

**EFFECT OF RICE PEST MANAGEMENT PRACTICES ON POPULATION  
DYNAMICS OF GREEN LEAFHOPPER [*NEPHOTETTIX VIRESCENS*  
(DISTANT)] AND ITS NATURAL ENEMIES**

**KER MONTHIVUTH**

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF SCIENCE  
(AGRICULTURE)  
IN AGRICULTURAL SYSTEMS**

**GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY  
MARCH 2002**

**EFFECT OF RICE PEST MANAGEMENT PRACTICES ON POPULATION  
DYNAMICS OF GREEN LEAFHOPPER [*NEPHOTETTIX VIRESCENS*  
(DISTANT)] AND ITS NATURAL ENEMIES**

**KER MONTHIVUTH**

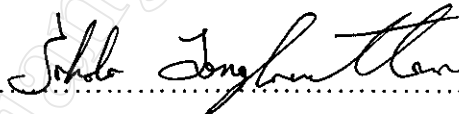
**THIS THESIS HAS BEEN APPROVED  
TO BE A PARTIAL FULFILLMENT OF REQUIREMENTS  
FOR THE DEGREE OF MASTER OF SCIENCE (AGRICULTURE)  
IN AGRICULTURAL SYSTEMS**

**EXAMINING COMMITTEE**



.....Chairman

**Assoc. Prof. Dr. Manas Titayavan**



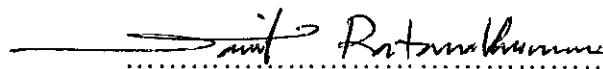
.....Member

**Asst. Prof. Dr. Sakda Jongkaewwattana**



.....Member

**Lect. Phrek Gypmantasiri**



.....Member

**Assoc. Prof. Dr. Sanit Ratanabhumma**

**25 MARCH 2002**

## ACKNOWLEDGEMENTS

There are many people to whom I wish to express my profound thanks for their invaluable contributions to my overall experiences during my graduate studies for MS in Agricultural Systems at Chiang Mai University.

My utmost sincere appreciation and profound gratitude are extended to Assoc. Prof. Dr. Manas Titayavan, my academic and thesis advisor, for his invaluable guidance, constructive suggestions and constant encouragement throughout my graduate program. His strong support and enthusiasm provided me with the great self-confidence and motivation needed to finish my thesis. My special thanks are also extended to other three committee members: Asst. Prof. Dr. Sakda Jongkaewwattana, Mr. Phrek Gypmantasiri, and Assoc. Prof. Dr. Sanit Ratanabhumma for their constructive advice and comments that helped lead to a successful completion of this research project.

In addition, I would like to express my heartfelt thanks to Assoc. Prof. Dr. Benchaphun Shinawatra, for her suggestions on the design of the questionnaires, and Dr. Kamol Ngamsomsook, for his advice on the economic analysis, Mr. Somkiat Suwanakeree, for his instructions on the use of laboratory apparatus, Mr. Surapol Kornkhun, for his assistance in identification of natural enemies, Mr. Jamlong, Irrigated Research Station Chief, for his beautiful cooperation throughout the periods of my fieldwork. Special thanks also go to all lecturers and staff members of the Agricultural Systems Program, Faculty of Agriculture, Chiang Mai University for their sharing of knowledge base and nice hospitality.

It is of my great pleasure as well to sincerely thank Mr. Nuth Sakhan and Mr. Pen Vuth, Director and Deputy Director of the Department of Agronomy and Agricultural Land Improvement (DAALI) for their kind supports and facilitations which contributed significantly to the fulfillment of my field survey. Thanks also go to a number of colleagues who shared their thoughts and information during my field research in Cambodia. These people are: Mr. Yech Polo, an IPM specialist of Food and Agriculture Organization of the United Nations, Mr. Chea Sareth, a farming system specialist of the Department of Agronomy and Agricultural Land Improvement (DAALI), Mr. Khiev Bunnarith and Mr. Pol Chanthy, IPM specialists of the Cambodian Agricultural Research and Development Institute (CARDI). In addition, I would like to thank Mr. Oum Mo, an IPM master trainer, and his colleagues for their helps with the interviews, and the farmers in Roleang Ken commune, who spent their busy time giving me information during my lengthy interviews. Their honesty and generosity can never be adequately compensated.

I wish to thank all Agricultural Systems Program students, especially my classmates Mr. Aung Moe Myo Tint, Mr. Teerachart Krataitong, and Ms. Naruemon

Tinrach, for their warm friendship and kindness that have made my stay here illuminating and fun.

I wish to express my appreciation for a warm brotherhood shared by my two Cambodian countrymen, Mr. Tang Sochetra and Mr. Thoun Try, while we were studying together in Chiang Mai. These two people are nice to me whom I have learnt a lot from their noble characters.

This thesis would have not been possible without funding support from Department of Technical and Economic Cooperation (DTEC) of Thai Government. My profound thanks are extended to the government and the people of Thailand for their generous contributions.

Finally, and most of all, I owe my deepest thanks to my father (Ker Sa Out), my mother (Oum Simon), brothers and sisters for their loves, inspirations, supports, and for everything.

Ker Monthivuth