



## Avocado phenological phases and their nutrition requirements

One of the goals is to arrive at the quiescent winter season with trees fully loaded with nutrients to enable a moderate passage into the spring season and its requirements for new buds and flowers.

The growers practice annual leaf analyses to make sure that the mineral nutrition keeps balanced and take measures to correct it if a deviation from the norm takes place.

It is noteworthy that in case of applying manures (especially- chicken manure) excessive P may provoke Zn deficiency.

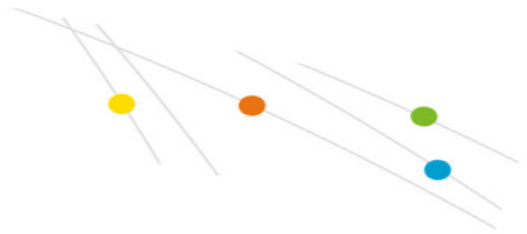
*Critical nutrient levels for late-summer / early-fall leaf samples in "Hass" Avocado. Ref.:*

*<https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Avocado.html>*

## Critical nutrient levels for late-summer / early-fall leaf samples in

- Leaf analyses are more useful for assessing the long-term adequacy of the fertilization program than correcting current-year deficiencies, since yield potential is mostly set in the earlier stages of fruit development.
- Leaf N levels often do not correlate well with yields, especially in alternate bearing trees.
- 'Hass' avocados have relatively high leaf N concentrations. Other varieties may have a slightly different optimum range.
- While a leaf P concentration of 0.1-0.25% is considered sufficient, concentrations exceeding 0.14% may already interfere with zinc uptake.

*Nutrients Removal by 1 MT of 'Hass' Avocado Fruit in California Ref.: Hofshi, R., Hofshi, S., 2012. Total Fruit Nutrient Removal*



Calculator for Hass Avocado in California.

N	P	K	Ca	Mg	S	Na
<b>(kg nutrient/MT fruit) / (kg nutriente/TM de fruta)</b>						
2,80	1,06	6,72	0,56	1,13	2,03	1,03
Al	B	Cu	Fe	Mn	Mo	Zn
<b>(kg nutrient/MT fruit) / (kg nutriente/TM de fruta)</b>						
23,4	99,3	14,4	11,7	2,2	0,0	38,6

# -AVOCADO

