

**APPLICATION OF VARIOUS DOSES OF NPK FERTILIZER AND  
FRUIT PRUNING ON WATERMELON PLANT GROWTH AND YIELD  
(*Citrullus vulgaris* Schard)**

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**ABSTRACT**

Watermelon is a plant that has various benefits because it has quite good nutritional content and high economic value, this causes the demand for watermelon to be very high. However, watermelon production has decreased significantly. The research was carried out in Klegen, Bangunharjo, Sewon, Bantul in July – September 2023. The field experiments using factorial Randomized Complete Block Design (RCBD) with 2 factors and 1 control. The first factor is the dosage of NPK 16-16-16 fertilizer consisting of 3 levels, namely 15 g/plant, 20 g/plant, 25 g/plant. The second factor is the fruit ovaries pruning consists of 3 levels, namely 1 fruit/plant, 2 fruits/plant, 3 fruits/plant. There is an interaction between the parameters of flowering age, fresh fruit weight per plant, fresh fruit weight per plot, fruit weight per hectare. Treatment with a NPK fertilizer dose of 25 g/plant gave the best results for plant length parameters aged 28 and 42 DAP. Treatment with a NPK fertilizer dose of 20 g/plant gave the best results on the parameters of fruit diameter, fresh weight per fruit, and fruit sweetness content. The fruit ovary pruning treatment with the amount of 1 fruit/plant gave the best results in the parameters of fruit length, fruit diameter, fresh weight per fruit, and fruit sweetness level. The treatment combination was significantly better than the control in the parameters of plant length at 14 and 28 DAP, number of leaves at 14 DAP, fresh weight per fruit, and fruit sweetness content.

**Keywords** : Watermelon, NPK fertilizer, fruit pruning