CITRUS ADVANCED TECHNOLOGY PROGRAM

QUARTERLY & FINAL REPORTS: Control of Citrus Greening, Canker & Emerging Diseases of Citrus

SELECT PERIOD March 2016

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Understanding and Manipulating the Interaction of Rootstocks and Constant Nutrition to Enhance the Establishment, Longevity and Profitability of Citrus Plantings in HLB-Endemic Areas

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
05/06/2016	Citrus Research and Development Foundation	Conventional Citrus Breeding

REPORT UPDATE (500 words-It is not necessary in this public report to disclose your institution's proprietary information or intellectual property.)

Objective 1. (Greenhouse experiment): seed was extracted, seed coats removed using a chemical-removal procedure and planted of the needed rootstocks: x639, Swingle, WGFT+50-7 and UFR-3. Seeds germinated well and healthy seedlings are now being transferred to larger pots as necessary to begin the treatments/grafting.

Objective III: To evaluate the effect of complete, balanced and constant nutrition on HLB-affected mature trees (composition, delivery and economics).
All the pretreatment data have been collected on trees, leaf and soil nutrient analysis are done to obtain a complete pretreatment tree assessment. First fertilizer applications have been made at both the locations and data is being collected. Second round of applications will be made in June 2016.

Ojective 5. (funded by Orie Lee, using donated fertilizer products): Alligator Vernia/Rough Lemon Enhanced Nutrition Experiment – Treatments: 6 tree plots (randomized), 2 plots per treatment – treatments 2 times per year. The second treatment was recently applied (May 30th, 2016).
1. Control – no extra nutrition
2. Harrells St. Helena mix (2lbs per tree)
3. Harrells St. Helena mix (2lbs.)+ 2x TigerSul manganese (90 gm)
4. Harrells St. Helena mix (2lbs.) + 2x Florikan polycoated sodium borate (32 gm)
5. Harrells St. Helena mix (2lbs.) + 2x TigerSul manganese (90 gm) + 2x FL sodium borate (32 gm)
6. 4x TigerSul manganese (180 gm)
7. 4x Florikan polycoated sodium borate (64 gm)
8. 4xTigerSul manganese (180 gm) + 4x Florikan polycoated sodium borate (64 gm)

Baseline yield data was taken from each plot in January, 2016; pfd is severe and will impact the 2017 harvest. Donated micronutrient treatments were also applied at the Hughes Post Office block - where there were yield increases this past season, enhanced by specific treatments, especially those containing both boron and manganese.

PI First Name Jude

PI Last Name Grosser

Email jgrosser@ufl.edu

Phone 863-956-8680

Organization University of Florida, CREC

Project Number 15-013

Project Duration (years) 3 *Year of Project* 1

Total Funds (current year) $125,520

Form PR-12 Quarterly Reports **SUBMIT REPORT**

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.