

**BEHAVIOR CHANGE OF PESTICIDES USE:  
A PARTICIPATORY APPROACH:  
A CASE STUDY IN TRAKANPHUTPHON DISTRICT  
UNBONRATCHATHANI PROVINCE**



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for the Degree of Master of Public Health  
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Unbonratchathani Province


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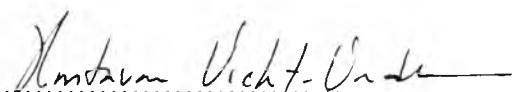
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## ABSTRACT

This study aimed to promote correct and proper pesticide knowledge, attitudes, and practices in the farmers by employing participatory learning process. The study group composed of 50 farmers who grew vegetables all year round for domestic consumption and for commercial distribution and who used pesticides of organophosphate and carbamate classes. Sixty eight percent of the participants were female, 24% of participants were between 40-42 years old, the highest education level of 94% of the populations was at primary school level, and 74 % of the participants had grown vegetables for more than 2 years.

The training program by participatory learning was adopted in this study. The participatory learning allowed the participants to participate in the activities by giving their opinions and asking questions that helped to maintain their interest level. Every group members participated in all training activities.

The results on pesticide knowledge showed that the participants' mean score was 6.16 scores at baseline compared to that of 10.74 scores after the participatory learning. Statistical comparison indicated significant difference between two data ( $P < 0.05$ ). It can be concluded that the knowledge of the participants was improved.

The results on attitudes towards pesticides showed that the participants' mean score was 19.46 scores at baseline compared to that of 20.36 scores after the

participatory learning. Statistical comparison indicated significant difference between two data ( $P < 0.05$ ). It can be concluded that the participants' attitudes were better after training.

The results on pesticide practice skills showed that the participants' mean score was 23.26 scores at baseline compared to that of 27.04 scores after the participatory learning. Statistical comparison indicated significant difference between the two data ( $P < 0.05$ ). It can be concluded that the pesticide practice skills of the participants were improved.

Analysis for levels of cholinesterase enzyme using reactive papers in order to determine chemical levels in blood of the farmers found 56 % of the participants with risky and unsafe blood results before the training program. However, there were only 22 % of those after the training.

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