

## Effects of growth regulators (Gibberlic acid and Sevin) and girdling on fruit quality of grape (*Vitis vinifera* cv. Askary)

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The cv. Askary is one of the leading cultivars. To increase the quality two separate experiments were conducted:

- a. The effects of pre-bloom application of GA3 concentrations of 0 to 50 ppm and Sevin at concentrations of 0 to 1500 ppm.
- b. The effects of post-bloom application of GA3 at concentrations of 0 to 300 ppm alone and in combination with girdling.

This experiment was performed in the vineyard of the college of Agriculture , Shiraz University.

The experiments were repeated in two successive years in 1993 and 1994. The design of the experiment was a complete randomized block design with 4 replicates.

The results indicated that GA3 reduced percentage of fruit set and cluster weight, increased leaf area and cluster length with individual bigger and elongated berries. At post-bloom, application of GA3 had no effect on fruit set, but increased both berry weight and volume, weight and length of the cluster and leaf area, but had no effect on L/W ratio of the berries. There were no effects of GA3 on juice quality. Girdling especially in combination with GA3 increased fruit set, weight and volume of berries and cluster, and leaf area.

Pre-bloom application of sevin reduced berry set, but had no effect on other characteristics measured.