

PREVALENCE OF HELMINTH PARASITES IN GOATS OF NAGPUR REGION (MAHARASHTRA)

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ABSTRACT

Prevalence studies of Helminth Parasites in Goats of Nagpur region of Maharashtra was carried out for a period of one year .A total of 1500 faecal samples of goats were examined in 10 villages from different localities viz., Ramtek and Katol Tahsils of Nagpur district of Maharashtra. A total of 904 (60.26%) samples were found positive for different helminthic infections. Nematode infection was most commonly encountered during and after rainy season. Only 204 (22.56%) cases were found positive for mixed helminthic infection, out of which, the most common cases of mixed infection were of *Strongyloid* sp, *Trichuris* sp. and *Moniezia* sp.

KEY WORDS: Goat, Helminth Parasites, Prevalence

INTRODUCTION :-

The economic losses due to helminthic infection in goats are mainly attributed to interference with absorption of food, bowel movement and digestion, thereby, causing loss of appetite and growth resulted into diarrhea, severe dehydration, toxemia and coma (Sykes, 1978).

In goats the helminthic infection of both genera and species is very rich in number. Gastrointestinal parasitism is a major constraint for livestock production causing heavy economic losses. Therefore, the present study was undertaken to investigate the seasonal prevalence of helminthic infection in goats.

MATERIALS AND METHODS:-

A total 1500 faecal samples of goats were randomly collected from ten villages of two Tahsils viz., Ramtek and Katol of Nagpur district. Faecal samples were collected directly from the rectum of goat. The samples were examined for helminthic infections qualitatively by direct smear method and sedimentation techniques as described by Ruprah et.al. (1986) and quantitative examination was carried out by Stoll's technique as described by Soulsby (1982). Month wise, season wise and species wise observations were recorded .

RESULTS AND DISCUSSION :-

Out of 1500 samples were examined for helminthic infection 904 (60.26%) were found positive for different helminthic infections. The season wise prevalence of helminth parasites during the study are shown in Table. The maximum prevalence of helminth parasites was recorded during the monsoon season 296 (74.93%) while minimum recorded in summer 221 (47.02%). The observations are in the accordance with the findings of Tripathi (1970) who reported high incidence of helminth parasites in goats during monsoon season in Uttar Pradesh.

The variability of infection in types of helminths recorded, revealed that the intensity of nematode infection is 534 (59.07%) followed by trematodes 133 (14.71%) and cestodes 33 (3.65%). Raote et.al. (1987) , Bhatia et.al., (1989), Sahay et.al.,(1996), Talukdar, (1996) recorded variable intensity of helminthic infection which are in accordance with the present findings.

The species wise incidence was found to be ; *Trichuris* sp. 375 (24.33%), *Strongyloid* sp.207 (13.8%), *Haemonchus* sp.127 (8.46%), *Oesophagostomum* sp. 29 (1.93%), *Bunostomum* sp. 12 (0.8%), *Ostertagia* sp. 09 (0.6%), *Chabertia* sp. 08 (0.53%), *Fasciola* sp. 15 (1.2%), *Paramphistomum* sp. 50 (3.33%) and *Moniezia* sp. 72 (4.8%). Misra, 1972., Deka et al.(1995), Prasad et al.(1996), and Talukdar, (1996) reported either single species of one type of helminth or more than one to seven species of one type of gastrointestinal helminthes infection in goats in different parts of the country.

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Table - 1: Season-wise Prevalence of Helminthic infection in Goats of Nagpur Region during the year 2008-2009.

Sr. No.	Season	No. examined	No. positive	Percentage
1.	Monsoon (July-Sept.)	395	296	74.93
2.	Post monsoon (Oct.-Nov.)	265	190	71.69
3.	Winter (Dec.-Feb.)	370	197	53.24
4.	Summer (Mar.-June)	470	221	47.02
	Total	1500	904	60.26

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