Abstract:

'Amarillo' melon fresh cut on trapeze shape sections were stored under passive and active (12% CO₂ and 18% O₂ or 0,5% CO₂ and 5% O₂) modified atmosphere packaging (MAP) at 0°C up to 14 days. In Passive MAP washing with CaCl₂ (1%) for 1 min. was used (Passive-Ca). Antimist microperforated polypropylene of 35 μm (PP) film was heat-sealed in 600 mL PP trays. As control a macroperforated film was used. Fresh cut melon was evaluated at harvest and after 14 days of storage at 0°C. Soluble solids content, pH, titratable acidity, firmness, colour, sensorial evaluations and microbial counts were monitored. At the end of storage 2-4% CO₂ and 18% O₂ levels in both Passive and Active MAP were found. Passive-Ca and both Active MAP kept good melon firmness until day 14. CaCl₂ was efficacy for keeping firmness although induced a slightly salty taste. All treatments were effective for keeping visual appearance up to 14 days, without differences among treatments. At any time off-aroma were detected. In all treatments moulds and yeasts counts were lower than 2 log CFU/g. Mesophilic and psychrotrophic bacterias counts appeared only on control and Active low O₂ MAP at 2.6 log CFU/g.