinella britovi.

Conclusion The aim of this study was to determine the helminth species in a dead grey wolf from wildlife. To the best of our knowledge, with this study, Taenia hydatigena, Mesocestoides litteratus and Trichinella britovi were detected for the first time in a grey wolf in Turkey.

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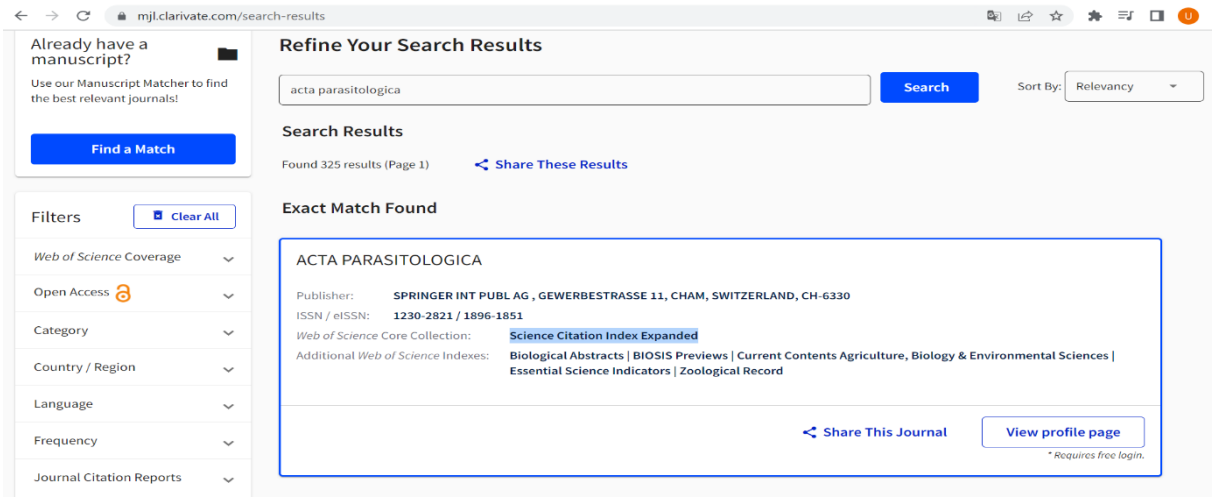

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