

Postharvest quality of sour cherry fruits sprayed by ethephon

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Abstract

Ethephon (2-chloroethylphosphonic acid) was used to reduce the fruit removal force and facilitate the harvest process for sour cherries. The effect of preharvest Ethephon application on the quality of sour cherry during the storage period in modified atmosphere packaging (MAP) at 0°C was investigated. Modified atmosphere packaging was used with 10, 15 and 75 % O₂, CO₂ and N₂, respectively. This composition of gas at 0°C increased the postharvest shelf life of fruits. Fruit samples were evaluated at harvest date and after 6 weeks of storage. Weight loss, skin colour, pH, total soluble solids (TSS), titratable acidity (TA), TSS/TA ratio and firmness of fruits were monitored. Ethephon effects on TSS, TSS/TA ratio, L* value, and TA at harvest date were concentration-dependent. Fruit colour became darker after 6 weeks of storage.