CITRUS ADVANCED TECHNOLOGY PROGRAM

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

SELECT PERIOD March 2016

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Diaprepes control using a plant based insecticidal transgene approach

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
06/01/16	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,most of the transgenic lines produced have been confirmed for gene integration by conventional PCR and analyzed for gene expression using qPCR. 40% of the lines tested have been determined to be high expressers while the rest were medium to low in expression. Cuttings from the larger lines have been made and are being rooted in the mist bed for future challange with Diaprepes. A number of other potential root specific promoters have been identified from the phytozome database. qPCR gene expression analyses on non-transgenic leaves, flowers, fruit, phloem, seeds and roots have identified some that can potentially be used in the future for root specific gene expression. Results from some of these studies will be presented in the World Congress on In vitro Biology in the summer.

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Project Number 925

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

Total Funds (current year) $41797

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.