Acknowledgement

It is my great pleasure to express my sincere gratitude and indebtedness to my supervisor Dr B.K. Dutta, Professor and Dean, Department of Ecology and Environmental Science, Assam University, Silchar, Assam for the completion of this research work. The success of this research work is the result of his wisdom, noble guidance, matchless supervision and kind words of encouragement, which can never be described in words.

I have the pleasure in expressing my heartfelt gratitude and everlasting indebtedness to my co supervisor Dr Dileep Kumar B.S. Principal Scientist, Biotechnology Division, for giving me the kind opportunity to complete this research work in the Biotechnology division of NEIST, Jorhat, Assam and also for his valuable guidance, constant encouragement during the course of my investigation and for providing all the facilities made available for the part of the research work carried out by me in his laboratory.

I thankfully acknowledge Prof. D.C. Ray, Head Department of Ecology and Environmental Science Prof. A.K. Das, Prof. J. Rout, Prof. A. Gupta, Dr P. Choudhury, all the faculty members of the department for their kind cooperation and help during the course of my research work.
I offer my sincere thanks to the Director, North East Institute of Science and Technology (NEIST), Jorhat for providing all the facilities made available for the part my research work.

I consider myself extremely fortunate to get considerable help from Dr H.P. Dekaboruah, Principal Scientist in Biotechnology Division, NEIST, Jorhat, for giving me valuable advice and suggestions related to my work.

I would like to offer my sincere thanks to Plant pathology Division of IARI, New Delhi, and IMTECH, Chandigarh for supplying and identifying fungal and bacterial strains.

I wish to express my sincere thanks to the General Manager and Deputy Manager and staffs of the Rosekandy Tea Estate for their help and co-operation for the field experimental work in the Mechipur Division of the tea estate.

I offer my sincere thanks to the technical and non-technical staffs of the department of Ecology and Environmental Science for their help and co-operation.

I extend grateful thanks to my senior research scholars Late Dr Ranabijoy Gope, Dr Dipendra Singha, Dr Hafsa Sultana, Dr Kulendra Ch. Das, Ganga rani Devi and my colleagues research scholars Abhijit Sarma Roy, Rosy Yein, Ipsita Duruah, Nikhil Das, Abdur Razzek, Romila Thoudam Nabajyoti Borah, Dharitri Bora for their practical and moral support.
I would also like to thank other research scholar for their kind cooperation.

I extend grateful thanks to the University Grants Commission, New Delhi, for granting financial assistance (RGNF) to carry out my research work successfully.

I also express my deep feelings of sincere gratitude to Miss Himakshi Pathak of Gauhati University, Department of Law, for her help, cooperation and moral support during my research work.

Lastly, this work would have been impossible without the blessing of my parents and so a special thank you to them.

Place: Silchar

Date: 17/05/13

Pranjal Morang