

**Application of Rabbit Urine Liquid Fertilizer
and Urea on Cowpea (*Vigna Unguiculata*)**
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ABSTRACT

Cowpea production in Indonesia is still low. This encourages the application of synthetic fertilizers excessively. Therefore the application of organic fertilizers to reduce the use of synthetic fertilizers needs to be done. This study aims to the effect of the application of urea and liquid fertilizer made from rabbit urine on the growth and yield of cowpea. This study used a factorial randomized block design (RBD) within two factors. The first factor was the dose of urea, consisting of three levels (25 kg/ha, 50 kg/ha, and 75 kg/ha). The second factor was the concentration of liquid fertilizer with three levels (0 ml/l, 50 ml/l, and 100 ml/l). The results showed that there was an interaction between urea and liquid fertilizer where the combination of Urea 75 kg/ha and liquid fertilizer 100 ml/l was significantly higher compared to 25 kg/ha in plant height (74.13 cm) and fresh weight of pods per sample (74.73 g). In the number of productive branches, Urea 75 kg/ha (23.29 branches) was significantly higher than urea 25 kg/ha (21,13 branches). Meanwhile, the liquid fertilizer 100 ml/l showed significantly higher numbers on plant height (74.13 cm), the number of productive branches (23.48 branches), number of pods per sample (26.04 pods), and fresh weight of pods per sample (64.06 g) compared to control (0 ml/l). It is suspected that the application of liquid fertilizer can optimize nutrient absorption which improves the growth and production of cowpea.

Keywords: Concentration, Cowpea, Liquid fertilizer, Rabbit Urine, Urea Dosage