ACKNOWLEDGEMENTS

Alhamdulillah, thank you Allah for all the blessing You had given me. The ability, courage, endurance, and patience You put inside me strengthening me in completing this study and research.

First and foremost, I would like to show my deepest appreciation to my supervisor, Dr Zazali Alias for his precious and continuous guidance and support throughout the course of this study. His dedicated supervision and constant encouragement towards the completion of this thesis encouraged me to do my best. His wide knowledge and his logical way of thinking have been of great value for me.

I would like to express my deep and sincere gratitude to my co-supervisor Prof Vikineswary Sabaratnam for the continuous support of my Master study, for her patience, motivation, enthusiasm, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis.

I would also like to express my sincere appreciation to Ms. May Hing and Miss Wong Kahui for their support and encouragement in the completion of this thesis. Their willingness to give guidance and supervision becomes a great help to me. Also, a thank you note goes to Encik Hasnol, who provides me with the *Ganoderma* cultures.

During this work, I have collaborated with many colleagues for whom I have great regard, and I wish to extend my warmest thanks to all those who have helped me with my work in
the Mycology and Plant Pathology Lab, Institute of Graduate Studies and Proteomic Lab, Institute of Biological Sciences, University of Malaya.

Not to forget my dearest labmates, Ms. Mumtaz Hidayatullah, Ms. Azura, and Mr. Loo Poh Leong. Their fully devoted into this study inspire me to work together. Their optimistic attitudes especially encouraged me not to give up even facing any obstacles or difficulties.

I owe my loving thanks to my supportive, encouraging and patient husband, Mr. Mohd Ashrof Zaki Yaakob and my dear daughter Nur Amna Insyirah. Without their encouragement and understanding, it would have been impossible for me to finish this work. My special gratitude goes to my beloved mother Ms. Reehanum Abdul Majid, family members and friends for being very supportive in spiritual and understanding during the whole course of my study in University of Malaya. The financial support of the University of Malaya under SBUM scheme and Research Grant (Vote F: PS150– 2008A and PS257-2009B) are gratefully acknowledged.