

Prevalence of Gastrointestinal Parasites in Cattle of Western Vidarbha Region

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Abstract

Total 350 fecal samples of cattle from representative area of Western vidarbha region around Akola was collected and examined for incidence of gastrointestinal helminth infestation. Out of total 232, positive sample 62.29% had single and 6.00% had mixed infection of *Haemonchus* and *Trichuris* spp. Seasonal prevalence revealed higher in rainy season and lower in winter. *Stogylus* sp. was the predominant helminth infection in all the season. The nematodes infection were higher followed by cestodes and trmatodes.

Keywords: Parasites, Cattle, Vidarbha region, prevalence, faecal sample

In this study, the incidence of gastrointestinal helminth parasites in cattle of Akola district in Western Vidarbha region have been documented.

Material and Methods

Faecal samples of 350 cattle from different villages of Akola district were collected during the year March 2002 to February 2003 in 3 different seasons viz., summer, winter and rainy season. The samples were processed and screened by direct smear method and ova of parasites were identified from their morphological features (Soulsby, 1982). The quantum of infection among the animals was derived in terms of percentage of total samples examined.

Results and Discussion

Out of 350 samples examined 232 were found positive. Of these 211 (60.29%) had single and 21 (6.00%) had mixed infection of *Haemonchus* and *Trichuris* spp.. Bhattacharya and Ahmed (2005) observed higher percentage of single infection (65.20%) than mixed one (2.51%).

The seasonal prevalence of gastrointestinal helminthic infection revealed higher prevalence of parasites in rainy season 114 (91.20%), followed by winter 80 (69.5%) and summer 45 (40.91%). Higher incidence of helminth parasitic infection during rainy season may be due to high moisture content and temperature which favours the growth and development of larvae on pasture resulting in increased contact between the host and parasites. These findings are in agreement with Dhoot *et al.* (2002) and Bhattacharya and Ahmed (2005) who recorded higher incidence of parasitic infection during rainy season.

Variation has been observed on the occurrence of different types of gastrointestinal parasites in this study. Nine species of intestinal helminths i.e. *Strongyloae* sp. 45 (19.39%), *Strongyloids* sp 39 (11.14%), *Trichoderma* sp 29 (8.28%), *Haemonchus* sp 21(6.57%), *Trichuris* sp 19(5.42%), *Trichostrongylus* sp 17 (4.85%), *Moniezia* sp 16(4.18%), *Foxioloa* sp 13 (3.71%) and *Coccidia* sp. 11 (3.14%) were encountered as a common helminths in cattle.

Strongyle sp. infection was the predominant helminth infection in all the seasons. This observation corroborates with the earlier findings of Godara *et al.* (2003) who reported higher incidence of *Strongyle* sp. in cattle of Rajasthan.

Out of 350 samples examined, 232 (66.28%) were found positive for helminthic infection. The incidence of nematodes were higher with 203 (58.00%) positive samples followed by cestodes 16 (4.57%) and trematodes 13 (3.71%).

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