

Pengaruh Jarak Tanam dan Pupuk Boron terhadap Produksi dan Mutu Benih Kacang Panjang (*Vigna sinensis* L.) (*Effect of Planting Distance and Boron Fertilizer on Production and Quality Of Long Bean Seed (*Vigna sinensis* L.)*). Supervised by Ir. Moch Bintoro, M.P

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ABSTRACT

High production and quality requires setting the optimal number of populations in an area of land, namely by adjusting the spacing. In addition, increasing the success of flower pollination by applying bo-ron fertilizer. The research was carried out on the land of PT. Wira Agro Nusantara Sejahtera in Kediri for 3 months starting from August to November 2021. The study used a factorial Randomized Block Design (RBD) with 2 factors and 3 repetitions. The first factor is the spacing (J) consisting of 3 levels, namely J1: 30 cm x 60 cm, J2: 40 cm x 60 cm and J3: 50 cm x 60 cm. While the second factor is boron fertilizer (B) consisting of 3 levels, namely B0: 0 gram/liter, B1: 1 gram/liter, and B2: 2 gram/liter. The data were tested using ANOVA and then further tested using DMRT. The results showed that long beans planted with a spacing of 50 cm x 60 cm (J3) produced the highest number of pods per plant (18.2 pods), pod weight per plant (80 grams), seed weight per plant (36 grams). and the weight of 1000 seeds (164.73 grams) and the greatest potential for seed production at a spacing of 30 cm x 60 cm (J1), which is 1.25 tons/ha. Long bean plants fertilized with boron 2 g/liter (B2) produced the largest number of pods per plant (17.2 pods), pod weight per plant (74 grams), seed weight per plant (34.6 grams), weight 1000 seeds (162.31 grams), seed production potential per hectare (1.17 tons) and seed growth speed (21.40%). The interaction between the two treatments had no significant effect (ns) on all observation parameters.

Key words: *long bean seed, planting distance, boron fertilizer*