

Pengaruh Jenis Pupuk Kandang Dan Konsentrasi Hormon GA3 Terhadap Hasil Dan Mutu Benih Kacang Panjang (*Vigna sinensis* L.) (*The Effect of Manure Type and GA3 Hormone Concentration on the Yield and Quality of Long Bean Seeds (Vigna sinensis L.)*) Supervisor: Ir. Suwardi, M.P.

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ABSTRACT

*Increasing long bean production is the availability of fertilizer and nutrients, one of which is using manure and the GA3 hormone. This research was carried out to determine the effect of applying the type of manure and the concentration of the GA3 hormone on the yield and quality of long bean seeds (*Vigna sinensis* L.). This experiment will be carried out in September-November 2023 at agricultural land on Jl. Tawangmangu. West Krajan, Kel. Antirogo District. Sumber Sari, Jember Regency. The experimental design used in this research was a factorial Randomized Complete Block Design (RCBD) consisting of 2 factors and was repeated 3 times. The first factor, cow manure 20 tons/ha (P_1), goat manure 20 tons/ha (P_2), chicken manure 20 tons/ha (P_3). The second factor is the GA3 hormone concentration of 50 ppm (G_1), 100 ppm (G_2), and 150 ppm (G_3). The results obtained were analyzed using Analysis of Variance (ANOVA). If it has a real effect, it will be tested further using DMRT with a level of 5%. The results of this study showed that the treatment of 20 tons/ha (P_1) type of cow manure had a very significant effect on the parameter of fresh pod weight per plant of 386,13 grams and had a significant effect on the parameter of seed weight per plant of 52,82 grams. The GA3 (G_3) hormone concentration of 150 ppm had a significant effect on the parameters of the number of 19 pods, seed weight per plot was 399,16 grams, seed production per ha was 1,11 tonnes/ha and had a very significant effect on the parameters of pod length 63,12 cm. The interaction between treatments (P_1G_3) of 20 tonnes/ha of cow manure and a GA3 hormone concentration of 150 ppm had a significant effect on the parameters of fresh pod weight per plant, 427,06 grams.*

Key Words : Long Beans, Manure, GA3 Hormone