ACKNOWLEDGEMENT

Heartfelt obligation to my research supervisor, the amiable humanist Dr. M.V. RAO, Reader, Department of Plant Science, School of Life Sciences, Bharathidasan University, for his valuable guidance and avail shown on me throughout the course of the investigation.

Irredeemable gratitude to Dr. K.V. KRISHNAMURTHY, Professor and Head, Department of Plant Science, Bharathidasan University, for providing infrastructural facilities and oriental salutary during the research period.

Whole hearted grateful thanks to Dr. N. JAYABALAN, Reader, Department of Plant Science, Bharathidasan University, for his involvement in academic prosperity and multitudinous help rendered, early from my entry into the area of research.

Thanks to my former teachers of School of Life Sciences, Bharathidasan University, colleagues and friends for their moral support, helpful comments and criticism.

Grateful thanks to Dr. S. M. JAIN, Plant breeding and Genetics Section, International Atomic Energy Agency, Vienna, Austria and Dr. P. K. GUPTA, Senior Scientist, Weyerhaeuser Inc., Tacoma, Washington, USA, for their valuable and constructive suggestions during the preparation of the manuscript.

Support as encouragement, inspiration, advice and practical help of my ever loving family members has been especially important to the successful completion of this thesis.

Beholden to COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH for subvention.

Deograting profusely for all visible and invisible powers and for each one who played a role in consummation of my object, I remain.

N. KOMALAVALLI