THE EFFECT OF APPLYING OIL PALM WASTE TOWARDS SOIL NUTRIENT

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Final Year Project Report Submitted in

Partial Fulfilment of the Requirements for the

Degree of Bachelor Science (Hons.) Plantation Technology and Management

in the Faculty of Plantation and Agrotechnology

Universiti Teknologi MARA

JULY 2015

DECLARATION

The Final Year Project is a partial fulfilment of requirement s for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, University Technology MARA.

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

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ABSTRACT

This study was done to analysis fertility of soil between soils under empty fruit bunch (EFB) and frond stacking residual (FSR) of oil palm on field. Besides that, this study was conducted for analysis elements and nutrients has containing in soil under EFB and FSR and to compare which one are more beneficial toward soil fertility. Soil sample was taken at Felcra Sg. Melikai plantation and transferred to soil laboratory on UiTM Jasin. The soil sample has been done several processes before elements or nutrients was analysed by using Inductive Coupled Plasma (ICP) machine. Elements and nutrition was analysed such as phosphorus (P), potassium (K), Calcium and magnesium (Mg) because this elements or nutrients very important to oil palm requirement except nitrogen (N. Meanwhile, elements or nutrients that contain in soils under EFB had shown higher and significance compare with soil under FSR. However, other nutrient such as phosphorus (P), potassium (K) and Magnesium (Mg) was present but in small quantities and no significance between soil under EFB and FSR. All this while had shown that soil under EFB and FSR are no significance difference. It means both of soil under EFB and FSR are beneficial to soil fertility, reduce fertilizer cost and save environmental surrounding.