

DETECTION OF HELMINTH INFECTIONS IN DOGS AND SOIL CONTAMINATION IN RURAL AND URBAN AREAS

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Abstract. A study was conducted to determine the helminthes in dog's feces and soil samples from urban and rural areas. Six species of nematodes (*Toxocara* sp, an undetermined nematode larvae, *Strongyloides* sp larvae, *Ascaris* sp ova, hookworm ova, *Trichuris* sp ova) and one species of Cestode (*Taenia* sp) were found in 175 stool samples. Seventy-eight point nine percent of stool samples were positive for helminthes. Mixed infection with at least one parasite was found in 32.6% of the samples. The prevalence of helminth infection ranged from 1.1% to 45.1%. The prevalence of hookworm sp was the highest with 45.1%. The highest prevalence in urban dogs was hookworm sp in 76.7% and in rural areas was *Ascaris* sp in 48.7%. Soil samples were also examined to determine contamination of the environment, especially due to *Toxocara canis*, as a potential source of infection. Urban soil samples showed a higher contamination rate with 26.7% compared to rural areas with 4.9%. *Toxocara* ova were the most prevalent helminthes contaminating the soil with 12.1%. This study showed that humans from both urban and rural areas are at risk of acquiring helminth infection from contaminated soil.

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