

## **The practice of imidazolinone-resistant rice production in the irrigated rice fields of Kg Sungai Leman**

### **ABSTRACT**

Rice is an important crop and a staple food in Malaysia. Herbicides are used extensively to control weeds, which represent a major constraint to yield production. Although the introduction of Imidazolinone-resistant Rice with its management system (IRPS) has greatly improved both yields and weed control, the system is designed to be used for only a short term before transitioning to local varieties. Thus, a survey was conducted among 115 farmers to obtain information on their general knowledge on weed control and IRPS. The results showed that the majority of the farmers use herbicides to control all types of weed presented with a small minority still using manual control. The majority of farmers using IRPS were applying the herbicide imidazolinone when soil condition were right and only once per season, which is the recommendation. Most of the farmers still utilized imidazolinone to control weedy rice but would not use it on other weeds. However, many of the farmers perceived imidazolinone as becoming more ineffective and expensive and were willing to change to other herbicides if there was a viable alternative. Although herbicide is the main method employed in controlling weeds when using IRPS, farmers still regard imidazolinone as an ineffective herbicide. The reason IRPS is still in use is due to the high yields provided. This study shows a better understanding of knowledge on weeds and IRPS among farmers. Nonetheless, the IRPS will become a redundant system due to the ineffectiveness of imidazolinone and a new system should be introduced to replace it.

**Keyword:** Rice; Herbicide; Imidazolinone herbicide; Imidazolinone-resistant rice; Imidazolinone-resistant rice production system; *Oryza sativa*