

Title Effects of different precooling treatments with ozonated water on the quality of '0900 Ziraat' sweet cherry fruit

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Citation ISHS Acta Horticulturae 795:831-836. 2008.

Keywords *Prunus avium*; color; firmness

Abstract

'0900 Ziraat' sweet cherry (*Prunus avium* L.) fruit were precooled immediately after harvest at the postharvest physiology laboratory at Suleyman Demirel University. The precooling was performed using four different methods of applying ozone in water. Following treatment, the fruit were placed in plastic cases covered with a stretch film and were stored at 10°C and 60 to 65% relative humidity. Fruit quality was evaluated after 3, 5 and 7 days of storage by measuring weight loss, flesh firmness, soluble solids content, titratable acidity, pH, fruit color, stem colour, external appearance and microbiological quality. All fruit precooled with ozonated water were marketable at the end of storage. Weight loss varied from 0.57% (control) to 0.72% (first treatment). While flesh firmness did not change in the control fruit, the firmness of ozone treated fruit increased slightly during storage. Titratable acidity was higher in the control fruit than in the ozone-treated fruit at the end of storage. Samples from the first treatment had minimal fruit darkening and maximal stem yellowing.