

**THE EFFECTS OF ARBUSCULAR MYCORRHIZAL FUNGI (*Glomus mosseae* sp.)
INOCULATION ON AEROBIC PADDY GROWTH PERFORMANCE AND
ROOT'S NUTRIENT (PHOSPHORUS)**

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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
In the Faculty of Plantation and Agrotechnology
Universiti Teknologi MARA**


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DECLARATION

This Final year Project is a partial fulfillment of the requirement for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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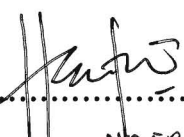
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ABSTRACT

This research was done by inoculated Arbuscular Mycorrhizal fungi (*Glomus mosseae* sp.) with aerobic paddy to observe the effect of the fungi whether it can boost the growth performance and nutrient uptake (phosphorus), since its' lack of growth performance and nutrient uptake (phosphorus) compare to lowland paddy. The other objective of this research was to find the least amount of mycorrhizae needed to increase the growth performance and nutrient uptake (phosphorus) by Aerobic paddy. The research was done by applying different rate of mycorrhizae which is 10gram, 20gram and 30gram to aerobic paddy seedling. All the treatment has 4 replication. The research was done inside greenhouse and all the paddy was plant inside pot. The data was taken from week 5 until week 11 of aerobic paddy. The data taken was the height of paddy, the number of paddy leave and tiller, the fresh weight of root, the dry matter of stem,leave and root, the leaf area (cm²), the number of phosphorus obtain and lastly the presence of Mycorrhizae colonization on root. The result shows that all the treatment shows significance of difference ($P < 0.05$) after the data being analyzed by ANOVA calculation. The mycorrhizae were presence on the root after being observed under Trinocular microscope. The conclusion from the research was Arbuscular mycorrhizae can enhance the growth performance and nutrient uptake (phosphorus) for aerobic paddy.