A REVIEW THE EFFECT OF BIOFERTILIZER ON GROWTH AND YIELD PRODUCTION OF PADDY *(Oryza Sativa L)*

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Partial Fulfillment of the Requirements For The

Bachelor of Science (Hons.) Technology and Plantation Management

In The Faculty of Plantation and Agrotechnology

Universiti Teknology MARA

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DECLARATION

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

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Signature: .....

Name of Supervisor: Dr. Asmah Awal

Position: Lecturer

Date: 27/7/2016

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NURUL ATIKA BINTI OTHMAN

ABSTRACT

EFFECT OF BIOFERTILIZER ON GROWTH AND YIELD PRODUCTION OF PADDY (*Oryza sativa L*)

Soil fertility is one of the most important constraint limiting crop yield and maintaining soil quality could help in reducing the impact of agricultural practices on the environment such as land degradation, decreasing soil fertility and rapidly declining production levels. Biofertilizer is one of the best technology used in the agricultural field to replace chemical fertilizer. Beneficial microorganisms contained in biofertilizer will increase plant growth and yield. The successful of using biofertilizer toward paddy growth and yield production are depend on beneficial microorganisms. Microorganisms that are commonly used as biofertilizers component are nitrogen fixers (N-fixer), phosphorus solubilising, phosphate mobilizing and plant growth promoting rhizobacteria (PGPR). Biofertilizer is eco friendly, more efficient, economical and easy availability while chemical fertilizers are not environmentally friendly and in a long time period usage will give negative effect to soil, water, air and also will strengthened pesticide. With the usage biofertilizer, it can help in increasing paddy growth and yield production.

Keywords: Biofertilizer, microorganisms, chemical fertilizer, N-fixer, phosphorus solubilising, phosphate mobilizing, PGPR