THE EFFECT OF LIQUID ORGANIC FERTILIZER (POC) TOFU WASTE ON THE GROWTH OF VARIOUS COCOA BEAN CLONES

(Theobroma cacao L.)

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ABSTRACT

Fertilization is one of the plant maintenance activities that has an important role in the productivity of cocoa plants. Fertilization that is less than optimal can affect growth in the seedling and production phases. In order to know optimal fertilization, it is necessary to fertilize based on the dose of fertilizer needed by the plant. The research was carried out at the Jember State Polytechnic Innovation Garden which took place from February 2023. This research used a Randomized Factorial Group Design (RAKF) using 2 factors with 4 replications. The first factor is C (POC dose of tofu waste) with 4 levels of C, namely C0 = 0 ml/polybag, C1 = 080 ml/polybag, C2 = 160 ml/polybag, C3 = 24 ml/polybag. The second factor is K (hybrid cocoa clone) which consists of 2 levels, namely $K1 = ICCRI\ 06$ and K2 =ICCRI 08. Parameter observations, namely plant height (cm), plant diameter (cm), number of leaves (strands), wet weight (Grams) and dry weight (Grams). The observations that have been made are then carried out by analysis of variance (Anova) and if the results show a significant difference, then a further BNJ test at 5% level is carried out. The results showed that differences in liquid organic fertilizer (POC) doses from tofu waste did not have a significant effect on all the parameters observed. The treatment of hybrid cocoa clones also gave results that had no significant effect on all observed parameters. Meanwhile, the interaction between the POC dose of tofu waste and hybrid cocoa clones gave results that had no significant effect on all parameters.

Keywords: Fertilization, Seeding, Tofu Waste, Cocoa Clones.