

Aplikasi Pupuk Kompos dan Pupuk Sp-36 terhadap Produksi dan Mutu Benih (*Vigna radiata L.*) (*Application of Compost and Sp-36 fertilizer on the production and quality of green bean seeds (Vigna radiata L.)*). Supervised by Ir Suwardi, MP.

Lutfi Rio Nurhidayat

Study Program of Seed Production Technique
Department of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

*Mung beans (*Vigna radiata L.*) are a leguminosae plant that is widely consumed by Indonesians because it has a high content of protein, carbohydrates, and vitamins. As time goes by, the demand for mung beans is getting higher which is balanced with the increase in Indonesian society. However, the amount of mung bean crop production has not shown a stable figure every year, while the harvest area of mung bean crops tends to decrease. Efforts are needed to increase mung bean productivity by providing quality seeds to increase mung bean productivity. Efforts that can be made are intensification efforts including improving soil quality with compost and Sp-36 fertilizer. This study aims to determine the interaction between compost and Sp-36 fertilizer on the production and quality of mung bean seeds. The research was conducted in October-December 2023 at the field or rice field Jl. Tlogowetan, Tawangmangu, Sumpalsari, Jember Regency, East Java. The experimental design used was a factorial Randomized Complete Block Design (RCBD) which was repeated three times. The first factor is the dose of compost consisting of 5 tons/ha (K_1), 10 tons/ha (K_2), and 15 tons/ha (K_3). The second factor is compost fertilizer consisting of 50 kg/ha (D_1), 75 kg/ha (D_2), and 100 kg/ha (D_3). Data were analyzed using ANOVA, and continued with DMRT test at 5% level. The results showed that the interaction between the dose of compost fertilizer 15 tons/ha and Sp-36 fertilizer (K_3D_3) gave significantly different results on the number of pods per plant with an average of 23.93 pods, on the weight of seeds per plant 15 tons/ha compost fertilizer treatment (K_3) gave a very different effect with an average of 13.16 grams, seed weight per plot with an average of 171.62 grams, and seed production per hectare with an average of 1.86 tons/ha.*

Key word : *mung beans, compost fertilizer, Sp-36*