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	7/7/09

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

Good control of psyllids by repeated LV application of 435 Oil by ground and selected insecticides by air

TITLE and CONTACT INFORMATION

Proposal Title Ultra low-volume and Aerial Application of Insecticides and Horticultural Mineral to Control Asian Citrus Psyllid in Commercial Orchards.

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Phone (239) 658 3400	*Project Duration (years)* 3 *Year of Project* 1
Organization SWFREC - IFAS - University of Florida	*Total Direct Funds (current year)* $108,132

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

Last year under another project, we saw reduced infestation of young flush in a replicated trial conducted in a large commercial block of 'Valencia' orange in Collier Co. treated every two weeks with 1 gal/acre straight 435 spray oil. This year funds were released on 27 Apr although we reinitiated this experiment with LV applications of oil on 14 Apr for our first objective. The experiment is being conducted in the same block, as last year although we have increased the rate to 2 gal/ac pure FL-435 oil and comparing two LV applicators: a modified London Fogger model 18-20 provided by Chemical Containers and the Proptec P400D. Applications will continue through fall flush at 2-3 week intervals depending on pest pressure. Psyllid populations were below detectable levels until 15 June when preliminary data indicated we may get similar positive results as last year. We have also commenced a separate study on a highly infested, 38-acre block of 'pineapple' orange in Glades Co. to compare the London Fogger ™ applied only to the bed tops with a standard airblast sprayer treating tops and swells. Applications with both sprayers of Delegate (spinetoram) @ 4 oz/ac and Dimethoate (24 oz/ac), both in 2 gal of water were made on 15 June. Preliminary data (2 weeks) indicate that both insecticides worked well with the speed sprayer but neither provided control with the low volume application. Also last year under another project, we saw that ground application of Delegate and Provado (imidacloprid) and Imidan (phosmet) were all effective against the psyllid, but only Imidan of these three worked well by air. This year we are comparing the efficacy of aerial and ground applications of two selective insecticides — Delegate, and Movento (spirotetramat), again against the broad-spectrum Imidan, all with oil. Preliminary results indicate significant differences among insecticides but not between application methods, although the trends favor the ground application for both Imidan and Delegate. Results from these trials have been presented at the Florida State Horticultural Society 2009 annual meeting and will be published in their proceedings.