ACKNOWLEDGEMENTS

I would like to convey my deep sense of gratitude and sincere thanks to my guide Dr. Vadlapudi Kumar, Reader, Department of Biochemistry, Kuvempu University – P.G. Centre, Shivagangothri, Tholahunsae, Davangere for assigning the work, stimulating discussions and fatherly inspiring guidance throughout my research work with keen interest.

I would like to express my heartily indebted thanks to my beloved co-guide Dr. C. K. Ramesh, H.O.D, Department of Biotechnology, Sahyadri Science College, Kuvempu University for valuable discussion and suggestions and guiding the assigned task with individual involvement.

Its my pleasure to extend my sincere thanks to Prof. B. S. Sherigara, Honourable Vice-Chancellor, Kuvempu University, Prof. Gopal M. Adavirao, Chairman, Department of Biochemistry and Prof. Basavaraj Madhusudhan, Co-ordinator, Department of Food Technology, Shivagangothri, Kuvempu University, Tholahunsae, Davangere.

I take this opportunity to convey my heartfelt thanks and warm regards to Prof. T. S. Hooviah Gowda, former Principal, Sahyadri Science College (Autonomous), Prof. B. R. Sidharamappa, Principal Sahyadri Science College (Autonomous), Prof. Malteshappa, ex-chairman, Department of Chemistry, Sahyadri Science College (Autonomous), Prof. Jayadevappa, Chairman, Department of Chemistry, Sahyadri Science College (Autonomous), Prof. Padanaban, Department of Zoology, Sahyadri Science College (Autonomous), for their constant support during my research work.

I am very much thankful to and also I would like to convey my heartly thanks to Dept of Biotechnology for providing basic laboratory facilities. I would also like to thank Dr. Ramesh Babu, Head of the department of Seed technology, for his support during my research.
I also take this opportunity to convey my heartfelt thanks and warm regards to Dr. M. H. Moinuddin Khan, Lecturer, J. N. N. College of Engineering, National Educational Society®, Shimoga.

In this moment, I would like to thank Dr. Basavaraj Padmasali, Dr. B.C. Gowdershivavannavar, Dr. K.P. Latha, Ms. Anitha, Dr. Vagdevi, for their timely help. I am also very much thankful to Dr. Satisha J. Gonchigara., Chethan N.I., Kavitha K.R., for their support during my research.

I would also like to extend my regards to my memorable research team and friends including Dr. Fasiulla, Nagana Gowda, Chidananda, Department of Chemistry Sahyadri Science College (Autonomous), Veerashree, Raghavendra, Department of Biochemistry, Davangere. Parmesha M., Anil Kumar H.S, Asha Srikanth, Department of Biotechnology, Sahyadri Science College (Autonomous), Dr. Shoba K.S. Department of Microbiology, Sahyadri Science College (Autonomous). It is hard to write the appropriate acknowledgements that reflect their assistance, inspirations and love.

My sincere thanks to Prof. S. Manjappa, H.O.D, Dr. Suresh, Mr. Prasanna, Mr. Halesh Dept of Chemical Engineering, BIET for their timely help in carrying out HPLC pertaining to my research and Prof. Rananjani Gowda and Mr. Ramacandra, GKVK, for their help in providing Agrobacterium strain (EHA 101) and also to Mr. Rajeshaker, Chromous Biotech, for their assistance rendered during PCR technique.

I would also like to extend my regards to Chandrababu, attender, Department of Biochemistry, Sahyadri Science College (Autonomous).

Without failing in my duties, I would like to thank all the teaching fraternity who taught me at different levels whose inspirations and encouragements were responsible for me to attain this level.

It's my prime duty which gives me immense pleasure and satisfaction to thank my father, Sathyanarayana R and my mother, Giriya Sathyanarayana whose instilling aspirations lead me to take up this research project and for their support and encouragement in each and every moment of my life. I am also thankful to my brothers Dr. Gururaj. S and Krishna. S. for their valuable support and courage extended to me.

Mr. RAGHAVENDRA. S.