DETERMINANTS OF TECHNICAL KNOWLEDGE TOWARD RICE BLAST DISEASE MANAGEMENT PRACTICES AMONG DEPENDENT FARMERS IN PASIR MAS, KELANTAN

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DECLARATION

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Plantation and Agrotechnology, Universiti Teknologi MARA.

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ABSTRACT

DETERMINANTS OF TECHNICAL KNOWLEDGE TOWARD RICE BLAST DISEASE MANAGEMENT PRACTICES AMONG DEPENDENT FARMERS IN PASIR MAS, KELANTAN.

Rice plant (Oryzae sativa) is the most important and primarily source of food for the world population. Currently, global rice's industry is unable to fulfill the worldwide population demand regarding the incurable rice pests and diseases. Yet in Malaysia, rice blast disease remained as an important and destructive disease that capable to give higher contribution to yield losses up to 100% under favourable conditions. Recently, approximately four hectare granny area at Kangkong, Pasir Mas, Kelantan have been infected by blast disease. This area has been selected to conduct a survey study to determine the factors that influence the technical knowledge on rice blast disease management practices among dependent farmers in Pasir Mas, Kelantan. The survey study was conducted among 50 respondents selected randomly with the structured questionnaires. A Likert scale was used to measure the respondents on the technical knowledge on rice blast disease management practices. From the descriptive analysis result, the total mean of the respondents' general knowledge toward the rice blast disease, the development factors of rice blast disease, rice blast disease symptoms and toward the rice blast disease detection are 3.52, 3.55, 3.65 and 2.09 respectively. Based on the Pearson Correlation analysis, the result showed that there was a strong relationship between technical knowledge on rice blast disease management practices and chemical control. While the relationship between technical knowledge on rice blast disease management practices with biological and cultural control was a moderate relationship. In addition to that, in the multiple regressions, it concluded that the chemical control was the major factors that influence the technical knowledge on rice blast disease management among farmers compared to the biological and cultural control.

Keywords: Rice blast disease, technical knowledge, chemical control, biological control, cultural control