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## Effects of *Aloe vera* Coatings on Quality Characteristics of Oranges Stored under Cold Storage

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### Abstract

Three hundred and twenty (320) oranges of Valencia variety were stored under cold conditions in the refrigerator for 8 weeks. The following parameters were measured during storage: total soluble solids, titratable acidity, weight loss, firmness, pH, vitamin C and sugar/acid ratio.

The final value for firmness for coated oranges was found to be  $1781.25 \pm 118.30\text{N}$ , while that of uncoated oranges was  $1531.25 \pm 185.53\text{N}$ . The pH was gradually increasing during the course of storage in the two treatments, whereas vitamin C was found to be decreasing in storage. The total soluble solids for coated oranges was  $9.79 \pm 1.14\%$  while that of uncoated oranges was found to be  $9.34 \pm 0.06\%$  at the end of storage. There was a linear decrease in titratable acidity during the course of storage. It was found that the value obtained for coated oranges was higher than that of uncoated oranges which was obtained to be  $1.14 \pm 0.07$  at the end of storage. Converse to this was obtained for % weight losses in the two treatments. The weight loss for coated oranges was  $29.20 \pm 0.55\%$ , while that of uncoated oranges was  $53.30 \pm 1.17\%$  at the end of storage. A linear increase was observed in sugar/acid ratio in the two treatments during the course of storage with higher value being recorded for uncoated oranges as  $8.90 \pm 0.87$ , while lower value was gotten for coated oranges as  $7.43 \pm 0.34\%$ .

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