

UNIVERSITI TEKNOLOGI MARA
THE EFFECT OF DIFFERENT SOIL pH
LEVEL ON THE AVAILABILITY AND
THE UPTAKE OF MACRO PLANT
NUTRIENT BY OIL PALM (*Elaeis*
***guineensis*) SEEDLING**

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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**

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CANDIDATE'S 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 has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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ABSTRACT

The effects of different levels of soil pH on the availability and uptake of plant macronutrient by oil palm seedling (*Elaeis guineensis*) was observed by planting them in the polybag that was filled with the soil of different pH. The soil pH played an important role in determining the availability of macronutrients. In this experiment, the soil's pH were adjusted from high acidity to high alkalinity. The soil's pH were adjusted by using sulphuric acid(H_2SO_4) and sodium hydroxide(NaOH) and applied to certain amount onto the soil. The availability of soil nutrients were marked by the content of the nutrient in the soil. The nutrient left in the soil was probably due to the unavailability of the nutrients to be uptake by oil palm seedlings roots. At the end of finding, it was found that the different soil pH has no significant effect to oil palm seedlings growth response which is due to the oil palm tolerance to change in soil ph.

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