Acknowledgment

I avail this opportunity to express my deep regards and profound sense of gratitude to the supervisor Dr. Gopal Chandra De, Professor of Agronomy and former principal, Palli Siksha Bhavana, Sriniketan for his constructive criticism, valuable suggestions and constant encouragement during the course of investigation and preparation of this manuscript.

I express my heartfelt gratefulness and regards to the Co-supervisor Dr. Gouranga Charan Mishra, Professor of Agronomy, OUAT, Bhubanipatna, Odisha for his scholastic guidance, constant supervision and inspiring suggestions in carrying out the investigation and preparation of this manuscript.

I am indebted to the Head, Department of ASEPAN, Palli Siksha Bhavana, Sriniketan, and to the Heads, Department of Agronomy, Soil Science and Pathology, OUAT, Bhubaneswar for providing me with all the laboratory facilities for conducting my research work.

I bestow my gratitude to Dr. R. K. Patnaik, Breeder and Officer-in-Charge, AICRP on Cotton, Bhubanipatna for his constant encouragement in pursuing the research work and allowing me to conduct the experiment in the Research Farm of the project.

My sincere regards and gratitude to Prof. Dr. D. C. Ghosh, Prof. A. K. Barik, Dr. B. Duary, Dr. B. K. Soren, Dr. M. Banerjee, Dr. K. Pramanik, Dr. S. K. Maiti and Dr. G. C. Malik, honourable teachers of my Ph. D. coursework for their valuable advice and encouragement.

I express my deep regards to Prof. Dr. Ch. H. P. Mishra, Associate Dean, College of Agriculture, Chiplima and Prof. Dr. L. M. Gadnayak, Dean, College of Agriculture, Bhubaneswar for their constant inspiration and help in bringing out this manuscript.

I like to convey my thanks to Mr. N. Mandi, Mr. S. K. Mohanty, Dr. S. K. Nayak, Mr. U. K. Behera, Mr. P. Pradhan, Mr. A. P. Raj, Alok, Anurag and Supriya for their immense help and encouragement during the course of the investigation and preparation of the manuscript.

Last but not the least, I owe due respect to my mother, father-in-law and mother-in-law for their relentless prayer, affections and blessings. I must remember my wife Bishnupriya, daughters Gungun and Munnun, my brother and sisters and all my relatives for their enduring patience, moral support and constant encouragement for pursuing higher studies and research work.

I also express thanks to those who rendered help from behind to plan, programme and execute the investigation and to prepare the manuscript in the form of a thesis.

Place:               (BHABANI SHANKAR NAYAK)