

## ABSTRACT

Abstract of thesis submitted to the Graduate School of Maejo University in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Extension

### FACTORS AFFECTING ADOPTION AND NON-ADOPTION OF INTEGRATED PEST MANAGEMENT IN CABBAGE BY FARMERS IN DOI PAMONE HIGHLAND, CHIANGRAI PROVINCE

By

KHINNARAT KEWSUWANWONG

OCTOBER 2000

Chairman: Associate Professor Dr.Numchai Thanupon  
Department/Faculty: Department of Agricultural Extension,  
Faculty of Agricultural Business

The objectives of this research were to find out 1) differences in personal and socio-economic traits, communication behavior, and psychological aspects of farmers adopting and not adopting integrated pest management (IPM) in cabbage; and 2) problems in and recommendations for convincing the farmers to adopt the IPM in cabbage. The data were collected from 84 samples of farmers growing cabbage in Doi Pamone highland in Chiangrai; 10 farmers adopted IPM but 74 did not. The samples were selected by means of simple random sampling and interview schedules pre-tested for accuracy and content validity were used in data collection from December 1999 to January 2000. The data were analyzed by using the SPSS/PC<sup>+</sup>.

The results revealed that most of the respondents are Mhong, had an average age of 36 years, had never been to school and had no experience in any training. Their incomes were not sufficient for their own family and they borrowed

some money from capitalists. Their land right document was Agricultural Land Reform Allowed Document (ส.ป.ก.) providing an average of 2 rai farming area per family. The average family farm labour was 2 persons. Agricultural information was mainly received through television and radio broadcasting. They did not contact change agents when having cabbage cultivation and pest problems but they consulted their neighbors. They did not join any farmer group either.

Most of the respondents were found to have a high level of perception of IPM in the aspects of advantage, complexity and trialability: use of glued trap, Bt (*Bacillus thuringiensis*) and ground neem seed. They had a low level of perception of the compatibility of technology in the following aspects: seed preparation before sowing, use of glued trap, Bt and ground neem seed. In terms of observability, the respondents with high and low levels of perception of seed preparation before sowing, use of glued trap, Bt and ground neem seed were equal in number.

The factors affecting the respondents' adoption and non-adoption of IPM in cabbage were educational level, experience, credit obtained from capitalists and cooperatives, land right document (ส.ค.1), document of right allowed by Agricultural Land Reform Office, farming area per family, household labor contributed to farming, group membership, and perception of the use of glued trap, Bt and ground neem seed. The following were found not to affect the respondents' adoption and non-adoption of the new technology: age, income from cabbage cultivation, credit obtained from banks or farmer's groups, land right allowed by the Department of Forestry (สทก.), agricultural information access, perception of soil preparation before sowing or planting and seed preparation before sowing.