APPLICATION OF LIQUID ORGANIC FERTILIZER BANANA WEEVIL AND POTASSIUM FERTILIZER ON TOMATO PLANT (Solanum lycopersicum L.) GROWTH AND YIELD

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ABSTRACT

Banana weevil is one of the ingredients that can be used as liquid organic fertilizer. The research aims to determine the best concentration of banana weevil liquid organic fertilizer and the dose of potassium fertilizer for the growth and yield of tomato plants. The research was carried out in Kapanewon Ngaglik, Sleman Regency, and the Special Region of Yogyakarta. The research used field experiments in polybags, which were prepared using a Randomized Complete Block Design (RCBD) consisting of 2 factors with 3 replications. The first factor was the concentration of banana weevil LOF which consists of three levels, namely, concentrations of 20%, 30% and 40% and the second factor was the dose of KCL fertilizer which consists of three levels, namely, a dose of 75 kg/ha, 112.5 kg/ha , and 150 kg/ha. Data were analyzed using analysis of variance (ANOVA) at 5% level. Orthogonal Contrast test is carried to find out if there was a real difference between the treatment combination and the control, and if there is a real difference between treatments, a further test was carried out using Duncan's Multiple Range Test (DMRT). The research results showed that giving banana weevil LOF with a concentration of 30% and KCL fertilizer with a dose of 112.5 kg/ha was the best combination for the growth and yield of tomato plants.

Keywords*: tomato, LOF, potassium, banana weevil*