

**THE EFFECT OF DIFFERENT RATE COMPOUND FERTILIZER
TOWARDS SOIL PROPERTIES AND GROWTH OF MUSTARD
GREEN (*Brassica rapa* Var. *Parachinensis* L.) UNDER
GREENHOUSE.**

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**FINAL YEAR PROJECT REPORT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN
AGROTECHNOLOGY (HONS.) HORTICULTURE
TECHNOLOGY IN THE FACULTY OF PLANTATION AND
AGROTECHNOLOGY
UNIVERSITI TEKNOLOGI MARA**

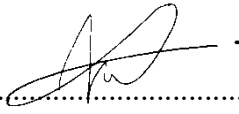
FEBRUARY 2022

DECLARATION

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ABSTRACT

THE EFFECT OF DIFFERENT RATE COMPOUND FERTILIZER TOWARDS SOIL PROPERTIES AND GROWTH OF MUSTARD GREEN (*Brassica rapa* Var. *Parachinensis* L.) UNDER GREENHOUSE.

Brassica rapa var. *parachinensis* or green mustard rich in nutrients and grows quickly in 27 to 35 days. Chemical treatments cause loss of properties and fertility and need to ensure food sustainability in the future, and an optimized agricultural system is essential. Therefore, this research evaluates the effects of different rates of compound fertilizer on soil properties and the growth of green mustard under greenhouse. This research was conducted in greenhouse of UiTM Perlis and arranged in a complete randomized design (CRD) with five replications. The total number of experimental units was 25. The treatment for this experiment is a different rate of NPK Green including T1(control), T2(0.375gram), T3(1.750 gram), T4(1.125 gram), and T5(1.50gram) per polybag to the Green Mustard plant. The soil samples with different rates of NPK Green fertilizer were tested for parameter available phosphorus, soil pH, soil bulk density, and soil pore space while for green mustard growth were tested for parameters plant height, leaves number, root length, fresh weight, and dry weight. The result showed that rates fertilizer 1.50-gram influenced the effect on the plant growth parameters and also for available phosphorus and soil pH. There has no influenced effect on the soil bulk density and pore space. The selected rate of 1.50-gram fertilizer due to better results in producing the yield weight of the plant.

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