I wish to express my gratitude to Dr. V.Kaul, M.Sc. Ph.D., Reader, Department of Botany, Kashmir University, Srinagar, for his invaluable guidance and constant encouragement during the course of the present investigation.

My sincere thanks are due to Professor P.Kachroo, Head of the Botany Department for his ungrudging help and the facilities provided during the period of this work.

I am thankful to Dr. A.K.Koul, Department of Botany, Kashmir University, Dr. S.N.Raina of Regional Research Laboratory, Srinagar and Shri S.N.Zadoo of National Botanical Gardens Lucknow, for their help and useful suggestions during the analysis of Cytological observations.

The varied help rendered by Shri B.L.Saproc, Shri A.M.Shah, Shri K.K.Vass, Shri Bimal Misri and Shri Gurcharan Singh (Research Scholars, Department of Botany, Kashmir University), Shri Muneer Ahmad (Ege University, Turkey), Shri S.K.Bhat (Statistician, Govt. Medical College, Srinagar), Shri J.L.Kaul (J&K Minerals, Srinagar) and Shri M.L.Misri (Audiovisual Department, Srinagar) is greatly acknowledged.

Dr. S.K.Roy and Dr. D.P.Zutshi were kind enough to go through some of the chapters, included in this thesis, for which I want to express them my special thanks.

Award of Junior Research Fellowship by Council of Scientific and Industrial Research, Government of India, is gratefully acknowledged.

Dated: 7th October, 1970.