

Pengaruh Jarak Tanam dan Macam Pupuk Npk terhadap Produksi dan Mutu Benih Kacang Hijau (*Vigna radiata* L.). (*Effect of Planting Distance and Npk Fertiliser on the Production and Quality of Mung Bean Seeds (Vigna radiata L.)*). Supervisor by Ir. M. Bintoro, M.P.

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ABSTRACT

*Efforts to increase the production and quality of mung bean seeds (*Vigna radiata* L.) can be done with the treatment of planting distance and the type NPK fertilizer. This research was conducted in September-December 2023, on the land of Gunung Lincing Hamlet, GunungSari Village, Umbulsari District, Jember Regency and Seed Technology Laboratory, Jember State Polytechnic. The experimental design used in this study was a Randomised Complete Block Design (RCBD) consisting of two factors and repeated 3 times. The first factor was planting distance, which consisted of 40 cm x 15 cm (J_1), 30 cm x 15 cm (J_2), 20 cm x 15 cm (J_3). The second factor is the type of NPK fertilizer, which consists of NPK X (N_1), NPK Y (N_2), NPK Z (N_3). The observation results were tested using ANOVA (Analysis of Variance). If the effect was significant, further test was conducted using DMRT. The results showed that the interaction between 40 cm x15 cm spacing and NPK X fertilizer (J_1N_1) significantly affected the number of pods per plant 13.67 pods and seed weight per plot 278.85 grams. The interaction between 20 cm x15 cm spacing and NPK X fertilizer (J_3N_1) had a significant effect on seed production per hectare 1.86 tonnes.*

Key words: *mung beans, planting distance, NPK fertilizer, seed production.*