Cross Sectional Study of Gastrointestinal Parasitism of Cattle in Kilinochchi District

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Gastrointestinal parasitism is a condition caused by the gastrointestinal parasites. It is a major impediment to livestock production. It has negative impact on economy of farms by causing mortality and losses in body weight gain, growth, production and condemnation of carcasses. A cross sectional study was carried out at cattle farms in Kilinochchi district to determine the prevalence of gastrointestinal parasites of cattle from January 2020 to July 2020. A randomly selected 106 cattle were examined using standard coprological examination. The faecal samples were screened for gastrointestinal parasitic eggs by McMaster and simple sedimentation test. The positive samples were subjected to egg morphological identification of prevalent gastrointestinal parasitic species. The results showed 15.10% (n=16) of cattle were moderately infested by gastrointestinal parasites and 84.90% (n=90) of cattle were highly infested by gastrointestinal parasites. In this study area most of the cattle (94.30 %, n=100) were infested by more than one parasite species (Multiple parasites infestation) while 5.70 %(n=6) of cattle had single parasite infestation. The eggs of nematodes (85.95%), trematodes (9.03%) and oocysts of protozoans (5.02%) were observed in this study area. The Ascaris sp (84.00%, n=89) was common parasite found in all four veterinary regions. Other species such as *Strongyle* sp (77.40%, n=82), Strongyloides sp (72.60%, n=77), Paramphistomum sp (25.50%, n=27), Eimeria sp (14.20%, n=18) and Trichostrongylus sp (8.50%, n=9) were also found. The Eimeria sp, Paramphistomum sp and Trichostrongylus sp were highly observed in cross breed than the local breed. The Ascaris sp, Strongylus sp and Strongyloides sp widely found in local breed. The higher infestation was recorded in Kandawalai veterinary region (96.00%) while lowest infestation observed in Karachchi veterinary region (71.42%). The Trichostrongylus sp and *Paramphistome* sp were not found in Pachilapallai veterinary region.

Keywords: Coprological examination, Egg morphology, Gastrointestinal parasitism, Kilinochchi district