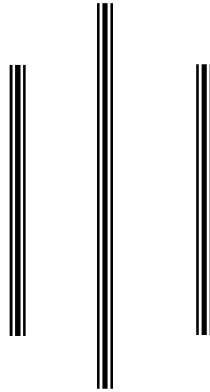
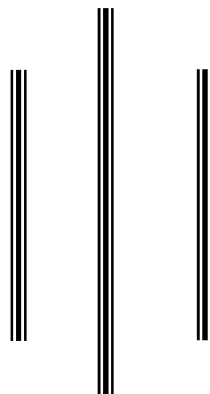


**A STUDY ON
INTESTINAL HELMINTH PARASITES OF
GOATS (*Capra hircus*) BROUGHT TO KHASIBAZAR,
KALANKI (KATHMANDU) FOR SLAUGHTER PURPOSE**



**A THESIS
SUBMITTED IN THE PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE MASTER'S DEGREE OF SCIENCE IN
ZOOLOGY WITH SPECIAL PAPER PARASITOLOGY**

**BY
LAXMI PARAJULI**



**SUBMITTED TO
CENTRAL DEPARTMENT OF ZOOLOGY
INSTITUTE OF SCIENCE AND TECHNOLOGY
TRIBHUVAN UNIVERSITY, KIRTIPUR
KATHMANDU, NEPAL**

2007

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KIRTIPUR, KATHMANDU
RECOMMENDATION

This is to recommend that the dissertation entitled “Intestinal helminth parasites of goats (*Capra hircus*) brought to Khasibazar, Kalanki (Kathmandu) for slaughter purpose” has been carried out by **Ms. LAXMI PARAJULI** for the partial fulfillment of M.Sc. Degree in Zoology (Parasitology). This work has been conducted under our supervision. To the best of our knowledge, this dissertation work has not been submitted for any other degree.

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On the recommendation of the supervisor Associate Prof. **Dr. RANJANA GUPTA** and Co-supervisor **Dr. KEDAR BHADUR KARKI**, Veterinary Officer, this thesis submitted by **Ms. LAXMI PARAJULI** entitled “Intestinal helminth parasites of goats (*Capra hircus*) brought to Khasibazar, Kalanki (Kathmandu) for slaughter purpose” is approved for examination and submitted to the Tribhuvan University in partial fulfillment of the requirements for Master’s Degree of Science in Zoology with special paper Parasitology.

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CERTIFICATE OF APPROVAL

This dissertation work submitted by **Ms. LAXMI PARAJULI** entitled “Intestinal helminth parasites of goats (*Capra hircus*) brought to Khasibazar, Kalanki (Kathmandu) for slaughter purpose” has been approved as a partial fulfillment of requirements for the Master’s Degree of Science in Zoology with special paper Parasitology.

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Date:

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 institutions.

Laxmi Parajuli

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ABSTRACT

Capra hircus (goat) is one of the important species of domestic livestock in Nepal. The helminthic diseases are most varied and common in goat. Present study was carried out to find the prevalence of intestinal helminth parasites in goat. Both sedimentation and floatation technique were used for the detection of helminth parasites. A total of 222 stool samples were collected during the study period (November, December-2006 and May-2007) and examined. The over all prevalence of helminth parasite was found to be 81.53%. There is significant difference in prevalence of trematode, cestode and nematode infection among goats. The infection with trematodes was 13.96%, with cestodes 8.56% and with nematodes 76.13%.

Nematode genus *Diocotophyma* is reported here for the first time from Nepal. No work regarding this genus from other host also has been found. Cestode genus *Taenia*, Trematode genus *Dicrocoelium* and Nematode genera *Oxyuris* and *Capillaria* have been reported from various hosts like cattle, horse, buffalo, pig and poultry but not from goat. **So *Taenia*, *Dicrocoelium*, *Oxyuris* and *Capillaria* are also reported here for the first time from the host goat in Nepal.**

The trematode genera identified with their prevalence percentage was found to be *Dicrocoelium* 5.85%, *Fasciola* 5.40% and *Paramphistomum* 2.70%.

Among cestodes, the prevalence percentage of identified genera was found to be *Moniezia* 5.40% and *Taenia* 3.15%.

Nematodes include *Strongyloides* 9.45%, *Haemonchus* 19.36%, *Trichostrongylus* 17.56%, *Ostertagia* 9.00%, *Oesophagostomum* 8.11%, *Cooperia* 4.05%, *Nematodirus* 5.4%, *Diocotophyma* 2.25%, *Dictyocaulus* 2.7%, *Chabertia* 14.86%, *Oxyuris* 0.9%, *Ascaris* 3.15%, *Toxocara* 1.80%, *Bunostomum* 0.9%, *Trichuris* 5.85% and *Capillaria* 2.25%.

Single infection was observed among 51 positive samples and maximum due to *Haemonchus*. Mixed infections were observed among 130 positive samples. Among Trematodes, the heavy infection was found due to *Fasciola*, among Cestodes, due to *Moniezia* and among Nematodes, due to *Chabertia*.

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Fasciola

Cooperia

Paramphistomum

Trichuris

Dicrocoecium

Capillaria

Moniezia

Dictyocaulus

Taenia

Ascaris

Haemonchus

Toxocara

Ostertagia

Nematodirus

Strongyloides

Bunostomum

Trichostrongylus

Diectophyma

Chabertia

Oxyuris

Oesophagostomum

II. Prevalence of Helminth Parasites in Goats

General Prevalence

Class wise Prevalence

Prevalence of Trematode Genera

Prevalence of Cestode Genera

Prevalence of Nematode Genera

III. Intensity of Infections

Degree of Infections

Single Infection

Multiple Infections

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- 9 : Egg of *Trichostrongylus*
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ABBREVIATIONS

ADPCD	:	Animal Disease and Parasite Control Division
ARS	:	Agricultural Research Station
FAO	:	Food and Agricultural Organization
CCPP	:	Contagious Caprine Pluro-Pneumonia
DLSO	:	District Livestock Service Office
GI	:	Gastro-Intestinal
HMG	:	His Majesty Government
IAAS	:	Institute of Agriculture and Animal Science
IELA	:	Import and Export of Live Animals
LARC	:	Lumle Agricultural Research Centre
LP	:	Livestock Production
MOAC	:	Ministry of Agriculture and Cooperative
NASc Conv.	:	National Animal Science Convention
PAC	:	Pakhribas Agriculture Center
PPR	:	Peste des Petits Ruminants
rpm	:	rate per minute
VDC	:	Village Development Committee
VEC	:	Veterinary Epidemiology Centre
WHO	:	World Health Organization