Dedicated to My beloved parents

Mr. B. D. Diwan

& Mrs. Vandana B. Diwan I am very much glad to acknowledge the people who have contributed to this work. I we deep gratitude to so many people for their help, that pages would be required simply to list iem all. The following are pre-eminent.

First and foremost, I would like to express my deepest gratitude to my guide Dr. Pakash D. Raut. I have been extremely fortunate to work under his able guidance and his ristant support has helped me immensely throughout the tenure of my work. His active volvement and dedication with all his students has always been his priority. It was a seasure to conduct the dissertation under his guidance.

I would like to thank Prof. M. M. Salunkhe, Hon. Vice Chancellor for allowing me to mplete my M. Phil. degree in the university and for providing me with all the facilities. My necese thanks to Hon.Dr. Jay Samant for his support throughout and most appreciated aggestions and valuable comments on my work and for extending timely help to me whenever quired

I am really thankful to Mr. M. B. Rajpathak and Mr. U. R. Pendharkar from udarshan Chemical Industries, Pune for donating the colour pigments for my study.

I would sincerely like to thank Dr. Govindwar and Ashok Chougule from the epartment of Biochemistry for providing me the facility of microphotography. Thanks are se to Mr. Shailesh Raut for his diligent efforts, valuable time and for extending help in gitalization of plates. I also thank Department of Zoology and Statistics for helping me in e study period.

I would like to thank Mr. Dangare, Mr. Chavan, Mr. Bhange, Mr. Koli, Mr. Arvind Ltil, Mr. Chikhalvale, Mr. Sidhnerli, Mr. Dokare and Late Mr. Ghunakikar for their every ssible help in my research work.

I am very grateful to my friends and colleagues of Dept. of Environmental Science, ivaji University, Kolhapur. especially Mr. Sandip Sohoni, Ms. Nita Ghadge, Ms. Julie. Mr. kas Jadhav, Mr. Chandrashekhar Chandgade, Ms. Asawari Patil, Mr. Sudesh Manjarekar, T. Ashish Mane, Ms. Nilisha, Mr. Jalindar Kashid, Mr. Sandeep Mangalekar, Ms. Sonal Londe, Ms. Manisha Tike, Ms. Archana Injal and Ms. Priya Bawalekar.

I wish to express my thanks and appreciation to all those who may have contributed to is work even though anonymously.

Finally, I reserve my profound gratitude and immense debt to my family members who ways stood by me throughout the period of my struggle and paved my way without any fliculties. The credit of sincerity and the punctuality in this work really goes to my beloved aughter Aarya who always rejuvenated me in the study period. This work would not have me into its existence without their love, strong support, constant motivation and belief in e. I am indeed very fortunate and blessed to belong to a family who has always showered me with love and supported me throughout without any hesitation.

Ms. Sayali D. Phadnis