

Acknowledgement

I have much pleasure in expressing my deepest sense of gratitude to my supervisor Dr. Aniruddha Saha, Reader and Head, Department of Botany, University of North Bengal, for his inspiration, encouragement and guidance throughout the execution of this work. I am grateful to Dr. (Mrs.) Dipannwita Saha, Lecturer, Department of Biotechnology, for her ungrudging help and advice at all the times. I am also indebted to Prof. A. P. Das, Prof. B. N. Chakraborty, Prof. P. K. Sarkar, Prof. (Mrs.) U. Chakraborty, Dr. A. Sen, Mr. P. Mandal and Mr. S. Roy of Department of Botany, University of North Bengal for their valuable encouragement throughout the course of this work.

Special thanks are due to Dr. J. Pal of Department of Zoology, University of North Bengal for providing some laboratory facilities. I am thankful to Dr. Sourish Dasgupta, research associate of our laboratory for his help and advice in various times.

I am thankful to Dr. P. N. Chowdhury, ITCC, IARI, Pusa, New Delhi for identifying some of my organisms and I am also thankful to Dr. A. Chowdhury, UBKV for supplying me one fungal culture. I am also thankful to Dr. Y. V. Singh, Professor of Brinjal Breeder, G. B. Pant University, Pantnagar for supplying me seeds of some brinjal varieties. Thanks are also due to the Director, Indian Institute of Horticultural Research (ICAR), Bangalore for supplying me seeds of some brinjal varieties. I am thankful to the farmers of Barobisha and other parts of North Bengal for permitting me to do various field experiments. Thanks are also due to Mr. Babul Biswas for his topographical works to compose the thesis.

I also express my thanks to my colleagues Mr. Parimal Mandal, Mrs. Chandrani Choudhury, Mr. Hari kamal Barman, Ms. Lopamudra Das, Ms. Gargee Dhar Purkayastha and Mr. Surjit Sen.

Finally, I express my heartfelt gratitude and respect to my beloved parents Mr. Md. Abul Kalam and Mrs. Marium Begam for their endless inspiration, affection and encouragement. Special thanks to my beloved wife Mrs. Habiba Sultana and son Md. Mahboob Murshid for their continuous encouragement and dedication to complete this work. Thanks are also due to my family member for their help and encouragement.

Md. Mehbub Isha

[Md. Mehbub Isha]