

Study of NAA effect on preventing preharvest drop of apple cv. Golden Delicious

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The abscission of apple and pear fruits usually occur before ripening and harvesting period. Somehow, in some years this may causes a fruit drop of more than half. In order to face with this problem, nowadays, various chemicals are applied to prevent and delay such fruit abscission.

In this research, NAA at 10 or 15 ppm was used to control the fruit abscission. Fifteen years-old "Golden Delicious" grafted on seedling rootstocks were treated 2 and 3 weeks before harvest (131 and 138 days after full bloom) in 1992 and 1993. Results analysed in randomized complete block design.

In this experiment, fruit drop percentage, weight, length, diameter, volume, fruit juice pH, sugar content and flesh firmness were measured. Results showed that NAA delayed fruit drop 12 days compared with control. Treatments had strong effect on the fruit juice pH, sugar content and soluble solid. There was not considerable effect on the flesh firmness, weight, length, diameter, volume and titrable acid in harvested fruits.