

**Title** Improving the postharvest characteristics of table grape by pre-harvest application of polyamines

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#### **Abstract**

Although the table grape is a non-climacteric fruit with low physiological activity but is very sensitive to weight loss, softening and fungal infection during postharvest period. The whole vine especially fruits were sprayed with putrescine (0, 1, 2 mM), spermidine (0, 1, 2 mM) 40 and 20 days before harvest. Different fruit characteristics were analyzed after harvest and remained fruits were stored at  $1.5\pm 1^{\circ}\text{C}$  and  $90\pm 5\%$  RH. After 25 and 55 day of storage various parameters such as berry firmness, color, weight loss, TSS, titratable acidity, pH and fungal infection were measured. Different concentration of polyamines could increase the firmness and decrease the weight of fruit during the storage significantly compared to control. The results revealed that table grape storability could be extended by put and spd treatments due to their effect on delaying the softening, water loss, fungal infection and senescence.