

## **Intention to adopt a new variety of paddy among farmers in Terengganu, Malaysia**

### **ABSTRACT**

Rice security has been consistently in Malaysia's self-sufficiency program as it is a staple food for vast majority of the population. One of the main reasons of low paddy productivity is due to rice blast disease which is caused by fungus pathogen, *Magnaphorthe oryzae*. Putra 1 is one of the Universiti Putra Malaysia (PadiU Putra) technologies introduced in 2017 and has proven to be the best variety to combat blast diseases and increasing yield of paddy per acre based on trials that has been conducted in Besut, Terengganu. However, a clear perception about this new variety among paddy farmers is anonymous. Therefore, this research aims to explore the latent factors that could influence the adoption intention of Putra 1 by paddy farmers in Besut, Terengganu. Theory of Planned Behaviour (TPB) was used as theoretical framework to analyze the paddy farmer's intention to adopt Putra 1 as their new variety to replace the existing variety. Descriptive analysis and factor analysis were then performed in order to extract the latent factor from factor analysis while the descriptive analysis is used to measure the distribution of the data in term of it central tendency and normality. The interview of paddy farmers in Besut, Terengganu was done from April to May 2017. The results showed that four factors; attitude, subjective norms, knowledge and perceived behavioural control significantly affect farmers' intention to adopt Putra 1. Thus, encouraging paddy farmers to adopt the new variety can help to control blast diseases, increase production and hence the level of self-sufficiency.

**Keyword:** Theory of planned behaviour; Blast disease; Factor analysis; Putra 1