

**Aplikasi Pupuk Fosfor dan Pupuk Kalium terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus* L.)** *Application of Phosphorus and Potassium Fertilizers on the Production and Quality of Cucumber Seeds (*Cucumis sativus* L.)* Supervised by Leli Kurniasari, SP., M.Si

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**ABSTRACT**

*Cucumber is a horticultural crop that is in great demand by Indonesian people because it contains nutrients for health. Obstacles encountered in cucumber cultivation are procuring seeds, maintaining plants in the field, handling harvest to post-harvest and the low productivity of cultivated land. Efforts to increase cucumber production are carried out by providing quality seeds by applying proper fertilization. The research was carried out in September - January 2022 at the Experimental Field and Laboratory of the Jember State Polytechnic. The experimental design used a randomized block design (RBD) with 2 factors. The first factor was Phosphorus with 3 levels, namely (P1) SP-36 250 kg/ha, (P2) SP-36 300 kg/ha and (P3) SP-36 350 kg/ha. The second factor is Potassium with 3 levels namely (K1) KCl 200 kg/ha, (K2) KCl 250 kg/ha and (K3) KCl 300 kg/ha. Data analysis used ANOVA and follow-up test using 5% DMRT. The results showed that the effect of providing Phosphorus and Potassium had a very significant effect on the parameters of the number of branches per plant, the time of appearance of male flowers, the time of appearance of female flowers, fruit length, fruit diameter, fruit weight per plant, number of seeds per plant, number of seeds per plant, weight seeds per plant, seed weight per plant, 1000 grain weight, seed weight per hectare, germination rate, vigor index, growth speed and growth synchrony. Phosphorus and potassium treatment interactions had a significant effect on the parameters of the number of seeds per plant and seed weight per plant. As well as having a very significant effect on the parameters of fruit diameter, fruit weight per plant and 1000 grain weight.*

**Keyword :** *Cucumber, Phosphorus Fertilizer and Potassium Fertilizer*