

**PREVALENCE OF GASTROINTESTINAL PARASITES IN DUCK IN
FOUR WARDS OF HARPUR VDC, PARSA, NEPAL.**



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A thesis submitted
in partial fulfillment of the requirements for the award of the degree of Master of Science in
Zoology with special paper Parasitology

Submitted To

Central Department of Zoology
Institute of Science & Technology
Tribhuvan University, Kirtipur,
Kathmandu Nepal

March, 2017

DECLARATION

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

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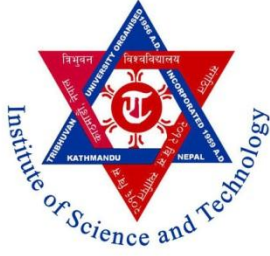
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This is to recommend that the thesis entitled “ **Prevalence of Gastrointestinal Parasites in Duck in Four Wards of Harpur Vdc, Parsa, Nepal.**” has been carried out by Gyanu Kumari Chaudhary for the partial fulfilment of Master’s Degree of Science in Zoology with special paper parasitology. This is his/her 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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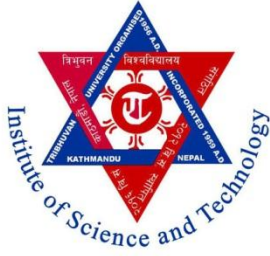
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LETTER OF APPROVAL

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CERTIFICATE OF ACCEPTANCE

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ACKNOWLEDGEMENTS

I extend my first and foremost gratitude to my supervisor, Dr. Mahendra Maharjan, for his continuous encouragement, support and valuable suggestions from the initial phase to completion of the thesis. I am also thankful to senior veterinary officer of Central Veterinary Hospital Mrs. Pragya koirala and senior lab. Technician Mr. Purna Maharjan for their support and guidance during laboratory work and other staffs for behaving friendly. I am thankful to our honorable Head of Department Prof. Dr. Ranjana Gupta, Central Department of Zoology, T.U. Kirtipur for providing me such an opportunity to carry out this dissertation work. I am indebted to my junior friends: Naresh Oli, Pujan Adhikari, Amrit Gurung and Pramod Chaudhary for their constant help during study period. I also acknowledge to all the teachers, friends and staffs of Central Department of Zoology for their continuous aspiration and motivation.

At last but not least, I am grateful to my family for the encouragement, support, and love which finally lead to the successful completion of the research work. Finally, I would like to dedicate this dissertation to my late father Mr. Ramnarayan Mahato.

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LIST OF ABBREVIATION

GI-	Gastrointestinal parasite
µm -	Micrometre
et al.-	and his associates
VDC -	Village development committee
Rpm -	Revolution per minute
FAO-	Food and agriculture organization
LGCDP-	Local governance and community development programme.

ABSTRACT

Domestic mallard duck (*Anas platyrhynchos*) and muscovy duck (*Cairina moschata*) are reared in rural area for eggs and meat which also reduces poverty by fulfilling the demand of cash. The present study was conducted to determine the general prevalence, identification, compare area-wise, sex wise, intensity wise as well as infection-wise prevalence of gastrointestinal parasites in domestic ducks belonging to the genus *Anas* sp., *Cairina* sp. and their cross breeds in four wards of Harpur VDC of Parsa district i.e. ward no.6 (Ektanga), ward no.7 (Teliya), ward no.8 (Baderwa) and ward no.9 (Ramauli). A total of 200 faecal samples were collected from October to November, 2016 A.D and examined by saline wet mount, floatation and sedimentation technique. Out of 200 faecal samples examined, an overall prevalence of 73.5% were found positive for parasitic infection. Total of eight GI parasites were found that include 6 genera of nematodes: *Ascaridia* sp. 60 (30%), *Capillaria* sp. 40 (20%), *Heterakis* sp. 36 (18%), *Syngamus* sp. 21 (10.5%), *Amidostomum* sp. 6 (3%) and *Oxyuris* sp. 4 (2%) whereas 2 genera of trematodes: *Echinostoma* sp. 46 (23%) and *Prosthogonimus* sp. 19 (9%) for the first time in Parsa district. The prevalence rate of nematode parasites (83.5%) were higher than trematode parasites (32%). The higher prevalence of GI parasites was in ward no.8 (82%) and the lowest was in ward no.6 (64%). Statistically, the difference in prevalence of GI parasitic infection among study area was found to be insignificant ($\chi^2=1.3549$, $P>0.05$). Similarly, the prevalence rate of GI parasites in female (73.68%) was higher than male (73.33%) but the prevalence of GI parasites regarding gender was insignificant ($\chi^2=1.5018$, $P>0.05$). Whereas significant difference in prevalence of intensity of parasite was observed between light intensity (53.5%), moderate intensity (49.5%) and heavy intensity (12.5%) ($\chi^2=21.517$, $P<0.05$). This study provides baseline data on prevalence and species distribution of helminths of domestic ducks in different wards of Harpur VDC.