

Is my tree hungry and thirsty? Determining fertilizer and water needs for a growing tree

Davie Kadyampakeni
UF/IFAS Citrus Research and Education Center
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CITRUS IN THE
HOME LANDSCAPE

Take home messages

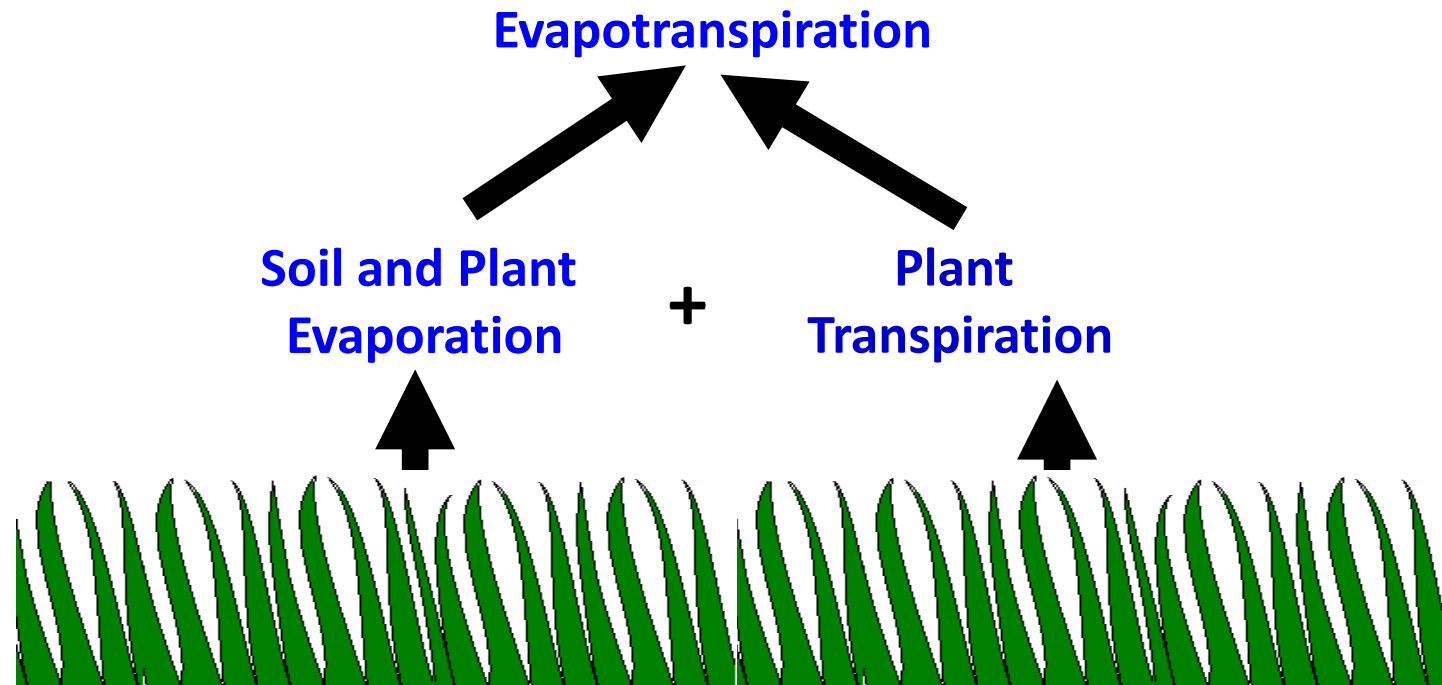
- We have tools to determine if the tree needs fertilizer or more water.
- A lab soil or leaf test is more reliable to determine accurate nutrient needs.
- It is good to understand the fertilizer label to know how much the fertilizer contains.
- Timely, frequent irrigation and optimal fertilization keeps trees healthy and productive.

Outline

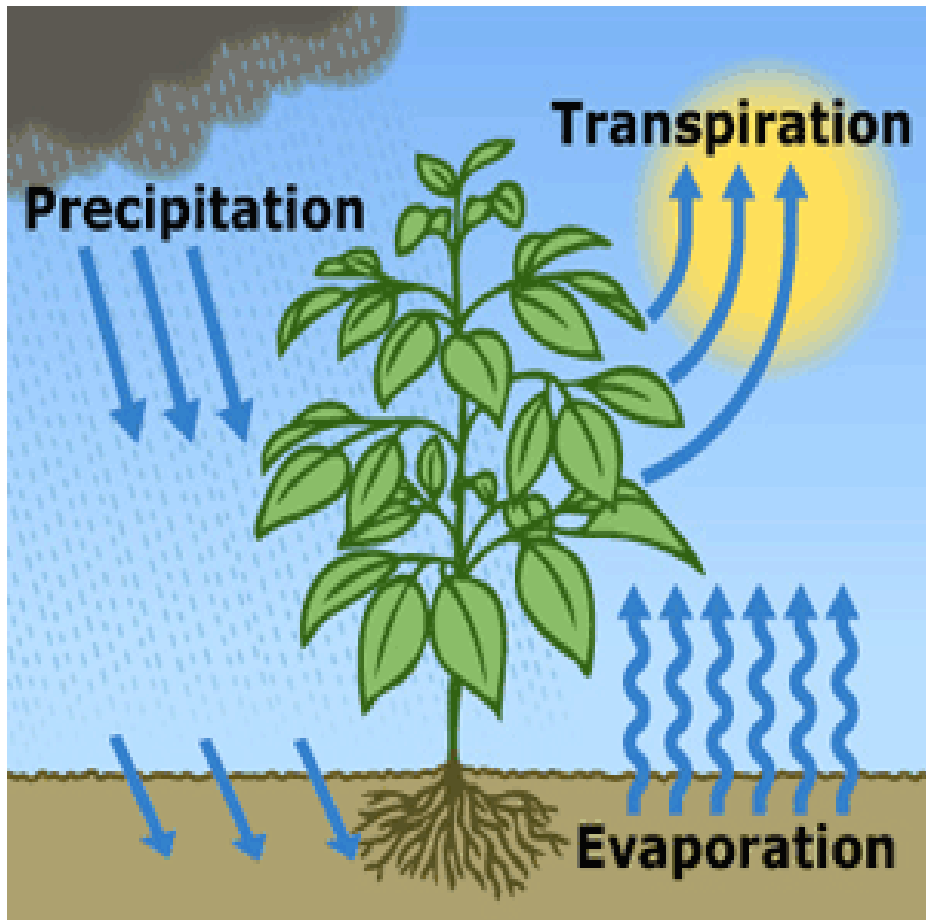
- Water requirement for citrus
 - Irrigation management
 - Irrigation rates
- Nutrient management for home citrus gardeners
 - Types of fertilizer ideal for home citrus
 - How often to fertilize and how much
 - How to select the right fertilizer for home gardens

Citrus water requirements

Definition: The loss of water from a vegetated surface through the combined processes of soil and plant evaporation and plant transpiration.

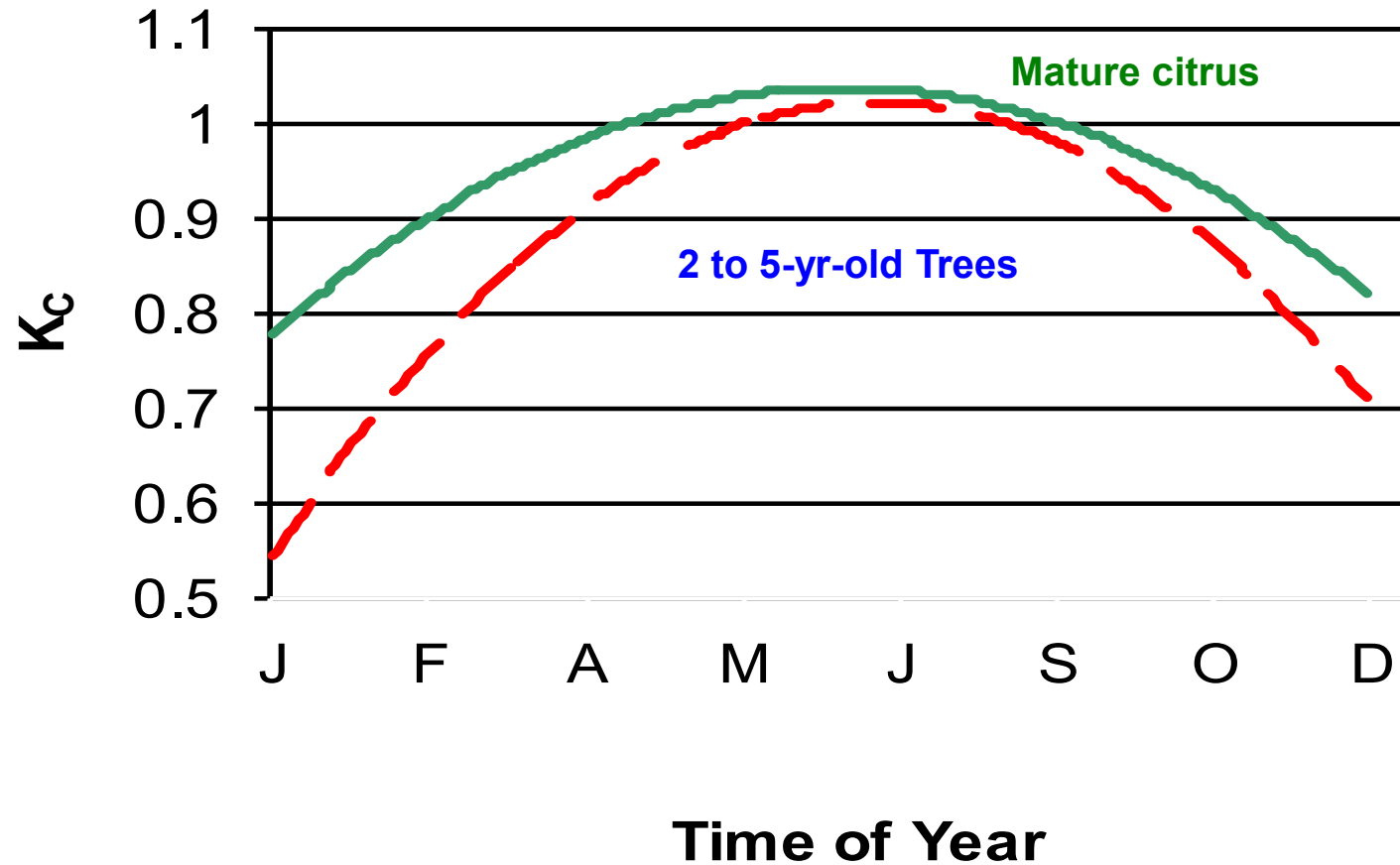


Citrus water requirements



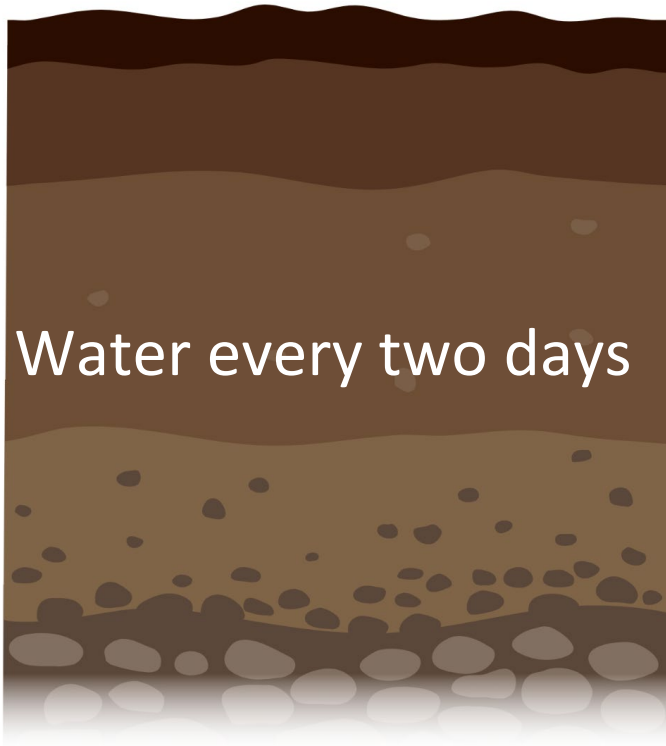
Evapotranspiration as seen in the hydrological cycle.

Citrus water requirements



Water needs are highest in summer and lowest in winter.

Tree water needs will depend on soil type



Clayey/Loamy

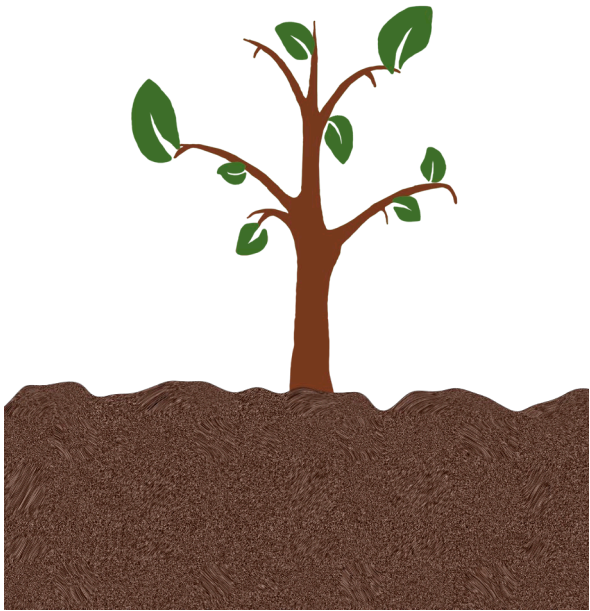
- Poor drainage
- Holds water longer over time



Sandy

- Good drainage
- Water moves through quickly

Tree water needs will depend on tree age and size



Young Tree

½ gallon each time

- Not bearing fruit
- Less than four years old



Mature Tree

1 to 1 ½ gallons each time

- Bearing fruit
- Four years old and up

But what if it rains?

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|

Rainy season



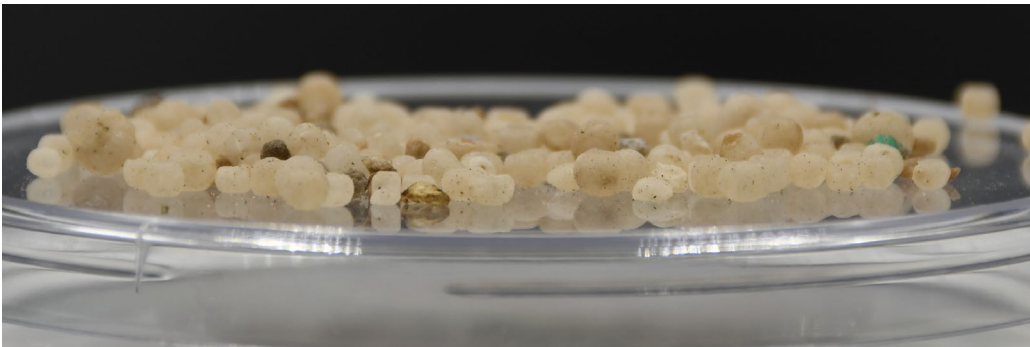
If you receive ½ inch (or more) of rain, recommended not to irrigate for 2 days because the soil will be moist enough.

Florida receives enough rainfall in a year, but we don't receive the rainfall when we need it.

Nutrient management for home citrus gardeners

Controlled- or Slow-release Fertilizer

- Coated granules that dissolves over time releasing fertilizer inside
- Releases over a period of 6–12 months
- **Highly recommended** for home citrus



Application

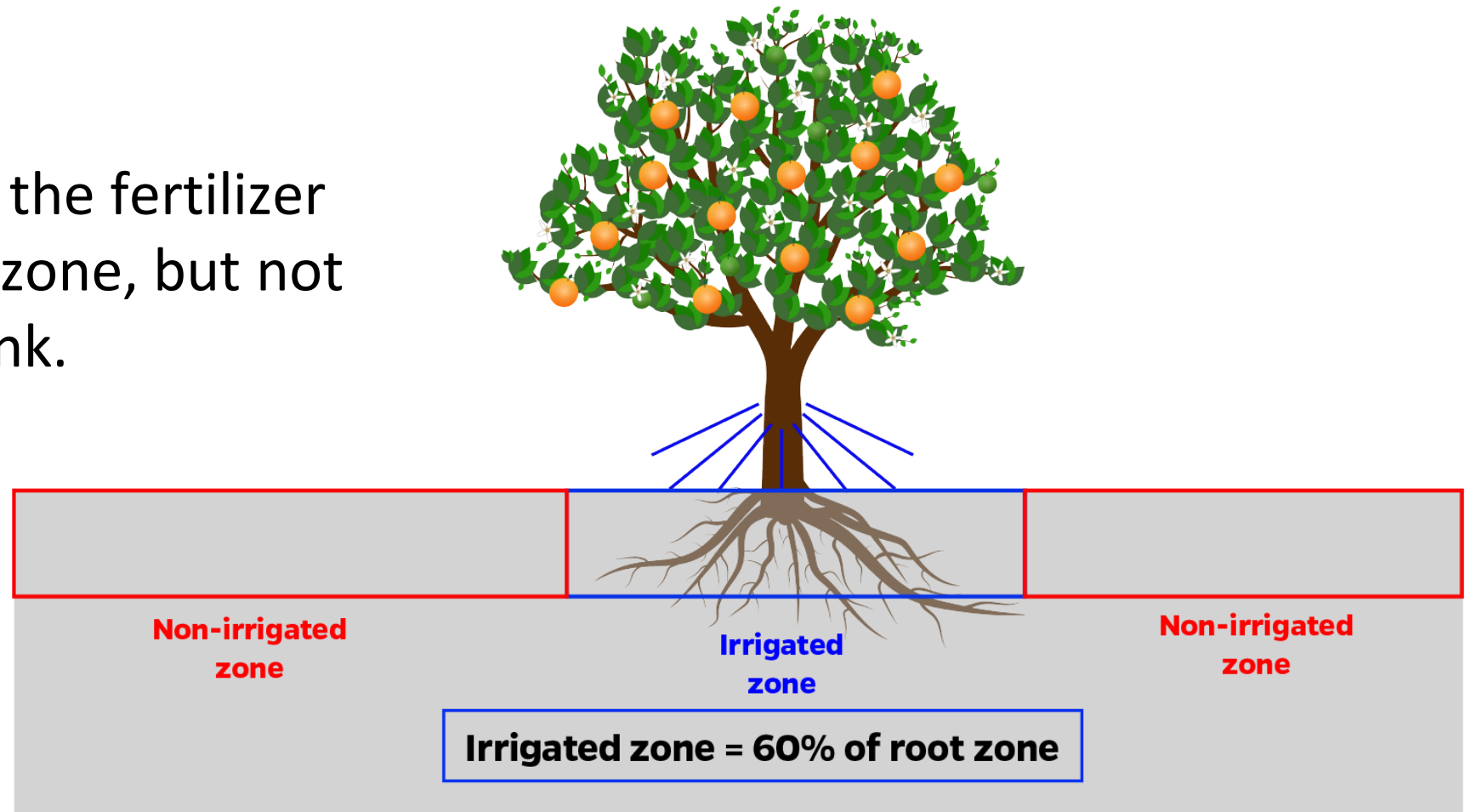
- Young tree
 - 0.5 lb/tree, 2× a year
- Mature tree
 - 1 lb/tree, 2× a year

Timing

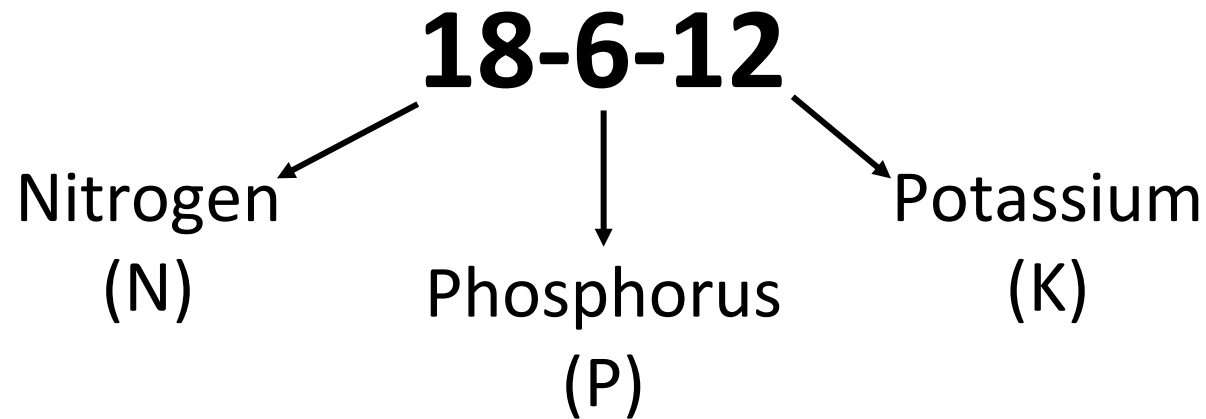
- February/March-before bloom
- September/October-after rainy season

Nutrient management for home citrus gardeners

It is important to place the fertilizer near the irrigated root zone, but not directly next to the trunk.

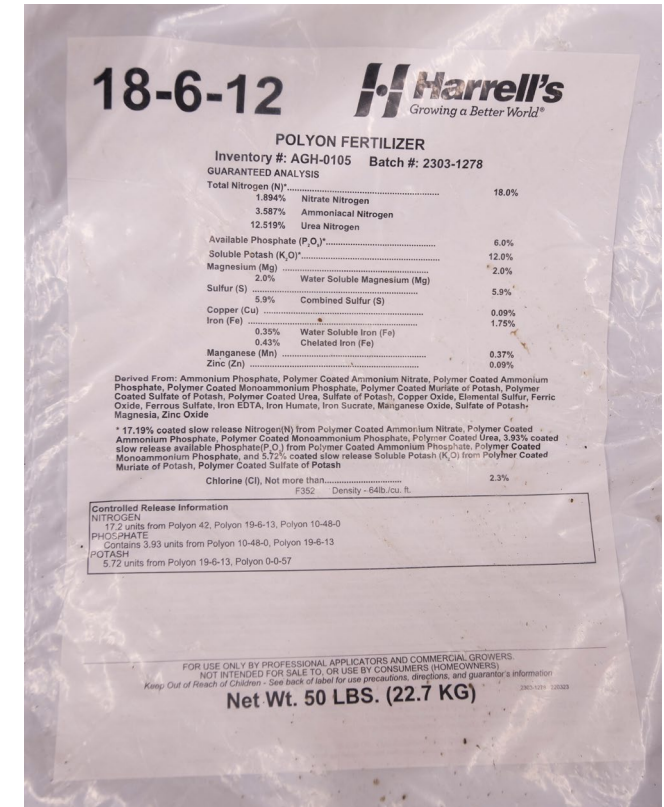


Nutrient management for home citrus gardeners



For home citrus, fertilizer should have:

- N:K nearly equivalent amounts, and lowest in P
- Some macronutrients (Ca, Mg, S)
- Some micronutrients (Fe, Mn, Zn, B)



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Any questions?

Thank you!

