ACKNOWLEDGEMENTS

I wish to express my deep sense of gratitude to Dr. Geetha Bali, Reader in Zoology, Bangalore University, Bangalore for her immense interest, valuable guidance and constant encouragement throughout the course of the present investigation.

I thank the Director, Indian Institute of Horticultural Research, Bangalore (IIHR) for sponsoring me for the research programme. I am highly indebted to Dr. P. L. Tandon, former Head, Dvn. of Entomology and Nematology, IIHR, for his invaluable advice and help in carrying out life table studies. I am also thankful to Dr. P. Parvatha Reddy, Head Division of Entomology and Nematology, IIHR, for constant encouragement. I am grateful to Dr. Sudha Nagarkatti, former Project Coordinator, Biological Control, IIHR, for arranging to obtain shipments of Zygogramma bicolorata from Mexico, without which it would not have been possible to embark on the problem which I have chosen for my thesis work.

I am grateful to Dr. Syamasundara Joshi, Associate Professor, University of Agricultural Sciences, Bangalore for providing information on the biology of parthenium weed and also for identification of other weeds. I am thankful to Mr. G. S. P. Rao, Senior Scientist, IIHR for helping me with statistical analysis of the data. Finally I wish to express my sincere thanks to my colleagues Dr. M. Mani, Dr. D. Leela, Mr. A. Krishnamoorthy and Mrs. P. N. Ganga Visalakshy of IIHR and Mr. Y. L. Ramachandra and Miss D. Manjula Kumari, Research Scholars, Department of Zoology, Bangalore University, for their help in various ways during the course of my studies.

I dedicate this thesis to my wife Vimala and children Anupama and Anirudh who were constant sources of inspiration and joy in the pursuit of my studies and also helped out in turns during field observations.