## GROWTH AND YIELD TEST OF SIX GENOTYPES MELON (Cucumis melo L.) BY HYDROPONICS

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## ABSTRACT

Golden Dalmatian melon genotypes (DMGC-2-5-16-1-5 and DMGD-4-9-3-3-4) are candidates for superior varieties produced by breeders of the Faculty of Agriculture UPN "Veteran" Yogyakarta. This study aims to test the yield power of 2 genotypes of Golden Dalmatian melon with 4 comparison varieties. The research used the Randomized Complete Block Design (RCBD) method with a single factor, namely melon genotype. Golden Dalmatian melon genotypes consisted of 2 genotypes, namely DMGC-2-5-16-1-5 and DMGD-4-9-3-3-4 and 4 comparison varieties namely, Sweet D25, Golden Langkawi, Luna, and Dalmatian. Each experimental unit consisted of 6 plants. The data obtained were analyzed using analysis of variance (ANOVA)  $\alpha = 5\%$  and further test using Scott-Knott test at 5% real level. The coefficient of genetic diversity is high in the character of plant height 14 HST. The value of heritability is high in the characters of plant height (14, 21, 28 HST), stem diameter (14, 21, 28 HST), number of leaves (14, 21, 28 HST), harvest age, fruit length, and fruit sweetness level including high. Genotypes that have the potential to continue to the next plant breeding stage are DMGD-4-9-3-3-4 on fruit length and fruit sweetness characters.

Keywords: melon, genotype, yield test, heritability, genetic diversity