

GRAFTING WATERMELON (*Citrullus vulgaris* Schard)
WITH SEVERAL VARIETIES OF SQUASH (*Cucurbita* sp) USING AUXIN
PLANT GROWTH REGULATOR ROOTONE F TREATMENT

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ABSTRACT

Watermelon is favored by many people because of its sweet and fresh taste.. The increase in watermelon production can be achieved through vegetative propagation by grafting several varieties of squash and the application of the auxin plant growth regulator, Rootone F. The research was conducted from April to July 2024 at PT East West Seed Indonesia (EWINDO). This study utilized a Factorial Completely Randomized Block Design (RCBD). The first factor was the use of several varieties of squash (*Cucurbita* sp) as rootstocks, consisting of 5 levels: RUMA F1 variety, ORBIT F1 variety, KAGUM F1 variety, ALMOND F1 variety, and GRADE F1 variety. The second factor was the various concentrations of the auxin plant growth regulator Rootone F, consisting of 3 levels: no auxin, 100 ppm, and 200 ppm. The results of the variance analysis showed no interaction in all observed parameters. The use of several varieties of squash shows the ORBIT F1, ALMOND F1, dan GRADE F1 variety produced the best results in the parameter of the number of nodes at 14 DAS (days after sowing). Meanwhile, the application of the auxin hormone Rootone F did not have a significant effect on any of the observed parameters.

Keywords: *watermelon, squash, auxin*