ACKNOWLEDGEMENTS

I wish to express my profound sense of gratitude to Dr. P.R.K. Reddy who is not just the supervisor but the fountainhead of this thesis. His unfailing scientific instinct constitutes the core of this work; his eye for detail and his meticulous belief in perfection have helped me to examine this problem by experiment, the pitiless and impartial test of truth and clothe the conclusions in the garb of reasoned logic; his perseverance, his constant encouragement to me and his resoluteness have held this work and my spirits together in the most testing period of my struggle and lastly, his practical and pragmatic approach has enabled me to conclude this work against all odds.

I wish to thank Professor P.S. Ramaurty, Dean, School of Life Sciences, and Professor A.N. Radhakrishnan, former Dean, School of Life Sciences, for providing me with all the necessary facilities.

I must place on record my special gratitude to Dr. T. Malathi, Institute of Genetics and to Dr. V. Seetharamam, National Institute of Nutrition, Hyderabad for their help. I wish to express my sincere thanks to Dr. David J. Wilkins of the Centre de Recherche Merrell International, Strasbourg, France for generously providing a-Difluoromethylornithine, (RMI 71732) used in this study. I also express warm
appreciation of my friend and colleague, Dr. V. Rukmini for her constant support and assistance in innumerable instances.

I owe my thanks to Mr. P. Omprakash for typing this thesis and to Mr. Anantha Rao who assisted me in compiling the figures. I also acknowledge with gratitude the assistance given to me by the staff of the animal house. My thanks are also due to all my other colleagues, faculty members and non-teaching staff for their co-operation during this study.

This work would not have been possible but for the financial assistance and research fellowship given by the University Grants Commission. Finally, I must extend my sincere thanks to the authorities of the University of Hyderabad for providing me with all the general facilities.

R. Madhubala

R. MADHUBALA