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	4/15/10

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

Comprehensive program with area-wide action for psyllid management

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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Organization SWFREC - IFAS - University of Florida	*Total Direct Funds (current year)* $136353

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

Funding for this project has enabled us to develop a comprehensive program for ACP management. We are building programs targeting ACP adults using dormant sprays of broad-spectrum insecticides and treatments during the growing season based on scouting. Dormant sprays have evolved into a successful annual area-wide cooperative effort in SW Florida. For the growing season, we have developed a wide range of choices such as (1) recurrent low-volume applications of horticultural oil, (2) wide selection of tested selective and broad spectrum insecticides, and (3) strategies to conserve and augment biological control. A survey of local managers covering 106,148 acres of commercial citrus in SW Florida showed widespread adoption of these management strategies. Our first objective was to assist growers to plan and implement effective strategies for ACP control. All growers surveyed used dormant sprays during the 2008-2009 dormant season in cooperation with a voluntary area-wide program initiated and promoted in cooperation with Gulf Citrus Growers Association and Cooperative Extension. 71,916 acres were sprayed by air in 08/09 and 73,180 in the 09/10 seasons with an additional estimated 30,000 sprayed by ground, virtually all the present commercial acreage in SW Florida. Field counts obtained from DPI-CHRP and growers' personnel trained by us indicated that populations by air were only 1.5X winter numbers three months into the growing season compared to a 28X increase in untreated blocks. Results of the post application survey will be evaluated this May. Our 2nd objective was to assist in development of efficient monitoring methods. The "tap" sampling method we developed has proved to be an effective and efficient tool for monitoring ACP adults, as well as other pests and beneficial insects. We integrated this and a technique for assessing immature stages into a rapid and easy to use system promoted in Citrus Industry Magazine, fully explained on our website http://swfrec.ifas.ufl.edu/ and used by 95% of surveyed growers. Our 3rd objective was to accelerate testing of new chemical tools for psyllid suppression. We completed four field evaluations of insecticides for ACP control in 2009 and submitted reports for publication in the ESA journal Arthropod Management Tests. These join 17 previously published reports on insecticidal control of ACP available online. We found that foliar applications of spirotetramat, fenproximate + 435 Oil, spirotetramat, or 435 Oil alone during bloom suppressed ACP populations for two months. Our 4th objective was to evaluate the economic feasibility of psyllid management strategies. Two aerial dormant sprays could cost less than $25/ac. The cost of monitoring psyllids using the tap method is about $25 per block up to 100 acres so could be done 20 times per year for as little as $5/ac, and would avoid unnecessary sprays during the growing season that could cost up to $50/ac. Unnecessary applications also cause secondary pest outbreaks of mites, scales and leafminers, reported by 70% of surveyed growers. Our 5th objective was to provide an information bridge between growers and researchers. Experimental results and recommended management programs have been presented at 18 extension meetings across Florida including two production managers meetings and two CCA trainings, as well as the Entomological Society of America, the Florida State Horticultural Society, the Florida Entomological Society, Citrus HLB & Potato Zebra Chip (ZC) in Mc Allen, TX, and the XIII Simposio Internacional de Citricultura. CD Victoria, Mexico. 91% percent of surveyed growers were satisfied at some level by their present management programs and 85% of respondents were monitoring ACP more than 3 times per year. We are working on emphasizing the use of this information to make informed decisions to use insecticides only when needed. (1)Stansly, PA, JA Qureshi, and HA Arevalo. 2009. Why, when and how to monitor and manage Asian citrus psyllid. Citrus Industry 90(3):24-26. (2) Stansly, PA, HA Arevalo, M Zekri, and R Hamel. 2009. Cooperative dormant spray program against Asian citrus psyllid in SW Florida. Citrus Industry 90(10):14-15.