CITRUS ADVANCED TECHNOLOGY PROGRAM

QUARTERLY & FINAL PROGRESS REPORT FORM: Control of Citrus Greening, Canker & Emerging Diseases of Citrus

▶ SELECT PERIOD May 2021

(●) *Quarterly Report* ( ) *Final*

Proposal Title

Evaluating sustainability of yield and fruit quality of sweet oranges with use of controlled release fertilizer and micronutrients

Today's Date: 06/29/2021

Sponsoring Organization (drop-down): Citrus Research and Development Foundation

Category (drop down): Horticultural & Management

ABSTRACT (750-word Executive Summary-public report-do not disclose proprietary information or intellectual property)

This project is an continuation of an objective of existing CRDF funded project (# 00124558 ; ended in March 2019, final report submited to CRDF) with some added treatments to be evaluated in comparison to control (dry conventional fertilizer with foliar micronutrients). Objective 1 which is the continuation of # 00124558 included 10 treatments.

Altogether currently there are 25 treatments of citrus nutrition that are being compared to control.

Within this quarter we have successfully harvested the trial. The Mn and B treatment is still the best performing treatment across all the treatments in Fort Meade. Where treatment with CRF and tiger micronutrients (6-6-3-1) is consitent good performer at both the sites. Altogether our data so far suggests that use CRF and soil applied micronutirents with slightly acidic pH is beneficial for the trees.

No significant differences have been oberserved in new added treatments, it is speculated that two two years is not long enough duration to statitiscally impact the yield. We anticipate that we whould be able to see effect of treatments in upcoming year.

Unfortunately, due to Covid-19 related restriction we could not perform sensory analysis, however we collected juice for flavor analysis in order to asses the effect of nutritional treatments on sensory aspect of juice. Currently, we are in process of data organization and analysis of field data and flavor analysis of juice samples.

Within this quater the we successfully collected data on tree health, leaf and soil nutrition. We continue to analyze the data.

PI First Name Tript

PI Last Name Vashisth

Email tvashisth@ufl.edu

Phone 863-956-8846

Organization UF

Sponsor Project Number 18-061C

Project Duration (years 2 *Year of Project* 3

% Completion of Objectives 85.00%

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.