ACKNOWLEDGEMENTS

I take this opportunity to express my deep sense of investigating gratitude to Dr. R.K. Jauhari, Reader, Department of Zoology, D.A.V. (P.G.) College, Dehradun for suggesting me the research problem, designing systematic procedure for experiments, planning the study and supervising each chapter of the thesis with patience by giving critical thoughts for its presentation and discussion.

I am highly indebted to my honourable supervisor of M. Phil., Prof. S.S. Lal, Ex - Head, Department of Zoology, C.C.S. University, Meerut (U.P.) for his unstained encouragements and many useful suggestions while designing the experiments. Thanks are also due to Dr. Dushyant of the same Department for his help in the compilation of this work.

I am thankful to the Head of Zoology Department and the Principal, D.A.V. (P.G.) College, Dehradun for providing necessary facilities for carrying out present investigation.

I am highly obliged to Dr. V.K. Tyagi, Head of Zoology Dept., Dr. P.K. Tyagi, Reader in Zoology and Dr. N.K. Tyagi, Vardhman College, Bijnor for their timely guidance and inspiration that enabled me to complete the work.

I owe my heartiest gratitude to Shri B.P. Verma, Principal, DIET, Ismilpur, Bijnor for co-operation and exhilaration throughout the study period and to Prof. I.J. Singh, Dept. of Fisheries, G.B. Pant University of Agriculture & Technology, Pantnagar (Udham Singh Nagar) for making available some of the experimental fishes and identifying the fish specimens.

I should not forget to express my deep sense of gratitude towards Dr. M. Mohan Director, Cold Water Fish Research Centre, Bhimtal, Nainital, Dr. B.L. Kushwaha, Reader, Dept. of Botany, R.M.P.P. College, Narsan for the sincere help and guidance.
Thanks are also due to Mr. Rajeev, Jal Vibhag, Bijnor for his prudent and immaculate suggestions in physico-chemical analysis of water samples and to Mr. Sanjeev Dass of the same office for collection work.

My grateful appreciation goes to the Director, Forest Research Institute, Officer-in-charge, Zoological Survey of India, Library-in-charge, Wild Life Institute of India, Dehradun, Library-in-charge, C.B.R.I., Roorkee and Chief Librarian-in-charge, C.C.S. University, Meerut for their full cooperation in providing me the necessary documentation as and when required.

My cordial thanks are due to Dr. N. Pemola Devi, SRF, Dept. of Zoology D.A.V. (P.G.) College, Dehradun, for her help in compiling the data and to Mr. Balbir Singh for helping me while performing small scale field trials.

I must also express my gratitude to my respected mother Smt. Kasturi Devi and father Dr. Kali Ram, Director, S.V.B. College, (College of Education), Meerut for their blessings, constant co-operation and inspiration.

I also wish to express my heartily obligation to my parent-in-law Smt. & Shri Ratiram, Sister-in-law Sanjeeta, Brother-in-law and my husband Mr. Subhash Kumar for extending their full cooperation. I also express my affection to my children who extended their cooperation in many invisible ways to me.

Place : Dehradun
Date: (Ms. Rekha)