ACKNOWLEDGEMENT

This is the opportunity to express my deep sense of gratitude and indebtedness to my supervisor, Dr. M.M. Goswami, Professor, Department of Zoology, Gauhati University for his invaluable guidance, critical observations and suggestions and constant inspiration throughout the period of study right from selection of the topic till completion of the thesis. His earlier work on enmeshed macro-invertebrate fauna in a tectonic lake of Assam is a source of inspiration and has been found helpful in developing the strategy for the present study, for which I am obliged to him.

I am thankful to the University Grants Commission for awarding me the UGC Teachers' Fellowship under the UCG Faculty Improvement Programme and the authority of Guwahati College where I have been working as a Sr. lecturer in Zoology Department for granting me study leave for availing the fellowship.

I express my sincere thanks to the Department of Zoology of Gauhati University for allowing me to execute the Ph.D. work by way of providing laboratory facilities in Fish Biology and Fishery Science Laboratory and the Aquaculture laboratory of the UGC- SAP (DRS) Project of the department.
I feel overwhelmed with heartfelt gratitude to Dr. A.K. Sanyal, Deputy Director, the Zoological Survey of India, Kolkata and to the Eastern Regional Centre located at Shillong for providing all possible help in confirmation of the species status of enmeshed fauna. I further acknowledge with gratitude the help received from the esteemed scientists of Z.S.I. namely, Dr. Amales Misra (O/C General Non-Chordata Section), Dr. B.C. Das (O/C C.E.L. Section), Dr. R. venkitesan (O/C Mollusca Section), Dr. P. Mukhopadhyaya (O/C Coleoptera Section), Dr. R. Babu (O/C M.I.O. Section), Dr. A. Chatterjee (O/C Platyhelminthes Section), Dr. A. Bal (O/C Hemiptera Section), Dr. M.K. Deb Roy (O/C Crustacea section), Dr. Dhriti Banerjee (O/C Diptera Section) and Dr. N. Sen (O/C Eastern Regional Centre of ZSI, Shillong) for their constant help and cooperation for identification of the faunae. I also express my special gratitude to Dr. C.K. Mandal, Dr. N. Saha and Mr. A. Mukharjii of Zoological Survey of India, Kolkata for providing information related to species identification as and when communicated personally.

My indebtedness is due to Dr. Eileen Harris of Parasitic Worm Group, Department of Zoology, The Natural History Museum, London and to Dr. Wim Willems of Department of Invertebrate Zoology, Swedish Museum of Natural History, Stockholm, Sweden for their prompt responses in worthy personal communications in respect of confirmation of identification of some turbellarian faunae.

My sincere acknowledgement with gratitude is also due to the State Public Analyst Laboratory of Assam, State Soil Survey Laboratory of
Assam, Assam Remote Sensing Application Centre, State Survey of Assam, Regional Sophisticated Instrumentation Centre, Shillong and Department of Instrumentation & USIC, Gauhati University for receiving help and laboratory facilities from time to time.

I am also thankful to the authorities of K.K. Handique library, Gauhati University; Library of Assam Agricultural University, Jorhat; Library of Indian Agricultural Research Institute, Pusa Campus, New Delhi; Library of Asiatic Society of Bengal, Kolkata and Library of Zoological Survey of India for providing me book facilities and for supplying me photocopy of some of the most valuable scientific communications.

It is my proud privilege to express special thanks to Dr. Fritz Paper, Museum of Zoology, Michigan University, USA, for his kind help in providing me relevant study materials in respect of a very rare molluscan species (*Camptoceras lineatum* Blanford) described for the first time through this work.

My cordial thanks and respect are due to Dr. A. Barkotoky, Professor and former Head of the Department of Zoology, Gauhati University and former Dean of Faculty of Science, G.U., Dr. D.K. Sharma, Professor and present Head of the Department of Zoology, G.U., Dr. H.C. Mahanta, Professor (Retd.) and Dr. A. Dutta, Professor, Department of Zoology, G.U. for their official help, encouragement, and valuable advices.

I am indebted to the Former Registrar of Gauhati University, Dr. M.C. Sarma and the present Registrar of G.U. Dr R.N. Das for their help and cooperation to meet all official formalities.
I am thankful to my well wishers and friends Mr. Gautam Das (Principal, Dhamdhama College, Nalbari), Mr. Arunv Barthakur (Presently working in WWF), Mr. Tapan Ch. Kalita (Sr. Lecturer, Dudhnoi College), Mr. T. Goswami (Sr. Lecturer, B.P. Chaliha College), Mr. Prassana Baruah (Scientific Officer, ARSAC, Guwahati), Dr. Munin Sarma (Agriculture Extension Officer, Mangaldoi), Mr. Sofikure Rahman (Cartographer), Mr. Munin Sarmah (Laboratory in-charge, State Public Analyst Laboratory of Assam), and to Mr. Niranjan Bhagawati (Sr. Instructor in Computer Science, Institute of Advanced Study in Science and Technology) for their continuous help and support throughout the research period.

My thanks are due to Mr. Mahendra Das (Field Assistant) and to the Villagers of Keotpara village of Pachim Guwahati for their help during my field works.

Last but not the least, I am thankful to my brother Mr. S.S. Kalita who has helped me a lot by providing computer facility during compilation of my thesis.

Gauhati University

September 5, 2007

(GIRINDRA KALITA)