## Acknowledgement

I express my wholehearted gratitude to my Research Supervisor Dr. Punita Parikh for her invaluable guidance, perceptive criticism and encouragement throughout the course of this research work. My association with her impressed upon me that a great can be achieved by dedicated perseverance. She has moulded my scientific career and shaped my research personality. I am blessed and honored to have worked under her guidance. Thank you very much Madam.

It's my privilege to thank Prof. G. Sandhya Kiran, Head, Department of Botany for providing infrastructure to work and necessary facilities.

My sincere thanks are to Prof. A.C. Sharma, Dean, Faculty of Science and Late Prof. Nikhil Desai, Ex. Dean, Faculty of science, for providing me the research facilities. I would like to gratefully acknowledge Prof. Arun Arya, Ex. Head, Department of Botany, Prof. M. Daniel and other senior teachers of the department for their constant motivations, encouragement and advice in my work. Cooperation given by all non – teaching staff of my Department during my research tenure is thankfully accredited.

While conducting research I had the privilege of receiving valuable information and advices from all the teachers of this Department. I thank them all. My special thanks to Dr. Padamnabhi Nagar for his valuable suggestion, co-operation, painstaking efforts and readily extended help.

I am thankful to Prof. K.S. Rao and Prof. Subhramanium, Department of Bioscience, S. P. University, Vallabhvidhyanagar for permitting me to perform Light Microscopy and Atomic Absorption Spectroscopy (AAS) studies.

The work would have not completed without the help provided by Gujarat State Biotechnology Mission group. My sincere thanks to Shri. Akshaykumar Saxena, IFS — Director and Dr. Snehal Bagatharia, Sector Specialist — Agriculture Biotechnology, Gujarat State Biotechnology Mission, Gandhinagar for providing me an opportunity to undertake this project, for providing laboratory instruments as well as library facilities and helping me to gain more knowledge.

I extend my thanks to Mr. Nilesh Patil, Environment Department, M.S. University of Baroda, Vadodara for his kind approach and encouragement to complete this study successfully.

My special thanks to my Ecotoxicology lab-mates Soma Mazumder, Mr. Rahul Parikh, Ms. Payal Vyas, Dr. Tattu Shree Stuti and Mr. Rakesh for their cheerful cooperation and support whenever required.

I would like to express my heartfelt thanks to my family for their support and encouragement throughout this research work.

Above all I would like to thank almighty "GOD" for everything.

## Unadkat Krupa Vinodray

Department of Botany, Faculty of Science The Maharaja Sayajirao University of Baroda Vadodara 390 002. Gujarat (India)

Date: