

**Pengaruh Pemeliharaan Cabang dan Penambahan Pupuk P Terhadap Produksi dan Mutu Benih Melon (*Cucumis melo* L.)** *Effect of Branch Maintenance and Addition of P Fertilizer on Production and Quality of Melon Seed (*Cucumis melo* L.). Supervised by: Ir. Mochamat Bintoro, MP*

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**ABSTRACT**

*Melon is an annual plant whose life creeps or climbs in a snaking or spiral way. To meet the needs of melons, it can be started by providing quality seeds by optimizing melon seed production activities through the application of branch maintenance and the addition of P fertilizer. The research was conducted for 3 months at PT. Tunas Agro Persada, Central Java. The experimental design used was a Randomized Block Design factorial (RAK). The first factor is the effect of maintaining branches with 3 levels, C<sub>1</sub> (maintenance of the main stem without branches), C<sub>2</sub> (maintenance of the main stem and 1 branch), C<sub>3</sub> (maintenance of the main stem and 2 branches). While the second factor is the addition of P fertilizer with P<sub>1</sub> (1 g/plant), P<sub>2</sub> (3 g/plant), P<sub>3</sub> (5 g/plant). Data were analyzed by ANOVA followed by Duncan's Multiple Range Test with a significance level of 1%. The results showed that the C<sub>2</sub> branch maintenance treatment (main stem and 1 branch maintenance) had a very significant effect on seed weight per plant of 8.55 grams, seed weight per ha of 228.08 kg and number of seeds per fruit 195.33 grains. The treatment of adding P fertilizer showed a significant effect on the P<sub>2</sub> level (3 g/plant) on the parameter of seed weight per plant of 8.41 grams, seed weight per ha of 224.27 kg and number of seeds per fruit 188.49 grains, a very significant effect on the parameter weight of 1000 grains is 28.73 gram and germination is 89.09%. The interaction between the two treatments showed no significant effect (ns) on all parameters.*

**Keywords:** *melon seeds, maintenance of branches and addition of fertilizer*