

Title The influence of pre-storage waxing and wrapping on quality attributes of stored 'Shamouti' oranges

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Abstract

'Shamouti' oranges harvested from a commercial farm in Jerash (north of Jordan) were subjected to four treatments: Without wrapping or waxing (Control), with wrapping (Wr) or Waxing (Wax), all placed at 4°C and 90-95 % relative humidity, and wrapping (Wr-R) placed under room conditions (13-19°C), for three months. Stored oranges were analyzed at 0 days (harvest), after 45 days, and after 90 days of storage to evaluate fruit weight loss, fruit albedo firmness, total soluble solids, total titratable acidity, and ascorbic acid (vitamin C). It was noticed that all treatments, except the control, resulted in decreasing water loss from the fruit and maintaining higher fruit albedo firmness throughout the storage period, with the Wr treatment being the most efficient. However, the Wax treatment resulted in the highest total soluble solids at the end of three months storage period. Total titratable acidity was relatively low for all treatments as compared to the control during the storage period. No significant differences were found among all treatments in vitamin C content. It is recommended to use wraps on "Shamouti" oranges to preserve high quality during storage at low temperature up to three months.