ACKNOWLEDGEMENTS

I express my deep sense of gratitude to my research supervisor, Dr. A. Vijaya Bhaskara Rao, Associate Professor, Department of Sericulture, Sri Krishnadevaraya University, Anantapur for his constructive criticism, thoughtful suggestions and untiring help, which have been a constant source of encouragement to me during the course of investigations. He has been a moral courage and motivation during moments of depression. I am very deeply indebted to him.

I am grateful to the Head & Chairman, Board of Studies, Prof. S. Sankar Naik, for his valuable help, affectionate and most generous encouragement throughout the investigation. I am also thankful to all teaching and non-teaching staff of the faculty of Sericulture, especially Dr. P Lakshminarayana Reddy, Dr. B. Sujatha and Mr. B. Sathyanarayana, Asst. Professor for their valuable help.

I owe my gratitude to Ch. Satyanarayana Raju (Director, RSRS), and Dr. M. P. Reddy (Scientist – C), Mr. Vijaya Naidu and Mrs. S. Viduyunmala (Scientist – C) of RSRS, Rapthadu, Anantapur, for their help in providing mulberry varities for my research work and constructive suggestions during the whole period of the study.

My humble thanks are due to Dr. N. Ch. Varadacharyulu, Professor, Dept. of Biochemistry, Prof. Chowdoji Rao, Dept. of Polymer Science, Prof. V. Rangaswamy, Dept. of Microbiology, Dr. D. Prabhakar, Assistant Professor of SKIM. I am also thankful to my colleagues and senior scholars Dr. S. Venkata Swamy Naik, Dr. S. Smitha, Dr. K. Anil Kumar, and Dr. Ibrahim Basha.
I am also thankful to my friends M. Srinivasulu Dept. of Law, A. Ankanna, Dept. of English, B. Viswanath Dept. of Microbiology, N. Mani Kumar, Assistant Professor, Dept. of Electronics, GITAM University, Mr. D. Nagesh, Anantapur, Dr. M. Thyagaraju, Dept. of SKIM for their help in preparing the thesis.

Words fail to convey my sense of profound regards and indebtedness to my parents and family members, my mother Smt. P. Suvarnamma, my father Late Linga Swamy, my brothers P. Jayakumar, P. Sudarshanam, Technician, Dept. of Instrumentation, Mr. P. Ravi Mohan, Mr.P. Ratan Raju, M. Tech. (Mech), my life partner, Mrs. J. M. Mary Kezia, Father-in-Law, Mr. J.M.Caleb and Mother-in-Law Ms. Mariyamma, nieces P. Srilatha, P. Rishika, and P. Harshini for their constant motivation towards academic excellence. I am also thankful to the last person, but not the least, to Mr. Prashanth (Photographer).

University Grants Commission, New Delhi is gratefully acknowledged for providing Rajiv Gandhi National Fellowship.

P. Vara Prasad...