11. A PRELIMINARY STUDY ON EPIDEMIOLOGY OF GASTROINTESTINAL NEMATODEASIS IN GOATS MANAGED UNDER VILLAGE CONDITIONS IN THE DRY ZONE OF SRI LANKA

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Gastrointestinal nematode infection is identified as a major constraint to the development of the goat industry in tropical and subtropical countries including Sri Lanka. Strategies such as chemoprophylaxis and grazing management based on parasite epidemiology are used in the control of the infection. In this presentation, we describe the findings of an ongoing epidemiological study on gastrointestinal nematode infection in goats in the dry zone of Sri Lanka aimed at developing a strategic anthelmintic protocol to control the infection as an alternative to the *ad hoc* treatment practised currently.

Two herds of goats managed under extensive system in the North Central Province were used for this study. The farms were visited monthly from May 1996 to February 1997, and on each visit the animals were examined clinically and samples were collected for haematology and for the determination of faecal egg counts. The pasture contamination was assessed by considering the worm burdens of the tracer animals. The body weight of the animals was also measured during these visits.

During the period under study, the faecal egg counts remained at a very low level during the months of May and June, then gradually increased in the subsequent months to show a significant rise from October that peaked in November. This was followed by a marginal decline in December. It was also noted that the trend in the faecal egg count during may to December mirrored the rainfall pattern for this period in the experimental area. Further, the increase in the faecal egg count was associated with decline in the haemoglobin and packed cell volume, indicating a chronic blood loss due to the parasitic infection.

The worm burdens indicate a distinct seasonality in the availability of pasture larvae where low contamination was observed in June followed by a significant increase in the availability during October and November. Three genera of nematodes namely, *Trichostrongylus, Oesophagostomum* and *Haemonchus* were identified, with predominance of the latter genus.

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