Effect of Bagging Materials and Bagging Time on Navel Orange Fruit Quality

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Abstract

This study used different bagging time and materials applied in bagging treatment to evaluate the effect to the growth and quality of navel orange fruit. The bagging time was at August 18, September 6, and September 16. And bagging materials including white paper bag, double black paper bag, black PE bag, non-woven bag. The results showed that bagging time on the percentage of fruit drop, fruit color, fruit weight, fruit skin thickness, and titratable acidity had significantly different. Bagging material treatments on fruit color, fruit weight, fruit skin thickness, total soluble solids, and titratable acidity had significantly different also. But there were no interaction between two factors. Navel orange fruit bagging at September 6 had the lowest fruit drop (37.5%). When navel orange fruit bagging more late, fruit skin color in L* values and H* values had been trending up. Double black paper bag treatment had the highest C* values. When navel orange fruit bagging more late, fruit weight had been trending up. Black PE bag treatment had the biggest fruit weight, is 344.7 grams. However, to select double black paper bagging material can enhance the color of navel orange fruit, and the best bagging period for early September can have good fruit quality.

Key words: Citrus sinensis L. Osbeck, bagging, fruit color, fruit quality.

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