PREVALENCE OF COCCIDIOSIS IN GOATS IN NAGPUR REGION OF MAHARASHTRA

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ABSTRACT

A survey on the prevalence of coccidiosis in goats was conducted in two different localities viz., Ramtek and Katol Tahsils of Nagpur district of Maharashtra during the year 2008-2009. A total of 1500 goats were examined for coccidial infection of which 940 samples (62.66%) were found to harbour the Oocysts of *Eimeria* sp. infection. Among 375 kids examined, 230 samples (61.33%) were found infected with coccidiosis.

KEY WORDS: Coccidiosis, Goats, Prevalence.

INTRODUCTION:-

Coccidiosis in goats has been well documented as a serious protozoan disease in India, particularly in view of the intensive system of rearing practiced for increased meat production (Prasad et al., 1981). It causes substantial losses in young stock while the adult animals generally suffer from chronic infection without marked clinical signs. Coccidiosis is an enteric parasitism responsible for heavy mortality and morbidity among kids. Coccidiosis in goats shows clinical signs like brownish diarrhea stretched with pain, anaemia, in appetence, weakness and loss of weight. It is therefore, proposed to study prevalence of coccidiosis in goats in Nagpur region of Maharashtra.

MATERIALS AND METHODS:-

A total of 1500 faecal samples were randomly collected per rectal from goats of Ramtek and Katol Tahsils of Nagpur district from July 2008- to June 2009. . Freshly collected faecal samples were processed and examined grossly and microscopically. Sedimentation technique of faecal examination was performed and identification of parasitic ova was done by morphological criteria as described by Soulsby, (1982). Season wise, age wise and sex wise prevalence was noted.

RESULTS AND DISCUSSION:-

The influence of season, age and sex on the prevalence of coccidiosis in goats has been shown in Table. A significant ($P<0.01$) seasonal influence was noticed. The prevalence was highest during monsoon season, 490 (74.24%), moderate during summer 275 (58.51%) and least in winter 175 (47.29%). The present result is in agreement with the reports of Sinha and Sahai (1990), Ahmad et al., (1992) and Tiwari et al. (2003). Monsoon season may provide favourable conditions such as optimal moisture, humidity and temperature for easy dispersion, sporulation and transmission.

Significant Prevalence (<0.01) of coccidiosis was highest in kid in the age group 0 to 5 months, 77.5% and 57.14% was noted in goats between 5 to 10 months of age in faecal samples respectively.

Infection rate was found to be slightly more in females (62.99%) as compared to males (61.66%). This suggests that both males and females have equal opportunities to acquire the coccidial infection in similar circumstances . Rajkhowa & Hazarika (2001) and Ahmad et.al. (1992) suggested that physiological changes in females may be associated with lowered resistance to infection

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Table - Season wise, Age wise and Sex wise prevalence of Coccidiosis in Goats

Sample (n=1500)	Season			Age		Sex	
	Summer	Monsoon	Winter	0 to 5 months	5 to 10 months	Male	Female
No. Examined (1500)	470	660	370	200	175	373	1127
No. Positive (940)	275	490	175	155	100	230	710
% infection (62.66%)	58.51	74.24	47.29	77.5	57.14	61.66	62.99

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