Abstract:

The effect of aminoethoxyvinylglycine (AVG) applications on delaying fruit maturity in Japanese pear (Pyrus serotina) was investigated. A field experiment was conducted using (15-year-old) Japanese pear 'Kousui' and 'Housui' trees during the 2000 season, to investigate the effect of AVG on ethylene evolution and fruit quality parameters at harvests. The fruits were sprayed with 250 and 500 ppm concentrations of AVG, along with 0.1% Approach BI as a surfactant, 2 and 4 weeks before the commercial harvest time. Fruits were harvested at 2 different times, i.e. commercial harvest and 2 weeks after the commercial harvest time. Ethylene evolution was suppressed in both cultivars compared to the control, during both harvests. The decrease in ethylene evolution was more obvious following application of the higher concentration of AVG (500 ppm). Pre-harvest application of AVG had no significant effect on fruit quality parameters at either harvests. However, treatment effects on fruit firmness were evident: AVG applied 2 and 4 weeks before the commercial harvest at 250 and 500 ppm increased fruit flesh firmness at both harvests Fruit skin color tended to be greener in AVG treated fruit at both harvests for the 'Kousui' and 'Housui' cultivars.