CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD March 2015

○ *Quarterly Report* ● *Final*

Proposal Title

Expedited Indian River Evaluation of Tetrazyg Rootstocks Surviving the HLB-Gauntlet

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
8/24/16	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.)

The general goal of this project was to rapidly propagate complex citrus rootstock material for field testing in the Indian River citrus production area. The rootstock materials to be tested will be products of the Citrus Improvement Program at the UF-IFAS-CREC in Lake Alfred.

Dr. Jude Grosser assumed responsibility for completing the project, following the resignation of Dr. Barrett Gruber. Ms. Amy Dubois continued as the OPS assistant taking care of the trees at the IRREC, she continues in this roll. The final inventory of recovered liners from the micropropagation effort is provided below. All trees in group B have been grafted, and grafting of Group A is underway (with assistance from Dr. Ahmad Omar). Trees will be planted in field trials as they reach adequate size (this will happen after the ending date of the project). Since we now have new cybrid grapefruit clones showing improved tolerance to canker (10-fold better) in greenhouse screens, we decided to use these clones as the scions (including cybrids of Flame, Ruby somaclone N11-11, and White Marsh). These cybrid grapefruit clones contain cytoplasm from 'Meiwa' kumquat. As mentioned, these new grapefruit clones have shown significantly improved canker tolerance in greenhouse assays as compared to traditional grapefruit clones, and they are not considered GMO. Final trees to be tested in the field have potential to solve both the HLB and canker problems for Indian River grapefruit growers. Finishing all the trees and getting the field trial established will be accomplished with funding from other grants.

Viable cutting inventory (Group A, tetraploid selections from 'gauntlet' screening):

Rootstock	# of liners recovered
1. A+HBPxCH+50-7-12-14	44
2. 46x31-00-S10x46x31-00-S11-S5	78
3. Orange 10 x Green 7-11-1	52
4. A+VolkxOrange19-11-5	90
5. A+HBJL2BxOrange14-09-7	71
6. A+HBJL2BxOrange19-09-31	14
7. A+HBJL1-09-14	25
8. A+FDxOrange19-11-11	50

Viable seedling inventory (Group B, diploid sour orange-types):

1. 46x20-04-S22	86
2. 46x20-04-42	94
3. 46x20-04-48	78
4. 46x20-04-S13	86

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Organization University of Florida, CREC

Project Number Project 736

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

Total Funds (current year) $25,632.00

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.