CITRUS ADVANCED TECHNOLOGY PROGRAM

QUARTERLY & FINAL REPORTS: Control of Citrus Greening, Canker & Emerging Diseases of Citrus

▶ INSTRUCTIONS

(●) *Quarterly Report* ( ) *Annual Report* ( ) *Final*

Required: What is the "headline" for this report (e.g. a one-sentence "newspaper headline" describing what you accomplished)

Update on UF Field Trials of Soil Applied Insecticides for ACP

Proposal Title

Efficacy of seasonal insecticide programs for suppressing HLB in new citrus plantings

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
1/7/11	Citrus Research and Development Foundation	Vector Management

REPORT UPDATE (500 words; summarize your accomplishments)

This project includes experiments being conducted by USDA-ARS and University of Florida on protecting newly planted citrus trees from Asian citrus psyllid and huanglongbing. This progress report reviews research conducted by University of Florida in Southwest Florida.

The original experiment to compare a granular slow release imidacloprid product (Suscon) to the standard liquid formulation was discontinued in spring 2010 due to a poor stand (deer damage) and lack of psyllids during the interval following applications. Three other studies evaluating soil applied products for psyllid control were initiated in spring/summer 2010.

The first study included 11 different treatments and an untreated control on 2 year old Hamlin trees and was designed to evaluate the difference between a single application of Admire Pro, Suscon (slow release) Platinum or Cyazapyr versus a split application of these products or the inclusion of Temik and Movento (foliar) as a rotation partner with the Admire Pro (imidacloprid). Initial applications were conducted 25,26 – Feb with the follow up applications on 19,20 – May. Psyllid eggs and small nymphs were found in low numbers on very few flushes on some sample dates and significant differences were found only on 29-Apr when untreated plots contained 8.1 nymphs per flush which was significantly greater than other treatments which did not differ from each other. Nymphs were only found on the low rate of Cyazapyr and two different rates of platinum. Differences in leafminer activity was noted with the split application of Platinum and admire providing greater control of leafminers than the corresponding single application but this trend did not reveal itself with Cyazapyr as the different treatments were not significantly different from each other. Neither Movento or Temik had a significant effect on leafminer incidence.

The second study compares three rates of cyazapyr against Admire Pro and Platinum applied on 19,20 Jul to newly planted Hamlin trees. Evaluations were conducted 10,23 – Sep. and no psyllids were found. However, all products have been 100% effective for leafminer control. Leaf samples are being analyzed for residues of all insecticides.
Another study is designed to last 3 years with applications of Cyazpyr, Platinum and Admire Pro every three month in rotation with each other. The objective is to assess the ability of these treatments to delay or prevent the onset of HLB in an area of high incidence. Initial treatments were made 29-Jul on newly planted Hamlin trees and evaluations conducted 2,22-Sep with no psyllids being observed although all treatments have been 100% effective in controlling leafminer. Leaf samples are being analyzed for residues of all insecticides.

PI First Name David

PI Last Name Hall

Email David.Hall@ars.usda.gov

Phone 772-462-5897

Organization USDA-ARS

Contract Number Hall-91

Project Duration (years) 3 *Year of Project* 2

Total Funds (current year) $99,701.00

SUBMIT REPORT

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.