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*	Other	7/14/09

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

Recovering citrus germplasm from Florida

TITLE and CONTACT INFORMATION

Proposal Title Recovery of Citrus germplasm in Florida

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Phone 951 827 4399	*Project Duration (years)* 3 *Year of Project* 1
Organization USDA ARS NCGRCD, Riverside	*Total Direct Funds (current year)* $36,970.00

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

The purpose of this project is to preserve citrus germplasm in Florida that is threatened by loss due to huanglongbing (HLB) and citrus canker. A meeting was held at the University of Florida (UF)'s Citrus Research and Education Center, Lake Alfred on June 30, 2009 with the purpose of discussing and identifying what citrus germplasm needs to be rescued from Florida and to prioritize the order of rescue. The participants of the meeting include members of the Crop Germplasm Committee for the USDA ARS National Clonal Germplasm Repository for Citrus and Dates, Riverside with additional participants invited to provide better representation of Florida needs and information as to current status of Florida germplasm. Attending the meeting from Florida: L. Williams, W. Dixon, P. Chaires, F. Gmitter, M. DuBois, W. Castle, E. Stover, N. Jameson, M. Kesinger, J. Grosser, J. Burns, and G. McCollum; from California: R. Lee, R. Krueger, M. Roose (Phone), L. Rose, T. Kahn, M.L. Polek, G. Vidalakis, K. Kosta (phone); G. Wright from Arizona; G. Wisler (USDA ARS), K. Williams (USDA ARS), and E. Rudyj (USDA APHIS) from Maryland. Lists of germplasm already at Chiefland and varieties currently undergoing clean up at Winter Haven were provided by M. Kesinger and P. Sieburth, Florida Citrus Budwood Registration Bureau. The protocol to be used for recovery, therapy, and release from quarantine of the selected germplasm was discussed, as well as the differing needs of the USDA ARS and the UF citrus breeding groups. Preliminary results of L. Williams using standard citrus protocols for thermotherapy (Frison, E.A. and Taher, M.M. (eds.). 1991. FAO/IBPGR Technical Guidelines for the Safe Movement of Citrus Germplasm. Food and Agriculture Organization of the United Nations, Rome/International Board for Plant Genetic Resources, Rome.) suggest that maybe only a small percentage, depending on variety, may be recovered free of HLB. Stover and Lee have been developing alterative approaches to therapy by use of heat and antibiotics, and the group encouraged further research in this direction. It was agreed that interested parties would each assemble a list of candidate germplasm to be considered for recovery. This list would include comments on "Level of risk of loss", "Is the selection currently protected elsewhere?", "Stage of development" (as relates to breeding or commercial release), "Patented?", "IP protected", "Value to research and industry", "Current disease status", "Allelic diversity", "Positive horticultural characteristics", "Uniqueness", and the "Sponsor". The lists will be forwarded via e-mail at the end of August, and circulated among the group for consideration and prioritization. The Repository, Riverside, has received 17 accessions from the USHRL, Ft. Pierce, and four from DPI, Winter Haven. These accessions are currently going through therapy and indexing. A follow-up meeting to assess progress and discuss varieties to be prioritized for the coming year will be held in January 2010 in conjunction with the Plant and Animal Genome Workshop in San Diego, CA.