By the grace of Almighty, I am privileged to express my abiding sense of gratitude to my revered supervisor, Dr. Qudsia Tahseen, lecturer, Department of Zoology, Aligarh Muslim University, Aligarh, whose sagacious and invaluable guidance, continuous help and counsel over the entire period, was instrumental in completion of this work.

I owe my sincere thanks to Prof. Mohd. Hayat, Chairman, Department of Zoology, for providing all necessary infrastructure and laboratory facilities.

I am immensely thankful and deeply indebted to my respected teachers Prof. M. Shamim Jairajpuri, Prof. Shahid Hasan Khan, Prof. Irfan Ahmad, Dr. Waseem Ahmad and Dr. Mahalaka Chowdhary for their valuable suggestions and encouragement.

Many scientists were kind enough to send their research publications especially Dr. Istvon Andrássy, Dr. Seven Boström, Dr. Holovachov, Dr. Walter Traunspurger and Dr. Walter Sudhaus and their timely help is gratefully acknowledged.

From the core of my heart, I am sincerely thankful to my lab. colleagues Dr. Azra Shaheen, Mr. Mohd. Mahmood, Mr. Ali Asghar Shah, Mr. Peerzada Mushtaq, Mr. Baniyamuddin, Mr. Ab. Rashid, Ms. Rahmat Khan, Ms. Razia Sultana, Ms. Shikha, Ms. Tabassum, Mr. Vijay and Mr. Gaurav for their valuable help and support.

I cannot fail to express my indebtedness to my family members, my beloved mother, uncles, aunts, cousins, sisters and loving nieces for their everlasting moral support, affection and forbearance. A special note of thanks goes to my elder brothers, Dr. Akhtar Hussain and Mr. Shahid Hussain, who are great source of inspiration and whose encouragement and untiring efforts have enabled me to carry out this work.
I have been fortunate enough to get the love and affection of my friends, Mr. Waseem Raja, Dr. Zubair Ahmad, Mr. Sajjad Hussain, Mr. Rashid Hameed, Mr. Shabir Hussain, Mr. Nasir Aameen, Dr. Badruddin, Mr. Waseem ul Hassan, Mr. Tariq Hussain, Mr. Hamid Iqbal, Mr. Qaiser, Mr. Barkat, Mr. Javeed Iqbal, Dr. Syed Untoo, Dr. Mohd. Manzoor, Mr. Intiyaz Khan, Mr. Muheet Aalam, Mr. Harris Shah, Mr. Reyaz, and Mr. Farman who supported me in difficult moments.

Mr. Naeem deserves special thanks for typing and shaping the manuscript. Lastly, the financial assistance provided by the Ministry of Environment and Forests, New Delhi is gratefully acknowledged.

Ather Hussain