

EFFECT OF TEMPERATURE BREAK IN THE BEHAVIOR OF AVOCADOS (*Persea americana* Mill.) HASS cv. DURING REFRIGERATED STORAGE

P. Undurraga¹, J. A. Olaeta¹ and J. San Martín¹

¹ Facultad de Agronomía. Pontificia Universidad Católica de Valparaíso. San Francisco s/n La Palma Quillota. Chile. Correo electrónico: pundurra@ucv.cl

To evaluate the effect caused by a temperature break on the quality and conservation of stored fruit, avocados of Hass cultivar were harvested with a stage of ripeness between 10 – 12% of oil, weighted, evaluated the resistance of their pulp to pressure, color, presence of pathogens, physiological disorders and enzymatic analysis, and then refrigerated at 7°C (45 °F) ± 1°C (34 °F) and 90 – 95% de relative humidity, for 30 and 40 days in Hass. At days 7 and 15 of refrigerated storage, the fruit was subjected to a temperature break for 48 and 72 hours at 25°C (77°F). At the end of each storage period, the following was evaluated: weight loss, pulp resistance to pressure, epidermis color, physiological disorders, pathological damages and enzymatic analysis; this was also evaluated at the beginning and at the end of the application of cold break, analysis of which was only carried out to those treatments with a cold break for 3 days. Subsequently, the fruit was left to soften at room temperature up to 1,81 kg of pressure, with the same variables being evaluated again. In Hass cultivar, cold breaks for 2 or 3 days cause weight loss, early softening, with absence of pathogens and physiological disorders. Cold breaks for 3 days in Hass cause the fruit to reach 40 days of refrigeration in bad conditions as well as the control.