EFECT OF COLD BREAK DURING REFRIGERATED STORAGE ON CONSERVATION AND QUALITY OF HASS AVOCADOS (Persea americana Mill.)

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In order to evaluate the effect of a temperature break on the quality and conservation of stored fruit, Hass avocados were harvested at 2 stages of ripeness (10-12% and 13-15% oil) weighed, refrigerated at 7 ± 1°C and 90-95% of relative humidity, for 20, 25 and 30 days. On day 15, part of the fruit was subjected to a temperature break, for 24 hours, 50% at 15°C (59°F) and the other half at 25°C (77°F), and another group for 48 hours at 15 and 25°C, respectively, keeping a control with no temperature break. At the end of every storage period, the following was determined: weight loss, pulp resistance to pressure (PRP), epidermis color, physiological disorders and pathological damages. Subsequently, the fruit was left to soften at ambient temperature up to 1.81 kg of PRP, with the same variables being evaluated again. Cold breaks at 15°C (59°F) for 2 days maximum, do not provoke a reduction in the post-harvest life and final quality of the fruit, until 30 days of storage, in both ripeness stages. Cold breaks at 25°C (77°F) for 2 days cause an early softening, a decrease of chroma and brightness with absence of pathogens and physiological disorders. Cold breaks at 25°C for 1 or 2 days cause a greater weight loss than the other treatments, evaluated during the 3 refrigeration periods.

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