Kombinasi Jenis Pupuk NPK dan Dosis Pupuk KCl terhadap Hasil Produksi dan Mutu Benih Induk Semangka (Citrullus vulgaris L.) (Combination of Types NPK Fertilizer and KCl Fertilizer Doses on the Yield and Quality of Watermelon Parents Seed (Citrullus vulgaris L.)) Supervisor: Maria 'Azizah, S.P., M.Si. and Agung Basuki, S.P. M.Agr.

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## **ABSTRACT**

Increasing the need and quality of parent watermelon seeds is the provision of macro and micro nutrients for plant growth. Efforts that can be made are to add NPK and KCl fertilizers. This study aims to determine the type of NPK fertilizer and the best dose of KCl on the yield and quality of watermelon seeds. The research was conducted in the field of Research and Development of CV. Aura Seed Indonesia in September 2021 to December 2021. This study had 2 treatments which included the type of NPK fertilizer and the dose of KCl fertilizer. The first treatment was NPK fertilizer which consisted of 2 levels, namely NPK 16:16:16 and NPK 15:15:15 + TE (MgO, CaO, B, and Zn). The second treatment was a dose of KCl fertilizer which consisted of 3 levels, namely 0 g/plant, 4 g/plant, and 8 g/plant. The study used a factorial Randomized Block Design (RAK) method with 4 replications. These results were tested by calculating ANOVA and then the Least Significant Difference test was carried out at the 5% level. This study has several parameters to prove these observations, namely, the number of fruit per plant, fruit diameter, fruit weight, number of seeds and empty seeds, weight of seeds and empty seeds, germination, and weight of 1000 seeds. The results showed that the use of NPK 16-16-16 fertilizer had a significant effect only on fruit diameter. While the dose of 8 g/plant gave a significant effect on almost all parameters, except seed weight, empty seed weight, and 1000 seed weight.

Keyword: watermelon, seed production, NPK, and KCl.