Iranian Journal of Horticultural Science and Technology 19 (3): 353-364 (2018)

Combined Preharvest Application of Polyamines and Chitosan Postharvest Treatments on Qualitative Parameters of Fresh Pistachio cv. Akbari

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Keeping fresh pistachio appearance after harvest had important role in economic value of this produce. In this research, pistachio trees were sprayed with 1 mM of putrescine, spermidine and permine 20 days before harvest. Foliar spraying by distilled water was considered as control. Harvested fruits were coated by chitosan (0 and 1%) and stored at 2±1 ^{o}C and 90±5% R.H. The fruits were evaluated at 0, 20, and 40 days of storage. The results showed that hull and kernel firmness, hull and fruit water content, L^* index in hull and shell, hue angle and chroma indices, chlorophyll content were decreased during storage but application of polyamines maintained these traits in comparison with control. The results also indicated that combined application of putrescine and chitosan improved these characteristic than alone application of each.

Keywords: Edible-coating, Putrisine, Spermine, Spermidine.

[DOR: 20.1001.1.16807154.1397.19.3.4.8]

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