

Title Quality and microbial changes of fresh-cut mango cubes held in controlled atmosphere.
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Abstract

The marketable period of fresh-cut mango cv. Tommy Atkins and Kent cubes was 3 to 5 days at 10 deg C and 5 to 8 days at 5 deg C. The marketable period was extended by 1 to 2 days when cubes were held in a 4 kPa O₂ + 10 kPa CO₂ or 2 kPa O₂ + 10 kPa CO₂ (balance N₂) atmospheres, depending on cultivar and temperature. Variations in texture (shear force), pH and soluble solids were greater among cubes from different mango lots than among cubes held at different temperatures or atmospheres. Yeast count increased more with time than the total mesophilic, aerobic microorganism count, and the increase was less under controlled atmosphere (CA) than in air at 10 deg C. The CA was beneficial in maintaining quality of the cubes; however, low temperature was more effective than CA.