

ACKNOWLEDGEMENT

I have much pleasure in expressing my deepest sense of gratitude to my supervisor Dr. Aniruddha Saha, Associate professor, Department of Botany, University of North Bengal and my co-supervisor Dr. Pranab Ghosh, Reader, Department of Chemistry, University of North Bengal for their inspiration, encouragement and guidance to execute the work. I am grateful to them for their help and advice throughout the present work. I am also thankful to Prof. A.P.Das, Prof. B.N.Chakraborty, Prof. P. K. Sarkar, Prof.(Mrs) U. Chakraborty, Dr. A. Sen, Dr. S. C. Roy, Sri. P. Mandal, Department of Botany, and Dr.(Mrs) Dipanwita Saha, Assistant professor, Department of Biotechnology, for their valuable help and/or suggestions during the course of this work.

Special thanks are due to Dr. Dilip De Sarkar Principal, Raiganj University College and Mr.Tapan Majumder, Reader, Department of Botany, Raiganj University College, for providing some laboratory facilities.

I express my heartiest thanks to my colleagues Mr.Amitava Mandal and Mr.Golam Rasul, Department of Chemistry for helping me in various ways. I am also thankful to Mr. Shankar Ghosh, Ms. Lopamudra Das, Mr. Bikram Saha and Mr. Hrishikesh Mandal of Department of Botany. Special thanks are due to the farmers of Kashibati, Raiganj for permitting me to perform some field experiments.

Finally, I express my gratitude and respect to my parents Mr. Debabrata Chakraborty and Mrs. Anjana Chakraborty for their endless inspiration, affection and encouragement. Special thanks are due to my beloved husband Mr. Ujjwal Bhattacharjee for his continuous encouragement and support. I am thankful to my sister Paromita Chakraborty and other family members.

Madhumita Chakraborty
Madhumita Chakraborty 27.08.2012