## **ACKNOWLEDGEMENTS**

I would sincerely like to acknowledge the efforts of many people who contributed to the research and to this thesis in particular. Without them, the work would never have been undertaken. I am profoundly indebted to my advisers, Associate Professor Chitapa Ketavan for her direction, suggestion, encouragement and intelligent ideas for the improvement of this thesis. I am also indebted to Professor Gérard Duvallet for his important suggestion, constructive comments and his encouragement in the duration of my stay in Montpellier, France. I am much grateful to Mr. Jeramie Gilles and Miss Chloé Lajoinie for their cooperation, assistance during the conduct of my experiments in laboratory. I thanks to Lajoinie's family for giving me love and warm times duration. I am also thankful to the members of Centre D' Ecologie Fonctionnelle et Evolution, Université Paul Valery- Montpellier III, specially for Mr. Michel Bertrand for his kind assistance in equipment for photography and illustrated. Sincere appreciation is extended to my committee, Associate Professor Panapa Saksoong for her useful suggestion and constant help.

This research was supported by grants from the Graduate School, Kasetsart University. The authors would like to express their sincere appreciation to The Thai-French Cooperation Program for Higher Education and Research for their financial support to conduct part of this research in Montpellier III University, Montpellier, France. Thanks are also extended to personnel at Suwanvajokkasikit Animal Research and Development Institute at Kamphaengsaen Campus, Kasetsart University, Nakornpathom province, Thailand for their kind assistance in collecting insect specimens. The molecular study part of this study was made possible because of the assistance of people who provided stable fly samples from several continents. Many thanks are also expressed to Miss Monthathip Kongmee, who always helped me in solving computer problems.

Finally I would like to dedicate this work to my parents, sister and brother for their support, encouragement and comfort, especially for their pray, love, patience and understanding. Thay have provided continual inspiration for my higher education.

Roungthip Masmeatathip
September 2006