UNIVERSITI TEKNOLOGI MARA

EFFECT OF EFFECTIVE MICROORGANISM ON PADDY SEEDLING GROWTH

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Final year project report submitted in partial fulfilment 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 other academic institution or non academic institution for any other degree or qualification.

In the event that my Final Year Project is found to violate the conditions mention above, I voluntarily waive the right of conferment of my bachelor degree and agree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

This study was conducted at UiTM Jasin, Melaka, during September to December 2014. The study is to determine the effect of difference Effective Microorganisms (EM) rates on radical emergence and growth of paddy seedlings and to identify the most suitable concentration for seed treatment. The experiment was carried out with four levels of seed treatments. T1 = 1:10 dilution of EM, T2 = 1:20 dilution of EM, T3 = 1:50 dilution of EM and T4 = pure water (control). The seeds were soaked for four days before being sown immediately. The result showed that the treatment T3 got highest seedling height, germination percentage, number of tillers and fresh and dry weight of root compare to other treatments. Considering 1:50 dilution of EM found to be most suitable concentration in this study for better and consistent performance of seedlings growth. However, there was no significant difference between EM treatment and control in most parameters that have been measured.

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