

**EFFECT OF DIFFERENT VERMICOMPOST RATE TOWARDS  
GROWING CROP OF CHILLI (*Capsicum frutescens* var.  
*fasciculatum*) UNDER RAIN SHELTER FOR SOIL PROPERTIES  
AND YIELD**

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## DECLARATION

This Final Year Project is a partial fulfilment of the requirements for a Degree of Bachelor of Science in Agrotechnology (Hons.) Horticulture Technology in the Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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## **ABSTRACT**

### **EFFECT OF DIFFERENT VERMICOMPOST RATE TOWARDS GROWING CROP OF CHILLI (*Capsicum frutescens var. fasciculatum*) UNDER RAIN SHELTER FOR SOIL PROPERTIES AND YIELD**

Chilli is one of the most important crop in Malaysia. It has high demand from people because of the benefit that can gained from it. The objectives of this study were to determine the effect of different rate of vermicompost on plant growth and to determine the effect of different rate of vermicompost on soil properties. This experiment was carried out under rain shelter with 6 replications (R1,R2,R3,R4,R5,R6) in a completely randomized design (CRD). The treatments used in this experiment were T1 (NPK fertilizer as a control), T2 (100% vermicompost), T3 (60% vermicompost), T4 (50% vermicompost) and T5 (40% vermicompost). The rate for T1, T2, T3, T4 and T5 are (0g vermicompost + 6g NPK Blue, 21g vermicompost + 6g NPK Blue, 19g vermicompost + 6g NPK Blue, 17g vermicompost + 6g NPK Blue, 15g vermicompost + 6g NPK Blue) per polybag. Most of the growth performance on chilli showed no significant difference. For root weight, there was significant difference which showed the highest in T2 and T3 with 6.50g. For pH and EC, there were significant difference. pH showed the highest value in T4 with 6.27 and T5 showed the lowest value with 5.87. For EC value, EC showed significant different in T1 with 0.77 and give the highest mean value. The lowest mean value of EC was in T5 with 0.33. This showed that the rate of vermicompost used in this study did not affect the plant too much. This may had occurred due to disease and pest outbreak attacked during this time.

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