

Epidemiology and Control of Gastrointestinal Nematodes Infections in Dorper Lambs in a Semi-arid Area of Kajiado District

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Abstract

A study on the epidemiology and control of gastrointestinal nematode infections in Dorper lambs in a Semi-arid Area of Kajiado District of Kenya was carried out between January 2001 and December 2001. Forty Dorper lambs were randomly recruited at the age of 6m weeks and their faecal samples examined for strongyle-type nematode eggs output at 3 weeks intervals for a period of one year. At the age of 12 weeks the lambs were divided into 2 groups A and B each consisting of 20 animals. Group A lambs were then strategically treated with albendazole at the dosage 5rate of 5 mg/ kg body weight at the age of 12 weeks, at weaning (aged 4 months) post-weaning in mid-dry season (aged 4 months) and 3 weeks into the short rain in November 2001. Group B lambs remained as un-treated controls and only received salvage treatments based on clinical signs of nematodosis. Strongyle-type nematode eggs were first detected at the age of 9 weeks and then rose sharply at the age of 12 weeks. In the un-treated group the egg counts peaked shortly after weaning at the age of 4 months then gradually declined to the lowest level at around the 10th months. The lambs treated strategically had lower faecal egg output throughout the study period and had significantly higher weight gain compared to the un-treated controls. Eleven out of the 20 group B lambs received salvage treatment, an indicator that young animals need protection from the adverse effects of helminthosis. The strategic treatments given in this study effectively decreased the levels of pasture contamination and improved productivity and are therefore recommended for use in the study area.