

An assessment of the internal parasitic infection of dogs in rural areas

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Dogs play many important roles in human life. In rural areas, they are usually watchdogs. Close human contact with dogs obliges the animal keepers to perform systematic deworming to eliminate the potential risk of parasitic infection. The main threat to dogs is presented by the internal parasites *Toxocara canis, Diphyllobothrium latum, Ancylostoma* spp., *Uncinaria stenocephala, Echinococcus granulosus*.

The aim of the study was to evaluate the endoparasitic infections of dogs from rural areas who spend most of their lives within one household.

The study was conducted in July 2015. Samples of fresh faeces of 69 dogs (43 ♂ and 26 ♀) from rural areas in the Mazowieckie and Warmia-Mazury regions were examined with the flotation method. The obtained suspension was viewed under a light microscope at a magnification of 10x and 400x. The age, sex and weight of the animal were also recorded. The owner also completed a survey concerning the number of visits to the veterinarian in connection with suspected parasitic infection, the number of deworming treatments applied during the year and the behaviour of the dogs to strangers on a scale of 0 to 3 (0-non-aggressive, 3 -very aggressive) to determine the uncontrolled behaviour (coprophagia).

Parasite eggs were found in 29 of 69 dogs (42%): 14 females and 15 males. Most prevalent were eggs of *T. canis* – 12 (41.37%) positive samples and *A. caninum* – eight (27.58%) positive samples. *T. vulpis* eggs were found in six samples (20.68%). *D. caninum* eggs were found in two samples. Oocysts of *Isospora* spp. were found in one sample from a male dog. Most of the positive samples came from dogs aged 6 to 10 years, more often male than female. According to body weight, dogs heavier than 10 kg were more often infected with parasites than smaller ones weighing 1 to 5 kg. According to the data obtained in the survey, 18 out of 29 infected animals had never been seen by the veterinarian and 11 others had been once. In animals which were seen by the veterinarian twice or more, no parasitic infection was found. Out of 29 infected dogs, 26 had never been dewormed and three others only once a year. According to the survey, 10 of 29 infected dogs shown no aggressive behaviour, 10 demonstrated a low level of aggression and six were very aggressive. Regardless of the sex and the level of aggressiveness, the most prevalent parasite was *Toxcara canis*.