

**APPLICATIONS OF VARIOUS NPK DOSAGES AND LOCAL
MICROORGANISM CONCENTRATIONS ON EGGPLANT (*Solanum
melongena* L.) GROWTH AND YIELD**

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ABSTRACT

Eggplant has quite complete nutrition. According to BPS, production of eggplant in DIY is relatively low. Efforts were needed to increase the yield of eggplant, such as providing fertilizer. The research aims to examine the effect of various NPK doses and stale rice local microorganism concentrations which provide the best growth and results. This research was a factorial field experiment with a Complete Randomized Block Design (CRBD) with two factors and 1 control. First factor was NPK dose, consisting of 3 levels named 200 kg/ha, 300 kg/ha, and 400 kg/ha. The second factor were stale rice Local Microorganism concentration, consisting of 3 levels named 100 ml/L, 150 ml/L, and 200 ml/L. Data were analyzed using Analysis of Variance (ANOVA) at $\alpha=5\%$, followed by Duncan's Multiple Range Test (DMRT) at $\alpha=5\%$ to see any significant differences. To determine the difference between the treatment combinations and the control, an Orthogonal Contrast Test was carried out. The results showed that the treatments gave better results in all parameters compared to the control. The NPK fertilizer dose of 300 kg/ha gave the best results in the parameters of fruit weight per fruit for the 6th harvest, total fruit weight per harvest plot, and conversion fruit weight. Concentration of stale rice Local Microorganism of 200 ml/L showed the best results for the parameters of fruit diameter in the 6th harvest and fruit weight per fruit in the 6th harvest.

Keywords: Eggplant, NPK, Local Microorganism