

Screening for Sarawak Paddy Landraces with Resistance to Yellow Rice Stem Borer, *Scirpophaga incertulas* (Walker) (Lepidoptera: Crambidae)

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ABSTRACT

The yellow rice stem borer, *Scirpophaga incertulas* (Walker) is a prevalent pest in paddy fields worldwide. In Sarawak, a survey on pest of paddy carried out from 2009 to 2011 covering 166 paddy fields revealed that rice stem borers caused 11.4% of total paddy damage. In order to reduce the damage, identifying resistance paddy variety is crucial. The objective of this study was to screen Sarawak paddy landraces with resistance to

S. incertulas. Twelve Sarawak paddy landraces were selected randomly for this study. Antixenosis resistance screening was performed in aquariums (60 x 28 x 33 cm). Three replications of one-month-old seedlings were randomly arranged in aquarium and exposed to adult *S. incertulas*. The number and position of egg mass on each plant were recorded. Egg mass abnormalities were also observed. For antibiosis, rice culms of two-month old seedlings from each landrace were infested with larvae. The length of surviving larvae from five rice culms was measured. The experiment revealed variations in landrace

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