

## VALIDATION OF FOLIAR NUTRITIONAL STANDARDS, AND IDENTIFICATION OF FOLIAR SAMPLING OPTIMAL TIME FOR HASS AVOCADO IN NAYARIT

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The available nutritional leaf standards have been associated to total fruit production and have been inaccurate for Hass avocado in Nayarit. Foliar standards were validated and tested to be suitable for management of Hass avocado nutrition in Nayarit. As a working hypothesis, it was proposed that total fruit yield and fruit size depends on tree foliar nutritional status. A five-year set of data on foliar analyses, yield and fruit size, was used. When total crop production was low, production of larger size fruit (170 - >266 g) increased. A fruit size index (FSI) was calculated by the mathematical expression:  $FSI = \text{Production of larger fruit} / \text{Total yield}$ . Standard foliar nutritional values were calculated for total yield, production of larger fruit, and FSI for each of 13 nutrients considered (N, P, K, Ca, Mg, S, Cl, Fe, Cu, Mn, Zn, B, and Na). The nutritional standard values here proposed were lower than those currently available for Hass avocado in Mexico, except for copper and zinc. At the same time, the moment when foliar nutrient concentration stabilized, was established. In order to identify the months with the highest correlation, the values obtained for each month were correlated with total yield and fruit size. For most nutrients, August was the appropriate time for foliar sampling, when winter leaves were 6 months old already.