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*	Management	6/30/09

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

SAR control is under evaluation for HLB control in young citrus trees in severely affected areas with HLB

TITLE and CONTACT INFORMATION

Proposal Title Does systemic acquired resistance (SAR) control HLB disease development?

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Phone 863-956-1151	*Project Duration (years)* 2 *Year of Project* 1
Organization UF, Citrus Research and education Center	*Total Direct Funds (current year)* $66,861

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

The Objectives are to: 1) Test the effect of soil applied imidacloprid as an inducer of SAR on HLB disease incidence in newly planted citrus trees subjected to psyllid mediated infection; and 2) test the effect of imidacloprid on HLB disease progress in newly planted citrus trees that are graft-inoculated with budwood from HLB infected field trees. The following treatments were set up in the USDA-ARS, Picos Farm in Ft. Pierce FL: 1) untreated check, 2) foliar insecticide to control psyllids, 3) soil applied imidacloprid/thiamethoxam to induce SAR, 4) soil applied imidacloprid/thiamethoxam plus the foliar insecticide to induce SAR and control psyllids, 5) HLB bud graft-inoculated untreated check, 6) HLB bud graft-inoculated with soil applied imidacloprid/thiamethoxam to induce SAR. The experimental design is a completely randomized block design with 50 trees per treatment (5 blocks of 10 trees per block). Tree and insecticide treatments commenced in May and HLB graft inoculations will occur in July. A HLB bud-grafted experiment of similar design will be set up in Brazil in spring time (September-October) for southern hemisphere.