

**STUDY ON THE GROWTH PERFORMANCE OF RICE WITH DIFFERENT
RATE OF EFFECTIVE MICROORGANISM (EM)**

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**Final Year Report Submitted in
Partial Fulfillment of the Requirement for the
Degree of Bachelor of Science (Hons.) Plantation Management and Technology
in the Faculty of Plantation and Agrotechnology
Universiti Teknologi MARA**

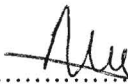
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I hereby declare that I have checked this project and in my opinion, this project is adequate in term of scope and quality for the award of the degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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ABSTRACT

STUDY ON THE GROWTH PERFORMANCE OF RICE WITH DIFFERENT RATE OF EFFECTIVE MICROORGANISM (EM).

In order to study the effect of different rate of effective microorganism (EM 4) on growth performance in rice an experiment was carried out in rain shelter UiTM Jasin in complete randomized design (CRD) based on 3 replications. The variety of rice use is MR 220 and the different rate of effective microorganism were dilute with distilled water in 4 level rate 1ml EM+ 100ml H₂O, 1ml EM + 250ML H₂O, 1ml EM + 500ml H₂O and 1ml EM + 750ml H₂O. Each of the level will mix with inorganic fertilizer NPK with recommended rate. The rice without effective microorganism (EM) was served as control. Dilute solutions of effective microorganism (EM) had a beneficial effect on all measured parameters such as number of leaves, tillers and panicle. The height and its components were showed significant different between the treatment. The maximum plant growth was noted in plant treated with 70% EM + 30% NPK that show the excellent of growth performance of rice with the highest mean value of fresh (1071.7) and dry weight (453.33). So, from this study the treatment of effective microorganism combine with chemical fertilizer was proved in boosting a better performance of paddy crop.