Acknowledgements

I wish to express my profound sense of gratitude to my teacher and research supervisor Dr. P. Sreenivasulu, Professor of Virology, S.V.University, Tirupati, for suggesting me this problem. I remain indebted to him for his valuable guidance, enlightening discussions, critical comments and constant encouragement. His wisdom, combined with enthusiasm, is central in bringing out this thesis to the present form. I take this opportunity to express my heartfelt thanks to my research supervisor for all that he has done to me and I consider working with him is the greatest privilege I ever had.

I wish to express my thanks to Dr. Krishnaprasad, Horticulture Research Station, Kovvur, West Godavari District, and Andhra Pradesh for providing me plant material for my research work.

I record my deep sense of gratitude to Prof. Glyn Harper, Department of Disease and Stress Biology, John Innes Centre, Colney Lane, Norwich NR4 7UH, UK for providing me primers and enlightening discussions during the period of this study.

I express my sincere thanks to my teacher Dr. D. V. R. Sai Gopal, Professor and Head, Department of Virology S.V.University, Tirupati for his co-operation in the successful completion of my research work.

I express my sincere thanks to Dr. R. Sudheer, Dr. V. V. S. P. Prasad, Dr. P. P. V. G. K. Sarma, Dr. Hema, and for their help and critical suggestions and constant help during my research work.

I express my heartfelt thanks to Dr. A. Nagarjun, Mr. Surendra (Biochem), Dr. Giri Prakash and Mr. Koateswara Rao for their transparent and healthy suggestions and constant encouragement for my growth.
I extend my deep and sincere thanks to my friends and research colleagues Mrs. Malathi, Dr. Prasanna, Dr. Sarovar, Dr. Sreenivasulu, Dr. Subbareddy, Mrs. Padmavathi, Mr. Satheesh, Mr. Johnson, Mr. K. P. Srinivas, Mr. Naresh, Mr. Siva Prasad, Mr. Subbrahmayam, Mrs. Mahathi, Mr. Suri, Mr. Hari Prasad and all my friends for their joyous company, help and encouragement I received throughout my research work.

I wish to express my sincere thanks to Rajanna, Chinnabba, Purushotham, Muniswami Reddy, Kala, Chandra, Suresh and Devaraju for their help during my research work.

I am indebted in a measure beyond words to my most beloved parents, Smt. B. Suseela and Sri. B. Subbaiah who have given me life and taught the concepts of life. I wish to express my warmest feelings and affection to my sister and brother Ms. Aruna and Mr. B. Murali for their constant encouragement throughout my life. Diction is not enough to express my gratitude and regards without whose everlasting love and help in every walk of life, this work would not have been possible.

Finally, I express my special thanks to University Grant Commission, New Delhi for providing me Rajiv Gandhi National Fellowship.

I am also thankful to all those who helped me directly or indirectly in completing this Thesis.
“There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning”

Jiddu Krishnamurti