UNIVERSITI TEKNOLOGI MARA

EVALUATION OF EFFECTIVE MICROBES FOR CONTROL BACTERIAL LEAF BLIGHT (BLB) DISEASE ON PADDY

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Final year project report submitted in partial fulfillment of the requirements for the degree of
Bachelor of Science (Hons.) Plantation Technology and Management

Faculty of Plantation and Agrotechnology

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CANDIDATE'S DECLARATION

I declare that the work in this Final Year Project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. The final year project report has not been submitted to any academic institution or non academic institution for any other degree or qualification.

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ABSTRACT

Bacterial leaf blight diseases have become major nuisance of paddy production nowadays. Bacterial Leaf Blight is, the more destructive manifestation of the disease, wherein the leaves of the entire the plant turns pale yellow and white during the seedling to the early tillering stage, resulting in a partial or total crop failure . In the late years, the scientist has diverted their attention towards the potential of good and beneficial microbes (Ritika Bhattacharjee., 2014). Thus, this study is conducted to evaluate the effectiveness of microbe's formulation to control Bacterial Leaf Blight. The parameters of this study are *Xanthomonas orayzae* (pathogen of Bacterial Leaf Blight) and Effective microbe's formulation (Streptomyces bacteria). The methodology used in this research is by determining the diseased paddy that affected by Bacterial Leaf Blight disease and rate of microbes (Streptomyces bacteria). The experiment will be first tested in the. In the laboratory, the infected paddy leaves will be isolated and inoculate under the nutrient agar (NA) medium. After that, the experiment will be further conducted in the greenhouse at where the healthy paddy plants will be grown. The pathogen will spread into the healthy plants and after the certain period of time, the application of treatment will be applied. The expected outcome of this experiment is the effectiveness application of effective microbes can be recommended for wider use in paddy fields and also will be useful for further research of wider scale in paddy fields industry.

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