CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD September 2015

(●) *Quarterly Report* ( ) *Final*

Proposal Title

DETERMINATION OF CLAS SIGNAL AND TRANSMISSION PROPERTIES OF HLB IN CITRUS TREES

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
10/20/15	Citrus Research and Development Foundation	Infection Consequences

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

This proposal is aimed at following previous work in CRDF-710 and CRDF-818 with a series of precise experiments that will:

1. Elucidate the nature of the HLB signal(s)
2. Provide additional evidence on its transmission in terms of movement across tissues and between trees though underground organs.
3. Determine the progression of physical symptoms from its inception.
4. Examine the in-tree variation in CLas titer.

Research commenced addressing objective 4, due to natural timing of events. Fifteen trees were selected for having branches with at least 11 leaves. This number of leaves was needed for analysis of CLas transport in both directions. The middle leaf of all 15 trees was disc grafted with HLB material and placed in the greenhouse until the presence of HLB symptoms.

Experiments for objective 2 are in under way. Trees, both HLB-affected and healthy, have been selected and special pots purchased. For this experiments, a healthy and a HLB tree will be root grafted and placed in a larger, flexible pot until HLB symptoms appear.

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Organization UF-CREC

Project Number 15-008

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

Total Funds (current year) $53,572.00

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.