

Title Effect of chitosan coating on the storage of pomegranate fruit
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Abstract

There are wide range of pomegranate cultivars and genotypes with various taste and fruit appearance grown in the Iranian orchards. 'Rabab e Neyriz' is one of the popular and commercial pomegranate cultivars in Iran which characterized for its good taste and color that is suitable for the export market. Although, the quality of the fruit of this cultivar reduced under some storage conditions. The objective of this research was to determine whether or not a chitosan coating can extend the postharvest life and maintain quality of pomegranate fruit under certain set of storage conditions. For this purpose, matured pomegranate fruits of cv. 'Rabab e Neyriz' were treated with aqueous solutions of 0, 1 and 2% chitosan, and then stored at 2 and 5°C with 90% relative humidity. The effects of chitosan coating treatments on the fresh pomegranate fruits were assessed and monitored in terms of determining changes in color, weight loss, total soluble solids, titratable acidity, fruit flavor index and eating quality during the storage period at the certain time intervals. Research is underway and the measurements will continue in order to determine the effects of the chitosan treatments on the pomegranate fruit under the short and long term storage. Results will analyse and discuss in order to determine the best chitosan concentration and suitable storage condition in terms of temperature in order to keep fruit quality under cold storage condition.