

**RESPONSE OF MUNGBEAN TO PHOSPHOROUS ON YELLOW-RED
FERRALITIC SOIL IN HILLY ZONE OF THUA THIEN
HUE PROVINCE, VIETNAM**

BUI XUAN TIN

**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
DECEMBER, 1999**

**RESPONSE OF MUNGBEAN TO PHOSPHOROUS ON YELLOW-RED
FERRALITIC SOIL IN HILLY ZONE OF THUA THIEN
HUE PROVINCE, VIETNAM**

BUI XUAN TIN

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

EXAMINING COMMITTEE

Sakda Jongkaewwattana

Chairman

Assist. Prof. Dr. Sakda Jongkaewwattana

Phrek Gypmantasiri

Member

Lecturer. Phrek Gypmantasiri

B. Ekasingh

Member

Assoc. Prof. Dr. Benchaphun Ekasingh

Tavatchai Radanachales

Member

Assoc. Prof. Dr. Tavatchai Radanachales

December 1999

Copyright by the Graduate School, Chiang Mai University

ACKNOWLEDGEMENT

I am greatly pleased to extend profound gratitude to people and institutions who have helped in the completion of my study at The Multiple Cropping Center (MCC), Chiang Mai University.

First and foremost, I would like to express the sincere appreciation and respect to Assist. Prof. Dr. Sakda Jongkaewwattana, my academic advisor as well as chairperson of my thesis research committee for his continuous and immeasurable guidance, constructive comments, and genuine help not only in academic field but also to solve other problems that came up during the course of the study.

I am also equally grateful to other members of advisory committee, lecturer Phrek Gypmantasiri, Assoc. Prof. Dr. Benchaphun Ekasingh, and Assoc. Prof. Dr. Tavatchai Radanachaless for their invaluable suggestions and constructive comments.

The lecturers and staffs of MCC, Faculty of Agriculture, Chiang Mai University whose co-operation, sharing knowledge, experiences and services during the study period helped to complete my study successfully. I am sincerely pleased to express thanks and gratitude to all of them. Special thanks go to the Department of Technology and Economic Cooperation for providing financial support for my graduate work.

It is greatly pleased to thank leaders and staffs of Hue University of Agriculture and Forestry, who have helped and significantly contributed to fulfillment of my field experiment in Vietnam. Sincere thanks also go to all AGS students for their kindness and friendly cooperation. Finally, very special thanks should be reserved for my parents, my parents in law, my beloved wife, Nguyen Thi Hong Phuong and my son, Bui Quoc Minh, for their sacrifices, supports, patience and love they have dedicated to me while I was far away from home.

มหาวิทยาลัยเชียงใหม่
Chiang Mai University