Epidemiology of gastrointestinal helminthes infections in Dorper sheep in a semi-arid area of Kenya

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ABSTRACT


A survey on the prevalence and intensity of infection with gastrointestinal helminths of Dorper sheep in relation to age and weather factors was carried out on a ranch in Kajiado district, a semi-arid area of Kenya for a period of 13 months (May 1999 to May 2000). Faecal samples from lambs (3 months to 1 year), yearlings (1ï 2 years) and adult breeding ewes (2ï 4 years) were examined for helminth egg output and helminth genus composition at 3-week intervals. The results indicated that the prevalence of strongyle and tapeworms infections were highest for lambs, followed by the adult breeding ewes and then for the yearlings. In all age groups the proportions of infected animals were higher during the wet season than in the dry season for both nematodes and tapeworms. The mean strongyle egg counts were higher during the dry season for lambs, but were higher during the wet season for the other age groups. Mixed strongyle infections were detected, with Trichostrongylus (55 %), Haemonchus (28 %), Cooperia (10.5 %) and Oesophagostomum (6.5 %) being the most frequently encountered genera throughout the study period. The trends in strongyle faecal egg counts indicated the occurrence of hypobiosis, with resumption of development towards the end of the dry season and at the onset of the short rains in October and November. Self-cure was also observed in September and November in all age groups, although less frequently in lactating ewes. The prevalence and intensities of infection with gastrointestinal helminths in this area appeared to be influenced by the age of the host and weather factors.

Keywords: Dorper sheep, gastrointestinal helminths, hypobiosis, self-cure, semi-arid region