CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD June 2014

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Evaluation of rootstocks appropriate for higher density groves and advanced citrus production systems leading to a sustainable, profitable Florida citrus industry

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
11/7/14	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.)

HLB's impacts have led to grower interest in advanced production and harvesting systems with the potential for early and sustainable yield, as well as ease of harvest and other management efficiencies. The goal of this project is to identify appropriate rootstocks among exiting field trials and those soon to be planted that are well suited to advanced citrus production and harvesting systems. Existing field trials previously planted with size-controlling rootstock candidates have continued to be observed, including the portion of the St. Helena project planted with dwarfing selections, a 40-acre Hamlin/Valencia cooperative rootstock trial with trees planted between 300-500/acre, and a high density planting of LB8-9 (Sugar Belle). Data are being compiled on rootstocks to identify new candidate rootstocks for larger–scale ACPS trials. Seedlings of some Flying Dragon hybrids that have come through the "HLB gauntlet" screening process (grafted with CLas-infected Valencia budsticks, and then cycled through a hot psyllid house, ending with no obvious HLB symptoms) were planted in the field, under a DPI permit for further observation. Seed were collected from previously untested Flying Dragon-derived hybrids, as well as from a range of other complex interspecific hybrids with tree size control potential; these seed were characterized for polyembryony and have been planted to assess relative trueness to type and seedling vigor; observations are in progress to identify the best candidates for new trials. A large scale, ACPS trial was planned in collaboration with a major citrus outfit, and seeds collected in 2013 have been provided to the propagating nursery.

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Organization UF-CREC

Project Number 615

Project Duration (years) 3 *Year of Project* 2

Total Funds (current year) $63,223.30

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.