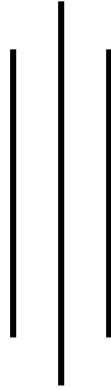
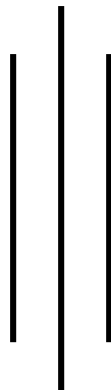


**Lymphatic Filariasis: Epidemiological Analysis of the
Situation in Salyantar VDC of Dhading District, Nepal**



**A Dissertation
Submitted in Partial Fulfillment of the
Requirements for the Master's Degree in Zoology**

**To
Central Department of Zoology
Institute of Science and Technology
Tribhuvan University, Kirtipur
Kathmandu, Nepal**



**By
Reena Byanju
2006**

RECOMMENDATION

This is to certify that **Miss REENA BYANJU** has completed her dissertation work entitled **“LYMPHATIC FILARIASIS: EPIDEMIOLOGICAL ANALYSIS OF THE SITUATION IN SALYANTAR VDC OF DHADING DISTRICT, NEPAL”** as a partial fulfillment of the Master’s degree of Science in Zoology with special paper Parasitology under my supervision. To my knowledge her work has not been submitted for any other degree.

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LETTER OF APPROVAL

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We certify that this dissertation presented by Miss **REENA BYANJU** entitled **“LYMPHATIC FILARIASIS: EPIDEMIOLOGICAL ANALYSIS OF THE SITUATION IN SALYANTAR VDC OF DHADING DISTRICT, NEPAL”** is satisfactory in scope and quality as a dissertation for the partial fulfillment of Master’s Degree of Science in Zoology with Parasitology as a special paper.

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ABSTRACT

Lymphatic filariasis, also known as bancroftian filariasis or elephantiasis is a mosquito borne disease which refers to the human filarial infection with the nematode parasite, *Wuchereria bancrofti*. Filariasis has its global distribution. It is endemic in different regions of Nepal. The present study was conducted from October 2005 to September 2006 and the study area was Salyantar VDC of Dhading district, site selected on the basis of elephantiasis situation and as recommended by District Health Office. A total of 516 night blood samples were collected from the ear lobe of respondents. The community people were informed about the study through mass orientation program and the information of participating respondents were collected by filling up the questionnaire. Microscopical observation revealed 117 microfilarial positive cases out of 516 respondents i.e. 22.67%. The highest distribution of filariasis was found in the age group >70 years (36.36%) while the least was found in the age group 10 years (12.37%). Regarding sex wise distribution, males (24.54%) were found to be more infected than females (21.28%) in the ratio of 1.2:1. The youngest person to be infected was a 4 years old boy and the oldest was an 85 years old man. Crude disease rate was reported to be 22.09% and total endemicity rate was 44.76%. The determinant factors for the prevalence of disease were illiteracy, lack of awareness about the disease, poor sanitation, careless of using nets, and carelessness about their health. Lymphatic filariasis is not much known to people. Thus people should be made familiar to this disease by organizing awareness programs, through mass media, radio, television etc. that will help to prevent the spread of disease and people will be alert of improving health, get prevented from the bite of mosquito, get regular health check up and treatment if MF is seen in blood. Also vector control measures should be applied side by side for the elimination of filariasis.

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Wuchereria bancrofti

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-) Map of Dhading District Showing the VDC under Present Study
-) Map of Salyantar VDC of Dhading District

LIST OF ACRONYMS

ADL	: Ademolymphagitis
Alb	: Albendazole
CDR	: Crude Disease Rate
CFA	: Circulating Filarial Antigens
DEC	: Diethylcarbamazine
DNA	: Deoxyribonucleic acid
DoHS	: Department of Health Service
EDCD	: Epidemiologicals and Disease Control Division.
ELISA	: Enzyme Linked Immunosorbent Assay
ER	: Endemicity Rate
FILDEC	: Filarial Diethylcarbamazine
HMG	: His Majesty's Government
ICT	: Immunochromatographic Test
LF	: Lymphatic Filariasis
LFE	: Lymphatic Filariasis Eradication
MDA	: Mass Drug Administration
MF	: Microfilaria
MoH	: Ministry of Health
NMF	: Nucleopore Membrane Filtration
PARASED	: Parasitological Research and Socioeconomic Development, Nepal
PELF	: Program to Eliminate Lymphatic Filariasis
TBF	: Thick Blood Film
VDBCRT	: Vector Borne Disease Research and Training Centre
VDC	: Village Development Committee
WHO	: World Health Day