ACKNOWLEDGEMENT

First, I would like to thank the Almighty God for His enduring love, care and blessing through out my study. He has been with me in times of pain, hardships and joy. He had always pulled me through at times of despair and depression and has never failed to lead me to successful path.

I am indebted to Prof. N. Senthil Kumar, Dept. of biotechnology and Dr. G. Gurusubramanian, Dept. of Zoology who have always managed to find answers to my experimental errors or queries and had never failed to meet the demands related to my multiple research necessities. I am also thankful of their friendship, openness and advices to my countless problems encountered during my study.

I am immensely grateful to my mother Florence Lalhminglian for her unconditional love, advices and patience which have leaded to the completion of my thesis. I am also thankful to my sister Theresa Zorammuani and brother Christopher Lalhmingthanga who have been my ears, hands and legs at home, wherever or whenever I needed them. I am deeply humbled by my whole family’s undying love and for believing in me.

My gratitude also goes to Prof. Wej Choochote, Changmai University and Dr. Lizette L Koekemoer, Johanesburg for the advices and specimens that have helped me especially with identification of species, insecticidal bioassay and anopheline culture related methods. I am also thankful to Mr. Vanramliana for providing specimens that aided in my research work.

My sincere appreciation also goes to all my colleagues Brindha Senthil Kumar, Lalremsiami Hrahsel, Catherine Vanlalruati, Sangzuala Sailo, Zothansanga, Lalrinfela, Zothansangi, Liangsangmawii, Lallawmawma and Lalthlimpuia Pachaua Lalrothluga, and Lakshmi Pyari Devi; MSc students Lalduhawma, Benjamin and Albana for your valuable co-operation and help. I am also extremely thankful to all the non-teaching staffs of the Biotechnology Department – Babie, Lahnunzira, Vanlalruata, Lalmuanpuia, David Zorinsanga, Lalринhua and David for your ready–to–help attitude whenever called for.
My heartfelt gratitude also extends to CSIR, New Delhi, DBT-Bioinformatics Infrastructure facility, Directorate of Health services, Govt. of Mizoram and UGC–Research Fellowship for Meritorious Students for supporting my research work.

Last but not the least I would like to thank my grandmother M. Tawni and my aunt, Sr. Bernadette Sangpuii and Zothantluanga Hauhnar for your continuous prayers and being there for me; and to Lalmalsawmtluanga for helping me to cross check and help me find a press for printing and binding of thesis.

RITA ZOMUANPUII