

ABSTRACT

The growth rates of grazing calves were evaluated after subcutaneous strategic treatments using ivermectin (IVM, Ivomec) or IVM in combination with clorsulon (CLS, MSD Agvet). Thirty weaner calves harbouring infections of *Fasciola gigantica* and subclinical gastrointestinal (GI) nematode infections were randomly assigned to one of three treatment groups: group I comprising 10 unmedicated controls; group II, 10 calves treated with 0.2 mg IVM kg⁻¹ body weight; group III, 10 calves treated with 0.2 mg IVM kg⁻¹ body weight and 2 mg CLS kg⁻¹ body weight. Strategic treatments were undertaken in June, October 1999 and February 2000. Individual weights and faecal samples were taken at study initiation and at 3-week intervals thereafter. Both GI nematodes and liver flukes were transmitted to the calves during the entire study period with an overall prevalence of 34 and 63%, respectively. *Strongyle*-type eggs were most prevalent during the rainy seasons while prevalence of liver fluke eggs was highest during the dry months. Even in the face of continual helminth challenge, at study termination, group III calves had gained an average (\pm S.D.) 157.6 \pm 5.8 kg (P <0.05) compared to the group II gain of 125.6 \pm 6.3 kg and the group I average gain of 95.7 \pm 7.1 kg. These results indicate that a programme using three IVM/CLS strategic treatments of cattle provided significantly better nematode and liver fluke control resulting in a better weight gain than untreated calves