NUTRIENT RECYCLING BY 'HASS' AVOCADO LEAVES

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The magnitude of macro- and micronutrient recycling that occurred previous to leaf senescence was quantified in 'Hass' avocado cultivated under rainfed conditions (annual rain = 1,185 to 1,300 mm) in the semi-warm sub-humid climate of the state of Nayarit, Mexico. Leaves in positions 5 and 6 (basipetal fashion) were collected from previously tagged shoots, at monthly intervals from the beginning of leaf growth in winter (April 2004) and summer (September 2004), until the date of leaf abscission. For leaves from winter, the beginning of senescence and nutrient recycling concurred with floral bud break (December 2004), and for summer leaves these processes coincided with the emergence of the winter vegetative flow (February 2005).

Leaf abscission on winter and summer shoots occurred on March and April 2005, respectively. According to their magnitude, nutrient recycling on winter leaves was: K > Cu > N > P > Fe > S, and there was no recycling for Ca, Mg, Mn, Zn, and B. For summer flush leaves, nutrient recycling was: Cu > N > Zn > Mn > P > S > Fe > K > B, and no recycling for Ca and Mg was observed. This information will be useful to make a more effective management of 'Hass' avocado nutrition.

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