Prevalence of Gastrointestinal Parasites Infections in Goats and Sheep in Addalaichenai DS Division of Sri Lanka

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Abstract

Gastrointestinal parasites (GIP) are considered a common problem in goats and sheep production worldwide. This study investigated the prevalence of GIPs infection in goats and sheep and associated risk factors in Addalaichenai DS division. Goats (n=95) and sheep (n=83) were sampled randomly (apparently). Faecal samples were collected directly from rectum and analyzed using a simple flotation method. Nematode eggs were counted and graded using the McMaster techniques to determine degree of infection. The results showed that the overall prevalence of parasites in goats and sheep was 93.7% and 86.7% respectively. Parasitic species in goats were identified as *Eimeria* spp. (77.90%), *Nematodirus* spp. (78.90%), *Strongyloides papillosus* (65.30%), *Moniezia* spp. (14.7%), *Strongyles* spp. (33.7%) and *Trichuris* spp. (1.10%) whereas in sheep they were 71.10%, 63.90%, 60.20%, 15.7%, 37.30% and 0% respectively. The age of goats and sheep was significantly associated with *strongyles* spp. and *Eimeria* spp. ($P<0.05$) respectively. No significant association of sex of goats and sheep with GIPs was found. The association of *Nematodirus* spp. was significantly lower in sheep than goats ($p<0.05$). Number of eggs per gram of faeces (EPG) of nematode parasites showed that mild cases were high in goats and severe cases were high in sheep. From the study, it is concluded that the higher prevalence of Eimeria spp. and *Nematodirus* spp. in goats and sheep was found in the study area, however, the prevalence of *Nematodirus* spp. was lower in sheep than goats. Farmers should be educated to manage goats and sheep especially at adult age to protect from the infection of *Eimeria* spp. and *Nematodirus* spp.

Keywords: Gastrointestinal parasites, Prevalence, Disease management, Farmer awareness