

**MATURITY EVOLUTION OF ISABEL AVOCADO FRUITS  
(*Persea americana* Mill.), GRAFTED ON MEXICOLA STOCK**

P. Undurraga<sup>1</sup>, J. A. Olaeta<sup>1</sup> and A. Bontá<sup>1</sup>

<sup>1</sup> Facultad de Agronomía. Pontificia Universidad Católica de Valparaíso. San Francisco s/n La Palma, Quillota, Chile. Correo electrónico: [pundurra@ucv.cl](mailto:pundurra@ucv.cl)

The Faculty of Agronomy of Pontificia Universidad Católica de Valparaíso has developed a new cultivar of Isabel avocado, with appealing characteristics for consumers. Fruits from the Isabel cultivar grafted on Mexicola rootstock were collected every 10 days, between April and October 2005, with dark green skin, in order to determine minimum oil percentage for commercial harvest. During every harvest period, part of the fruits were analyzed to determine percentage of oil, percentage of moisture and weight in order to establish the correlation curve between oil and dry matter. Subsequently, the rest was left to soften in anteroom (at room temperature) with up to 1.84 K of pulp resistance to pressure, determining: polar and equatorial diameter, pulp colour, skin and seed coat, fibrosity, seed-pulp relation, internal rot, skin blemish, loss of moisture and palatability, with the latter being assessed through a sensory evaluation panel. A correlation curve between variables of oil and moisture was determined:  $y = 89.0104 - 1.01018 x$  (percentage of moisture). The minimum percentage of oil determined for harvest was 12.81% (24.21% dry matter). The fruit has a high seed percentage (19.62%). A decrease of the softening period, loss of moisture and firmness of the fruits were reported in the season; whereas weight, equatorial and polar diameter did not show any variations; which means fruits reach their final size early in the season. Palatability increased as harvest time delayed.