

Seasonal Prevalence Of Gastrointestinal Parasitism in Goats at Nagpur

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Abstract

In a year round study, faecal samples of goats from selected villages (viz., Chicholi, Bodhala, Takalghat) of Nagpur district were collected during the year Oct-2007 to September 2008. Out of 779 faecal samples examined 513 were positive (65.85%). In rainy season out of 294 faecal samples examined 237 were positive (80.61%), while in winter out of 250 faecal samples examined 153 (61.20%) positive and in summer season out of 235 faecal samples examined 123 were positive (52.34%).

Keywords: Prevalence, Parasitism, Goat, Gastrointestinal, Economic,

Introduction

Gastrointestinal parasites in sheep and goat causes substantial economic losses. Krishnan *et al.*, (1989) reported various gastrointestinal parasitism in ruminant livestock on the basis of faecal sample examination in mid hill area of kangra valley. Herlich (1978) attributed 5-10 percent mortality and 10-20% morbidity losses to the helminthic disease in ruminants. Several reports have been documented regarding gastrointestinal parasitism in ruminants from tropical plains of India. (Tharpar, 1956; Patnaik *et al.*, 1973 and Mishra *et al.*, 1974).

Materials and Methods

Faecal samples of animals from selected villages of Nagpur district were collected during the year October 2007 to August 2008 in three different season viz., winter, summer and rainy season. The samples were examined by sedimentation techniques (Soulsby, 1982).

Results and Discussion

Out of 779 faecal samples examined 513 were positive (65.85%). In rainy season, out of 294 faecal samples examined 237 were positive (80.61%), while in winter, out of 250 faecal samples examined 153 were positive (61.20%) and in summer season out of 235 faecal samples examined 123 were positive (52.34%). The seasonwise prevalence of endoparasites infection shows higher prevalence in rainy season (80.61%) followed by winter (61.20%) and summer (52.34%). Howkins (1945) suggest that heavy rainfall and high rh lower the resistant of animals and this is taken advantage by the infected larvae in establish heavy infection. The percentage of animals infected with different endoparasites species viz.,

Haemonchus sp. (26.17%), *Trichostrongylus axei* (19.10%), *Eimeria sp.* (16.95%), *Strongyloides sp.* (20.07%) and mixed (17.15%). *Haemonchus sp.* Infection is predominant all season. Thapar, Patanaik *et al.*, (1973) also recorded *Haemonchus sp.* as pre dominant parasite in sheep in hot plains of India. *Haemonchus* causes immune suppression (Tizard, 1992) which probably predisposed the animal towards secondary infection. In male animals out of 387 faecal samples examined 226 were positive (58.39%) while in female animals, out of 392 faecal samples examined 287 were positive (73.21%). The sex wise prevalence of endoparasites infection shows higher prevalence in female (73.21%) than male (58.39%).

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