

# **RESPONSE OF PRODUCTION OF PEANUT (*Arachis hypogea*, L.) TO FERTILIZING VERMICOMPOST AT VARIOUS PLANTING DISTANCES**

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## ***ABSTRACT***

*Efforts to improve peanut cultivation are carried out to meet public consumption needs and suppress imports. One of the efforts to improve peanut cultivation techniques is to apply the use of organic matter (vermicompost) and set the ideal spacing. The purpose of this study was to analyze the response of peanuts (*Arachis hypogea*, L.) to the application of vermicompost at various spacings. The experimental design used factorial RAK with 3 replications. The first factor is the spacing which consists of 20 cm x 20 cm, 40 cm x 20 cm, and 30 cm x 30 cm. The second factor is the dose of vermicompost which consists of 5 tons/ha, 8 tons/ha, and 10 tons/ha. Observational variables in this study consisted of the weight of root safe per sample, the weight of canopy per sample, number of pods per sample, weight of wet pods per sample, weight of dry pods per sample, the weight of dry seeds per sample, the weight of dry seeds per plot, and weight of 100 dry seeds. The data were analyzed using ANOVA and then further tested using DMRT 5% and 1%. The use of spacing of 40 cm x 20 cm and 30 cm x 30 cm showed high yields on the weight of root safe per sample, the weight of canopy per sample, the weight of wet pods per sample, weight of dry pods per sample, dry seed weight per sample, and dry seed weight per plot. While the application of vermicompost fertilizer at a dose of 10 tons/ha gave the highest yield only on the number of wet pods per sample with an average number (14.17).*

**Keywords:** *Peanuts, Planting Distance, Vermicompost*