

ABSTRACT

EFFECTIVENESS TEST BIO-SLURRY LIQUID FERTILIZER AND COMBINATIONS INORGANIC FERTILIZER TO THE GROWTH AND PLANT PRODUCTION ON PEANUTS (*Arachis hypogaea* L.)

by

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The research aims to determine the best dose in promoting growth, nutrient uptake, and the production of peanut plants. In addition, to determine the effectiveness of bio-slurry liquid fertilizer and its combination with inorganic fertilizers agronomically and economically on peanut plants. The research was conducted in Desa Muara Putih Kecamatan Natar Lampung Selatan from November 2014 - January 2015. The research was arranged in a randomized block design (RAK) three replications consisting of a single treatment with 6 (six) the level of treatment that A (Control); B (Urea 50 kg/ha, SP-36 60 kg/ha, KCl 50 kg/ha); C (Urea 37.5 kg/ha, SP-36 45 kg/ha, KCl 37.5 kg/ha and bio-slurry 1 liter/ha); D (Urea 25 kg/ha, SP-36 30 kg/ha, KCl 25 kg/ha and bio-slurry of 1.5 liters/ha); E Urea 12.5 kg/ha , SP-36 15 kg/ha, KCl 12.5 kg/ha and bio-slurry 2 liters/ha); and F (Bio-slurry of 2.5 liters/ha). Data generated on average by each group, and then tested with the test Barlett homogeneity and additivity by Tukey's test. Then analyzed by analysis of variance followed by LSD at 5% level. These results indicate that treatment D (Urea 25 kg/ha, SP-36 30 kg/ha, KCl 25 kg/ha

and bio-slurry of 1.5 liters/ha) giving peanut production at 2.92 kg/cabin whereas the control treatment gives a production of 2,34 kg/cabin, so that better treatment D of 0.58 kg/cabin compared to the control treatment. It also makes the combination treatment is more advisable to apply the farmers because it has the potential to increase the production of peanuts.

Keywords: Peanuts, bio-slurry liquid, inorganic fertilizer .