

**PREVALENCE OF EGGS OF THREE TREMATODE
GENERA (*Fasciola* spp, *Dicrocoelium* spp and *Schistosoma* spp) IN
BUFFALOES OF SATUNGAL SLAUGHTER
HOUSE, KATHMANDU**

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

**BY
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**SUBMITTED TO
CENTRAL DEPARTMENT OF ZOOLOGY
INSTITUTE OF SCIENCE AND TECHNOLOGY
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RECOMMENDATION

This is to certify that **Ms. Bharatee Gurung** has successfully completed her dissertation work entitled "**PREVALENCE OF EGGS OF THREE TREMATODE GENERA (*Fasciola* spp, *Dicrocoelium* spp and *Schistosoma* spp) IN BUFFALOES OF SATUNGAL SLAUGHTER HOUSE, KATHMANDU**", as a partial fulfillment of the Master's Degree in Zoology with Special paper parasitology under our supervision and guidance. To our Knowledge her work has not been submitted for any other degree. Her work is an original one and deserve for recommendation.

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LETTER OF APPROVAL

On the recommendation of supervisor **Associate Prof. Dr. Ranjana Gupta** and Co-supervisor **Dr. Kedar Bahadur Karki**, Veterinary Officer, this dissertation work of **Ms. Bharatee Gurung** is approved for the examination and is submitted to Tribhuvan University in partial fulfillment of the requirement for the Master's Degree of Science in Zoology with Parasitology as a special paper.

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APPROVAL

We, the members of expert committee, evaluated the dissertation work entitled **"PREVALENCE OF EGGS OF THREE TREMATODE GENERA (*Fasciola* spp, *Dicrocoelium* spp and *Schistosoma* spp) IN BUFFALOES OF SATUNGAL SLAUGHTER HOUSE, KATHMANDU"**, approved that **Ms. Bharatee Gurung** is qualified for awarding Master's Degree of Science in Zoology with Parasitology as a special paper.

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ABSTRACT

A study on the prevalence of trematodes in buffalo was conducted in Satungal, Kathmandu during the period of December 2006-January 2007. A total of 210 stool samples were collected during the study period and examined employing sedimentation method. The overall prevalence of helminth parasite was found 61.90%. Significant difference was found in the prevalence of three genera of trematode infection among buffaloes. The parasitic infections of *Fasciola* spp was 38.57%, *Dicrocoelium* spp 18.10% and of *Schistosoma* spp 28.10%. Single infection (infection with one species) were observed among 8.57%. Mixed infections of different genera of trematodes (*Fasciola* spp, *Dicrocoelium* spp and *Schistosoma* spp) were also observed and was found in 14.76%. It was noticed that a higher infection rate was recorded in buffaloes above 2 years (71.65%) than buffaloes below 2 years (46.99%). Most of the buffaloes examined during the present survey had low to moderate *Fasciola*, *Schistosoma* and *Dicrocoelium* egg counts suggesting that the infections were usually sub-clinical. Pseudoparasites were also observed among 23 (10.95%) positive samples. No work regarding these pseudo parasites was found.

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ABBREVIATIONS

AGDP	:	Agriculture Gross Domestic Product
AGDT	:	Agar Gel Diffusion Test
CBS	:	Central Bureau of Statistics
CVL	:	Central Veterinary Laboratory
DNR	:	Department of National Resource
GI	:	Gastro-Intestinal
IELA	:	Import and Export of Live Animals
ISSA	:	Institute of Agriculture and Animal Science
ISSN	:	International Standard Serial Number
LP	:	Livestock Production
MAFF	:	Ministry of Agriculture, Fishes and Forests
RADIL	:	Regional Animal Disease Investigation Laboratory
rmp	:	rate per minute
SESA	:	System Engineering Society Australia
VDC	:	Village Development Committee
VEC	:	Veterinary Epidemiology Centre
VETCON	:	Veterinary Conference
VISSAN	:	Fast Food Company
WHO	:	World Health Organization
MOAC	:	Ministry of Agriculture and Cooperatives
LARC	:	Lumle Agricultural Research Centre

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