

Aplikasi Pupuk Fosfor dan Varietas terhadap Produksi dan Mutu Benih Mentimun (*Cucumis sativus* L.). *Application of Phosphorus Fertilizer and Varieties on the Production and Seed Quality of Cucumber (*Cucumis sativus* L.).*
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ABSTRACT

Cucumber is one of the most popular vegetables in Indonesia. There is a decline in cucumber production and productivity in Indonesia in 2022. Efforts that can be made to increase cucumber productivity are the provision of high quality seeds. One of them is the application of phosphorus fertilizer and the use of superior varieties of cucumber. This study aims to determine the interaction between phosphorus fertilizer application on the production and quality of cucumber seeds timonop anv PMS varieties. This research was conducted from September to December 2022 in the experimental field of Jember State Polytechnic. The experimental design used was Factorial Randomized Group Design (RGD) which was repeated 3 times. The first factor is the dose of phosphorus fertilizer consisting of 300 kg/ha (P1), 350 kg/ha (P2), and 400 kg/ha (P3). The second factor is the variety consisting of PMS Ke-0405 variety (V1), and Tomonop 439 variety (V2). The research data were analyzed using Anova, if the treatment gave a significantly different effect, it would be continued with the DMRT test at the 5% level. The results showed that the interaction of phosphorus fertilizer application of 400 kg/ha and PMS KE-0405 variety (P3V1) gave a significantly different effect on the number of seeds per plant (1554.46 grains), seed weight per plant (38.99 grams), number of seeds per fruit (310.89 grains), and seed production per hectare (1624.44 kg/ha).

Key Word : *Phosphorus Fertilizer, Variety, Cucumber*