ACKNOWLEDGEMENTS

First and foremost, I gratefully remember Merciful and Almighty God who enabled me to conduct and complete the research work successfully.

I find great pleasure to show cordial and heartfelt respect to my supervisor, Dr. Y.P. Singh, Scientist E, Forest Pathology Division, FRI for his keen scholastic supervision, valuable constructive suggestions, useful criticism, kind cooperation and inspiration in planning and execution of the research work as well as in editing the thesis. He painstakingly helped me in each and every step of my work.

I would like to sincerely express my gratitude to Dr. Vineet Kumar, co-supervisor and Scientist E, Chemistry Division, FRI for his valuable suggestions and supervision in chemistry part of the thesis work.

I am extremely thankful to Dr. S.S. Negi, Director, FRI, Dehradun, for granting permission for conducting research work in this premier institute.

I also feel thankful to Dr. A.N. Shukla, Chairman, RAC and ex-head Forest Pathology Division, FRI, for his critical suggestions.

I must record my gratefulness to Dr. N.S.K. Harsh, Head, Forest Pathology Division, FRI for providing necessary facilities and encouragement for the research work.

I am thankful to Dr. Veena Chandra, Dr. P.S. Rawat and Mr. Jawaid Ashraf, Members, R.A.C. for their meaningful evaluation of my research work.

I would like to thank Dr. A.K. Tripathi, Registrar, FRI University for all the help extended at different phases of my degree.

I am greatly indebted to Dr. V.K. Varshney, Scientist E and Dr. Rashmi, Scientist B, Chemistry Division for allowing me to avail departmental resources.

I wish to convey my thanks to Shri Shailendra Kaushik, Chief Librarian, NFLIC, FRI for his co-operation in literature survey and arrangement.
I must convey my thankfulness to Shri A.S. Chauhan, Statistical Division, ICFRE, who improved my knowledge of statistics and helped me in data analysis of my work.  
Thanks are also extended to Dr. Amit Pandey, Scientist E and all the employees of Forest Pathology Division, FRI for making conducive environment to carry out the research work.  
I am thankful to Dr. Bikram Singh, Head, Natural Plant Products Division, Institute of Himalayan Bioresource Technology, Palampur, for help in recording \(^1\)H and \(^{13}\)C spectra of the compounds.  
My sincere appreciation goes to my ex-senior, Dr. Rashmi Verma; my labmates, Kartik Uniyal, Solomon Das, Rituraj, Sajala Mishra, Helly, Kavita, Archana and Diwakar from Pathology Division and Late Manmohan Uniyal, Usha, Shanti, Madhusudan, Gajendra, Deepika and Arvind Tomer from Chemistry Division and all other friends for their compassion, company and helping hand during the research work.  
It is beyond words to express my appreciation, gratitude and esteemed respect for my parents and brothers for their unconditional love, ever willing help, patience, constant encouragement and their faith in me with always kept me focussed on my objectives and helped me achieve my goals.  
Grateful thanks to all those who helped me directly or indirectly during my degree.  
Finally, the errors that remain are mine alone.

FRI, Dehradun  
(Prerana Badoni)