ACKNOWLEDGEMENT

I would like to pay thankful regards to my guide Dr G K Kulkarni, Reader, Department of Zoology, Dr Babasaheb Ambedkar Marathwada University, Aurangabad, for his immense patience, friendly gesture and strong moral support at crucial movements which helped me in accomplishing the goal. It is my pleasant privilege to place on record my sincere feelings of gratitude to him for suggesting the problem and offering valuable guidance and encouragement during the entire tenure of the investigation.

I am thankful to the Heads of the Department of Zoology, Dr Babasaheb Ambedkar Marathwada University, Aurangabad, for providing laboratory facilities during the complete tenure of this research work.

I am thankful to the UGC - Special Assistance Programme (SAP) in zoology in the thrust areas of Comparative Animal Physiology and Invertebrate Endocrinology for partial financial assistance.

I am grateful to Dr U H Mane, Reader, Department of Zoology, Dr Babasaheb Ambedkar Marathwada University and Co-ordinator UGC - SAP, for his encouragement and timely suggestions.

I am indebted to Dr D P Garud, Principal, Adarsh College, Omerga, for rendering facilities during the course of this research work. Thanks are due to Prof Dulange, Dr Mahi, Dr Menkudale, Prof Upase, Prof Kesare, Prof. Mulla, Mr Ashete and to all the members of staff in the college for their encouragement during the course of this investigation.

My research colleague Mr Suhas Kondekars deserves a word of special appreciation for his invaluable assistance during the final stages of research work. My sincere thanks to Dr (Miss) Khapate, Dr. Chaudhri, Prof. Patil, Prof. Borole, Prof Jawale, Prof. (Miss) Khadakkar whose friendly gestures and constant support is praise worthy. They stood by me like a Rock of Gibraltar throughout my research induced stress. Their friendship is an honour worth. I am also thankful to Prof Patare, Mr Bagade, Prof Pandarkar, Prof Salunke and Mr Ustad for their incessant moral encouragement during the tenure of this work.

Words cannot express my gratitude to my loving parents who had to put up with much inconvenience and hardship and with whose
blessings, constant encouragement and help this present work was made possible.

I express a deep sense of gratitude to my aunt and uncle, Mrs Rukhamuni and Mr Vithalrao Kulkarni. I wish to express my special appreciations to my brothers, Chandrakant, Satish and Sunil for their constant moral support during this task.

Last but not least, I owe my gratitude to my beloved wife Sadhana, who carried all the domestic responsibilities on her shoulders and care of our son, Aditya during this research tenure. She also helped in treasuring my dreams in the form of this thesis. Without her constant inspiration and co-operation, it could have been quite impossible for me to complete this task.

The cheering moments with my son Aditya through his confidence generating smile gave always a lot of relief during my work.

I acknowledge a deep appreciation to Mr Nitin Nikam for meticulous typing of manuscript and Mr B S Dhokane for preparing the photomicrographs.

Suresh G. Kulkarni.