ACKNOWLEDGEMENT

I express my profound gratitude to my research supervisor Dr. Farid Waliyar, Director, West and Central Africa, Principal Scientist (Plant Pathology), ICRISAT, Niamey for suggesting the topic of this thesis, his stimulating guidance and constant academic support throughout my research work. He made persistent efforts to perfect me as a researcher to be thorough, conscientious and logical with a scientific perception.

I am immensely thankful to Dr. K.K. Sharma, Principal Scientist, Genetic Transformation Laboratory, ICRISAT, for providing adequate facilities in execution of research work and for his suggestions, guidance, constant encouragement and critical supervision.

I gratefully acknowledge Dr. S.N. Nigam, Principal Scientist and Groundnut breeder, ICRISAT for his encouragement and providing me financial assistance at critical times that I faced during the period of research at ICRISAT. This enabled me to complete this task successfully.

I am equally thankful to Dr. M. Lakshmi Narasu, Director and Head, Center for Biotechnology, Jawaharlal Nehru Technological University, Hyderabad, for her encouragement and permitting as a student to register for the Ph.D. program at JNTU, Hyderabad.
I am immensely grateful to all my colleagues Dr. Pooja Bhatnagar-Mathur, Dr. M. Kiruthika, Dr. B. Hameeda, Dr. Chander Rao, Dr. V.A. Arunachalam, Dr. Sreelatha, Dr. D. Srinivas Reddy, Dr. Arun, Dr. Bhanupriya, Madhurima Bhatnagar, S. Sowmini, N. Padmini, K. Prasanthi and J. Sridhar Rao who have contributed their time, effort and expertise to the success of this thesis.

Thanks to members of LSU for providing a chance to carry out the research work at ICRISAT. I am greatly thankful to the faculty of the Library in ICRISAT.

I would like to thank my lab mates, Mohd. Yousuf, D. Pandary, C. Laxminarayana, K. Prabhakar Reddy, Laxmi and Manemma for their co-operation during the entire of the study.

It is my pleasure to acknowledge the services and support received from the Mycotoxin and Virology lab members R. Kanaka Reddy, S. Veera Reddy, Pentaiah, and Mohd. Soffi Miya, Ch. Ravinder Rao, G.Harini, Haritha and S. Rohini. Also I thank A.G. Surender Reddy, and T. Ravindra from the Groundnut breeding department.

This acknowledgement would not be complete without mention of my parents, who have always supported me in every thinkable way. I thank my family members for their help, moral support, cooperation and encouragement throughout my work.

Date: March 2011

(KALYANI PRASAD)