

STUDY OF THE EFFECT OF SMARTFRESH™ (1-METHYLCYCLOPROPENE; 1-MCP) ON POSTHARVEST LIFE OF HASS AVOCADO

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The effect of SmartFresh™ (300 ppb) and controlled atmosphere storage (CA; 4 % O₂ and 6 % CO₂) on postharvest physiology of Hass avocado was studied in the 2006-2007 season. Ripening of avocado fruits harvested at early and mid-late season was delayed with the application of SmartFresh™ and CA. Fruit firmness after 30 days at 5°C in the CA and SmartFresh™ treatments was higher than the control. In addition, the time required to reach a fruit firmness of 1 kgf at 20°C was longer in the SmartFresh™ treatment than CA and control fruits. Avocado fruits treated with SmartFresh™ showed after storage significantly less flesh browning than control. Finally, SmartFresh™ treatment did not induce changes in the development of skin colour or organoleptic quality of the avocado.