INCIDENCE OF COLD STORAGE OF ESTHER AVOCADO (*Persea americana* Mill.) FRUIT ON THE OCCURRENCE OF POSTHARVEST PHYSIOLOGICAL DISORDERS

J.I. Covarrubias¹ y L.A. Lizana¹ and L. Luchsinger

E-mail: jcovarru@uchile.cl, alizana@uchile.cl

The effect of avocado cold storage on the occurrence of post-harvest physiological disorders was determined for different harvest dates, storage temperatures and storage periods. Twelve 8-year-old trees were used, with three samplings being performed every month as of January 18^{th} , 2006. Harvested avocado samples were stored for 10, 20 and 30 days at 4, 6 and 9° C and evaluated after a storage period at 20° C, once the fruit reached 0.5 - 0.9 k-f firmness. Evaluated parameters were fibre browning, internal browning intensity, percentage of flesh with internal browning, percentage of external spots and seriousness of grey spots. For the different parameters, avocado fruits were evaluated by means of a grading scale. The results were analyzed by ANOVA according to a factorial randomized design of $3 \times 3 \times 3$ (harvest dates x storage periods x storage temperatures) and by the Kruskall-Wallis test when the data did not comply with the assumptions of normality and equality of variance. The results obtained indicate that for fibre browning differences were detected among treatments, attributed to harvest dates, storage periods and storage temperatures, with harvest dates as determining factors. Regarding the intensity of internal browning, percentage of pulp with internal browning, percentage of outer spots and seriousness of grey spots, no statistically significant differences among treatments were found.

¹ Universidad de Chile, Facultad de Ciencias Agronómicas. Santa Rosa 11315, La Pintana, Santiago, Chile.