



Effect of Foliar Feeding of GA₃, Triacantanol and Calcium Salts on Shelf-Life in Kinnow Mandarin

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Abstract: The studies on the effect of pre-harvest chemical treatments in kinnow were conducted to investigate their effect on shelf life of the fruits. The plant material used was fifteen year old plantation raised on citrus jambhiri rootstock. Pre-harvest foliar application of GA₃ (10, 20, 30 ppm), triacantanol (400, 600 ppm), CaCl₂ (4, 6 %) and Ca(NO₃)₂ (0.1, 0.2, 0.3 %) were applied to the kinnow plants on 25th October. The harvesting of the fruits was done on January 15th and the fruits were kept under ambient conditions for 30 days. The fruit samples were analysed for physico-chemical evaluation at 10 days interval. It was observed that CaCl₂ 6% proved to be the most effective treatment for minimizing the weight loss during ambient storage. Like physiological loss in weight, the minimum spoilage loss was also recorded in the fruits from CaCl₂ 6% treatment. Significantly lower spoilage loss was also observed with GA₃, triacantanol and other calcium treatments. Highest level of TSS content was shown by fruits treated with GA₃ 30 ppm, while the highest acidity level was observed in the fruits treated with CaCl₂ 6% and Ca(NO₃)₂ 0.3%.

Key Words: Kinnow mandarin, GA₃, CaCl₂, Ca(NO₃)₂, Triacantanol
