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	7/13/09

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

Delivery of comprehensive management plan for psyllid

TITLE and CONTACT INFORMATION

Proposal Title Development and Delivery of Comprehensive Management Plans for Asian Citrus Psyllid (ACP) Control in Florida Citrus

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Phone (239) 658 3400	*Project Duration (years)* 3 *Year of Project* 2
Organization SWFREC - IFAS - University of Florida	*Total Direct Funds (current year)* $131, 853

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

This is a continuing project for which funding was released this year on 27 April and a comprehensive management scheme has taken shape and been documented: (a) sampling plans for monitoring psyllid populations, (b) preemptive dormant sprays of broad-spectrum insecticides targeting adult psyllids, (c) wide choice of selective and broad-spectrum insecticides to use in the growing season, and (d) strategies for conservation and augmentation of biological control. Objectives and some of the corresponding achievements during this quarter are listed below.

1) Assist growers with planning and evaluation of field tests to develop site specific season-long psyllid control on young and mature trees including active ingredients, timing, application methods, rates etc.

- SAR inducers and micro-nutrients did not statistically improve the quantity or quality of the harvest after one year although trends are positive (see Report FCPRAC # 0179)
- Aerial application of broad spectrum insecticides reduced ACP adults although ground sprays (speed sprayer) were more effective. LV application of 435 Oil every 2 or 3 weeks at 2 gal./ac. during growing season appear to be have good effects although a single such application with spinetoram or dimethoate was not effective (see Report FCPRAC # 0210).
- Area wide dormant spray: 80,000 acres were treated by air and many more by ground in a voluntary program last season promoted by Gulf Citrus Growers Association. A field survey coordinated by SWFREC-Entomology and DPI-CHRP documented greatly reduced psyllid populations compared with the few blocks left untreated. A survey of grower responses is being conducted in coordination with Multi-County Cooperative Extension and plans are to coordinate two dormant sprays this season.

2) Assist in development of efficient monitoring methods to make and evaluate control decisions.

Tap samples provide timely information and are 14 times faster than sticky traps. Tap sample and sweep nets gave similar results and took about the same time although taps may be more convenient and less fatiguing (see Report FCPRAC # 0164)

3) Accelerate testing of new chemical tools for psyllid suppression: (a) Laboratory bioassays with new products from Dupont and Gowen are continuing, (b) Foliar application of spirotetramat, and fenproximate with 435 Oil or NIS (spirotetramat) during bloom 2009 suppressed psyllids for 2 months, (c) foliar and soil-applied field testing continues this summer. All field test results are published in Arthropod Management Tests and on our website http://www.imok.ufl.edu/entlab/.

4) Evaluate the economic feasibility of psyllid management strategies. The cost of two aerial dormant sprays is less than $25/ac each and could be as low as $15/acre earch depending on material, volume and distance from the airstrip. The cost of monitoring psyllids using the tap is about $25 per block up to 100 acres so could be done 20 times per year for as little as $5/ac total, depending on block size and would avoid unnecessary sprays during the growing season that could cost up to $50/ac. Details on website.

5) Provide an information bridge between growers and researchers: (a) Conducted 2 scouting workshops, 1 management workshop, and 2 talks given at the Florida State Horticultural Society annual meeting. (b) Published: Stansly, P. A., J. A. Qureshi, and Arevalo, H. A. 2009. Why, when and how to monitor and manage Asian citrus psyllid. Citrus Industry. March 2009. Other publications available at http://swfrec.ifas.ufl.edu/entlab/ and at http://swfrec.ifas.ufl.edu/hlb/database/ (see Report FCPRAC # 0004)