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Effect of Hydroxy Propyl Methyl Cellulose (HPMC) Coating in Combination with MGSO4 on Some Guava Cultivars

Authors : Muhammad Randhawa, Muhammad Nadeem

Abstract : Guava (Psidium guajava L.) is a vital source of minerals, vitamins, dietary fiber and antioxidants. Owing to highly perishable nature and proning towards chilling injury, diseases, insect-pests and physical damage the main drawbacks of guava after harvesting, present study was designed. Due to its delicacy in physiology, economic importance, effects of pre and postharvest factors and maturity indices, guava fruits should be given prime importance for good quality attributes. In this study guava fruits were stored at 10°C with 80% relative humidity after treating with different levels of sulphate salt of magnesium followed by dipping in cellulose based edible coating hydroxy propyl methyl cellulose (HPMC). The main objective of this coating was to enhance the shelf life of guava by inhibiting the respiration and also by binding the dissolved solids with salt application. Characterization for quality attributes including physical, physiological and bio chemical analysis was performed after every 7 days interval till the fruit remains edible during the storage period of 4 weeks. Finally, data obtained was subjected to statistical analysis. It was concluded on statistical basis that Surahi variety (treated with 5% MgSO4) showed best storage stability and kept its original quality up to almost 23 days during storage.

Keywords : edible coating, guava cultivars, physicochemical attributes, storage
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