

Effect of Anthelmintic Treatment in Indigenous Goats of Sri Lanka

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Gastrointestinal parasite of livestock are nematodes, trematodes, cestodes and protozoans (including coccidians) which represent an important cause of reduced productivity of goats worldwide. Anthelmintic treatment is an effective way to control these parasites, the present study evaluated the effect of an anthelmintic drug in indigenous goats of a livestock farm in Puliyankulam, Vavuniya district of Sri Lanka from mid of March to May 2021. A randomly selected 20 indigenous goats were divided into following groups: below one year, one to three years, above three years and control group which was selected without considering age. The fecal samples were collected and treatment groups were subjected to oral dosing of closented 96% and abamectin 4%. Then fecal samples examined using McMaster techniques to count the egg per gram/ oocyst per gram of gastrointestinal parasitic species for ten weeks with two weeks interval. The results were analyzed in SPSS statistical package through the ANOVA table. The result showed 100% Nematode population (*Trichostrongylus* spp., *Strongyloides* spp., and *Trichuris* spp.) in goats was effectively controlled in two weeks after of anthelmintic treatment. Drug was not effective to control *Eimeria* spp. and *Monezia* spp. After four week of treatment *Trichostrongylus* spp. was reappeared in all treatment groups and *Strongyloides* spp. was reappeared only in one to three years goats. After eight week of treatment all Nematodes species were increased because the effectiveness of drug was highly reduced. The closantel 96% and abamectin 4% oral dosing was effective to control Nematode species less than eight weeks.

Keywords: Anthelmintic, Parasitism, Goats, McMaster egg counting