Acknowledgments

I take this opportunity with much pleasure to thank all the people who have helped me through the course of my journey towards producing this thesis. First and foremost, I owe my profound gratitude to my supervisors Prof. D. S. Hooda Dean (R) in Jaypee university of Engineering and Technology Guna (M.P.) and Dr. S. K. Singh Asst. Professor in Indian Institute of Information Technology, Allahabad (U.P) for their continued inspiration and encouraging supervision in an innovative direction. Without their support, this work would not have structured in a finer shape. Their top level guidance has made me to enrich my knowledge, especially, in the field of Digital Image Processing. It was a great pleasure of working as a research scholar in the department of Computer Science & Engineering, Jaypee University of Engineering & Technology Guna. I would like to acknowledge Jaiprakash Sewa Sansthan for providing the financial support.

I am very grateful to our Vice Chancellor Prof. N.J.Rao and Registrar Col. (Retd.) S.K.S. Negi for providing all these facilities and I would like to extend my sincere thanks to our doctoral program monitoring committee members Prof. K. K. Jain (Dean Academic) and Prof. Shishir Kumar for their continuous monitoring and creative direction of research work. Special thanks are extended to our Head of Department Prof. Shishir Kumar for his regular observation, necessary support and suggestions. I want to acknowledge Prof. G. L. Hartman for providing the valuable suggestions, leaf data and technical expertise. Special thanks to A. E. Dorrance and D. Mills Department of Plant Pathology, “The Ohio State University” for valuable research. Last but not the least I acknowledge Dr. Dean Malvick, Assistant Professor, Department of Plant Pathology, “University of Minnesota”, for providing the permission to use the infected soya leaves.

At last I want to present my extraordinary thank to almighty God, My Parents, My sister and My wife for providing every kind of support on each step of my life. My singular thank to all the people who always motivated and supported directly or indirectly during my Ph.D. work.

Sourabh Shrivastava