CITRUS ADVANCED TECHNOLOGY PROGRAM

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

▶ SELECT PERIOD June 2013

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Analyzing Liberibacter isolates undetectable by standard diagnostic methods in Florida

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
7/15/13	Citrus Research and Development Foundation	Pathogen/Disease Detection

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

Citrus huanglongbing (HLB) is associated with three species of Candidatus Liberibacter: Ca. Liberibacter asiaticus (Las), Ca. L. americanus (Lam), and Ca. L. africanus (Laf). The majority of the testing in Florida is focused on detection of Las as this is the only bacterium known to be associated with HLB in Florida to date, while Lam and Las have both been found in Texas. In March 2013, twelve different isolates from plants identified as being naturally infected with Ca. Liberibacter species but which would test negative for Las, Lam, and Laf, were inoculated into receptor plants in a greenhouse at Ft. Pierce. We are currently testing these inoculated plants to verify the establishment of the Ca. Liberibacter species in the receptor plants. Once this has been verified, the "cross protection" trials will be established. DNA extractions from the isolates has been used for macro array qPCR to identify genomic regions which differ from Las, and selected isolates are being prepared for further sequencing to verify their relationship with Las and Lam and other reported Ca. Liberibacter species.

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Form PR-12 Quarterly Reports SUBMIT REPORT

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.