

**Effects of Postharvest Chitosan Treatment on of Fungal Growth and  
Quality of Rishbaba Table Grape During Cold Storage  
(*Vitis vinifera* L. cv. Rishbaba)**

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**Abstract**

A study was carried out to determine the effects at postharvest chitosan treatment on the pattern of quality changes in red Rishbaba table grape. The bunches were treated with chitosan at 0, 0.5 or 1% concentration and stored at  $0\pm 0.5^{\circ}\text{C}$  for 4 months. Fruit quality attributes including total soluble solids, total acidity, ascorbic acid content, decay incidence and bunch browning, berry browning, berry abscission, taste and flavor were evaluated after 2 and 4 months during storage. After 2 months of cold storage, the fruit treated with 0.5% chitosan had the highest ascorbic acid and lowest level of berry browning and abscission. At the end of storage period (4 months), bunch browning was low at 0.5% chitosan treatment. Taste and flavor at the end of 2 months with 0.5% chitosan and at the end of 2 and 4 months with 1% chitosan were high compared with control. TSS and fungal decay contents were not significant. According to the obtained results, treatment with 0.5% chitosan showed the best effect on quality of Rishbaba grape.

**Keywords:** *Chitosan, Rishbaba table grape, Postharvest, Ascorbic acid, Decay, Taste and Flavor*