PREVALENCE OF PARASITIC INFECTIONS IN CATTLE AND BUFFALOES OF ANANTAPUR DISTRICT OF ANDHRA PRADESH

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ABSTRACT

Investigation on the influence of season on the prevalence of helminthic infection among cattle and buffaloes indicated that the overall prevalence of parasitic infection was 336 (42.0%) out of 800 faecal samples. The highest incidence was observed by amphistomes 180 (22.5%) followed by coccidia 65 (8.1%), strongyles 61 (7.6%) and fasciola 30 (3.8%). The incidence of parasitic infection was higher in monsoon season as compared to that of summer and winter.

Key words: Parasitic infestation, Amphistome, Coccidia, Strongyle, Fasciola

Parasitic infections are commonly encountered in bovines reared under traditional animal husbandry system in India. These infections cause considerable economic loss in terms of productivity and lowering down the immune status of the animals, which become susceptible to secondary infections. Epidemiological survey of parasitic diseases is an important tool in controlling losses due to parasites by adopting effective control measures. The prevalence and seasonal variation in the intensity of parasites of cattle and buffaloes has been observed in different parts of the country (Sharma and Lal, 1986; D’Souza et al., 1988; Sanyal et al., 1992; Manna et al., 1994; Hirani et al., 1999 and Roy et al., 2004). Hence the present investigation was conducted to study the prevalence of commonly occurring parasitic infections in cattle and buffaloes raised by farmers under field conditions.

The present investigation was conducted in Penukonda and Hindupur areas of Anantapur district, in Andhra Pradesh. The seasonal variation on the prevalence of infection was carried out by regular monthly examination of faecal samples over a period of one year. The seasonal incidence of parasitic infections was studied through out the year dividing into three seasons viz., summer (March-June), monsoon (July-October) and winter (November-February). A total of 800 faecal samples from cattle and buffaloes were collected in all the seasons. The faecal samples were collected in polythene bags and brought to the laboratory for examination. The samples were processed by concentration method of centrifugation and sedimentation technique (Soulsby, 1982) and examined for ova of helminth parasites and coccidial oocysts. The prevalence of infection was studied and analyzed by using the statistical tools (one sample t-test) as per the procedures laid down by Snedecor and Cochran (1994).

The incidence of parasitic infections was studied over a period of one year and the results are summarized in Table 1. Out of 800 faecal samples examined during the period of investigation, 336 (42.0%) samples were found positive for parasitic infections. Highest prevalence of strongyles, amphistomes, coccidia and fasciola infection was recorded in July (18.2%), October (44.4%), June (15.9%) and December (7.6%) months respectively. These findings are in accordance with those reported by Hirani et al. (1999). The variation in the incidence of parasitic infections might be due to the differences in the climatic conditions prevailing in the study area. The high prevalence of coccidia in the month of June might be due to contamination of water bodies which are filled with water resulting from monsoon rains. The onset of southwest monsoon is early during that year in the study area. The most prevalent infection was that of amphistomes (22.5%) which is in agreement with the report of Hirani et
The occurrence of parasitic infection was influenced by season. Seasonal influence showed that during monsoon the incidence of strongyles, amphistomes, coccidia and fasciola were 12.72%, 26.8%, 11.4% and 2.19%, respectively and these values were higher than those reported by Hirani et al. (1999). The high rate of amphistome infection (26.8%) could be due to wide spread availability of snail intermediate hosts and access of animals to contaminated grazing land. The animals frequently come in contact with infective stages of these parasites and become infected. These animals may act as carriers to spread the infection to other animals. The seasonal influence in the prevalence of parasitic infection might be due to the fact that during monsoon season the climate might be conducive for the development of infective stages of the parasites and the fodder received from outside might be contaminated with such infective stages.

**REFERENCES**


