

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

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ABSTRACT

Fruit vegetables that are often consumed by Indonesians in fresh form are cucumbers. Every year the population increases so that with the increase in population the need for cucumber consumption also increases, it is necessary to increase cucumber production to meet the increasing consumption needs of the population. This study aims to determine the effect of phosphorus fertilizer doses and mycorrhiza on the production and quality of cucumber seeds. The research was conducted in the farmland of Umbulrejo Village, Umbulsari District, Jember Regency from September to December 2022. This study used factorial randomized group design (RAK) repeated 3 times. The first factor is the dose of phosphorus fertilizer with 3 levels, namely P1 = 150 kg/ha, P2 = 250 kg/ha, P3 = 350 kg/ha. The second factor is the dosage of mycorrhiza with 3 levels, namely M0 = 0 g/plant, M1 = 6 g/plant, M2 = 12 g/plant. The data obtained were analyzed using ANOVA (Analysis Of Variance) and further tested using DMRT (Duncan Multiple Range Test) at the 5% level. The results showed that phosphorus fertilizer treatment significantly influenced the parameters of fruit diameter, mycorrhiza treatment significantly influenced the parameters of flowering age, fruit length, fruit weight, number of fruits, seed weight, seed growth uniformity, seed growth speed and had a very significant effect on the number of seeds with seeds weight, 1000 grain weight, seed production per plot, seed production per hectare. The interaction of the two treatments had a significant effect on the parameters of flowering age, fruit length, fruit weight, seed weight, 1000-grain weight and a very significant effect on the 1000-grain weight parameter.

Keywords : *Phosphorus Fertilizer, Mycorrhiza, Cucumber Seed*