Abstract

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Title of thesis: Verification of parasitological activities of roundworm *Elaphostrongylus cervi* in farmed red deer population

This thesis evaluates the incidence of parasitic nematod worm *Elaphostrongylus cervi* on farm raised deer population. *Elaphostrongylus cervi* is a parasite of the family Protostrongylidae, occurs almost worldwide and infects domestic and wild ruminants, especially deer. When migrating a host organism, causes tissue damage, which is manifested with typical neurological and respiratory symptoms. Acute cases end in death. The *Elaphostrongylus cervi* parasite causes economic losses to the animals. Our aim was to examine the current parasitostatus of farmed deer population during the season (from November 2011 to February 2013). For the quantitative determination of nematodes in feces, we used Baermann method. Results demonstrate that the highest awards L₁ larvae in fresh feces were observed in deer in February 2012 and 2013, when the excretion of larvae at the end of the late winter and early spring typically increases. The lowest findings were conversely recorded during May to September 2012, when the excretion of larvae decreases to a minimum. Next, we examined the effect of laboratory freezing of coprological material on larvoscopical findings of L₁ larvae. Compared with the findings using fresh material occurs the first week of storage in freezing temperatures, we recognized decreased findigs, which are maintained at approximately 50.2% level larvoscopic findings from fresh material.