

Title Effect of packaging on storage quality and microbial changes of fresh-cut cabbage
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Abstract

The objectives of this study were to evaluate the effects of using different types of packaging materials (ONY/LDPE (oriented nylon laminated with low-density polyethylene), BOPP/LDPE (biaxially oriented polypropylene laminated with low-density polyethylene) and LDPE (low-density polyethylene)) on the storage quality and microbial changes of fresh-cut cabbage stored at 2°C. It was found that different packaging materials affected sensory, surface colour, chemical analyses and gas production (CO₂ and C₂H₄) but not soluble solids content (TSS) and browning. LDPE maintained sensory quality and CO₂ production during storage compared to the other packaging. Meanwhile for the microbial study, a low total count for bacteria (<6 log₁₀ CFU/g) and yeasts and moulds (<4 log₁₀ CFU/g) was found from all samples. The results suggest that LDPE could be used for packing fresh-cut cabbage as it can maintain the sensory quality with low microbial counts up to one month storage.