Pengaruh Dosis Pupuk Boron dan Waktu Pemangkasan Pucuk (Topping) terhadap Produksi dan Mutu Benih Semangka (Citrullus vulgaris L.) (The Effect of Boron Fertilizer dose and Topping toward Production and Quality of Watermelon Seed (Citrullus vulgaris L.)) Supervisor: Maria 'Azizah, S.P., M.Si. and Agung Basuki, S.P. M.Agr.

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ABSTRACT

Watermelon is one of the most widely cultivated fruits in Indonesia. One of way to fulfill superior watermelon seeds is by manipulating the environment. An effort could did was add the boron fertilizer and used a topping. The research aims to determine the best dose of boron fertilizer and topping efficiency toward production and quality of watermelon seed. The research conducted at the Research and Development land of CV. Aura Seed Indonesia from September 2021 until December 2021. The research consisted of 2 treatments which includes the dose of boron fertilizer and topping. The first treatment (Boron Fertilizer) consisted of 3 level, 0 kg.ha⁻¹, 2 kg.ha⁻¹, and 4 kg.ha⁻¹. The second treatment (Topping) has 2 level, not using the topping and using the topping. The research used factorial Randomized Complete Block Design (RCBD) method with 4 replications. Observation result have been analyzed using ANOVA and continued with BNT level of 5%. The parameters to prove this research are, flowering age of male and female flower, fruit diameter, fruit length, fruit weight, seed weight per fruit, seed production per hectare, number of seeds per fruit, weight of 1000 seeds, germination power, and indeks vigor. The result showed that the dose of 2 kg.ha⁻¹ boron fertilizer gave the significant effect for almost all parameters, except number of seeds per fruit. The topping haven't significantly different effect for all parameters.

Key word: watermelon, seed production, boron fertilizer and topping