

Article

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**PREVALENCE OF INFECTION WITH *DIROFILARIA IMMITIS* AND
DIROFILARIA REPENS IN DOGS FROM THE SOUTH-EASTERN PART OF
ROMANIA**

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As a result of global warming, the change in the biological cycle of vectors and the increase in intercontinental travels, we are now facing an increase in the number of cases of vector-borne diseases. Among these, heartworm disease has escalated in recent years in Romania, with cases increasing in many parts of our country. Our study was carried out in the South-Eastern part of Romania, with the aim of establishing the prevalence of heartworm disease in dogs, with the identification of the two species *Dirofilaria immitis* and *Dirofilaria repens*. Blood samples were collected during the period May - July 2022 and January - July 2023, from 220 dogs with and without an owner from Tulcea county, from places such as Tulcea, Murighiol, Somova, Mineri, Niculițel. The blood samples were tested through the Knott method, which is considered as the reference method in the diagnosis of dirofilariosis in dogs. The results show a prevalence of *Dirofilaria spp.* infection of 11.36% in dogs. Of the 220 samples examined by the Knott test, 25 were positive for circulating microfilariae, of which 21 showed infestations with *Dirofilaria immitis* and 4 with co-infection with *Dirofilaria immitis* and *Dirofilaria repens*. The study underlines the importance of introducing monitoring and control programs for heartworm disease in dogs in Romania.

Key words: dirofilariosis; dogs; Tulcea;
