ACKNOWLEDGMENT

It is good fortune and a matter of privilege for me to have the esteemed supervision of Dr. Nizam U. Khan (Reader) for his never failing inspiration, scholarly guidance, constructive criticism, encouraging suggestions in the interpretation of results and above all, sympathy and benevolent attitude.

I am deeply indebted to Prof. K.C. Singhal (M.D., Ph.D., FIAN, FIAMS), Chairman, Department of Pharmacology, an eminent scientist, for providing necessary research facilities and to the devotion of much of his precious time to guide me. I can hardly find any word to express my deepest sense of gratitude to him.

I am thankful to Prof. N. Islam, Chairman, Department of Chemistry, for extending various departmental facilities during the period of study. A large debt of gratitude is owed to my senior colleague, Dr. (Ms.) Nazneen Parveen for constructive discussions and encouragement during this work.

Deep appreciation is extended to Dr. P.B. Singh (Taxonomist), Regional Research Centre (Ayurvedic), Mandi (H.P.) for collection and identification of plant material. Also, I do not want to waste the opportunity of acknowledging my gratitude to Mr. Subhash Varshney for word processing in time.

I am deeply beholden to my dear Papa, Mummy and all other well wishers whose love, support and encouragement are the base of my every success. Lastly but not least, I am extremely thankful to my wife Mrs. Archana for her sustained help and buoyancy. She has been a beacon all along to enable me to present this thesis.

(Rajinder Singh)