

Abstract:

The effect of modified atmosphere packaging (MAP) on the keeping quality of fresh-cut fennel during 14 days of storage at 0°C was investigated. Diced (1 x 1 cm) fennel were washed with chlorinated (100 ppm) water for 1 min and placed in 35µm oriented polypropylene (PP) bags or plastic trays heat-sealed with unperforated or perforated (control) PP film. Changes in soluble solids content, pH, titratable acidity, physiological disorders, decay, sensory attributes (visual appearance, aroma, flavour and texture) and microbial counts were monitored. After storage gas composition within both type of packages was about 10-12% O₂ and 10-12% CO₂. Under this atmosphere, a slight browning on the surface of the fennel dices developed, but no off flavour appeared. After cold storage in all treatments, soluble solids content and titratable acidity decreased, total plate count were less than 10⁷ CFU/g (limit recommended)