

# **Effect of Dosage and Frequency of Application of *Bio-Slurry* on Liquid Growth and Production of Peanut (*Arachis Hypogaea* L).**

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## **ABSTRACT**

Peanut (*Arachis hypogaea* L.) is the second legume food crop after soybean in Indonesia. In increasing the growth and production of peanuts, it can be done by adding nutrients, namely fertilizing with organic fertilizer *Bio-slurry* liquid. *Bio-slurry* is the final product of the fermentation process for processing waste made from cow dung. This study aims to determine the production of groundnut (*Arachis Hypogaea* L) hypoma 1 variety with the addition of fertilizer *ofbio-slurry* liquid and the frequency of application *ofbio-slurry* liquid. This research was conducted for 4 months from December 2020 to March 2021. All activities were carried out on the land of the Jember State Polytechnic, Sumbersari Jember District, East Java. This study used a factorial randomized block design (RBD) with 2 factors 9 treatments and 3 repetitions, factor A 3 levels, namely the dose of *Bio-slurry* 12 liters/ha, 16 liters/ha and 20 liters/ha, Factor B 3 levels, namely the frequency of application. 1 time at the age of 2 WAP, 2 times at the age of 2 and 4 WAP and 3 times at the age of 2, 4 and 6 WAP, with a combination of treatments A1B1, A1B2, A1B3, A2B1, A2B2, A2B3, A3B1, A3B2 and A3B3. Data were analyzed using ANOVA and further tested using DMRT at 5% level. The results of this study showed that the dose of *Bio-slurry* (A) had a significant effect on the weight of wet pods at a dose of 12 liters/ha. Treatment The frequency of application of *Bio-slurry* (B) had no significant effect on all treatments. And the interaction of the two treatments gave a very significant effect on the number of pithy pods, dry pod weight, wet seed weight and dry seed weight at a dose of 12 liters/ha with 3 applications at 2, 4 and 6 WAP, giving a significant effect on wet pod weight. with a dose of 12 liters / ha with 3 times the application at 2, 4 and 6 WAP.

**Keywords:** *Bio-slurry Dosage, Frequency, Peanuts.*