(*Application Planting Distance and Chicken coop organic fertilizer on Production and Seed Quality of mung bean (Vigna radiata L.))*
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ABSTRACT

One of the efforts to improve the production and quality of mung bean seeds can be done by applying planting distance and doses of chicken manure fertilizer. This study was conducted to determine the effect of planting distance and doses of chicken manure fertilizer on the improvement of mung bean seed production and quality (Vigna radiata L.). The research was carried out from July to October 2024, at the land in Antirogo Village, Sumbersari District, Jember Regency, East Java, and in the Seed Production Technology Laboratory of the Jember State Polytechnic. The experimental design used was a factorial Randomized Block Design (RBD) consisting of two factors, repeated three times. The first factor was planting distance (J), consisting of 40 cm x 10 cm (J1), 40 cm x 15 cm (J2), and 40 cm x 20 cm (J3). The second factor was doses of chicken manure fertilizer (F), consisting of 10 tons/ha (F1), 15 tons/ha (F2), and 20 tons/ha (F3). The results obtained were then analyzed using ANOVA (Analysis of Variance), followed by further testing with the BNT test. The results showed that the planting distance treatment of 40 cm x 20 cm (J3) provided the best results and showed significant differences. The best seed weight per plant was J3 (21.11g), the best seed weight per plot was J1 (903.92g), the potential production per hectare was J1 (4.40 tons), the highest total number of branches was J3 (7.93), the highest number of productive branches was J3 (4.96), the highest number of pods per plant was J3 (21.11), actual production per hectare for J1 was (2.37), and actual production per hectare for F3 was (1.95).