CITRUS ADVANCED TECHNOLOGY PROGRAM

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

▶ SELECT PERIOD December 2014

(●) *Quarterly Report* ( ) *Final*

Proposal Title

An integrated approach for establishment of new citrus plantings faced with the HLB threat

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
12/8/14	Citrus Research and Development Foundation	Epidemiology and Cultural Control

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

This is the first year of a three-year project. This overall 3 year project will focused on determining the optimum combination of chemotherapy, thermo-therapy, and nutrient therapy that can be registered for use in field citrus and control HLB. In this quarter (Oct 2014 to Dec 2014), we evaluated the efficiency of chemical compounds (Amp and silver dyne) against Las bacterium to combat HLB disease by gravity bag infusion.

In our previous study, Al(OH)3 was difficult to be absorbed in citrus trees due to its low solubility in water. Therefore, in this quarter, Al(OH)3 was replaced in the field trial by silver dyne (SD), which was effective in the graft-based test in the greenhouse. The preliminary results indicated that Amp could suppress HLB bacterial titer in several citrus rootstocks after about one year, and SD had no significant effect on reducing HLB bacterial titer, 2 months after initial treatment.

Because HLB bacterial titers in various citrus rootstocks were different in response to chemical compound, we continue to evaluate effect of Amp and SD against HLB bacterial in the future. Meanwhile, agronomic performance of treated trees will be investigated, and the nutrition and heat treatment therapy with several additional molecules will be conducted in next quarter.

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Organization IRREC-IFAS, University of Florida

Project Number 910

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

Total Funds (current year)

Form PR-12 Quarterly Reports SUBMIT REPORT

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