

**Title** Influence of different packaging systems on fresh-cut zucchini (*Cucurbita pepo*)  
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**Citation** Innovative Food Science & Emerging Technologies, Volume 11, Issue 2, April 2010, Pages 361-368  
**Keywords** Minimally processed vegetables; Modified atmosphere packaging; Shelf life; Zucchini

#### **Abstract**

In this work different packaging strategies aimed to prolong the shelf life of minimally processed zucchini are presented. In particular, two different cultivars (Sofia and Diamante) were tested. The sliced zucchini were packaged in oriented polypropylene-based (OPP) bag and into a bio-polymeric film (COEX) under passive and active MAP. The investigated produce was stored at 5 °C for approximately 9 days. Headspace gas concentrations, pH, mass loss, sensory quality and viable cell load of main spoilage microorganisms were monitored for the entire observation period. In order to determine the respiration activity, O<sub>2</sub> and CO<sub>2</sub> concentrations were monitored not only in OPP and COEX packages but also in the headspace of an aluminum-based package. Results suggested that for Diamante cultivar OPP film under active and passive MAP showed slightly better performances in prolonging the shelf life, compared to COEX film; instead, for Sofia cultivar better results were obtained with OPP film only under active MAP conditions.