Pengaruh Pupuk Kandang Sapi dan Pupuk SP-36 terhadap Produksi dan Mutu Benih Kacang Hijau (*Vigna radiata* L.). *Effect of Cow Manure Fertilizer and SP-36 Fertilizer on Production and Seed Quality of Mung Beans (Vigna radiata L.) Supervised by* Dr. Ir. Rahmat Ali Syaban, M.Si.

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ABSTRACT

Mung beans is a food plant that is widely consumed by people in Indonesia. Mung beans occupy the third position after soybeans and peanuts in Leguminous plants. Therefore, the demand for green beans has never decreased, both domestically and for export. Mung beans production needs to be increased because it is in line with the demand for mung beans, but mung beans production has decreased. One of the efforts to increase mung beans production is by using a balanced fertilizer using cow manure and SP-36 fertilizer. This study aims to determine the effect of cow manure fertilizer and SP-36 fertilizer on the production and quality of mung beans (Vigna radiata L.) seeds. The research was conducted at the Jember State Polytechnic, Jember Regency, East Java from November 2022 to January 2023 using a factorial Randomized Block Design with 2 factors and 3 replications. The first factor was cow manure fertilizer 10, 20, 30 tons/ha and the second factor was SP-36 fertilizer 75, 137.5, 200 kg/ha. The results of this study indicated that the cow manure fertilizer treatment had a significant different effect on plant height at 42 hst (K3 = 66.21 cm), number of productive branches (K2 = 6.30), number of pods per plant (K2 = 21.11), seed weight per plant (K2 = 17.67 gram) and seed production per hectare (K2 = 2.357 tons). While the SP-36 fertilizer treatment had a significant different effect on the number of pods per plant (S2 = 21.11), seed weight per plant (S2 = 17.67 grams) and seed production per hectare (S2 = 2.357 tons). The interaction between cow manure fertilizer and SP-36 fertilizer had a significant different effect on the number of pods per plant (K2S2 = 21.11), seed weight per plant (K2S2 = 17.67 grams) and seed production per hectare (K2S2 = 2.357 tons).

Keywords: *Mung Beans, Cow Manure Fertilizer, SP-36 Fertilizer*