

Thesis Title Factors Affecting Farmer's Adoption of Neem (*Azadirachta* spp.)
Products for Insect Pests Control in Suphanburi Province.

Author Mr. Sangaroon Tongdang

M.S. (Agriculture) Agricultural Extension

Examining Committee :

Lecturer. Dr. Kovit Phong-Ngam	Chairman
Assist. Prof. Dr. Manas Titayavan	Member
Assist. Prof. Dusdee Nalampang	Member
Assist. Prof. Prateep Kochsila	Member

Abstract

The basic objectives of this research were to study socio-economic characteristics of farmers using neem products and analyze the relationship between basic socio-economic and other factors and the adoption of neem products for insect pest control and problems in using neem products by the farmers.

This study was conducted with the structured interview data from 86 sampled farmers in Suphanburi Province. Descriptive statistics such as Chi-Square and Pearson Product Moment Correlation Coefficients and other methods were used to analyze and interpret the data.

The results of the study revealed that the average age of farmers using of neem products for insect pests was 45.52 years. Most of them had finished primary education of grades 1-4. Their total household income was average of 131,568.50 baht per year and average of 21.65rai of landholding. The average experience farmers' using neem products was 3.14 years. An average of 37.9% of the farmers, in previous year, had contacted with other extension officers more than 8 times, and most of them had firstly got the information about using neem product from neighbours who were associated with middle level knowledge about

using neem products for insect pests control. Neem product for insect pests control is the traditional technology which the farmers have adopted for several years. Previously, rice field is the area that farmers applied neem products. The material resource used for neem ingredients in extracting for pests control can be obtained both from neem and other varieties of plants. These plants can be available from many areas such as surrounding house area, cultivated area. Moreover, most of the farmers have applied solely neem ingredient for insect pests control.

In farmers' opinion, they felt that it was highly safe in the application of neem extracts for insect pests control. However, neem products have been found not so effective. Additionally 50% of farmers think that it is difficult to prepare neem products whereas the rest 50% of farmers think that it is easy to produce neem.

From the hypothesis testing it was found that factors affecting farmer's adoption of neem product for insect pests control was total household income, land holding size, knowledge using of neem products, the information and the effectiveness of neem products applied.

The farmer's problem dealing with neem product for insect pests control were : 1) tedious and difficult to prepare ; 2) difficulty in spraying because of the blockade of spray nozzle by the solid residue of neem products ; 3) shorter storage life of neem products and strong smell of neem products, shorter storage life of neem seeds ; 4) difficult to collect neem seeds and ineffective to control heavy infestation of insects.

Suggestion for farmers usage of neem products were : 1) preparation, should be filtered with thin cloth several times and grinding equipment should be used; 2) application of neem product should be done while the light is dim and only for weak insects ; 3) storage should be done only in low temperature not more than 2 days.