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	1/15/10

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

Principal Investigator Stansly, P. A	*PI Last Name* Stansly
Email pstansly@ufl.edu	*FDACS Contract Number* 000
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)

Funding obtained from this grant has allowed us to develop a comprehensive management program that includes: sampling plans for monitoring psyllid populations and preemptive dormant sprays of broad-spectrum insecticides targeting adult psyllids that has been expanded to a cooperative area wide effort among the growers in the region. We also developed a wide range of alternatives including: (1) recurrent low volume application of horticultural oil, (2) selective and broad-spectrum insecticides for the growing season, and (3) strategies for conservation and augmentation of biological control. A survey of local managers of 106,148 commercial citrus acres in SW Florida indicated that there has been widespread adoption of these management strategies as indicated below under specific objectives of the project. (1) Assist growers to plan and implement effective strategies for psyillid control. All growers surveyed used dormant sprays during the 2008-2009 dormant season in cooperation with a voluntarily area wide program initiated by ourselves and promoted by Gulf Citrus Growers Association. Pilots reported 103,431 acres sprayed by air with an additional estimated 42,000 sprayed by ground, virtually all the commercial acreage in SW Florida. Field counts obtained from FDOACS-DPI and grower personnel trained by us indicated that up to 4 months later in May, treated populations were within 50-85% of winter numbers compared to a 28-fold increase in untreated blocks. Participation is expected to be even better this year and 73,500 acres were already sprayed aerially by 14 Jan. (2) Assist in development of efficient monitoring methods. The "tap" sampling method we developed is an effective and efficient tool for monitoring ACP adults, other pests as well as 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 and fully explained on our website www.imok.ufl.edu. (3) Accelerate testing of new chemical tools for psyllid suppression. We completed 4 field evaluations of insecticides for ACP control in 2009 and submitted reports for publication in the ESA journal Arthropod Management Tests. These join 17 other published reports on insecticidal control of ACP available on the website. This year we found that foliar application of spirotetramat, and fenproximate with 435 Oil or NIS (spirotetramat) or 435 Oil alone during bloom suppressed psyllids for 2 months. (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. 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, and would avoid unnecessary sprays during the growing season that could cost up to $50/ac and cause secondary pest outbreaks of mites, scales and leafminers that are already occurring according to 70% of survey respondents. (5) Provide an information bridge between growers and researchers: Experimental results and recommended management programs have been presented at 18 extension meetings held across the State including two Production Managers meetings and two CCA trainings, as well as the Entomological Society of America (ESA), the Florida State Horticultural Society (FSHS), the Florida Entomological Society (FES), Citrus Huanglongbing (HLB) & Potato Zebra Chip (ZC) Conference in Mc Allen, TX, and the XIII Simposio Internacional de Citricultura. CD Victoria, Mexico. Ninety one percent of surveyed growers professed to be satisfied at some level by their present management programs with 85% of respondents monitoring ACP more than 3 times per year. We are working on emphasizing the use of this information to make informed decisions to spray insecticides only when needed. Stansly, P. A., J.A. Qureshi, and H.A. Arevalo. 2009. Why, when and how to monitor and manage Asian citrus psyllid. Citrus Industry 90(3):24-26. Stansly, P.A., H.A Arevalo, M. Zekri, and R. Hamel. 2009. Cooperative dormant spray program against Asian citrus psyllid in SW Florida. Citrus Industry 90(10):14-15