

**EVALUATION OF PATHOGENICITY OF *XANTHOMONAS ORYZAE* PV.
ORYZAE TOWARDS MALAYSIAN RICE VARIETIES**

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ABSTRACT

EVALUATION OF PATHOGENICITY OF *XANTHOMONAS ORYZAE PV. ORYZAE* TOWARDS MALAYSIAN RICE VARIETIES

Nowadays, the increasing number of Malaysian population had inclined the demand of rice as a staple food. The importance of rice industry in the agricultural sector is undeniable because without rice, the nation is going to have a problems with inadequate food source. Bacteria leaf blight is a major and popular disease among rice growers and until now, there is no suitable solution to overcome the problem. There are many distinct management practices suggested to manage the disease, but no information were recorded yet on study of the efficiency of Malaysian rice varieties against bacterial leaf blight in Malaysia. In this research, three local varieties, MR 220 CL2, MR 219 and MR 297 were tested in the greenhouse to assess BLB severity reaction to the varieties. This experiment was implemented with three replications in Randomized Centralized Block Design (RCBD). Data on severity of disease recorded using normal rice assessment scheme (SES) and chlorophyll content recorded using SPAD meter. The result of the pathogenicity test showed that, MR 220 CL2 has the lowest percentage of severity which are (61%) followed by MR 297 is (63%) and the highest was MR219 (79%) which is most susceptible variety to bacterial leaf blight. For SPAD meter reading, the highest mean showed by MR 297 (13.18), followed by MR 220 CL2 (12.42) and MR 219 showed the lowest mean SPAD meter reading on inoculated plant (11.73). Based on this study, it can be concluded that MR 220 CL2 has the capability to against bacteria leaf blight.

Keywords: Xanthomonas oryzae pv. oryzae, bacteria leaf blight, disease severity