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*	Canker Pathology	9/30/09

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

Plots under establishment in Brazil to examine canker control strategies and studies established in FL on bacterial survival.

TITLE and CONTACT INFORMATION

Proposal Title Efficacy of citrus canker control strategies, leafminer interactions, and bacterial survival.

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Phone 772-462-5883	*Project Duration (years)* 1 *Year of Project* 1
Organization USDA, ARS	*Total Direct Funds (current year)*

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

The intent of this study is to examine the effect of windbreaks, copper sprays to reduce infection, and leafminer treatments to determine there individual and combined effects on control of citrus canker in Brazilian commercial citrus and the applicability of this strategy to the US commercial citrus industry.

We have obtained permission to use an IAPAR farm, in Xambrê, Parana state, located 350 km west from Londrina and 250 km west from Maringá where replicated field plots will be established. The cultivar used is Pêra on Rangpur lime, two years of age at the beginning of the experiment. We are currently working on establishing windbreaks. A specific cooperative agreement has been established with the Brazilian cooperator, and the funds transferred there. Windbreaks and citrus trees have now been purchased for the plot. Once the plots are completed, treatments will be 1) no sprays (control), 2) Cu++ sprays to reduce citrus canker incidence, and 3) insecticide sprays to inhibit infestations of Asian leafminer (secondary effects). Main effects are windbreak versus no windbreaks. Citrus canker incidence will be estimated on multiple branches on each tree treated as the number of leaves per branch infected. We anticipate running these plots fro 2-3 more years.

The development of the Programmable leaf wetness controller (PLWC) software is written, debugging is complete and the control program is working well. New leaf wetness sensors have been designed and constructed and are in the final stages of calibration. One final circuit to control fans that facilitate wind generation in ambient environments is being completed and needs to be tested. We anticipate trials to begin next month to examine the survival characteristics of bacterial pathogens under field conditions.