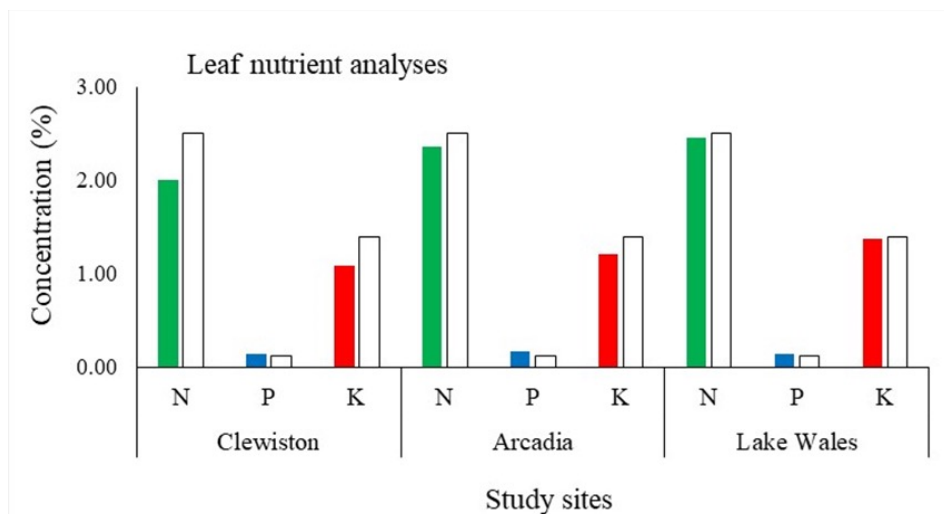


Developing Site-Specific Nitrogen and Phosphorus Rates for Young and Mature Sweet Oranges, Grapefruits, and Mandarins in Florida

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Take Home Message:

- Our study will develop new rates for applying N for HLB-affected trees.
- We will also identify the best P application rate for HLB-affected trees.
- This study will also develop site-specific recommendations for N and P throughout Florida.

Summary: Current citrus nutrient guidelines are based on studies of healthy citrus trees conducted in the pre-huanglongbing (HLB) era and may no longer be valid for the

present situation where 100% of mature citrus trees in Florida are HLB-affected. We propose to conduct research on different nitrogen (N) and phosphorus (P) rates for young/mature citrus cultivars including sweet oranges, grapefruits, and mandarins. Our project will evaluate 5 rates of N namely 100, 150, 200, 250, and 300 pounds of N per acre per year and 5 rates of P at 0, 10, 20, 40, and 80 pounds of P₂O₅ per acre per year. These rates will address the objective of evaluating different levels of N and P in identifying the appropriate

site-specific rate of N and P for HLB-affected citrus trees using site soil characteristics and production practices to determine if we need to increase or decrease the current guidelines for N (200 lbs/acre) or P₂O₅ (15 lbs/acre). Using conventional and controlled release fertilizer (CRF) fertilization sources, we should be able to develop and provide site-specific N and P guidelines for young and mature citrus trees of sweet oranges in central and southwest Florida, grapefruits in the Indian River district, and Satsuma mandarins in north Florida.

Funding:

