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	7/14/10

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

Dissemination of D. citri cell lines and production of material for genomic characterization

TITLE and CONTACT INFORMATION

Proposal Title Application of Asian Citrus psyllid, Diaphorina citri, tissue culture cell lines

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Phone 352-392-2488	*Project Duration (years)* 1 *Year of Project* 1
Organization University of Florida, Microbiology and Cell Scie	*Total Direct Funds (current year)* 57637

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

We have initiated two new collaborations in various efforts for the application of the D. citri insect cell lines developed. (1) Dr. W. Hunter, Objective: provide cultured cells for genomic characterization of D. citri. We have scaled-up the growth and culturing of several lines in order to have enough material for extraction and characterization of the genomic DNA derived from the cultured. The requested amount of cells ~0.1-1 g of material. We have gathered approximately 0.2 g of material and will forward the frozen cells to Dr. Hunter's lab presently. It is anticipated that an additional ~ 0.2 g of cells will be ready within the next month. (2) Dr. Lisa Fontaine-Bodin,CIRAD-BIOS, Montpellier, France, Objective: to use the cell lines in attempts to culture the various European and African Liberibacter strains. In the part quarter, we have sent Dr. Fontaine our cells and they are apparently viable and the cell lines should be established in the lab. It is anticipated that attempts to cultivate the various Liberibacter strains available in Dr. Fontaine's lab will proceed in the coming year.

The laboratory continues in attempts to increase the robustness of the cells lines. A periodicity in the growth has been noted which current efforts are aimed at mitigating. Suspension cells lines appear more uniform, however, contain large clumps and doubling times remain in 2-3 weeks. Attached cells remain heterogeneous with doubling times near 2-4 weeks. Antibiotic free cell lines have also been established and are now in routine growth in the lab.