DETERMINATION OF THE MEAN CHLOROPHYLL CONTENT OF 'HASS' AVOCADO LEAVES

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During the 2006 growing season, a characterization of the foliar tissues of avocados was conducted to determine mean total chlorophyll content. Using measurements taken at the Experimental Station, in La Palma, Quillota (32º S, 71º W), a standard curve for total chlorophyll content in leaves of adult 'Hass' avocado trees was made, indicating the total chlorophyll content at different leaf stages. Chlorophyll content values were correlated with SPAD values.

Leaf samples were taken during different development stages, determining 5 SPAD interpretations for each sample. The samples were taken to laboratory to directly determine the total chlorophyll content, using the N,N-Dimethylformamide (DMF) method protocol. The curve was then correlated using total chlorophyll values from both the direct and indirect measurements.

Once the curve was calculated, more SPAD interpretations were taken on field to verify its effectiveness. A linear relationship (0.91) was observed between the SPAD values and the total chlorophyll content determined by the laboratory method.