

Pengaruh Pemangkasan Pucuk (*Topping*) Dan Jarak Tanam Terhadap Produksi Dan Mutu Benih Tanaman Mentimun (*Cucumis Sativus L.*).

*(The interaction of shoot pruning and plant spacing on the production and seeds quality of Cucumber (*Cucumis sativus L.*)).*

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ABSTRACT

*One of the efforts to fulfill the demand of national cucumber production and increase the high of seeds quality is by improving the cultivation system. This study was conducted to find out the interaction of shoot pruning and plant spacing variations on the production and quality of cucumber (*Cucumis sativus L.*) seeds. This research was carried out in January until April 2021 at the State Polytechnic of Jember research area. The research used factorial Randomized Complete Block Design (RCBD) which consist of 2 factors and 4 replications. The first factor was the variation of shoot pruning with 3 levels, shoot pruning after the 9th segments, 12th segments and 15th segments. The second factor is the plant spacing with 2 levels, 30x60 cm and 40x60 cm. The data will be analyzed using ANOVA test and continued with DMRT test level of 5%. The results showed that the shoot pruning treatment has a very significant effect on the production and quality of cucumber seeds. The treatment of shoot pruning variation after 15th segments gave the highest results on the number of fruit 2.94 fruit, fruit weight 668.96 gram, the diameter of fruit 7.12 cm, fruit length 21.60 cm, the number of seeds 277.79 grains, the weight of 100 seeds 10.82 grams and seeds production per hectare 367.76 kg. The treatment of plant spacing 40x60 cm gave the highest results on the parameter of fruit diameter 6.98 cm and 20.99 cm in fruit length. The interaction of shoot pruning after the 9th segments and 40x60 cm spacing showed the highest value on fruit diameter 7.24 cm. Meanwhile, shoot pruning interaction after the 15th segments and 40x60 cm spacing gave the best value on fruit length 22.82 cm.*

Keywords: *cucumber, plant spacing and shoot pruning*