

**EFFECT OF THREE CALCIUM APPLICATIONS IN PRE-HARVEST ON
THE BEHAVIOR OF FUERTE AVOCADO (*Persea americana* Mill.)
UNDER REFRIGERATED STORAGE**

P. Undurraga¹, J. A. Olaeta¹ and J. Ramirez¹

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

In order to increase the shelf life of Fuerte avocados, calcium chloride applications to the trees with 72% of Ca were carried out in three stages of fruit growth, corresponding to 7, 9 and 11% of oil, in doses of: 0 (control), 0.23 and 0.33%, (commercial product), plus surfactant (120 cc of LI-700 ® / 100 L of water). When the fruit reached 13% of oil, fruits of similar size (200 to 250 g) were harvested and refrigerated at 7 ± 1 °C with 90-95% of Relative Humidity, for 12, 24 and 36 days. In each storage period, the following were evaluated: weight loss, pulp resistance to pressure, calcium content in pulp and browning of epidermis and pulp. Then, the fruit was left to soften at room temperature up to 0.92 kg of pressure, and softening time was evaluated, whereas sensory evaluation was made on taste, skin and pulp color, texture and fibrousness. Fruit with calcium chloride applications, in doses of 0.23 and 0.33%, from 24 days of refrigerated storage onwards, show a greater pulp resistance to pressure and less browning of pulp in comparison with the control. In all storage periods, calcium chloride dose of 0.33% results in increased chroma and calcium content in pulp of fruits.