CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD June 2015

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Creation, Development, and Screening of Citrus Germplasm for Resistance to HLB and Citrus Canker (Core Breeding)

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
3/20/2016	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.)

Three Valencia-type clones (N7-11, B7R9T35 and B7R9T36) with excellent fruit quality were discovered in our collection (older trees) that have no HLB symptoms and are PCR-negative for Liberibacter. Trees of these clones have been propagated for further study. Juice quality, as assessed by a large citrus juice company in Florida, was found to be excellent.

We continued to monitor performance, assess HLB severity, tree growth and yields of late maturing sweet oranges at different field sites throughout Florida. Also, we received seeds from collaborators in Sicily of rootstock candidates that showed good preliminary performance at St. Helena, as well as some new candidates of identical parentage for future trials. Seeds were planted to produce larger numbers of trees for extended trials.

Gauntlet rootstock screening: Approximaly 75 HLB+ Valencia budstick-grafted hybrid rootstocks already passed through the 'hot psyllid' house were planted at Picos Farm in Ft. Pierce. Three parental combinations from 2013 crosses produced numerous hybrids that are growing off beautiful trees from grafted HLB+ Valencia budsticks: C2-5-12 pummelo x C. latipes (papeda); Amblycarpa+HBPummelo x Sour orange+rangpur; and Amblycarpa+HBPummelo x White #1. Stick-grafting and production of rooted cuttings from 2013 gauntlet crosses has been completed.

The two early-maturing (December) Valencia somaclones identified, B7-70 and SF14W-65, have been cleaned up and a few pathogen-free trees were provided by the Parent Tree Program (DPI). We are following our plans for rapid pathogen-free budwood increase. We are moving quickly to have a substantial population of budwood increase trees available for nurseries at the time of the official release announcement. These clones have been put up for official release approval this summer, 2015.

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Organization UF-CREC

Project Number 539

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

Total Funds (current year) $504,828

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.