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*	Psyllid	7/27/09

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

Probing behavior and chemical control of ACP

TITLE and CONTACT INFORMATION

Proposal Title CAN INSECTICIDES AND MINERAL OIL AVOID TRANSMISSION OF Candidatus Liberibacter asiaticus BY Diaphorina citri?

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Phone +55 16 3301-7025	*Project Duration (years)* 2 *Year of Project* 1
Organization Fundecitrus	*Total Direct Funds (current year)* 39,275.00

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

The preliminary results showed that, imidacloprid (Confidor 700 GrDA), 0,35 g AI/plant and thiamethoxam (Actara 250 WG) 0,25 g AI/plant, applied in the nursery tree bags, before planting, was efficient to control ACP (Diaphorina citri) until 60 days after application. No transmission results yet.

Using electrical penetration graphs (EPG) techniques, we are studying the probing behavior of ACP. In the preliminary results we observed that the time feeding on phloem, in plants that was applied insecticides (thiamethoxam and imidacloprid), was reduced, in average from 8 to 15 minutes on those treated plants, and 150 minutes on test plants (control).

Using foliar application insecticides, until 14 days after application, in plants that was sprayed lambda-cyhalothrin and imidacloprid, adults of ACP probe the citrus trees, but not reach the phloem and died in 24 hours. In the test plant, all ACP tested reached and sucked the phloem sap for 2 hours in a 5 hours record test.

The goal is to start others projects in the second semester of the year and all goals and objective of this project will be reached.