

Thesis title: Utilization of *Trichoderma spp.* in Rice Paddy of Farmers in Sukhothai Province
Researcher: Miss Charun Khempol; **ID:** 2569001106;
Degree: Master of Agriculture (Agricultural Extension and Development);
Thesis advisors: (1) Dr.Sineenuch Khrutmuang Sanserm, Associate Professor;
 (2) Dr.Paranee Tangwiwat, Associate Professor; **Academic year:** 2016

Abstract

The objectives of this study were to study 1) social and economic fundamental state of rice farmers in Sukhothai Province; 2) their knowledge of *Trichoderma spp.*; 3) their practices of using *Trichoderma spp.*; and 4) their problems and suggestions on *Trichoderma spp.* usage.

The population in this study was 270 rice farmers who participated in a project on reducing their risks of pest spread in the year 2014. Taro Yamane's formular was used to obtain 162 sample selected by drawing lots, a simple random sampling methodology, from these rice farmers according to the proportion of the rice farmers in each district. The data were collected by interviewing the studied rice farmers. The statistical methodology used to analyze the data was frequency, percentage, minimum value, maximum value, mean, and standard deviation.

The findings of this study were as follows: (1) the average age of the studied farmers was 49.71 years. They were educated at primary level. The average period of their experience of doing rice farming was 28.75 years. The average number of their household labor in doing rice farming was 2.18 persons. The studied farmers had been transferred knowledge of *Trichoderma spp.* utilization in rice field from agricultural extension officials through training courses, and they had generally received information and knowledge of *Trichoderma spp.* at low level. The average area of their rice field was 32.15 rai. And the average cost of their rice production was 3,483.77 baht/rai. (2) the studied farmers had knowledge, at the highest level, of producing fresh *Trichoderma spp.* with the ratio of rice to water at 3 to 2, while their knowledge at the lowest level was to avoid applying chemicals in benomyl and carbendazim types during 7 days before or after applying *Trichoderma spp.* to their rice field.; (3) the studied farmers usually practiced in the production stages of fresh *Trichoderma spp.*, but they seldom practiced in the usage stages of fresh *Trichoderma spp.* and *Trichoderma spp.* storage; And (4) the studied farmers faced problems, at high level, with the utilization of *Trichoderma spp.* in their rice field in 4 issues, these were the lack of *Trichoderma spp.* sources, the *Trichoderma spp.* production period, the *Trichoderma spp.* life, and their habit of using chemicals. They suggested that *Trichoderma spp.* should have been produced in the form of ready-made *Trichoderma spp.* and it should have been stored longer. Besides, they should have been supplied with *Trichoderma spp.* continuously.

Keywords: *Trichoderma spp.*, Utilization, Paddy, Sukhothai Province