

PRE-HARVEST 1-MCP APPLICATIONS IN 'STARK SPUR GOLDEN' APPLES

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Abstract:

The effects of 1-MCP (a chemical which includes methyleylelopropene, dextrose, cyclodextrin A.I. and amino acid salt) treatments were determined on fruit drop at pre-harvest and fruit quality during the storage period of 'Stark Spur Golden' was determined and the chemical was applied as three doses (0-150- 300 a.i.g/ha). The 1-MCP was applied at two different times on apple trees as two groups. The application on the first group of apple trees was made seven days before optimum harvest time and harvested on optimum harvest time. The application on the second group of apple trees was made at optimum harvest time and harvested at seven days after optimum harvest time. Fruit were stored at 0°C (air humidity, 85-90%) in a polyurethane sandwich panel cold air store. Physical and chemical analyses at 60 and 120 days from harvest were done on stored fruits. Consequently, fruit flesh firmness, soluble solids and colors of fruit skin were measured and the chemical application which was made as 300 a.i.g/ha dose in optimum harvest time has been suggested as the most useful application.

Keywords: apple, storage, 1-MCP, fruit quality