ACKNOWLEDGEMENTS

With the deepest sense of gratitude, I thank my respectable teacher and research guide Dr. (Mrs.) M. M. Dongre, for her expert guidance, at every step. She has been a source of inspiration to me, right from the beginning. It is because of her able guidance and continuous encouragement that I have been able to give shape to my dissertation. It is my privilege that I have the opportunity to work under her guidance.

It is indeed difficult to express in words, my gratitude towards Dr. B.A. Vagyani, for his guidance, morale support, encouragement and invaluable help throughout the work. He is imperturable, magnamious and has always helped me to steer clear throughout the most difficult time of the work.

I am highly indebted to Dr. Dongre M. B., Physics Department for his cheerful wishes and morale support.

I am very much thankful to Prof. M.S. Patil, Head and Prof. B.A. Hegde, former Head, Department of Botany, Shivaji University, Kolhapur for their constant encouragement and for providing necessary laboratory facilities.

My special thanks to Dr. A.N. Thite, Dr. S.R.Yadav, Dr. G.B. Dixit, Dr. T.M. Patil, Dr. B.A. Karadge, Dr. (Mrs.) A.B. Sabale, Dr. (Smt.) L.J. Bhosale, Dr. (Mrs.) N.S. Chavan for their valuable help.

I also indebted to Late (Smt.) Dr. S. S. Chitanvis for her support and help.

I am very much thankful to all the teachers in the Kanya Mahavidyalaya, Islampur and Department of Botany, Smt. Kasturbai Walchand College, Sangli.

It is my pleasant duty to offer thanks to my research colleagues and teacher fellows, especially to Mr. Desai N. S., Mr. Moharekar S.T., Magdum S.M., Gaikwad S.P., Shimpale V.B., Ghanwat N. A., Sirdesai

M.M., Bhamburdekar S.B., Savalajkar R. A., Banik S., Kulkarni N. A., More G. K., Tamboli R. A., Bansode S. S., Jadhav S. Y., Gurav R. V., Miss Kalebere S. R., Patil Vaishali and my thanks are also due to M.Sc. students for their help.

I am also very much thankful to Shri Khot D. Y., Shri Deshmukh M. R. (Artist), Shri Sasane A. P., Shri Kenimama, Miss Fernandis S. F., Miss Mane U. R. and all other non-teaching staff and Gardeners, for their kind co-operation and valuable help throughout the course. I also thank my friends Bhiva, Prashant, Mahendra, Mohan, Ravi, Uday for their best wishes. It would be impossible to list all the friends especially 'Barshikars' who have come to my aid in one way or the other during my work. The cheerfulness of their company keeps me going and it is deeply appreciated.

I will fail in my duties if I do not recall my warm feelings towards my family members for their financial and morale support, inspiration, encouragement, blessings and best wishes. I remain indebted to my father, mother, grandmother, brother- Dashrath, Uncles - Bapu, Nana, beloved wife Jayashri and son Chi. Koustubh for enabling me to complete this piece of work.

With the deep sense of gratitude. I acknowledge the efforts on the part of Mr. Shaikh Sikandar for neat and prompt typing of dissertation.

Last but not least, I express my deep sense of gratitude to all my well wishers.

(Rajendra A. Lavate)

Place: Kolhapur.

Date: 31th December, 1999