

**THE EFFECT OF DIFFERENT PLANT EXTRACTS ON *Pyricularia oryzae*
IN-VITRO**

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ABSTRACT

THE EFFECT OF DIFFERENT PLANTS EXTRACT ON *Pyricularia oryzae* IN-VITRO

A research has been made about the antifungal attributes of some plant extracts against *Pyricularia oryzae*. Rice blast caused by *P. oryzae* is one of the most decimate diseases of rice and number of yield loss up to 100% in susceptible cultivars of rice. It can cause major symptoms including lesions that can be found on all parts of the plant such as in leaves, leaf collars, necks, panicles, pedicels, and seeds. There is no study of these 4 plant extracts conducted in-vitro. The objectives of this study are to isolate, inoculate, and characterize the causal agent of rice blast disease from Merlimau rice field in Melaka and to determine the effectiveness of different types of plant extracts as well as Kapal Terbang leaf (*Chromolaena odorata*), Papaya leaf (*Carica papaya*), Neem leaf (*Azadirachta indica*), and Lidah Buaya leaf (*Aloe vera*) against *P. oryzae* in-vitro. Antifungal activity will be tested at concentrations of 0%, 25%, 50%, and 100% of plant extracts by using dual culture method. The main results of this experiment which are the ability of these plant extracts to control blast disease in Malaysia with minimal inhibitory concentration (MIC) preferred as an alternative to chemical control and it can serve as bio-fungicides for farmers in Malaysia.

Keywords: *Pyricularia oryzae*, isolate, effectiveness, *Chromolaena odorata*, *Carica papaya*, *Azadirachta indica*, *Aloe vera*, concentrations, potatoes dextrose agar (PDA), bio-fungicides.