

**Lymphatic Filariasis Survey in the Endemic Area (Sirsiya)  
of Rautahat 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  
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2006**

## **RECOMMENDATION**

This is to certify that **Mr. RAWET RANJAN KUMAR** has completed his dissertation work entitled “**LYMPHATIC FILARIASIS SURVEY IN THE ENDEMIC AREA (SIRSIYA) OF RAUTAHAT 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 his work has not been submitted for any other degree.

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## **LETTER OF APPROVAL**

On the recommendation of supervisor **Dr. RANJANA GUPTA**, this thesis of **Mr. RAWET RANJAN KUMAR** is approved for examination and is submitted to the Tribhuvan University in partial fulfillment of the requirements for Master's Degree of Science in Zoology with Parasitology as a special paper.

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## ABSTRACT

Lymphatic filariasis refers to human filarial infection with the nematode parasite (*Wuchereria bancrofti*). It has been known to be endemic in Nepal since a long time and its recognition as pathogenic parasite continues to be found throughout the world. A total of 527 blood samples were collected during the study period between September 2005 to July 2006 from Sirsiya (ward no. 13 of Gaur municipality). In this cross-sectional survey, Rauthat district was selected as the study area. The community people were informed about the study through the mass orientation programme. Night blood samples were collected from ear lobe. Questionnaire survey was performed to gain the necessary information of the respondents in study area. Out of 527 samples 29 samples (5.5%) were found to be positive for Microfilariaemia with age ranges between 2 years to 80 years. In the present study the highest distribution of filariasis was found among 51 to 60 years age group i.e. (14.29%) and no filarial case was found in the age group above 70 years. Regarding the sex-wise prevalence of disease, maximum infection was recorded in females i.e. 15/29 (51.7%) than the males i.e. 14/29 (48.2%). But statistically the difference between the males and females was found to be insignificant ( $\chi^2 = 0.0137$ ,  $P > 0.05$ ). The prevalence of disease was mainly due to illiteracy, lack of awareness about disease, carelessness to use of bed nets and poor sanitation. The lymphatic filariasis is not much known to many people. Thus people need to be familiarized with this disease and aware them through mass media, radio, and television. The people should prevent themselves from the bites of mosquito, regular health check up and treatment of the person when microfilaria is seen in blood should be done. There is also a need to control the vectors side by side through out the elimination programme.

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