Pengaruh Pemberian Pupuk Kascing dan Hormon Giberellin (GA3) terhadap Produksi dan Mutu Benih Mentimun (Cucumis sativus L.) The Effect of Vermicompost Fertilizer and Giberellin Hormone (GA3) on Cucumber Seed Production and Quality (Cucumis sativus L.). Supervisor Ir. Sri Rahayu, MP.

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ABSTRACT

The need for cucumbers is high but is not supported by existing production, so efforts are needed to increase cucumber seed production to meet these needs. The purpose of this study was to determine the effect of vermicompost fertilizer and gibberellin hormone on seed production and quality. The research was conducted in Augut – December 2022 on Jl. Diamond Koptu, Jambuan, Antirogo, Sumbersari District, Jember Regency. The design used was a factorial Randomized Complete Blok Design (RCBD) with 2 factors and 3 replications. The first factor was vermicompost fertilizer which consisted of 3 levels, namely K1 (240 g/plant), K2 (360 g/plant), and K3 (480 g/plant). The second factor was gibberellin which consisted of 3 levels, namely G1 (100 mg/l), G2 (150 mg/l), dan G3(200 mg/l). The data were analyzed using the ANOVA test and continued with the DMRT (Duncan Multiple Range Test) test with a level of 5%. The result showed that the vermicompost fertilizer treatment hada a significant effect on the K3 level (480 g/plant) on the fruit weight parameter with a value of 556.13 grams and the fruit length parameter of 25.48 cm. The gibberellin treatment showed a very significant effect on the G1 level (100 mg/l) on the flowering age parameter with a value of 23.89. The interaction between the two K2G1 treatments (360) g/plant and 100 mg/l) showed a very significant effect on the parameters of the number of seeds with good planting of 318.02 grains, the weight of seeds with good planting of 5.27 grams, of seed production per hectare of 878.42 kg.

Key Words: cucumber, kascing fertilizer, gibberellin