

128/B

Some studies on liver and rumen flukes of cattle and buffaloes in Ja-Ela area of Gampaha district in Sri Lanka

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Fecal fluke egg output of cattle and buffaloes from three selected farms (A and B at Maeliya and C at Delathure) in Ja-Ela area of Gampaha district in Sri Lanka were examined for six months period from July 2006 to December 2006.

Regression analysis revealed that there was no correlation between mean monthly faecal egg output/g and monthly mean rainfall. However, there was an increasing trend of egg output with increasing rainfall. Same test revealed that there was no correlation between mean egg count/g and monthly mean temperature. In contrast, there was a decreasing trend of egg output with increasing temperature.

Usually female cattle had a higher fecal fluke egg output (\bar{x} = 202.76; n=18) than the male cattle (\bar{x} = 116.97; n=18) but egg output did not significantly differ. Also there was an increasing trend of mean fecal fluke egg count with the increment of age in cattle (R^2 = 0.6057).

Infected liver and rumen portions from seven slaughtered cattle and buffaloes lived in the study area were obtained and they were examined for the presence of flukes. Flukes found during the observation were identified by making histological sections and preparing whole mounts. During this study one species of liver flukes namely *Explanatum explanatum* and four species of rumen flukes namely *Paramphistomum* spp, *Gastrothylax crumenifer*, *Carmyerius* spp and *Fischoederius elongates* were identified. In addition, two other rumen flukes belonging to family Gastrothylacidae were also recorded. *Explanatum explanatum* was known to be a great cause in condemnation of liver at slaughterhouses in Sri Lanka.