

IMPROVEMENT OF THE GROWTH AND QUALITY OF TWO MELON VARIETIES (*Cucumis melo* L.) WITH SEVERAL AB MIX FORMULATIONS IN HYDROPONIC CULTIVATION SYSTEMS

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ABSTRACT

Melon (*Cucumis melo* L.) is a commodity with high economic value. Using superior varieties and proper nutrients can increase melon productivity. This study aims to determine the results of improving the quality of two melon varieties with several AB Mix formulations. Research method used a completely randomized design (CRD) factorial two factors. The first factor are Dalmatian and Sweet D25 varieties. The second factor are the AB Mix formulation which is made according to the growth phase focusing on the highest N, P, and K elements between formulations, namely F1 (generative (K) and fruit ripening (P)), F2 (generative (N) and fruit ripening (K)), F3 (generative (P) and fruit ripening (N)), and F4 (leaf Goodplant control and fruit Goodplant control). Each treatment was repeated three times. Data were analyzed using analysis of variance (ANOVA). The test was continued with Duncan's New Multiple Range Test (DMRT) at 5% level. The results showed that the Dalmatian variety gave the best results on weight per fruit, flesh thickness, and fruit flesh hardness with the highest K element between formulations in the generative phase and the highest P element between formulations in the fruit ripening phase, while the Sweet D25 variety gave the best results on weight per fruit and thickness of fruit flesh with the highest N elements between formulations in the generative phase, and the highest K elements between formulations in the fruit ripening phase.

Keywords: *Quality Improvement, Varieties, AB Mix Nutrition, Melon*