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	8/15/10

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

Area-wide action for more effective 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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Phone (239) 658 3400	*Project Duration (years)* 3 *Year of Project* 2
Organization SWFREC - IFAS - University of Florida	*Total Direct Funds (current year)* 128758

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

By piecing together the information collected during the last two years of this project, we have developed, tested, and delivered a comprehensive plan for ACP management that is being widely adopted by our clientele. The 4-pillared plan includes: (1) dormant insecticidal sprays which we have nurtured into a successful annual area-wide cooperative program with leadership from Golf Citrus Growers Association (GCGA), and in cooperation with from DPI-CHRP and Hendry County Cooperative Extension service (2) efficient methods for testing effectiveness of insecticides in lab and field including recurrent low-volume applications of horticultural oil, (3) a rapid and reliable psyllid monitoring system to guide insecticidal control during the growing season, and (4) strategies to conserve and augment biological control agents (see below). Independent information from aerial applicators showed that over 70,000 acres were sprayed by air least once during 2008-09 and 2009-10 dormant season, many more than once as part of the Southwest Florida Cooperative Area-wide Management program. Although our records for ground applications are less accurate, survey results indicate that over 30,000 acres were also sprayed each winter by ground. To our knowledge, all groves in the area have at least conducted one dormant spray last winter. Field counts provided by growers and FDOACS-DPI using personnel we trained show that five months after the dormant sprays, adult ACP populations in 2010 were still less than during the beginning of the dormant season and only a third of what they were the same time in 2009, thus showing an area wide decrease. An article is being submitted this month to Citrus Industry as a follow-up to one published there in 2009 on the area wide program. We are also promoting the use of scouting reports to make informed decisions to use insecticides only when needed during the growing season and an article we wrote on the subject appeared in the April issue of Citrus industry (see below). Also, an extension document on psyllid monitoring methods was submitted to the Electronic Data Information Source (EDIS) of the University of Florida. Survey results indicate that the stem tap method for monitoring psyllid population has become the standard in the region. The cost of monitoring psyllids this way was estimated at about $25 per block up to 100 acres so could be done 20 times per year for as little as $5/ac. and could thus avoid unnecessary sprays during the growing season that may cost up to $50/ac and cause secondary pest outbreaks of mites, scales and leafminers. (3) During this quarter, we have conducted 2 trials testing foliar insecticides (18 treatments) one drench trial (12 treatments), and are extensively testing a new systemic insecticide from Dupont, cyazapyr, for ACP control that could be a critical addition to neonicotinoid insecticides for protection of young trees. Since 2007 we have published and posted on our website http://www.imok.ufl.edu/entlab/pubs/sta_rpts/ 18 reports of insecticide trials in citrus. Last year we conducted a survey of local managers of 106,148 acres of commercial citrus in SW Florida who indicated that there has been widespread adoption of these management strategies. We are presently conducting a new survey to evaluate the changes and tendencies in adoption of ACP management strategies. After only a week, we have already received 11 surveys covering 28,379 acres, 40% of the total number received last year. Preliminary results indicate that 100% of the respondents are satisfied or very satisfied with their management program, that only 63% report increases in secondary pest pressure compared with 92% last year, and that there is strong support for including biological control in the area wide management program.

- Stansly, P., A. Arevalo and J. Qureshi. 2010. Monitoring methods for Asian citrus psyllid. Citrus Industry 91(4):20-22.
- Ortez M. J., H. A. Arevalo, and P. A. Stansly. 2010. Alternative Methods to Collect Tamarixia radiata (Waterston) (Hymenoptera: Eulophidae) From Mass Rearing Colonies. (Poster) Jupiter, FL July 2010