

**Efektivitas Jarak Tanam dan Penambahan Pupuk Majemuk Terhadap Produksi Benih Semangka (*Citrullus lanatus* L.) Sistem Hidroponik** (*Effectiveness of Planting Distance and Addition of Compound Fertilizers on Hybrid Watermelon Seed Production (*Citrullus lanatus* L.) Hydroponic System*) Supervisor : Ir Sri Rahayu, MP

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### **ABSTRACT**

*Watermelon is a popular plant because of its beneficial for health and has good commercial value, high quality seeds are needed to increase production to meet national watermelon needs. Efforts to produce high quality seeds, by adjusting the spacing and adding compound fertilizers. The purpose of this study was to determine the effect of spacing with the addition of compound fertilizers on watermelon seed production. The research was carried out in Rowosari PT. Benih Citra Asia, in October 2021 - January 2022. This experiment used a factorial Randomized Block Design (RCBD) with 4 replications. The first factor is the spacing of (25cm x 35cm), (50cm x 35cm). The second factor is the addition of compound fertilizers (ultradap), (a mixture of ultradap and mkp), (control). Data were analyzed using ANOVA and continued with the BNT test at 5% level. The results showed that the spacing of 50cm x 35cm had a very significant effect on fruit diameter (142.61 mm), fruit weight (1.62 kg) and weight of 1000 grains (53.07 grams), seed production per hectare (28.47 kg/ha) at a distance of 25cm x 35cm. The addition of Ultradap compound fertilizer gave a very significant effect on fruit weight (1.58 kg), number of seeds (26.78 grains), seed weight (1.60 grams), weight of 1000 grains (54.77 grams) and seed production per hectare (31.02 kg/ha). The interaction between 50 cm x 35 cm spacing and the addition of ultradap compound fertilizer had a very significant effect on fruit diameter (151.02 mm) and fruit weight (1.98 kg).*

**Key word :** *Watermelon, plant spacing, addition of compound fertilizer*