## Pengaruh Pemangkasan Pucuk dan Aplikasi Paclobutrazol Terhadap Produksi dan Mutu Benih Mentimun (Cucumis sativus L.), Effect of Pruning and Paclobutrazol Application on Cucumber Seed Production and Quality (Cucumis sativus L.), Dwi Rahmawati, SP., MP (Advisory Lecturer).

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## ABSTRACT

Cucumber (Cucumis sativus L) is a type of vegetable from the cucurbitaceae or pumpkin family that is popular all over the world. In Indonesia, cucumber plants are grown in the lowlands. The development of cucumber cultivation is fourth after chili, long beans and shallots from commercial vegetables produced in Indonesia. This study aimed to determine the effect of paclobutrazol concentration and shoot pruning on the production and quality of cucumber seeds (Cucumis sativus L.). This research was conducted from October 2021 to December 2021 at Kradenan Village, Purwoharjo. District, Banyuwangi. Regency. The study used a factorial Randomized Block Design (RAK) with 2 factors. The first factor is the concentration of paclobutrazol with 3 levels, namely the concentration of K1: 0.5 ml/liter, K2: 1 ml/liter, and K3: 1.5 ml/liter. The second factor was shoot pruning with 3 levels, namely P1: Pruning the shoots of the 10th segment, P2: Pruning the shoots of the 12th segment, and P3: Pruning the shoots of the 15th segment. The results showed that the treatment application of paclobutrazol (K) had a very significant effect on the parameters of the appearance of the first flower with the shortest result was 22.00 (days) in the treatment of paclobutrazol 0.5 ml/liter (K1), and gave a significant effect on the parameters of the number of female flowers of 14.04 (buds) in the 1 ml/liter paclobutrazol treatment (K2), the number of fruit planted was 8.18 (fruit) in the 1 ml/liter paclobutrazol treatment (K2). The shoot pruning treatment (P) had a very significant effect on the parameters of fruit length in the 15th internode shoot pruning treatment (P3) with an average of 22.31 pieces, the number of fruits planted by the 12th internode shoot pruning treatment (P2) with an average of 8.34 pieces, and fruit weight. pruning treatment of the 12th internode shoots (P2) with an average of 355.93, the number of pithy seeds in the 15th internode shoot pruning treatment (P3) with an average of 334.61 seeds, the weight of 1000 grains of the 12th internode shoot pruning treatment (P2) with an average of 27.95 gram, and seed production per hectare of the 15th internode (P3) shoot pruning treatment with an average of 362.81 kg. Then the interaction between the treatment of 1 ml/liter paclobutrazol concentration and pruning of the 12th internode shoots (K2P2) showed a significantly different effect on the parameters of the number of female flowers with an average of 15.78 buds.

Key words : Paclobutrazol, Pruning Cucumber, Production and Quality of Seed