

Acknowledgment

First and Foremost, I pay my obeisance to God the almighty to have bestowed upon me the courage, blessings, zeal, and light to do this work. In completing this task, I received help from several people whom I would like to acknowledge.

*I express my fervent sense of gratitude to my guiding teacher **Prof. Dolly Kumar,***

***Ex-Head,** Department of Zoology, for helping me throughout the journey with her Godsend guidance, accordant support, affectionate attitude, patience, and formative criticism that boost my enthusiasm every time. I am also immensely thankful for my co-guide **Dr. Priyanka Mathur,** Head, Department of Zoology, The IIS (deemed to be University) Jaipur for her kind support, encouragement, and criticism throughout the work*

*My deepest sense of gratitude to **Prof. B. Suresh,** Head, Dept. of Zoology, for providing departmental facilities and guiding me to sail rightly through the high waves of challenges in my research work. I am grateful to the respective heads of the Department **Prof. P. C. Mankodi, Prof. Pragna Parikh,** and **Prof. Kauresh Vacchrajani,** for providing departmental facilities from time to time. Thanks to **Pragna Madam** for her moral support and encouragement during my student days as an Entomology teacher till my entire Ph.D. tenure. I express my deepest gratitude to all the **teachers of the Zoology department** who taught me and **showed me the right path** during my master's. I am also thankful to the **non-teaching** staff of the Department for their help throughout my tenure as a Ph. D student*

*My heartfelt thanks to my lab seniors **Dr. Mamata Deb, Dr. Archana Yadav, Dr. Rupa Sule, Dr. Lekshmi Pillai,** and **Dr. Hardik Purohit,** who never treated me as a junior but*

as a friend and younger sister. They made the path easy and fun-filled while walking towards the destination with rightful opinions and help whenever I asked for it.

My M.Sc. classmates have always been a support, especially a few friends whom I can't miss to thank, **Bhaval, Nishi, Pankaj, Krupal, and Dhaval**. I express my special thanks to two labs- **PSL** & **PHP** where my seniors and juniors helped & motivated me. Big thanks to Nishi & Pankaj for accompanying me on the field trips. I am also thankful to **Dr. Ankita** for her moral support. I am glad to have found extended lab members **Rifat, Swati, and Jahnavi**. I would also like to thank my colleagues from other labs for their support. I am thankful to my **roommates** and **neighbors** for providing an easy environment to live in, especially to **Mridu, Sejal didi, Niketa** & **Krishna**.

I would like to express my heartfelt gratitude to **Sunil Sir**, for his constant help and cooperation in giving the final shape to the thesis and his wise advice regarding the importance and learning of computers and software. Thanks to **Hiten Raval**, Department of Chemistry for every possible help he gave ensuring a smooth fellowship from CSIR.

My friends, family, and family-friends in Udaipur & Jaipur have been lifelong relations I cherish. Also, I am thankful to my family in Kerala. I fall short of words to thank my husband **Dr. Vishnu Mohan** who has been a motivator and support for more than a decade and hopefully would be for many more decades. He has been helping me in my work, although belonging to a different profession. My special thanks to my father-in-law **Mr. Mohana Kurup**, my mother-in-law **Mrs. Bindu Mohan** & brother-in-law **Vinay Mohan** for their valuable and incredible support.

Words fail to express gratitude to my parents, **Dr. Vinod Sharma** & **Mrs. Neerja Sharma**. Grandparents Shri **Brij Mohan Sharma**, Smt. **Godavari Sharma** & brother **Abhishek Sharma** for their forever support. My cousin **Vinita Sharma** has always been my supporter

and go-to person in every situation, for whom I am deeply grateful. I am also thankful to my aunts, uncles, and cousins along with my maternal grandmother for always being my support.

I am thankful to the Council of Scientific and Industrial Research for granting me the CSIR NET JRF fellowship

I am appreciative to one and all whom I might be forgetting to acknowledge here in words and I believe they will accept my thanks and apology together.

Harshita Sharma