Acknowledgment

I take this opportunity to express my deep sense of gratitude and indebtedness to Dr. P. S. Munusi, Professor of Horticulture and former Head, Department of Crop Improvement, Horticulture and Agricultural Botany (CIHAB), Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan, West Bengal for his valuable guidance, able supervision, constructive criticism, enthusiastic interest and painstaking throughout the period of investigation and in the preparation of the manuscript of the thesis. Above all his positive attitude towards my abilities, made the achievements of this goal a challenging, enjoyable, rewarding and stimulating experience.

I deem it the rarest opportunity and proud privilege to express my profound sense of immeasurable gratitude and indebtedness to Prof. Dr. D. P. Ray, Vice-chancellor, OUAT, Bhubaneswar who is the joint supervisor of the research works. With busy scheduled of works as Vice-chancellor, he has given me time to complete the investigation and prepared the manuscript of the thesis.

I express my deepness gratitude and obligation to Dr. P. C. Lenka, Professor and Head, Fruit Science, College of Agriculture, Bhubaneswar for his scholastic guidance, prudent suggestions, constant inspiration and supervision, sustained interest, constructive criticism, classless encouragement and painstaking efforts throughout the period of investigation.

I am also grateful to the Principal, Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan for providing me an opportunity to carry out the research work.

I would like to express my thankfulness to Head, CIHAB and all my revered teachers and staffs of the Department of CIHAB, Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan for their prudent inspiration during the course of study.

I am also indebted to Dr. B. K. Das, Professor and Director, Tissue culture Laboratory, OUAT, Bhubaneswar, Dr. A. K. Parida, Associate Professor, Department of Agril. Statistics, OUAT, Dr. A. K. Patnaik, Professor and Horticulturist, AICRP on cashew, OUAT, Dr. S. K. Mohanty, Professor, Department of Soil Science and Agricultural Chemistry, OUAT and Prof. D. N. Singh, Department of Fruit
Science, OUAT and Er. B. Mohanty, S.M.S. (Ag. Engg.) K.V.K, Angul for giving their valuable assistance for the preparation of the manuscript of the thesis.

My sincere thanks to Mr. A.Kar, Mr. Ramesh Chandra Panda for extending his helping hands voluntarily during the investigation and preparation of the manuscript of the thesis.

I highly obliged to Prof. S. S. Nanda, Dean, Extension Education, O.U.A.T. Bhubanswar for allowing me to continue my Ph.D. study at Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati.

From the core of my heart, I acknowledge the selfless sacrifice, timely help, constant inspiration and ceaseless encouragement of my beloved Parents Dr. S.N. Behera, Former Director of Horticulture, Govt. of Odisha, Mrs. Minati Behera and my nephews Vedant, Lohit and Vineet to complete the thesis.

I owe a deep sense of gratitude to both my sister Suchismita and Madhusmita and my both brother in laws Saumendra and Jiten for their uninterrupted, persistence inspiration and good will which have brought about my glaring success in my work.

I convey my hearty and affectionate acknowledgement to my loving wife, Madhusmita, my elder son Aryaman and my youngest son Adyan for their loving attitude, affection, speechless inspiration, constant encouragement and dedication towards me in nursing and giving solace during my exhaustive moments.

Last but not the least, I wish to express my appreciation and great fullness to one and all who had helped me in any manner for completion of this dissertation.

At length, I bow down my head with devotion and selfness before the Almighty for fulfillment of his eternal desire.

Sriniketan       (Debasis Behera)
Date:                             Ph.D. Student