ACKNOWLEDGEMENT

I have great pleasure in expressing my deep, sincere and heartfelt sense of gratitude and indebtedness to my guiding teacher, Dr. (Sr.) Avita, Professor (Retd.), Department of Botany, St. Teresa's College, Ernakulam for her esteemed guidance, constant encouragement and parental love through out the course of this investigation. I wish to owe my intense gratitude to our dear Principal, Sr. Emeline for providing all the facilities to carry out this study.

My grateful thanks are due to Dr. (Sr.) Merlee Teresa, for her valuable suggestions. I am obliged to Prof. K.K. Parvathy (Retd.), Prof. Thangam Mathew, Sr. Tessa and all my beloved teachers of the department.

The timely help given by Dr. D.I. Arockia Samy, department of Botany, St. Joseph's College, Trichy is gratefully remembered. I am obliged to Dr. G. Kulandaivelu, School of Biological Sciences, Madurai Kamaraj University for the SEM photographs and Sri. H. Krishna Iyer, CIFT, Cochin for the statistical analysis.

I recall with gratitude the library facilities and help extended to me by the authorities of CMFRI, Cochin, RRII, Kottayam, University of Kerala, Trivandrum, St. Joseph's College, Trichy and Madurai Kamaraj University, Madurai.

My deepest thanks are due to Miss. Victoria P.K., Research Scholar, Department of Botany, St. Teresa's College, Ernakulam, without whose timely help, loving care and constant encouragement this work would not have completed in time. I am also thankful to my colleagues, Mrs. Lizzy Mathew, Mrs. Beena
Suresh, Dr. Sheela D., Dr. Thara K. Simon and Dr. Annie Deleela for their help at various stages of the preparation of this thesis. I extend my sense of gratitude to all the non-teaching staff of this department for the help rendered.

I am thankful to the services offered to me by BICS Computer Centre, Ernakulam, especially to Mr. Biju V. George and all other staff members for neatly typing the thesis.

The JRF awarded to me by Mahatma Gandhi University, Kottayam is gratefully remembered.

Last but not least, I record my heart felt thanks to my beloved parents, brother and sister for their love, blessings, encouragements and help without which this would not have been a successful effort.

Liza Jacob