ACKNOWLEDGEMENTS

In the very beginning I express my heartfelt honour, indebtedness and profound appreciation to my guides, Dr. S. P. Borah, Professor, Department of Botany, Gauhati University, Guwahati, Assam and Dr. B. C. Goswami, Professor, Department of Chemistry, Gauhati University, Guwahati, Assam for their keen interest, inspiring motivation, constructive criticism and caring guidance throughout the course of this study.

I wish to record my sincere thanks to the Head, Department of Botany, Gauhati University, Guwahati, Assam and Head, Department of Chemistry, Gauhati University, Guwahati, Assam for giving me permission and providing all the facilities and necessary help during the course of this study.

I express my appreciation to all the teachers of Department of Botany and Department of Chemistry, Gauhati University, Guwahati, Assam for their timely help, valuable suggestions and inspiration.

My thanks go to Dr. A. K. Saikia, Professor, Indian Institute of Technology, Guwahati, Assam, for GC-MS analysis of lipid samples and inspiring suggestions.

My heartfelt thanks to the librarians of I.I.T. Guwahati, Assam, NEIST, Jorhat, Assam, University of Madras, Chennai and of course Gauhati University, Guwahati for allowing me to use the unlimited resources of the libraries.

I will always remain grateful to Pulin da, Susanta da, Utpal da, Ajey, Aminul and Lima for their unconditional helping hand throughout the period, without whose help it would not have been possible for me to complete the work.

Lastly, but not the least, I recall the silent sacrifices and blessings of my maa (Kunjalata Majumdar), deuta (Ghana kanta Majumdar), brother (Manoj) and sisters (Anu, Sabita and Bharati) for their selfless help and encouragement. I am very much grateful to my wife 'Juri', Lecturer, Nowgang College, Nagaon for her constant inspiration and help throughout the research period and in preparation of manuscript in time.

Dated: Guwahati, the 22nd Dec, 2008

Hemen Chandra Majumdar
(Hemen Chandra Majumdar)