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

Diaprepes control using a plant based insecticidal transgene approach

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
2/16/15	Citrus Research and Development Foundation	Transgenic/Metagenomic Mediation of Resistance

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

Our project aims to provide durable long term resistance to Diaprepes using a plant based insecticidal transgene approach. In this quarter, as proof of concept to determine the root specific nature of the promoters (RB7, C1867 or SLREO), we have incorporated the promoter-gus sequences into N. benthamiana and Carrizo citrange and several plantlets have been regenerated. Testing of these plants to confirm the root specific activity of our promoters will be performed as they become available. In addition, we have initiated experiments to incorporate the plant transformation vectors containing the GNA, APA and ASAL genes driven by either the root specific RB7 promoter or the citrus derived C1867 promoter into Carrizo citrange. Stacked constructs, each containing the GNA, APA or ASAL genes with the CpTI gene driven by the SLREO promoter have been produced and are also being incorporated into Carrizo citrange.

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Project Number

Project Duration (years) 2 *Year of Project* 1

Total Funds (current year) $38,203.00