

EXAMINATION OF FRUIT POSITIONING ON GROWTH, RESULTS AND QUALITY OF VARIETIES OF MELON (*Cucumis melo*. L.) ON SUBSTRATE HYDROPONIC SYSTEMS

*By : Bias Denasa
Supervised by : Bambang Supriyanta*

ABSTRACT

*Melon (*Cucumis melo* L.) is a seasonal and high economic value fruit crop that is often cultivated. The quality of melon fruit is influenced by varieties and cultivation techniques. One of the cultivation techniques in improving the quality of melons is by determining the position of the fruit. The study aimed to determine the interaction and influence of fruit position on the growth, yield and quality of melon plants, as well as determining the right fruit position for various melon varieties. The study used a completely randomized design (CRD) with 3 replications. The treatment consisted of 2 factors, namely variety and fruit position treatment. Melon varieties consisted of Sweet D25, Taj Mahal, Golden Apollo, Honey Globe, Alisha, Dalmatian. The treatment of fruit position of internodes 8-10 (P1) and 11-13 (P2). Data were analyzed by analysis of variance (ANOVA) and then further tested by Duncan's Multiple Range Test at 5% level. The results showed there was no interaction between the combination of varieties and fruit position treatment on the growth, yield and quality of melon plants. Taj Mahal variety gave the best yield and quality on variables of plant height, stem diameter, number of leaves, fruit weight, fruit diameter, vertical circumference, and horizontal circumference of fruit. Internode 11-13 fruit position gave the best yield and quality on the variables of fruit weight, fruit diameter, fruit sweetness, fruit vertical circumference, and fruit horizontal circumference.*

Keywords: *melon, substrate hydroponics, fruit positioning*