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)

Characterization/Purification of Liberibacter from seed coats

Proposal Title

Analysis of the colonization of citrus seed coats by 'Candidatus Liberibacter asiaticus' the causal agent of citrus huanglongbing and their use as a concentrated, pure source of bacteria for research.

Today's Date	Sponsoring Organization (drop-down)	Category (drop down)
5/8/12	Citrus Research and Development Foundation	Culture, Molecular Biology, Koch's Postulates

REPORT UPDATE (500 words; summarize your accomplishments)

This report was inadvertently not submitted at the appropriate time.

This research agreement (418) became effective 1-Jun-11. A term GS-5 Biological Science Labortory Technician was in place as of Dec. 5, 2011. We have continued and confirmed results from previous analyses that suggested that Liberibacter cells reside in a matrix within the phloem sieve elements and which may contain bacterial DNA. We have additional results from microscopy with Fluorescence In Situ Hybridization (FISH) confirming that individual bacteria or clumps of bacteria could be liberated by mechanical pulverization of source tissues; efforts will be made to improve the recovery of bacterial cells from seed coat tissue. With technical support in place we will expand experiments to include different methods of tissue homogenization and fractionation on Percoll gradients.

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Organization USDA-ARS-USHRL

Contract Number 11-22-418

Project Duration (years) 2 *Year of Project* 1

Total Funds (current year) $89,650.00

SUBMIT REPORT

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.