Application of some concentrations of liquid organic fertilizer (POC) waste tofu to cowpea Crop Production *(Vigna Unguiculata)*

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ABSTRACT

Cowpea is a legume plant that has good nutritional content and has the potential to be developed in Indonesia. The research, entitled Application of several concentrations of liquid organic fertilizer (POC) of tofu waste to cowpea crop production, was carried out from November 2022 to January 2023 on agricultural land located in Antirogo Village, Sumbersari District, Jember Regency which aims to analyze the effect of liquid organic fertilizer tofu waste on cowpea production and determine the right concentration in increasing cowpea crop production. The method used in this study is a randomized design group (RAK) non factorial consisting of 6 levels, namely : 1. Concentration 0 ml / liter (control); 2. Concentration of 100 ml / liter; 3. Concentration of 200 ml / liter; 4. concentration of 300 ml / liter; 5. Concentration 400 ml / liter; 6. concentration 500 ml / liter. From the results obtained statistically by using fingerprint variety anova and with further testing using honest real difference test (BNJ). The results showed that the treatment of tofu waste liquid organic fertilizer has an influence on the observation variables of plant height, productive branches, Fresh Pod weight per sample, fresh pod weight per plot, dry pod weight per plot, dry seed weight per sample, dry seed weight per plot, weight of 100 seeds and showed no influence on the observation variables of plant height and dry pod weight per sample. The best results were found in the treatment of concentrations of 500 ml / ploy from several observation variables.

Keywords: *Cowpea, Tofu Waste Liquid Organic Fertilizer*