

**Pengaruh Penambahan Pupuk Kalium dan Giberelin terhadap
Produksi dan Mutu Benih Kedelai (*Glycine max* (L.) Merrill) (*The
Effect of Addition of Potassium and Gibberellin Fertilizers on
Soybean Seed Production and Quality (Glycine max* (L.) Merrill).
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ABSTRACT

This research aims to optimize seed production by adding potassium fertilizer and gibberellin. This research uses a factorial RAK design, with the main factor being the addition of potassium (0, 100, and 150 kg/ha) and the second factor being the addition of gibberellin (0, 100, 150, and 200 ppm). The results of this study show that the addition of potassium has a significant effect on the number of flowers per plant (201.42 stalks), seed weight per plant (16.23 grams), and 1000-grain weight. The addition of gibberellin has a significant effect on the number of flowers per plant (182.05-204.73 stalks), flower drop (45.34%), but has a significant effect on germination power (87.79%). The interaction between potassium and gibberellin addition has a significant effect on plant height at harvest time (157.63 cm), number of productive branches (4.63 branches), number of mature pods per plant (104.230 pods), 1000-grain weight (116.69 grams), but has a significant effect on harvest age (85 HST) and seed production per hectare (3,245,195 kg). The conclusion of this study is that potassium (K2) is the best treatment for the parameters of the number of flowers per plant and seed weight per plant. Gibberellin (G3) is the best treatment for the parameter of the number of flowers per plant. Gibberellin (G1) is the best treatment for the parameter of flower drop and germination power. For the parameter of seed weight per plant and seed weight per plot, the best treatment is without gibberellin (G0). The interaction K3G3 shows the best results for the parameter of plant height at harvest time. The interaction K1G3 is the best treatment for the parameter of the number of productive branches. The interaction K2G0 shows the best results for the parameter of the number of mature pods. The best result of the interaction K3G1 is obtained for the parameter of harvest age.

Keywords : Gibberellin, Potassium, Soybean

