

**SEASONAL PREVALENCE OF GASTRO-INTESTINAL HELMINTH PARASITES
OF GOATS (*Capra* sp.) OF SHIVRAJ MUNICIPALITY-13 KAPILVASTU, NEPAL**



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RECOMMENDATION

This is to recommend that the thesis entitled “SEASONAL PREVALENCE OF GASTRO-INTESTINAL HELMINTH PARASITES OF GOATS (*Capra* sp.) OF SHIVRAJ MUNICIPALITY-13 KAPILVASTU, NEPAL has been carried out by Rabindra Prasad Tripathi for the partial fulfillment of Master’s Degree of science in zoology with special paper **parasitology**. This is his original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

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LETTER OF APPROVAL

On the recommendation of supervisor “Mr. Janak Raj Subedi this dissertation of Mr. Rabindra Prasad Tripathi entitled “SEASONAL PREVALENCE OF GASTRO-INTESTINAL HELMINTH PARASITES OF GOATS (*Capra* sp.) OF SHIVRAJ MUNICIPALITY-13 KAPILVASTU, NEPAL is approved for examination and is submitted to the Tribhuvan University in partial fulfillment of the requirements for Master’s degree of science in zoology (**Parasitology**).

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This thesis work submitted by Rabindra Prasad Tripathi entitled “SEASONAL PREVALENCE OF GASTRO-INTESTINAL HELMINTH PARASITES OF GOATS (*Capra* sp.) OF SHIVRAJ MUNICIPALITY-13 KAPILVASTU, NEPAL” has been accepted as a partial fulfillment for the requirements of Master’s Degree of science in zoology with special paper Parasitology.

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DECLARATION

I hereby declare that the work presented in this thesis has been done myself and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by references to the authors or institution.

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ABSTRACT

Goat (*Capra* sp.), being an important source of meat in Nepal. This species is greatly affected by the helminthes parasites. The current study was carried out to observe the seasonal prevalence of intestinal parasites with sedimentation and flotation techniques. The samples were collected and examined for the study periods. The overall prevalence of helminth parasite during winter, 58 (54.71%) infection and summer 86 (81.13%) infection. Winter 13(12.26%) infection were caused by trematodes, 7 (6.66%) by cestodes and 38 (35.84%) nematodes. Summer 19(17.92%) infection were caused by trematodes 11 (10.37%) by cestodes and 56(52.83%) nematodes. The prevalence percentage of identified genera of trematodes were *Dicrocoelium* sp. (3.47%), *Fasciola* sp. (15.97%) and *Paramphistomum* sp. (2.77%). The difference in the prevalence of different genera of trematodes during winter and summer were not found statistically insignificant ($\chi^2 = 1.325$, $p = 0.250$). Among cestodes the genera identified with their prevalence percentage were found to be *Moniezia* sp. (2.77%) and *Taenia* sp. (9.72%). The difference in the prevalence of different genera of cestodes during winter and summer were not found statistically insignificant ($\chi^2 = 2.186$, $p = 0.139$).

Similarly the genera included in nematodes are *Toxocara* sp. (16.66%), *Strongyl* sp. (1.38%), *Bunostomum*(2.77%),*Capillaria*(4.86%),*Chabertia*(4.16%),*Dictyocalus*(4.86%),*Cooperia*(2.08%),*Heamonchus*(3.47%),*Oesophagostomum*(8.33%),*Nematodirus*(0.69%),*Ostertagia*(1.38%),*Strongyloides*(6.25%),*Trichuris*(5.55%),*Trichostrongylus*(4.86%). Mixed infection was observed in 54 (50.94%) winter and 80(75.47%) summer season. Altogether 134 (63.20%) mixed infection were detected. The difference in the prevalence of helminth parasites during winter and summer seasons were found statistically significant ($\chi^2 = 6.193$, $P < 0.013$, d. f. = 1)

Key:-Helminth, Trematodes, Cestodes, Nematodes, Parasite, Prevalence, Sedimentation, Flotation.

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LIST OF ABBREVIATIONS

ADPCD- Animal Disease and Parasite Control Division

CBS-Central Bureau of Statistics

CDZ-Central Department of zoology

CVH- Central Veterinary Hospital

DLSO-District Livestock Service Office

FAO- Food and Agriculture Organization

GDP-Gross Domestic Production

VEC- Veterinary Epidemiology Center

WHO- World Health Organization

T.U-Tribhuvan University

MAOC-Ministry of Agriculture and Cooperative

GI- Gastro-Intestinal

MOAC-Ministry of Agriculture and Cooperative