Acknowledgements

I sincerely thank

Dr. B.D. Ranjitha Kumari, Reader, Department of Plant Science, Bharathidasan University, Tiruchirappalli for her inspiring guidance, scientific freedom, meticulous editorial care and constant encouragement in the successful completion of this work.

Dr. K. V. Krishnamurthy, Professor and Head, Department of Plant Science, Bharathidasan University, Tiruchirappalli for his kindness and providing me the needed facilities during the course of investigations.

Dr. N. Jayabalan, Reader, Department of Plant Science, Bharathidasan University, Tiruchirappalli for the help, suggestions and providing facilities.

Mr. G. Jegadeesan, Head of the Department of Botany and Mr. A. Theodore Jeyaseelan, Principal (In-charge), Government Arts college, Karur for the permission given to carry out part of my work in the department laboratory.

Dr. K. Kumarasamy, Former Principal, Government Arts College, Karur (Regional Joint Director, Coimbatore) for his encouragement, constructive suggestions and critical comments during my work.

Dr. P. Jayaraman, Director, Plant Anatomy Research Centre, West Thambaram, Chennai for permitting me to carry out the anatomical studies in his laboratory and his valuable suggestions.

Dr. M. V. Rao, Reader, Department of Plant Science, Bharathidasan University, Tiruchirappalli for his suggestions.

Dr. T. Boopathy, Mr. K. Murugesan, Dr. N. Samy Veerappa, Mr. M. Ramakrishnan, Mr. N. Muthukumarasamy, Dr. K. Kala, Mr. P. Ayappan, Mrs. M. Rajeswari, Dr. G. Thirupurasundari, Mr. K. Palanisamy, Department of Botany, Government Arts College, Karur for their help and encouragement.

Head and members of staff, Department of Zoology, Government Arts College, Karur for their help and encouragement.

Dr. (Mrs.) S. Amerjothy, Reader in Botany, Presidency College, Chennai for her valuable help in anatomical preparations.

Mrs. P. Banumathi, Lecturer (SG), KNGAC, Thanjavur and Mrs. A. Lakshmi Prabha, Lecturer, Department of Plant Science, and Bharathidasan University, Tiruchirappalli, for their encouragement.

Mr. P. Baskaran, Mr. M. Ganesan, Miss. N. Karpagam, Mr. M. D. Saravannoomorthy and Miss. Thulasir Pillai, Research Scholars, Department of Plant Science and Mr. M. J. Abdul Hameed, Department of Biotechnology, Bharathidasan University for their help.
Mr. C. Malaimuthu, Mr. R. Balasubramanian and Mr. K. Velusamy, former students, Government Arts College, Karur for their valuable help.

Miss. R.B. Komaleeswari and Miss. N. Parimala, Plant Anatomical Research Centre, for their help in anatomical preparations.

Mr. V. Chinnasamy, Headmaster, Government Higher Secondary School, K. Paramathy, Karur, Mr. P. Balasubramanian, Mr. V. Ponnusamy, Mr. A. Karuppannan, Post Graduate Teachers, Government Higher Secondary School, Velliyanai, Karur and Mr. K. Selvaraj, Post Graduate Teacher, Government Girls Higher Secondary School, Karur for their help and encouragement.

Mr. V. Muthukumaran, Manager, Ceeal Analytical Lab, Chennai for his help in HPLC analysis

Dr. T. Senthil Kumar, Mr. M. Vijay Venkatesh and Mrs. A.T. Vasantha, Staff members of Office, Department of Plant Science, Bharathidasan University, Tiruchirappalli for their co-operation.

Scholars of Dr. N. Jayabalan Unit, Dr. K.V. Krishnamurthy Unit, Dr. M.V. Rao Unit, Bharathidasan University, Tiruchirappalli for their help.

my family members and relatives for their kind co-operation and encouragement to complete my work.

(P. VELAYUTHAM)