

UNIVERSITI TEKNOLOGI MARA

**Biomass Production and Phenology of
Selected Aerobic Rice Intercropped
With legume cover crop *Arachis pintoi***

WAFABIN MOHD SALLEH

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CANDIDATE 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 degree or qualification.

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Name of Candidate : Wafa Bin Mohd Salleh

Candidate's ID No : 2012867812

Program : Bachelor of Science (Hons.) Plantation
Technology and Management

Faculty : Plantation and Agrotechnology

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Legume Cover Crop *Arachis pintoi*

Signature of Candidate : _____

Date : 25th JANUARY 2015

ABSTRACT

Rice is important to Malaysia because it is staple food for this country and mostly of the paddy farmer in Malaysia is a smallholder in total 296 000 of farmers that cultivate a wet land paddy. Aerobic rice is a rice that grown in well-drained, non-puddled and non-saturated soils compare to conventional wetland paddy have a major problem that is weed because the absent of puddled and saturated in the field. *Arachis pinto* or pinto peanut is one of leguminous family can increases soil conservation and improvement by fixing nitrogen. In the practice there is no specification of fertilizer application practice in paddy cultivation, only as references. The study is to evaluate the biomass production and phenology of aerobic rice grown intercropping with *Arachis pinto* under various rate of fertilizer and determine the relative contribution of nitrogen from *Arachis pinto* to total nitrogen uptake of aerobic rice with the difference treatment such as 100% NPK, *Arachis pinto*, 50% NPK + *Arachis pinto* and 100% NPK + *Arachis pinto*. From this study, there is no significant difference ($P>0.05$) between the treatment of application of fertilizer and intercropping of *Arachis pinto* in the aerobic cultivation.

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