# CITRUS ADVANCED TECHNOLOGY PROGRAM

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

**SELECT PERIOD** December 2013

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Citrus Core Transformation Facility as a platform for testing of different genes and/or sequences that have potential to render Citrus plants tolerant or resistant to diseases

| Today's Date | Sponsoring Organization (drop-down) | Category (drop down) |
|---|---|---|
| 1/14/14 | 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.)

In the previous three months Core Citrus Transformation Facility (CCTF) has continued to provide services for production of transgenic material to interested clients. In comparison with the third quarter of 2013, productivity was higher in the last quarter.

Within this quarter, CCTF has received eleven orders. For five of those orders together with the other two from previous quarter, limited number of co-incubation experiments was performed as they required Valencia seedlings which are out of season. Other orders required the work with Duncan seedlings and experiments were performed at full capacity. Considerable amount of work was put into few orders placed in the first half of the 2013. In coordination with the client who ordered these plants, efforts are continuing to find out if the genes requested to be introduced into citrus have negative developmental effect that is hindering production. Additional six vectors and/or Agrobacterium strains received from the same client fall into the group were problems with the (common) PCR primers developed and are not solved yet. Since for all except two current orders, screen for putatively transgenic shoots is done based on PCR reaction, the work on the orders with questionable PCR primers is stalled.

Plants that were produced within these three months are from the following orders: pN4-one plant, pN5-one plant, pN7-two plants, pX28- six plants, pX19- 23 plants, pTMN1- seven plants, and pMG105- two plants. Altogether 47 plants were produced and they were all Duncan grapefruit.

Despite problematic nature of some recent orders, they are being placed at high volume which shows continued need for the CCTF services.


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*Project Number* #579

*Project Duration (years)* 3 *Year of Project* 2

*Total Funds (current year)* $85,000.00

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

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.