

RESPONSE OF GROWTH AND YIELD OF SHALLOT (*Allium ascalonicum* L.) PLANT TO THE APPLICATION OF LIQUID ORGANIC FERTILIZER CONCENTRATION OF COW'S URINE AND NPK DOSAGE

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ABSTRACT

Shallots are one of the horticultural crop commodities classified as spice vegetables and medicines. Shallot requires quite intensive care in its cultivation. This study aims to determine the response of shallot plant growth and yield to the application of cow urine liquid organic fertilizer and NPK dosage. The research method used a factorial experimental method with a completely randomized design (CRD) environment design with two factors + 1 control, namely 4 g/polybag NPK. The first factor with 3 treatment levels of cow urine liquid organic fertilizer consists of (30 mL/L), (40 mL/L), and (50 mL/L). The second factor with 3 levels of Pearl 16:16:16 NPK fertilizer treatment consisted of (1 g/polybag), (2 g/polybag), (3 g/polybag). The data were analyzed by Variance Analysis (ANOVA) with $\alpha = 5\%$ level, followed by orthogonal contrast test and DMRT further test with 5% level. The results showed that the combination of cow urine POC 40 mL/L and NPK 1 g/polybag was best for shallot growth in the parameters of plant height at 35 and 42 HST and the control treatment with the number of leaves at 35 and 42 HST, the number of bulbs, and plant yield per hectare. The combination of 40 ml/l cow urine POC and 1 g/polybag NPK is better in the parameters of plant height, number of leaves, number of bulbs, plant yield per sample plot, and plant yield per hectare compared to the control.

Keywords : *Shallot, Cow's urine, NPK*