CITRUS ADVANCED TECHNOLOGY PROGRAM

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

▶PROJECT QUARTER END July 2024 ◯ *Quarterly Report* ◉ *Final*

Proposal Title

Preliminary Field Trial to Evaluate the Ability of HLB Tolerant Interstocks to Protect Commercial Scions Against HLB

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
08/31/2024	Citrus Research and Development Foundation	Plant Improvement

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

This study laid the framework for the identification of selecting HLB tolerant interstocks that can result in trees with good growth and fruiting characteristics. Two sets of rootstock -interstock combinations were produced during this study. The first set of rootstocks were Swingle, A+Volk x Orange 19 and US942 for `Hamlin' scion. The second set of rootstocks were Swingle, US942 and Sour Orange for 'Star Ruby' grapefruit scions. The interstock candidates were the following: KB 1-55,KB 2-76, KBR1T3, KB2-2, N6-8, 5-7-99-3, KB1-11, SugarBelle, EL3-8 and UF Sunlime. Each of these interstock candidates were selected due to their enhanced tolerance to HLB in the field. A total of 761 interstock trees have been regenerated and over 600 of these lines have been grafted with a commercial scion (Hamlin or Star Ruby). The Hamlin trees are destined for a Central Florida grove while the Star ruby trees would be planted in the Indian River area. Initial observation lead us to assume that scions on interstocks with a pummelo parentage were generally more vigorous than scions on a mandarin parentage. Trees are being grown in a greenhouse for eventual planting in Spring 2025. A DPI permit, FDACS-08218. *Application and Permit to Plant Citrus Pathogen Infected Stock* will be obtained before trees leave our greenhouses for the field.

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Organization UF-CREC

Sponsor Project Number 22-016

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

% Completion of Objectives (FDACS requirement) 100.00%

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.