

Prevalence of Nematode parasites of Ruminants at Nagpur

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Abstract

In a year round study, two villages, viz. Chicholi and Bodala of Nagpur district were selected for assessment of prevalence of nematode parasites of ruminants. Out of 615 animals examined 242 were positive (39.34%) for nematode infection. The infection rate in buffalo, cattle and goat was 41.63, 32.18 and 51.94%, respectively. Higher infection was recorded during monsoon (63.07%) followed by winter (32.22%) and summer (21.33%). The percentage of animals infected with *Haemonchus* sp., *Toxocara* sp., *Trichuris* sp., *Strongyloides* sp. and mixed infection was found to be 38.01, 27.68, 14.87, 11.98 and 7.43%, respectively.

Keywords :- Ruminants, Nematodiasis, Nagpur

Introduction

Gastrointestinal helminthoses is a common cause of low productivity, unthriftiness and occasional deaths in farm animals (Sood, 1981). Parasitic infestation is a major constraints of livestock and causes great economic loss to dairy industry by way of retarded growth, low productivity and increased susceptibility of animals to other infections (Yadav *et al.*, 2004).

The losses due to parasitism can be minimized by early detection and timely initiation of prophylactic measure (Yadav *et al.*, 2004). The incidence of parasites in cattle has been reported from different states of India, but the parasitic survey especially on Nematodosis of ruminants at Maharashtra state is meager, hence the present work was undertaken.

Material and methods

Faecal samples of animals from selected villages of Nagpur district were collected during the year October 2006 to September 2007 in three different seasons viz., winter, summer and rainy season. The samples were examined by sedimentation techniques (Soulsby, 1982).

Results and discussion

Out of 615 samples examined 242 were positive (39.34%). The seasonal prevalence of nematode infection shows higher prevalence in rainy season (63.07%) followed by winter (32.22%) and summer (21.33%).

Climatic factors also influence the rate of larval movement (Croll, 1975) and higher rate of infection in rainy months may also be attributed to suitable molarity of salt present in soil which is an important factor for ecdysis (Soulsby, 1982).

The percentage of animals infected with different nematode sp. i.e. *Haemonchus* sp. (38.01%), *Trichuris* sp. (14.87%), *Strongyloides* sp. (11.98%) and mixed infection (7.43%). *Haemonchus* sp. infection is predominant in all season. Thapar (1956), Nadakal (1961) and Patnaik *et al.* (1973) also recorded *Haemonchus* as predominant parasite in sheep in hot plains of India.

The infection rate of these nematode sp. in different animals was 41.63% (buffalo), 32.18% (cattle) and 51.94% (goat).

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