UNIVERSITI TEKNOLOGI MARA

A STUDY ON NUTRITIONAL CONTENT OF COMPOSTED PRODUCTS FROM OIL PALM WASTE

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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

Faculty of Plantation and Agrotechnology

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ABSTRACT

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Oil palm is one of the major crops planted in this country. Every year, there will be lots of waste produced by the oil palm industries such as palm oil mill effluent, empty fruit bunch, decanter cake, mesocarp fibre, and palm kernel cake. This oil palm waste is becoming major concerns nowadays for the oil palm growers as its disposal problems has become an issue. The oil palm wastes contain many nutrients that can be used as a fertilizer supplement for plants. The main focus in this study was to assess the nutrient elements of fresh composted products from oil palm waste. Other than that, this study was done to determine the effectiveness of different type of oil palm waste towards crop performance and to determine the best composting technique that contributes towards better crop performance. In this study, there were three oil palm wastes used which are palm oil mill effluent, empty fruit bunch and decanter cake. These three materials have undergone two treatments which are dried and aerobic composting technique in order to turn it into finished compost. Then these composts will be used as planting medium for short term crop to compare their effectiveness. The nutritional content of each waste can be assess by making an evaluation on the micro and macro element analysis from pre­planting product samples. The outcome of this study is the wastes give significant difference toward vegetative growth of crops.
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