ACKNOWLEDGEMENT

At the very outset I must say that this work could not have been possible without the continued interest and stimulation provided by my research guide, Head, Dr. S.G. Sabnis, the Department of Yashwantrao Chavan College of Science, Karad. constant encouragement and inspiring guidance have not only created my interest in the subject but have helped me to sustain it for years to come. I am also thankful to Prin. V.A. Jamdagni, Yashwantrao Chavan College of Karad Science, for providing the library me and laboratory facilities.

consider it solemn duty to thank ' my Principal, Dr. A.A. Kadam, Kisan Veer Mahavidyalaya, Wai for his constant encouragement and inspiration at every stage in the progress of my work. I sincerely appreciate the help rendered by Dr. S.H. Jagdale in designing the experimental set-up. Sincere thanks are due also to Prof. S.H. Pawar, Dr. B.K. Chaugule, Dr. C.D. Lokhande, Dr. M.R. Mulla, and Dr. P.N. Bhosale who have extended a helping hand whenever I requested during various phases work. The adjustments made by colleagues Messers R.V. Dhekale, H.T. Lokhande, S.R. Bote and M.M. Khatavkar in the fulfilment of the duties allotted to me are greatfully recorded. I also express thanks to Mr. M.M. Dhopate for the neat and accurate typing of the dissertation.

I am indebted to my parents without whose love and support this dissertation would not have seen the light of the day. Finally I must appreciate the co-operation of my wife Sou. Sunita Chavan, during the course of my M.Phil. Work.

Karad Nov. 16, 1990.