

#### Abstract:

A close link exists between the reaching of “on-tree physiological maturity” and the most important market quality attributes of peaches. Quality is defined by several chemical, physical and sensory parameters and their evolution is controlled by ethylene. An approach to manipulate ripening could be achieved by applying substances which inhibit ethylene production, such as aminoethoxyvinylglycine (AVG). Redhaven peach was treated with AVG at a concentration ranging from 62.5 to 250 ppm 10 days before harvest, during the last phases of fruit development. The following data were collected: fruit growth, ethylene emission, drop and main fruit quality parameters. Fruit soluble solids content and flesh softening were also monitored during the post-harvest period. In all the tested experimental situations AVG reduced and delayed the onset of fruit ethylene emission as compared to control, impaired fruit drop and affected fruit quality. Particularly, fruit flesh softening was delayed, while soluble solids content showed a slight increase.