ACKNOWLEDGEMENTS

I offer my prostrations at the worshipful lotus feet of His Holiness Jagadguru Shri Bharathi Theertha Maha Swamiji, only due to whose grace I could begin, continue and complete this work.

It gives me great pleasure to express my profound sense of gratitude to my Research Supervisor Dr. P.B.B.N. Charyulu, Associate Professor and Head, Department of Microbiology, Sri Krishnadevaraya University, Anantapur for his unflinching support, incessant supervision, illuminating guidance, enormous encouragement and parental care throughout the period of this work and for providing facilities for the work.

I am indebted to the Faculty members of the Department of Microbiology, Prof. K. Venkateswarlu, Prof. R. Ramanjaneyulu, Prof. V. Rangaswamy, Dr. B. Rajasekhar Reddy and Dr. B. Venkatappa for their suggestions and kind cooperation.

Words do not suffice to express my feelings towards my parents Smt. M. Satyavathi and Sri M. Murali Mohan, brother Mr. M. Sesha Sai, sister Smt. M. Bhargavi, brother-in-law Sri M.T. Srinivasa Rao and little kids Chi Sri Vidya and Chi Bharathi for their benevolent gesture, unfailing support and constant encouragement without which I would not have been able to take up my research work.

I humbly express my gratefulness and heart felt thanks to Dr. P. Md. Akthar, Department of Statistics for statistical analysis of my data.
It gives me immense pleasure to acknowledge all my research colleagues Dr. G. Narasimha, Mr. C. Habeeb Khadri, Mr. Md. Raffi, Ms. N. Rajya Lakshmi, Ms. R. Jaya Madhuri and other friends for their moral support throughout my work.

I am grateful to the authorities of ICRISAT, Hyderabad, University of Agricultural Sciences, Bangalore, IISc, Bangalore, University of Hyderabad, Hyderabad for permission to make use of library facilities.

I owe my sincere thanks to Dr. Chinta Sudhakar, Department of Botany, Dr. N. Ch. Varada Charyulu, Department of Biochemistry and Dr. Muralidhar, Department of Bio-Technology for their support and encouragement.

I profusely thank non-teaching staff of the department viz., Mr. Nagaraja Rao, Mr. C. Santha Lingam, Mr. D. Peddana and Mr. Lakshmi Narayana, for their help.

I offer my utmost gratitude to Mrs. Charyulu, Chi Prasanna and Chi. Raghu for their personal help.

I lavishly thank Mr. V. Sahadevan for neat typing of the dissertation.

Not to fulfill a cold formality mechanically, but to foster a meaningful gesture whole-heartedly, I would like to acknowledge my sense of gratitude to all those who have been of some assistance, help and guidance to me directly or indirectly in the conception and execution of the present dissertation.

Any omission in this brief acknowledgement does not imply ingratitude.

KRISHNA VENI, M.S.