Florida Citrus Advanced Technology Program

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

Instructions Complete the fields based on your project specs. When finished, save the form to your local disk using a unique name. Then, go to **http://research.fcprac.com**, and log in with your user name and password using Researcher Login in the lower left. Find this project title and click on **Submit a Report**. Update your profile information if needed, then upload this report as directed.

2009-2010 REPORT	CATEGORY (drop-down)	TODAY'S DATE (m/d/yr)
◉ *Quarterly Report* ○ *Annual Report* ○ *Final*	HLB Pathology	6/23/09

WHAT IS THE "HEADLINE" FOR THIS REPORT (e.g. a one-sentence "newspaper headline" describing what you accomplished)

Florida Germplasm Cleans Up

TITLE and CONTACT INFORMATION

Proposal Title Rutaceous Germplasm Preservation

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Phone 863-956-4311	*Project Duration (years)* 1 *Year of Project* 1
Organization CREC, IFAS, UFL	*Total Direct Funds (current year)* $71,000

REPORT UPDATE (650 words; provide details about your headline)

Significant progress has been made in the identification, shoot-tip grafting (STG)ing, grafting in the greenhouse, testing, increase and release of cultivars needing STGing. Over 111 Citrus clones are currently in the STGing program. The last three remaining Florida Citrus Arboretum selections were set up as budsticks for the purpose of heat therapy and obtaining shoots for STGing. During this first quarter over 633 STGs were set up. These represented 18 varieties including 7 rootstocks, 4 breeder's selections, two Florida Citrus Arboretum selections, 4 difficult varieties and one field rescue. During the same time period, 41 successful STGs were grafted onto rootstocks in the greenhouse. These represented 15 varieties which included 7 rootstocks, 4 breeder's selections, 3 difficult varieties and one field rescue. Over 140 real-time PCR tests were performed on STGs that grew to sufficient size in the green house. To allow clean budwood to be propagated as soon as possible, 167 increase trees were propagated from tested original STGs. Twenty varieties completed testing and were released; 5 were breeder selections and the remainder was mainly STGed to remove Citrus tristeza virus (CTV). At the remote and secure Citrus Budwood Foundation in Chiefland, 18 fully tested and released STGs or their propagations were planted. These were either new to Chiefland or replaced varieties that hitherto were only available with mild isolates of CTV. Conventional Citrus tatter leaf virus PCR has been converted to a SYBR green real-time PCR assay as a first step. The initial attempt to create a Taqman assay failed due to the sequence variability of the isolates. Another attempt will be made. The equipment is essential for the success of this grant. The money is almost in place and quotes for requisitions are ready to go; the equipment should be in place by the next quarterly report. The number of candidates to be shoot-tip grafted is still over one hundred as 10 new parent candidates were entered for STGing during this quarter.