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POSTHARVEST TREATMENT WITH FERULIC ACID AND APRICOT GUM TO PRESERVE QUANTITATIVE AND QUALITATIVE CHARACTERISTICS OF STRAWBERRY FRUIT CV. CAMAROSA

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Strawberry (Fragaria x ananassa) is a particularly perishable fruit, susceptible to drying, mechanical injury, decay and physiological disorders during post-harvest storage. Edible coatings are an environmentally friendly technology that is applied on many products to control moisture transfer, gas exchange or oxidation processes. This study aimed to evaluate the effect of edible coatings based on ferulic acid (1 and 2 mM) and apricot gum (1 and 2%) on quantitative and qualitative characteristics of strawberry fruit cv. Camarosa during 15 days storage. The analysis of variance showed that ferulic acid, apricot gum and storage time had a significant effect on the assessed traits. The lowest weight loss was recorded for ferulic acid 2 mM +apricot gum 2% after 15 days storage, whilst the highest weight loss was recorded for the control. Soluble solids content, titratable acidity and vitamin C reduced during storage and ferulic acid and apricot gum decreased significantly the reduction rate. Total phenolic, anthocyanin, pH and antioxidant activity increased during storage period, and coatings treatments preserved the biochemical attributes better than uncoated fruits.

Keywords: Apricot gum, antioxidant activity, ferulic acid, total phenolic