First and foremost, praises and thanks to the God, the almighty for His showers of blessings throughout my research work to complete the research successfully.

I would like to express my deepest and sincere gratitude to my research supervisor Dr. Awadhesh Kumar Shrivastava, Assistant Professor, Head, Department of Botany, at Govt. Danveer Tularam College, Utai, Durg, Chhattisgarh, who expertly guided me through out my Ph.D. work. His genuine apprehension, understanding, enthusiasm, inspiration, guidance, encouragement, patience and unwavering support have provided a good base to present the thesis. I would also like to thank him for his empathy and great sense of humor. I am extending my heartfelt thanks to his wife and family members.

I am obligate to my Co-supervisor Dr. (Smt.) Suneeta Patra Assistant Professor, at, Department of Botany, Govt. Nagarjuna P. G. Autonomous College, Raipur, Chhattisgarh, for constant conducting monitoring, encouragement, wisdom, patience, enthusiasm collegiality and also providing the infrastructure. Patra Mam was always available for my queries, always guided me to the right source and the keen interest shown to complete this thesis successfully.

My sincere thanks also goes to Dr. S. K. Jadhav, Professor and Head, SOS in Life Science, Pt. Ravishankar Shukla University Raipur (C.G.), without his precious support it would not be possible to conduct this research.

I am very much grateful to Dr. Ashok Pandey, Principal, Govt. Nagarjuna P.G. College of Science, Raipur, C.G., for his consistent encouragement and ensuring provision necessary facilities during my research work.
I am highly thankful to Dr. R. Pimpalgaonkar, Head, Department of Botany, Govt. Nagarjuna P.G. College of Science, Raipur, C.G., for and my previous head of department Dr. Preeti Tiwari for their valuable suggestion, ideas, support and facilities.

I am also sincerely thankful to Dr. V. K. Kanungo, Dr. V. Kohli, Dr. R. Diwan, Dr. A. K. Sharma, Dr. N. B. Singh and Dr. S. Bajpai for their consistent support and encouragement.

I am thankful to office staff of Department of Botany and supporting staff of Govt. Nagarjuna P.G. College of Science, Raipur, C.G., for their help during research work.

I do not have words to express the contribution of my family members specially my husband Dr. Satya Prakash Tikariha, who stood like a strong pillar beside me giving moral and emotional support wherever I needed. I am extremely grateful to my family for their love, prayers, care and sacrifices for educating and preparing me for my future. I am very much thankful to my husband and my daughter Neeli who really have suffered because of my studies during so many years. It is only their encouragement, support and blessings that enabled me to submit this thesis.

I acknowledge the sacrifices made by my father-in-law Shri O. N. Tikariha, mother-in-law Smt. Janki Tikariha and sister-in-law Miss Yogita Tikariha during the course of this study. I specially thank them for the support and for taking care of my kid during the time when I was engulfed in my thoughts and perception. I’m thankful to Mr. M. Manohar mamaji, my brother-in-laws Mr. Mitesh Chandra Verma and Mr. Lokesh Verma for their support and admire them all for their unconditional helping nature. I pray to God for their success in life.
I’m thankful to my elder sisters Mrs. Prabha Verma, Pushpa Verma and Mrs. Satrupa Verma for their endless moral support, incredible co-operation and always been there wherever I needed them. I’m indebted to my nephews Sonu, Ranu, Vicky, Sujal, Vansh and my daughter Neeli for their unconditional support and help to survive all the stress from this year’s specially in my field works.

My special thank to my younger brother Mr. Yogesh Kumar Verma and bhabhi Mrs. Yogita Verma for their forever support not only for this thesis but also always for that has helped me to groom as an independent personality.

I specially thank to Dr. Meenakshi Bhardwaj mam and Mrs. Charulata Philip mam for their help, support, blessings and encouragement. Thanks are also due to my friends and lab mates Miss Khushi Dewangan, Mrs. Deepti Chauhan, Mr. Khilendra Dewangan, for sharing their knowledge and idea in helping the construction of the thesis. I would like to extend my thanks to faculty members of Utai College, who offered collegial guidance and support over the years.

I sincerely acknowledge the contribution of my friends and colleagues Mrs. Deepti Sharma, Mrs. Jolly Santosh, Mrs Annapurna Sinha, Mrs. Urvashi Sahu and Mrs. Sharda Dubey for academic support and friendship at Govt. High. School Fekari, Patan Block, Durg. My sincere thanks to the principal Mrs. Jagjeet Kaur mam for support and encouraging at time.

Finally, I must express my very profound gratitude to my parents my Mother Smt. Janki Verma and my Father Late. Shri Rama Prasad Verma, for their love, understanding, prayers and providing me with unfailing continuing support to complete this research work. Their support and continuous encouragement throughout my years of study and through the
process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

I also extended my sincere gratitude to Dr. V. N. Mishra, Sr. Scientist, Dept. of Soil Science, Indira Gandhi Agricultural University, Raipur, C.G., for their kind support and facilities provided to me.

Last but not the least I would like to thank all my teachers I learnt from since from my childhood. I have not been here without their guidance, blessing and support. It is because of them that I developed

Words fail me in expressing my gratitude to all those stalwarts who laid the foundation of Phytosociological, Phytochemical, Soil sciences and researchers who tirelessly worked in understanding the botany across the world, whose works I have referred to throughout my thesis.

My sincere thanks to all those who supported me on this journey directly or indirectly during my research work.

ANITA TIKARIHA