

Enrichment of *Aloe vera* gel with basil seed mucilage preserve bioactive compounds and postharvest quality of apricot fruits

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Abstract

The effect of *Aloe vera* gel (AVG) and basil seed mucilage (BSM) as coating on qualitative attributes of apricot fruits were studied during storage at 2 °C for 28 days. Fruits coating with AVG and BSM alone or in combination with together significantly reduced weight loss, soluble solid content, respiration rate, ethylene production and ripening index in comparison to the uncoated fruits. Also, in coated fruits the firmness and titratable acidity were higher than control fruits. Application of AVG and BSM efficiently increased antioxidant activity, total phenolic content and ascorbic acid of apricot fruits during cold storage. In evaluation sensory attributes, the panelists did not detect any negative effect of AVG and BSM on flavor and external visual aspect of coated fruits. The results demonstrated that addition of BSM to AVG or their individual application as an edible coatings could be a promising approach to maintain postharvest quality and control physiological process of apricot fruits during cold storage.