

**THE EFFECT OF LIQUID ORGANIC FERTILIZER BANANA STEM
AND RICE HUSK BIOCHAR ON THE GROWTH AND YIELD OF
JACKBEAN (*Canavalia ensiformis* L.)**

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ABSTRACT

Jackbean has the potential to be used as a food substitute or total protein-based replacement food, so additional cultivation is needed through fertilization and the provision of soil amendments. The application of liquid organic fertilizer (LOF) banana stem and rice husk biochar was expected to improve the growth and yield of jackbean. The research method was a field experiment arranged in a Complete Randomized Block Design (CRBD) factorial consisting of 2 factors + 1 control. The first factor was the concentration of LOF banana stem (100 ml/L, 150 ml/L, 200 ml/L), the second factor was the dose of rice husk biochar (5 ton/ha, 10 ton/ha, 15 ton/ha). The data obtained underwent an Orthogonal Contrast Test to determine significant differences between treatment combinations control. The data were analyzed using Analysis of Variance (ANOVA) with $\alpha=5\%$, followed by Duncan's Multiple Range Test (DMRT) with $\alpha=5\%$. The results of the study showed that there was no interaction between the treatment of liquid organic fertilizer (LOF) banana stem and rice husk biochar on all parameters. Giving liquid organic fertilizer (LOF) banana stem at a concentration of 150 ml/L showed a significant effect on the parameters of number of leaves at 12 weeks after planting (WAP), number of pods planted, dry pod weight planted, dry seed weight planted, dry seed weight per plot, 100-dry seed weight, seed weight per hectare. The application of rice husk biochar showed no significant effect on all parameters.

Keyword: Jackbean, Liquid Organic Fertilizer, Biochar