ACKNOWLEDGEMENTS

I would like to express my deep sense of gratitude to Dr. C.V. Murien, Dean of the Faculty of Marine Sciences, University of Cochin who guided me in this work and has critically gone through the manuscript and made necessary corrections. I am grateful to the University of Cochin for providing me with all the necessary facilities to carry out the investigation. I am thankful to the University of Cochin and the University Grants Commission for awarding me a Junior Research Fellowship and to the Council of Scientific and Industrial Research for awarding me a Senior Research Fellowship during the tenures of which this work was carried out.

My thanks are also due to Mr. T.M. Senkare, Lecturer in Statistics in the Department of Marine Sciences, who kindly helped me in computing and processing the data statistically and to Dr. George Philip, Reader in Biochemistry in the department who has critically gone through the biochemical part of the thesis and made necessary corrections. My thanks are also extended to the Research Staff and Research scholars who helped me in different ways in the preparation of this thesis.