

Pengaruh Konsentrasi ZPT Giberellin (GA3) dan Dosis Pupuk SP-36 Terhadap Produksi dan Mutu Benih Kedelai (*Glycine max* (L.) Merrill). *Effect of Concentration of ZPT Giberellin (GA3) and Dose of SP-36 Fertilizer on Production and Quality of Soybean Seeds (Glycine Max (L.) Merrill)*. Supervisor: Ir. Sri Rahayu, M.P.

Andini Wisnu Putri Rahayu
Study Program of Seed Production Technique
Department of Agriculture Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

*Soybean (*Glycine max* (L.) Merril) is a needed agricultural commodity in Indonesia. Soybean production in Indonesia has not yet fulfilled domestic needs, observing that the number of imports is still high. Therefore, a strategy is needed in planting so that soybean production can return to its maximum, namely by determining the concentration of ZPT giberellin and the right dose of SP-36 fertilizer. This study aims to determine the effect of the concentration of ZPT giberellin and the dose of SP-36 fertilizer on the production and quality of soybean seeds. The research was conducted from August to December 2023 in the field of Antirogo Village, Summersari District, Jember Regency. The experimental design used was Factorial Randomized Group Design (RGD) which was repeated 3 times. The data obtained were analyzed using ANOVA and continued with DMRT test at 5% level. The first factor is the concentration of ZPT giberellin consisting of 75 ppm (G1), 100 ppm (G2), and 125 ppm (G3). The second factor is the dose of SP-36 fertilizer consisting of 100 kg/ha (P1), 150 kg/ha (P2), and 200 kg/ha (P3). The results showed that the interaction between the concentration of ZPT giberellin 125 ppm and the dose of phosphate fertilizer 200 kg/ha (G3P3) gave a very significant effect on seed production per hectare (2164.88 kg/ha), and gave a significant effect on the number of pods per plant (102.07 pods), the number of seeds per plant (255,90 grains) the weight of seeds per plant (31.64 grams), the weight of seeds per plot (541.22 grams).*

Key Words : *Soybean, ZPT Giberellin, SP-36 Fertilizer*