

**Pengaruh Dosis Pupuk SP 36 dan Konsentrasi Hormon Giberelin GA3 terhadap Produksi dan Mutu Benih Kacang Hijau (*Vigna radiata* L.)** (*Effect of SP 36 Fertilizer Dosage and GA3 Gibberellin Hormone Concentration on Production and Quality of Green Bean Seeds*)  
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**ABSTRACT**

*One type of food plant that has high nutritional value and high protein content is green beans (*Vigna radiata* L.). Providing growth regulators and fertilization can increase the yield and quality of green bean seeds. This research aims to determine the effect of applying SP 36 fertilizer and the concentration of the gibberellin hormone GA3 on increasing the production and quality of green bean seeds (*Vigna radiata* L.). In Tegal Bal Hamlet, Karangrejo Village, Sumpersari District, Jember Regency, this research was carried out from September to December 2023. This research used a factorial Randomized Complete Block Design (RCBD) with two factors as the main components. The use of SP 36 Fertilizer at three application levels, namely 100 kg/ha (P1), 150 kg/ha (P2), and 200 kg/ha (P3) is the first factor. The second factor is the concentration of the gibberellin hormone (GA3) which has three levels, namely G1 100 ppm, G2 175 ppm, and G3 250 ppm. A total of 27 treatment combinations were obtained by repeating each combination three times. The data was examined using ANOVA, and if there were significant differences, the DMRT test was carried out at a significance level of 5%. The results of the research showed that there was a real relationship between the treatment dose of SP 36 (P3) fertilizer and the parameters of seed weight per plot, production per hectare, germination ability, and growth uniformity. Optimal plant height parameters were achieved at 28 HST 36.31 cm, 42 DAP 70.59 cm, and 18.87 productive branches when given the gibberellin hormone at a concentration of 250 ppm (G3). The interaction of the two treatments shows that the results do not have a real influence on all parameters.*

**Key words:** *Green beans, SP 36, Gibberellins, Seed production, Quality*