Pengaruh Pupuk Kalium dan Jumlah Buah Terhadap Produksi dan Mutu Benih Mentimun (Cucumis sativus L.) Kode Produksi 0746 (The Effect of

Potassium Fertilizer and Fruit Number on the Production and Quality of Cucumber Seeds (*Cucumis sativus* L.) Production Code 0746).

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ABSTRACT

Increasing the productivity of cucumber flowers and fruits was achieved by paying attention to the given nutrients and the appropriate number of fruits. The objective of this research was to improve the quality and production of cucumbers. This research was conducted from July 10th to August 10th, 2024 using a Randomized Complete Block Design (RCBD) factorial involving two factors: potassium fertilizer and fruit number. The first treatment used potassium fertilizer at three levels: 200 kg/ha, 300 kg/ha, and 400 kg/ha. For the second treatment, the number of fruits maintained was set at three levels: 4 fruits/plant, 5 fruits/plant, and 6 fruits/plant. To analyze the observation results, Analysis of Variance (ANOVA) was used. The parameters observed in this study included the number of viable seeds per plant, weight drying of normal seeds per fruit, amount of viable seeds fruit, 1000-seed weight, production per hectare, germination percentage, germination rate, and uniformity of germination. The research results showed that the potassium fertilizer dose of 300 kg/ha and 400 kg/ha had a significant impact on several parameters, including seed weight per fruit, seed weight per plant, number of seeds per fruit, number of seeds per plant, 1000-seed weight, and production per hectare. In addition, the third level of fruit number, which was 6 fruits/plant, had a significant effect on several parameters such as seed weight per fruit, seed weight per plant, number of seeds per fruit, and number of seeds per plant. Furthermore, the interaction between the two treatments had a significant effect on several parameters, including seed weight per fruit, number of seeds per fruit, and number of seeds per plant.

Keywords: potassium fertilizer, fruit thinning, cucumber seed production