

**IDENTIFICATION OF INTROGRESSED LINE OF BC₁F₁
FROM MALAYSIAN RICE VARIETY**

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ABSTRACT

IDENTIFICATION OF INTROGRESSED LINE OF BC₁F₁ FROM MALAYSIAN RICE VARIETY

Rice blast disease is mostly caused by the fungus, *Magnaporthe oryzae*. Marker-assisted backcrossing (MAB) is one of the reasonable approaches to develop a new resistant variety to confront with this challenge. The objective of the study is to identify the introgressed lines from BC₁F₁ population. A total of 80 seeds from BC₁F₁ families were obtained from Agrotechnology and Bioprocess Division, Malaysian Nuclear Agency, Bangi, Selangor, Malaysia. Based on the result there are 82.5% of seeds were successfully germinated meanwhile 17.5% seeds were unsuccessfully germinated. DNA was extracted by following the modified CTAB method. PCR analysis showed a pattern of band generated by using RM413 and RM206 primers. Marker RM 413 was tightly linked with *pi-21* demonstrated 4 heterozygous (score as “H”) out of 18 backcrossed plants. RM 413 marker can be further used as a foreground marker selection in future generation in development of rice blast resistant variety in Malaysia.