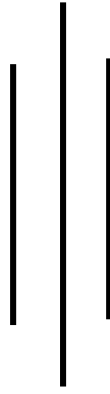
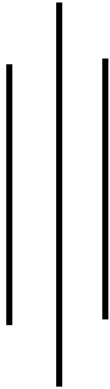


**Prevalence of Intestinal Helminth
Parasites in Rhesus monkey (*Macaca mulatta*)
of Swoyambhu and Nilbarahi Area
of Kathmandu Valley**



**A Thesis submitted in Partial Fulfillment of the
Requirements for the Master's Degree
in Zoology with Special Paper
Parasitology**

**By
Mary Dhoubhadel**



**To
Central Department of Zoology
Institute of Science & Technology
Tribhuvan University, Kirtipur
Kathmadu, Nepal
2007**

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RECOMMENDATION

This is certified that Miss Mary Dhoubhadel has completed her thesis work entitled **PREVALENCE OF GASTRO-INTESTINAL HELMINTH PARASITES OF RHESUS MONKEY (*MACACA mulatta*) FROM SWOYAMBHU AND NILBARAHI AREA** as a partial fulfillment of **Master's Degree of Science in Zoology** with special paper **Parasitology** under our supervision. To my knowledge her work has not been submitted for any other degree.

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On the recommendation of supervisor **DR. RANJANA GUPTA** and co-supervisor **DR. GANESH RAJ PANT** this thesis of Miss **MARY DHOUBHADEL** is approved for examination and is submitted to the Tribhuvan University in partial fulfillment of the **Master's Degree of Science** in **Zoology** with **Parasitology** as a special paper.

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ABSTRACT

The present study provides a base line data on faecal helminth parasites of Rhesus monkey from Swoyambhu and Nilbarahi area. As a whole 200 samples were collected. The faecal samples were examined by direct smear and concentration methods. In both the area the overall parasitization rate was 62%. Parasitization rate was found higher in Swoyambhu (67%) than that of Nilbarahi (58%). The result of the microscopic examination of faecal samples of Rhesus monkey demonstrated the presence of Nematode (85.82%), Trematode (93.14%), Cestode (7.08%) and Acanthocephala (3.93%). Out of the total positive samples, single infection of helminth parasite was found to be 65.3%, double infection 24.40% and multiple infections 7.08%. Prevalence rate of zoonotically infective gastro-intestinal helminth was found to be 83.46% and zoonotically non infective (16.53%). The species wise prevalence rate of gastrointestinal helminth parasites were as follows: Starting from the highest prevalence percentage of *Srongyloides fulleborni* (42.5%), followed by *Dictyocaulus* sp (7.87%), *Taenia* sp (7.08%), *Oesophagostomum* sp (6.29%), *Trichuris ovis* (4.72%), *Capillaria* sp (3.93%), *Ostertagia* sp (3.93%), *Cooperia* sp (3.93%), *Prosthenorchis elegans* (3.93%), *Dicrocoelium* sp (3.14%), *Trichostrongylus* sp (3.14%), *Oxyuris* sp (3.14%), *Toxascaries leonina* (3.14%), *Trichuris trichura* (2.36%), *Ascaris lumbricoides* (1.57%), *Toxocara canis* (1.57%) and *Chabertia* sp (1.57%).

All the genus and species of intestinal parasites are reported here for the first time from Rhesus monkey (*Macaca mulatta*) from Nepal whereas *Prosthenorchis elegans* is reported for the first time in Nepal. This is not even reported from any other host.

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ABBREVIATIONS AND ACRONYMS

EPG	Eggs per gram
gm	Gram
ml	Millilitre
rpm	Rate per minute
mins	Minutes
km	Kilometers
m	Meter
µm	Micrometer
ADPCD	Animal Disease Protection and Control Division
USSR	Union of Soviet Socialist Republics
IFP	Integrated Family Planning
PCP	Parasite Control Project
IAAS	Institute of Agriculture and Animal Science
CVL	Central Veterinary Laboratory
sp.	Species
mm	Millimeter
No.	Number
V.D.C.	Village Development Committee
T.U.	Tribhuvan University