

ACKNOWLEDGEMENTS

It is my profound privilege to place on record my deep sense of gratitude to my supervisor, Dr. Renu Bhardwaj and my co-supervisor Dr. A.K. Thukral, Department of Botanical & Environmental Sciences, Guru Nanak Dev University, Amritsar, for their guidance, constructive feedback and persistent motivation.

I also acknowledge the Head of the Department of Botanical and Environment Sciences, Dr. Satwinderjeet Kaur for providing infrastructural facilities to carry out the research work. I am also grateful to my teachers for their invaluable advice during the course of the present investigation.

Special acknowledgement to Vinod Kumar, Ripu Daman Parihar and my other research mates for their time to time help. My sincere thanks and appreciation also goes to the Office and the Botanical Garden Staff of the Department.

I owe my gratitude to the Department of Science and Technology, Government of India, for providing me INSPIRE Fellowship to pursue my Ph.D. I also acknowledge University Grants Commission, New Delhi, for providing sophisticated instrumentation facilities.

Last but not the least, I would like thank to my parents (Mr. Jia Lal Sharma & Mrs. Santosh Kumari), my sisters and my brother for supporting and encouraging me throughout my education at the University.

Anket Sharma