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*	Other	6/15/10

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

Recovering Citrus Germplasm from Florida

TITLE and CONTACT INFORMATION

Proposal Title Recovery of Citrus Germplasm from Florida

Principal Investigator Richard Lee	*PI Last Name* Lee
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Phone 951-827-4399	*Project Duration (years)* 3 *Year of Project* 2
Organization USDA ARS NCGRCD Riverside, CA	*Total Direct Funds (current year)* $36,970

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

The purpose of this project is to preserve citrus germplasm in Florida that is threatened by loss due to huanglongbing (HLB) and citrus canker.

More experiments are underway to evaluate different antibiotics and temperatures to eliminate graft transmissible prokaryotes from bud sources. In Riverside we are using stubborn, caused by Spiroplasma citri, infected material grafted onto rootstock liners and the tomato psyllid yellows disease causal bacterium, Candidatus Liberibacter psyllaurous grafted onto tomato as model systems. In addition to combinations of antibiotics, treatments include heat treatment and prolonged chilling of the buds. Initial results look promising for prolonged chilling treatments.

Accessions established at ARS, Ft. Pierce are being moved to Gainesville for shoot tip grafting by using budsticks in culture media. Experiments are underway to determine how best and at what age the shoot tip grafted material may be safely shipped to Riverside. Once received in Riverside, the material would be established in quarantine, then subjected to biological and laboratory indexing. The Florida accessions already established in Riverside are undergoing therapy and biological and laboratory indexing for release from quarantine status.