

Abstract:

The impact of gastrointestinal nematodes on health and production of goat was investigated in a low potential area (Ecozone 3) of Kenya. The study involved 44 Small East African goat kids aged 4–5 months divided into two replicate groups (treated and control) and set stocked on pasture for 7 months through a dry season and a short rainy season from May to December 1998. The treated group received fortnightly albendazole treatment while the control group were untreated. Live weight, packed cell volume (PCV), faecal egg counts and pasture larval counts were measured every 2 weeks. Half of the animals from each group were randomly selected for slaughter, total worm counts and identification at the end of December. The faecal egg counts for the treated group remained low while those of the control group rose gradually through the study period. The counts were higher during the short rainy season. The control group lost weight during the dry season and underwent compensatory growth during the short rainy season. The treated group maintained their weight during the dry season and also showed compensatory growth during the short rainy season. Comparing the weight at the start and end of the study, the treated group gained an average of 3.1 ± 0.3 kg while the control group gained 1.1 ± 0.2 kg. Two goats in the control group died at the end of the dry season after showing clinical signs of parasitic gastroenteritis. Two others in the same group were given salvage treatments during the same period. The PCV (%) values were reduced during the dry season in both groups. The values were higher in the treated group. At slaughter the mean group worm counts for the control group was 1133 ± 387 while that for the treated group was 123 ± 56 . In all the animals *Haemonchus contortus* was the main nematode recovered. Hypobiotic larvae were recovered in the abomasum. The pasture larval counts were significantly lower in the paddocks grazed by the treated group in both the dry and short rainy season compared to that grazed by the control group. It was concluded that gastrointestinal helminths cause production losses, weight loss and mortalities in goats. *H. contortus* was the main nematode infecting the goats in this area. The albendazole treatment prevented parasitic gastroenteritis, weight loss and mortalities