

Pengaruh Umur Pemberian Paclobutrazol dan Pemangkasan Cabang Terhadap Produksi Dan Mutu Benih Mentimun (*Cucumis sativus* L. The Effect of Age of Paclobutrazol Administration and Branch Pruning on Cucumber (*Cucumis sativus* L.) Seed Production and Quality. Supervised by Ir. Mochamat Bintoro, M.P.

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ABSTRACT

This research was conducted from September to December 2024 at Jl. Sarangan, Antirogo Village, Sumbersari District, Jember, East Java. The experimental design in this research used a Factorial Randomized Group Design (RGD) which was repeated 3 times. The first factor is the age of paclobutrazol application consisting of application at the age of 14 DAP (U1), 21 DAP (U2), and 28 DAP (U3). The second factor is branch pruning which consists of pruning up to the 5th branch (P1), 6th branch (P2), and 7th branch (P3). The data from the research were analyzed using the test of variance (ANOVA) and if the observed parameters showed significant differences, a further DMRT test was carried out at a level of 5% (0.05) to find out the specifics of each treatment. The results showed that treatment (U1) had a very significant effect on flowering age at 24.80 HST and harvest age at 52.80 HST. Treatment (U2) had a significant effect on the number of female flowers as many as 9.02 florets, the number of fruits as many as 4.29 fruits, the fruit diameter as many as 5.61 cm, production per plot as many as 90.03 gr/plot and potential production per hectare as many as 360.13 kg/ha. Treatment (U3) had a very significant effect on fruit length as many as 16.1 cm. Treatment (P1) had a significantly different effect on the number of fruits as many as 4.27 fruits, the weight of 1000 grains as many as 20.90 grams, the growth rate as many as 21.68%/etmal and the growth simultaneity as many as 52.22%. Treatment (P1) had a very significant difference on production per plot as many as 89.66 gr/plot and potential production per hectare as many as 358.63 kg/ha. The interaction (U2P2) significantly affected the number of female flowers by 9.67. The interaction (U2P1) significantly affected the number of fruits by 4.75. The interaction between treatments (U3P1) significantly affected the length of the fruit by 16.3 cm

Key words: *Cucumber, Age of Paclobutrazol Application, Branch Pruning*