The Effect of Concentration and Various Solvents of Super Active Organic Fertilizer on Growth and Yield of Peanuts Supervised by: Ir.Herlinawati, M.P

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ABSTRACT

Peanut is one of the most important legumes except soybean. Peanut productivity still not fullfilled the nessecity of community. Efforts to anticipate these problems can be solved with applying super active organic fertilizer and utilizing of coconut water as a solvent. The purpose of this research was to increase the growth and yield of peanut through application of super active organic fertilizer and coconut water as the solvent. This research was conducted from November 2020 to February 2021 at Kencong, Jember. This experimental design using a randomized block design (RBD) with 2 factors. The first factor was the concentrations of super active organic fertilizer, ie: $1.5 \text{ ml.}\Gamma^1$, $2 \text{ ml.}\Gamma^1$, $2.5 \text{ ml.}\Gamma^1$, and $3 \text{ ml.}\Gamma^1$. While, the second factor was various of solvent, ie water and coconut water, so that were 8 combinations and 4 replicated. Data were analyzed using ANOVA and if there was a significant difference, it will be tested using Least Significant Difference test (LSD) at 5% level. Collecting data consisted of the number of branches, plant biomass, number of pithy pods, number of cipo pods, pods wet weight, pods dry weight, seeds dry weight and seeds wet weight. The results showed that number of the branches, plant biomass, number of cipo pods, pods wet weight, seeds wet weight and seeds dry weight on solvents treatments significant differences. The other variables showed the results were not significantly different. The interaction between the concentration of super active organic fertilizer and various solvents were not significantly different. While, that the application of super active organic fertilizer with coconut water solvent was more effective for growth and yield of Peanut.

Key words: Super Active Organic Fertilizer, Solvent, Peanuts