ACKNOWLEDGEMENT

A journey is easier when you travel together. Interdependence is certainly more valuable than independence. This thesis is the result of years of work whereby I have been accompanied and supported by many people. I believe it is appropriate to acknowledge these people whom we still remember, those we know have directly shaped our lives and our works, and it is thus my pleasure to have this opportunity to express my sincere gratitude to those who have contributed to this work in one way or the other.

First and foremost, I thank God the Almighty, the creator of heaven and earth for giving me this humble piece of work, and being a guiding light to complete it successfully.

I would like to record my gratitude to my gracious mentor Dr. R. J. Verma, Professor, Department of Zoology, Gujarat University, Ahmedabad. His constant motivation, patience and support at each and every step has not only helped me in my research but to explore a “better me” in myself. His timely suggestions, ideas, criticism, enthusiasm and remarks helped me to outcast all the difficulties and give my best shot during the research. Above all and the most needed, he provided me unflinching encouragement and support in every possible way.

With profound gratitude and respect, I render my sincere thanks to Dr. M. V. Rao, Professor and Head, Department of Zoology, Gujarat University, Ahmedabad, Dr. N. K. Jain, Professor and Head, Department of Life Sciences, Dr. L. B. Goerge, Dr. H. N. Highland, Dr. K. R. Desai and Dr. Divya Chandel for extending their helping hand whenever needed throughout my research work.

With immense gratitude, I would like to thank Dr. Pranav Shrivastav, Associate Professor, Department of Chemistry, Gujarat University, Ahmedabad, for providing kind cooperation, constructive suggestions and valuable criticism during the course of my research.

I am extremely grateful to Dr. Yogesh T. Jasrai, Department of Botany, Gujarat University, Ahmedabad, for identification and authentication of the plants.

I offer my sincerest gratitude to Dr. Nitin Bhojak, for carrying out histopathological and histochemical analysis.

I sincerely thank the financial support from Lady Tata Memorial Trust, Mumbai, in the form of Senior Research Fellowship (SRF).

I render my sincere thanks to Mr. Sudhir Parikh from Advanced Analytical Research Institute for HPLC analysis and Torrent pharmaceutical for providing animals. I express my sincere love and sympathy for my dear rats who donated their valuable life for my research.

In my daily work I have been blessed with a friendly and cheerful group of lab team of Neha, Komal, Heena, Sneha, Hiral, Monali and Amit. I express my sincere and heartily gratitude to them.

There are no words, which can express my gratitude towards my dearest parents, Smt. Sumita and Shri Swapan Kumar and all my family members for their love, patience, support and understanding during the long years of my education.

I express my heartfelt gratitude to all those who have helped me directly or indirectly in the accomplishment of my studies.

SARMISTHA SAHA