ACKNOWLEDGEMENT

With immense respect, I bow my head and express my heartfelt gratitude to my Research Supervisor, Dr. N. S. Nagarajan, Professor of Chemistry, Gandhigram Rural Institute (GRI), Deemed University, Gandhigram, Tamil Nadu for his inspiring guidance, untiring help and valuable suggestions throughout the course of this work. Without his persuasive encouragement and moral support this work would not have been completed.

I thank Dr. G. Karthikeyan, Former Head, Department of Chemistry and Dr. M. Sundaravadivelu, Head, Dept, of Chemistry and all the teaching & non teaching staff of the Dept, of Chemistry for their constant encouragement in the completion of my Ph.D.

I express my sincere thanks to my beloved friends, Dr.C.N. Manoj, Managing Director and Dr. R. Priya, Director-R & D, Pelican Biotech., Cherthala, Alapuzha Dt., Kerala for all their help from the day one, I registered for my Ph.D. They were always kind enough to help me with my requirements in plant collection, discussions etc., in completing my thesis work.

I am grateful to Dr. Anuradha, Principal, Padmashree Institute of Medical Sciences, Bangalore for extending her help by providing their lab facility to carry out the Microprojadagation studies.

I sincerely thank Dr. P. Thirupathy Kumaresan, Professor of Pharmacology, Arulmiga Kalasalingam College of Pharmacy, Krishnan Kovil, Tamil Nadu for helping me in assessing the various pharmacological activities.
I thank Ms. P. Sivakami Sundari, Asst. Professor of Pharmacognosy, Dayananda College of Pharmacy, Bangalore for her help and support in carrying out the pharmacognostical work involved in my thesis.

I am grateful to GVK Bio Sciences Pvt Ltd, Hyderabad for allowing me to register for Ph.D. program during my tenure with the organization. I owe the organization and my then superiors there a lot. Though it is difficult to mention the names of all my colleagues at GVKBIO, who were always on their toes to help me, I must mention the names of Ms. Sangeetha, Mr. Anji Karun, Mr. Lavakumar, and Mr. G.S.Rao for being with me during the difficult times and for the untiring help with the data analysis.

I thank Dr. Sridhar Desikan, Biocon-Bristol Mayer Squibb Research Centre, Bangalore, my present boss for his encouragement and help in granting me necessary leave to complete this thesis.

I am extremely thankful to all the research scholars of Department of Chemistry, Gandhigram Rural Institute-Deemed University, Gandhigram, especially Ms. T. Radha, Mr. P. Rajesh Kanna and Mr. N. Muniyappan. for their valuable help and support during my research work

My sincere thanks go to my dear friend, Dr. Shambabu Joseph, Principal Scientist, GVKBIO for the encouragement that worked as a push to complete my research work.

Without the moral support and encouragement of my wife Ms. P. Geethavani, my daughter Ms. M. Priyanka and my son Chi. M. Arvind Karthik, it would not have been possible to complete this work.

(K. Muralidharan)