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RESPONSE OF LOCAL ORANGE TREES TO SHADDING AND SPRAYS OF SOME NUTRIENNTS , GROWTH REGULATORS AND ANTITRNSPIRANTS UNDER DIYALA CONDETIONS

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ABSTRACT

This study was conducted in unshaded locale orange orchard located in Diyala Province during the years of 2003 and 2004 . Afoliar sprays at full bloom from Urea (2%), Iron (150 mg/L) , Copper (50 mg/L), GA_3 (30 mg/L), BA (20 mg/L) , (GA_3+BA) (30+20 mg/L), Vapor gard (0.1%), Wax-Oil (Liquid paraffin) (0.1%) were used and shading .The objectives of this treatment was to determine the effect of these treatments on yield and fruit quality , and fruit growth in 2004 . A randomized Complete Block Design (RCBD) was used with three replications , The results of this study can be summarized as follows :

Shading and Liquid paraffin treatments slowed fruit growth after full bloom by 100 day up to ripening . while treatments Vapor gard increased fruit growth after full bloom by 100 day up to ripening. Urea, BA , GA_3, and Liquid paraffin treatments increased fruit number and yield weight / tree for the two years of study during 2003, (GA_3 + BA) treatments increased fruit number and weight, and in 2004 , Vapor gard treatments increased fruit number and weight. Urea and (GA_3 + BA) treatments increased total soluble solids (T.S.S) percentage for the two years of study . Fe , $CuSO_4$ and GA_3 treatments increased T.S.S during 2003 only .Urea, Paraffin, BA, and Vapor gard treatments increased Ascorbic acid (Vitamin C) in 2003. Urea and Fe treatments increased Vitamin C in 2004. Urea, Fe, paraffin , Vapor gard, and BA treatments increased total sugars in 2003 . Urea , Fe , GA_3 , and (GA_3 + BA) treatments increased non reducing sugar in 2003 .