**Efforts to Increase Cowpea Production (Vigna Unguiculata) Through Giving POC Cow Urine and Planting Distance**

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## ABSTRACT

Fulfilling food needs by developing innovations that are capable of becoming new food preparations in fulfilling one of the important sector needs to reduce the value of imports which is not balanced with domestic production. Increased production of cowpea on marginal land can be a diversification of food raw materials in Indonesia. By setting the right spacing with the appropriate combination of POC cow urine, it is expected to increase the yield of cowpea. This study aims to determine the effect of plant spacing and concentration of cow urine liquid organic fertilizer on cowpea crop production. This research was conducted from February 2022 to June 2022. All activities were carried out in the Bintoro Village, Patrang District, Jember Regency. This study used a factorial randomized block design (RBD) with 2 factors, namely spacing and POC of cow urine with 9 treatment combinations and 3 replications. The spacing factor consists of 3 levels, namely 40cm x 20cm, 25cm x 25cm, and 30cm x 30cm. While the concentration factor of cow urine POC consists of 3 levels, namely 0%, 15%, and 30%. The research data were analyzed by ANOVA and further tested using 5% DMRT. The results showed that the spacing differed significantly with the observed parameters of stover weight, number of pods, fresh weight of pods per plot, dry weight of pods per plot, weight of dry seeds per plot, and weight of 100 seeds per plot. While the POC concentration of cow urine showed no significant difference in all observation parameters. The interaction between plant spacing and POC concentration of cow urine showed significantly different results (NS) on all parameters of observation of cowpea production.

***Key words : cowpea, cow urine poc, spacing***