ACKNOWLEDGEMENTS

I express my profound sense of gratitude to Dr. U.H. Mane, Research Guide in Environmental Sciences and Reader, Department of Zoology, Marathwada University, Aurangabad for his valuable guidance, constant encouragement, brotherly affection and great interest in research, for which I am indebted to him.

I am thankful to The Professor and Head, Department of Zoology, Marathwada University, Aurangabad for providing all research facilities during the course of this study.

My profound thanks to Dr. G.K. Kulkarni, Reader, Department of Zoology, Marathwada University, Dr. B.N. Pande, Reader, Department of Environmental Sciences, Marathwada University, Dr. V.K. Kotekar, Head, Department of Botany, Nutan Mahavidyalaya Sailu, District Parbhani, Dr. R.P. Patil, Head, Department of Environmental Sciences, P.V.P. College, Loni, District Ahmednagar and Mr. Jewirkar, Superintendent, Post-graduate section, Marathwada University for their constant encouragement during the tenure of my study.

I am also thankful to research laboratory colleagues Dr. B.K. Singh, Mr. Saokar, Mr. Kulkarni, Mr. Bhagde, Mrs. Arti and Mrs. Jadhav for their vigilant cooperation during the entire experimental work in the research laboratory.

I am indebted to a great number of friends for their assistance and encouragement. I am sure my friends like Chetan, Ranchor, Rajesh, Upendra, Vijay Jaiswal, Prashant, C.M. Deshpande and Dr. Panchal have got big heart to bear with me and always motivated me for the completion of my Ph.D. research work.
I feel it is my duty to express my deep sense of gratitude to my elder sister, Shubhangi, younger brother Sanjay and sister Seema for their constant encouragement.

I owe my deep sense of gratitude to my uncle Shri Vishwambharrao Patil and Shri Padmakarrao Patil, my maternal grandmother Smt. Sushiladevi, anti Smt. Ashalata Joshi and maternal uncles, Shri Prabhakarrao, Shri Vijaykumar, Shri Dinkarrao and Anil Kumar Joshi, my brother-in-law Shri Diwakarrao Joshi and my cousins Shri Chandrasheker, Vidhyadhar and Moreshwar, for their constant encouragement during the tenure of this thesis work.

No words to express my feelings towards my parents for their constant encouragement, without which it would have been impossible to complete this work, with love and respect, I am dedicating this thesis to them.

Lastly, I must record my thanks to Mr. Nitin Nikam and Mr. C.H. Narale for dextrous typing of the thesis and preparing the photomicrographs, respectively.

Date

( S. S. Patil )