CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD December 2015

(●) *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)
2/1/16	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. Seed germination is underway.

Objective III: To evaluate the effect of complete, balanced and constant nutrition on HLB-affected mature trees (composition, delivery and economics).
The trial sites have been confirmed at two locations: Peace River Packing groves, Fort Meade and Orange Co, Arcadia. The trial sites have been surveyed and experimental setup has been custom designed for two locations and both the trials (CRF+ Tiger Micronutrient and hybrid fertilizer). The control release fertilizer has been formulated for both the trials and has been acquired from Harrell's and H.J. Bakers. Currently, data is being collected for before treatment time point. Data collected includes tree canopy measurements, leaf area index, leaf and soil nutrient levels, tree health, and HLB qPCR test). First fertilizer application will be made in second week of February at both the locations.

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 first treatment was applied first week of October, 2015.
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, just completed (January, 2016).

PI First Name Jude

PI Last Name Grosser

Email jgrosser@ufl.edu

Phone 863-956-8680

Organization University of Florida, CREC

Project Number 05-013

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

Total Funds (current year) $125,520.00

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.