

UNIVERSITI TEKNOLOGI MARA

**EFFECT OF INTEGRATED USE OF THE
DIFFERENT TYPES OF ORGANIC
FERTILIZER APPLICATION TREATED
WITH EFFECTIVE MICROORGANISMS
ON THE GROWTH AND YIELD OF
PADDY**

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Final Year Project Proposal 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 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

Study on the effects of different types of organic fertilizer treated with effective microorganisms (EM) on the growth and yield performance of paddy was conducted at field Universiti Teknologi MARA Jasin, Melaka for four months period. The study was carried out by using Variety MR220 CL1 of paddy obtain from MADA. Seven different types of organic fertilizer were prepared with treated by 1:500 EM1 (Chicken Dung + EM), (Cow Dung + EM), (Paddy Husk Ash + EM), (Chicken Dung + Paddy Husk Ash + EM), (Chicken Dung + Cow Dung + EM), (Cow Dung + Paddy Husk Ash + EM) and (Chicken Dung + Cow Dung + Paddy Husk Ash + EM). Those treatments were used in this study to determine the most suitable different types of organic fertilizer treated with EM for the paddy crop. The conventional compound fertilizer were used as control treatment. The study was conducted in a Completely Randomized Design (CRD) with eight treatments and four replications. Data on the parameters selected are plant height, number of tillers, number of panicles, weight of rice panicle, 100 grains weight, number of filled grain, weight of filled grain and grain weight,. Results from the ANOVA indicated that there has a significant increase in yield of paddy. Means separation using Tukey's test showed treatment T7 (Chicken Dung + Cow Dung + Paddy Husk Ash + EM) was found to have the most significant effect in the increase in all the parameters ($P \leq 0.05$).

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