

## FIELD TRIAL SIGN UP FORM

### Contact Information

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 Zip Code: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Email: \_\_\_\_\_

### Site Characteristics

Scion and Rootstock: \_\_\_\_\_  
 \_\_\_\_\_  
 Tree Age: \_\_\_\_\_  
 Grove Location (County): \_\_\_\_\_  
 Property Size (acres): \_\_\_\_\_

*On a scale of 1 (poor health) to 10 (healthy), rate the general health of the above mentioned grove.*

1    2    3    4    5    6    7    8    9    10

*Circle the types of fertilizer programs you currently use.*

Ground Controlled Release

Ground Soluble/Conventional

Fertigation

### Completed forms may be returned by mail or fax:

UF/IFAS Citrus REC  
 Attn: Tripti Vashisth  
 700 Experiment Station Road  
 Lake Alfred, Florida 33850  
 Fax: 863-956-4631

## CONTACTS

### Citrus Research and Education Center

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### UF/IFAS Southwest Florida REC

Kelly Morgan, Ph.D.  
 Soil and Water Science  
 239-658-3413

### County Extension Offices with Citrus Agents

Hardee, Hendry, Highlands, Lake, Polk, and Sumter

#### Websites

UF/IFAS Extension Citrus Agents  
<http://citrusagents.ifas.ufl.edu>

UF/IFAS Citrus REC  
[www.crec.ifas.ufl.edu](http://www.crec.ifas.ufl.edu)

UF/IFAS Southwest Florida REC  
<http://www.imok.ufl.edu>

Local UF/IFAS Extension Office  
<http://solutionsforyourlife.ufl.edu/map/index.html>

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2. Tripti Vashisth, assistant professor, Horticultural Sciences Department; and Jamie D. Burrow, Extension program manager, UF/IFAS Citrus Research and Education Center, Lake Alfred, FL 33850.

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## CITRUS NUTRITION UF/IFAS GROWER TRIALS<sup>1</sup>



Credit: Tyler Jones, UF/IFAS

## A collaboration between UF/IFAS and Florida Citrus Growers



October 2016

## CITRUS NUTRITION

- Plant mineral nutrition is critical for healthy and productive trees.
- A fertilizer program should include all the mineral nutrients. Every nutrient is essential.
- Nutritional programs should be crop-specific with the proper ratios of mineral nutrition. If there is too much or too little of any single nutrient, it can adversely affect plant performance.
- The supply of nutrients should be constant.
- Plants should receive the right source of nutrients, at the right rate, the right time, and the right location.

## UF/IFAS GROWER FIELD TRIALS

### Goal

The evaluation of promising nutritional products at multiple sites with the same evaluation protocol will help in determining the effectiveness of products in improving citrus tree health and productivity.

### Objectives

- To evaluate the response of HLB affected trees to applied controlled release fertilizer (CRF).
- To establish field trials throughout the state, using multiple sites to test the products under a wide range of growing conditions.
- To develop a database of product performance to assist growers in decision making for nutritional programs.

### Benefits

- TIME IS OF THE ESSENCE! Conducting multiple trials will help in collecting reliable data quickly.
- Trial results will help to determine promising CRF products.
- Products will be evaluated at multiple sites using the same protocol.
- Data collected will be accessible for use in production decisions.

### Considerations

- Pre-treatment assessment is CRITICAL.
- The overall block health should be comparable.
- Tree age, Scion/Rootstock, Tree spacing/density
- Soil type and pH
- Irrigation scheduling and water quality
- Nutrition program (foliar applied)
- Psyllid and other pest control
- Past 3 years of yields and fruit quality data

## TRIAL SETUP

- Preferred scion and rootstock combination is Valencia/Swingle or Hamlin/Swingle.
- Preferred tree age is 10–15 years old.
- Each site will be evaluated and the experimental design will be customized for each site.
- Identical/similar formulations will be used at all sites.
- Trials will be evaluated for at least two years.
- Growers will be responsible for application of CRF.
- UF/IFAS will be responsible for data collection and cost associated with the analysis.
- Participating companies will provide CRF.

## DATA COLLECTION

- Data to be collected prior to treatments and then every six months after first application include:
  - Visual disease index
  - Photographs
  - Leaf and soil nutrient analysis
  - Trunk diameter, canopy volume (height and diameter), and leaf area index
- Fruit drop data will be collected annually
- Fruit yield and quality will be assessed annually

## FIELD TRIALS 2016–2018

*The listing in this publication does not indicate general or specific endorsement or exclusion of product or service, nor does it indicate approval by the University of Florida, the Institute of Agricultural Sciences, or the Florida Cooperative Extension Service.*

### Evaluation of controlled release fertilizer to conventional soluble granular fertilizer.

#### Control

- Grower's ground applied fertilizer program.

#### Treatments

- Florikan CRF program
- Harrell's CRF program
- Wedgworth CRF program
- Yara CRF program

## FREQUENTLY ASKED QUESTIONS

### What is the time frame for these trials?

Trials will be conducted for a minimum of two years.

### What is the frequency of nutrition applications?

Application frequency will be specific to the product being applied. Ground applications will be made three times a year maximum.

### Will you consider varieties other than Valencia and Hamlin?

Valencia and Hamlin varieties are preferred, but other varieties would be considered.

### Is there a particular rootstock required?

Yes, all trees in the trial must be on Swingle.

### Will I be able to continue my current foliar nutrition program?

Yes. The current foliar nutrition program will continue and be applied to the control and treatments.

### Will bactericides applications have an effect on the nutrition trial?

No, as long as bactericides are being applied at the same rate to the entire experimental block.

### What is the cost to growers to participate?

The grower pays for the application expenses. Fertilizer will be donated by each company.

### Will I be able to sell my fruit?

Yes. UF/IFAS will only need 1/4 bushel per replicate for each treatment of fruit for quality testing.

### What is the minimum acreage requirement in order to participate?

A minimum of five acres is required.



Credit: Tyler Jones, UF/IFAS

For more information, please contact the UF/IFAS Citrus Research and Education Center, Lake Alfred 863-956-1151 or your local UF/IFAS Extension agent