Acknowledgements

I avail this opportunity to express my deepest sense of gratitude, to my beloved teacher, knowledge hungry, excellence pursuing guide Dr. Shobha Jagannath, Professor, Department of Studies in Botany, University of Mysore, for provoking suggestions, encouragement, valuable interaction, and guidance throughout my research work.

I am thankful to Prof. Shobha Jagannath Chairperson, Department of Studies in Botany, University of Mysore, for her encouragement and also for the facilities provided during my work.

I take this opportunity to owe a deepest debt of gratitude to my revered teachers Prof. K.A. Raveesha, Prof. G.R. Janardhana, Prof. M.S. Sudarshana, Prof. S. Leelavathi, Dr. M.S. Sharada, Dr. K.N. Amruthesh, Dr. Rajkumar H.Garampalli and Dr. M.S. Nalini, Department of Studies in Botany, University of Mysore, Mysore for their co-operation and valuable suggestions during my research work.

My special thanks to, who helped me a lot during my work. It will be always remembered; the help rendered by all the Research Scholars, Post Doctoral Fellows and Guest faculties of our department.

I thank to my lab mates Mrs. Nethra N.S., Mr. Prithviraj H. S., Mrs. Parvathi, G.R. Miss. Anvitha N R, Miss. Vinutha and Miss. Manasa Sangeetha who helped me during my work. It will be always remembered.

I express my love from inner core of my heart to endearing friends, Mr. Mahendra, C., Mr. Guru, C., Mrs. Manasa, G., Mrs. Bhavana, N. S. for their
affectionate love, inspiring encouragement, moral support and sustained interest throughout my studies.

I am very grateful to my beloved parents for showering blessings, encouragement, co-operation and provide me an opportunity in quenching my thirst for knowledge and pursuing my academic goals.

I also thank all the Office Staff and Gardeners of the Department for their constant help during my research work.

I take this opportunity to thank the University of Mysore, Department of Studies in Botany for the facilities provided during my work, and I extend my thanks to all my friends and well-wishers who have helped me on different occasions during the course.

Finally, I thank all those who helped me directly or indirectly during this study as well as in the preparation of my thesis.

Hemanth kumar, N. K.