

**EFFECT OF APPLICATION OF LIQUID TOFU WASTE FERTILIZER  
AND RICE HUSK BIOCHAR ON THE GROWTH AND YIELD OF  
MUNG BEANS (*Vigna radiata* L.)**

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***ABSTRACT***

*Mung bean production in Indonesia has decreased due to land degradation as a result of excessive use of synthetic fertilizers. Therefore, environmentally friendly efforts such as the use of organic fertilizer and biochar need to be carried out. This research aims to examine the application of rice husk biochar and organic fertilizer made from tofu liquid waste on the growth and production of mung beans. The research took place from August to December 2023 in the Antirogo rice fields, Sumpersari District, Jember Regency. The research design used was a Randomized blocked Design with two factors. The first factor was the concentration of liquid tofu fertilizer which consists of four levels: 10%, 20%, 30%, and control. The second factor was the dosage of rice husk biochar which consists of control, 1 kg/plot, 1.2 kg/plot, and 1.4 kg/plot (the size of each plot is 1m<sup>2</sup>). In this study, there was an interaction between the concentration of tofu waste fertilizer and the biochar dose. The interaction between 1.4 kg/plot biochar and liquid tofu waste fertilizer 30% showed the best results on plant height, number of leaves, number of pods per sample, pod weight per sample, and pod weight per plot. Individually, liquid tofu waste fertilizer 30% showed the highest number of pods per sample (248.43 pods). At a weight of 100 seeds, the best results were obtained by liquid tofu fertilizer of 30% (10, 87 g), and biochar 1.4 kg/plot (9.64 g). It is suspected that the application of biochar and liquid tofu waste fertilizer can improve soil properties which then increase nutrient absorption which has an impact on growth and increased mung bean yields.*

**Keywords:** Legume, Phyrolysis, Tofu Dregs