

## Current Research Objectives

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**Research topic:** Effect of Foliar Micronutrient Applications on Growth and Yield of HLB Affected Sweet Orange.

**Primary Research Objective(s):** Comprehensive understanding of the effect of micronutrient application rate on HLB expression.

**Research Goal:** Determine the effect if any on single micronutrients on the growth and yield of sweet orange trees affected with HLB.

**Outcomes to date:** The five year study determined that multiple applications of Mn and Zn on an annual basis is essential to improved health and reduced symptomology of HLB affected trees. The maximum effective rate of these nutrients is approximately three times the current IFAS recommendations. Rates greater than the optimum application rate increased leaf nutrient concentrations, increased growth but reduced yield.

Important outcomes of this work for growers to be aware of include:

- There was no difference in growth and yield among treatments in the first two years of adjusted nutrient treatments
- Foliar applications of Mn and Zn at annual rates equal to six times current IFAS recommendations resulted in increases in canopy volumes but reduced yields
- Yield was best at three times the current UF/IFAS recommendations for Mn and Zn.

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