

Title Fresh-cut radish using different cut types and storage temperatures
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Abstract

This project studied the effects of different types of cuts and storage temperatures on the quality of stored, fresh-cut radish. Two types of cuts (sliced and shredded), and three storage temperatures (1, 5 and 10 °C), were studied during 10 d. Whole radish was used as the control. Respiration rate and ethylene production were evaluated daily, while physicochemical parameters (soluble solids, weight loss, titratable acidity, ascorbic acid content, and color) were evaluated every second day. Twelve hours after processing, shredded roots had produced 0.04, 0.11 and 0.17 ng kg⁻¹ s⁻¹ of C₂H₄ at 1, 5 and 10 °C, respectively. On the 10th day, whole roots stored at 1 °C showed the lowest respiration rate (1.59 μg kg⁻¹ s⁻¹ of CO₂) while the highest rate was observed in shredded roots stored at 10 °C (7.42 μg kg⁻¹ s⁻¹). Shredded radishes had lower soluble solids during storage compared to other cut types. Loss of fresh matter increased with storage time and temperature. The content of ascorbic acid decreased in shredded roots stored at 10 °C. The value of lightness (L^*) of shredded roots decreased during storage at the three studied temperatures. Temperatures of 1 and 5 °C are recommended for maintenance of quality in fresh-cut radishes.