ACKNOWLEDGEMENT

I have undertaken the research work due to the blessings of the respected personalities and helping hands. I consider it is my duty to express my gratefulness as well as thankfulness to those who extended their co-operation and help. It is a golden opportunity in my life to express my gratitude to all those who helped me to complete this dissertation.

With a great pleasure, I would like to express my gratitude by heart to my guide, Dr. B. D. Patil, for his valuable guidance and hearty support to this research work. He unlocked the treasure of knowledge with the key in the form of constant encouragement to me, which helped me to develop myself as a scientific researcher.

I am very much thankful to Dr. A. S. Bhoite, Principal of Y.C.I.S., Satara for providing me the laboratory facilities. I deem it my pleasant duty to offer thanks to Dr. V. P. Khandekar, Head of the dept of Botany for his guidance through this research project.

I must thank Shree Suhas Salunkhe, Principal L. B. S. College, Satara, for his inspiration. I am very much indebted to Dr. C. R. Patil for his valuable guidance and encouragement. I am also very much thankful to Shree P. S. Jadhav H.O.D. of Botany, L.B.S. College, Satara, Shree S. A. Mohite and Miss A. S. Jadhav for their great inspiration.

I am very much grateful to offer my sincere thanks to Dr. G.B. Dixit, Head of the dept. of Botany, Shivaji University, Kolhapur Dr. P.D. Chavan. and S.S. Kambale for their inspiration and providing the Departmental laboratory and library facility during the research work.

It is a great pleasure for me to express my sincere thanks to Dr. S.H. Mahamulkar, Dr. A. B. Pawar, Shree. D. A. Kadam, Shree. P. R. Patil. Dr. R. B. Thoke, Dr. B. A. Kore, Dr. C.T. Karande, Dr. V.C. Karande, Dr. D. N. Jadhav, Shree. Y.T. Shinde, Shree. R.B. Dhage, and Miss Sharada Ghdage, Shree.

Gaikwad, Abhijit Kadam and Sandip Borge for their suggestions and technical help.

It is my pleasant duty to offer my thanks to Dr. M. M. Rajmane, Principal, S.G.M. College, Karad, for providing facilities to work in College laboratory. I also thank to Shree. V.B. Jadhav, Head of the Botany Dept., Dr. A.B. Kamole, Dr. B.J. Patil, Shree. B.D. Mohite and Mrs. Kishoree for their useful guidance, suggestions and critical discussions.

I also thank Prin., Agricultural College, Borgaon, for his permission to take soil samples from the Citrus garden. Thanks to Shree Purushottam Mane for allowing me to take the soil samples from Grape gardens.

I wish to thank to all my colleagues cum friends Lata Jadhav, Vaishali Shinde, Kedar Hogale, Sunita Patil, Ashwini Apate, Priyadarshani Kambale, Shakila Bagwan, Suvarta Patil, Sanyogita Yadav, Asmita Awale, Smita Pawar, Dhanaji Pawar and Sachin Patil at Y. C. I. S. Satara.

I must thank to non-teaching staff from Y.C.I.S., Satara, Mr. Khan, Mr. Avghade, Mr. Jagtap, Pawar and Mali.

Finally, I would like to express my gratitude to my loving mother Mrs. Maya Kambale, my father Prin. Anant Kambale, uncle Shree. Suresh Kambale and aunt Jayashree Kambale. I also thank to my maternal uncles Dinkar Zirmite, Ramchandra Zirmite, aunts Alpana Zirmite and Seema Zirmite for their support and encouragement. I would like to send my love to my brothers and sister Shree. Purushottam Kambale, Shree. Sunil Kambale, Shree. Satish Kambale, Shree. Amarsinh Kambale, Miss Mrinalini Kambale and sisters in law Sou. Anuradha Kambale, Sou. Reshma Kambale and Sou. Adishree Kambale.

Miss Tejaswini Anant Kambale.