

**CURRENT CRDF-FUNDED RESEARCH AND DELIVERY PROJECTS**

Project No.	Principal Investigator	Affiliation	Project Title
502	Hall	USDA-ARS	High-Throughput Screening of Transgenic Citrus for HLB Resistance
503	England	MFCF	The support of Citrus Research and Extension efforts by maintaining and improving the Mid Florida Citrus Foundation grove
516	Dawson	UF	Develop citrus resistant or tolerant to HLB using the CTV vector and transgenic approaches
531	Falk	Univ. of California	Transgenic RNAi-based psyllid control
533	Folimonova	UF	Deployment of a superinfecting Citrus tristeza virus-based vector in the field: a measure to effectively protect field citrus trees against HLB
539	Gmitter	UF	Creation, Development, and Screening of Citrus Germplasm for Resistance to HLB and Citrus Canker (Core Breeding)
544	Graham	UF	Improved management of citrus canker through use of systemic acquired resistance and more bioavailable copper bactericides
547	Grosser	UF	Applying Advances of Juvenile Citrus Transformation Technology
548	Grosser	UF	Understanding and Manipulating the Interaction of Complex Rootstock Genetics and Constant Nutrition to Enhance the Establishment, Longevity and Profitability of New Citrus Plantings in HLB-Endemic Areas
582	Pelz-Stelinski	UF	Factors influencing transmission of the huanglongbing (greening) pathogen by the Asian citrus psyllid and methods for interrupting the transmission process
606	Stover	USDA-ARS	Production of Transgenic Commercial Scion Cultivars Resistant to HLB and Canker: Continued AMP Approaches and Novel Transgenic Strategies
607	Stover	USDA-ARS	A secure site for testing transgenic and conventional citrus for HLB and psyllid resistance
615	Gmitter	UF	Evaluation of Rootstocks Appropriate for Higher Density Groves and Advanced Citrus Production Systems Leading to a Sustainable, Profitable Florida Citrus Industry
618 C	Dawson	UF	RNAi InnoCentive Project Extension (Phase II): In planta Characterization of dsRNA Effect on all Psyllid Life Stages and Selection of Target(s) to Advance to Commercialization
711	Bonning	Iowa State Univ.	Identification of Bacillus thuringiensis endo-toxins active against Adult Asian Citrus Psyllid
715	Dewdney	UF	The leaf litter cycle of citrus black spot and improvements to current management practices
716	Dewdney	UF	Improved fungicide control measures for pre- and post-harvest management of citrus black spot
717	Duan	USDA-ARS	Control citrus HLB by blocking the functions of two critical effectors encoded by 'Candidatus Liberibacter asiaticus'
723	Gabriel	UF	Exploiting the Las phage for potential control of HLB: year 2
724	Gmitter	UF	Accelerating Citrus Gene Discovery for HLB Tolerance/Resistance
726	Gonzalez	Texas AgriLife Research	A Bacterial Virus Based Method for Biocontrol of Citrus Canker
726Am1	Gonzalez	Texas AgriLife Research	A Bacterial Virus Based Method for Biocontrol of HLB
730	Graham	UF	Monitoring streptomycin resistance in Xanthomonas citri in support of FireWall registration for canker
731	Graham	UF	Calcium carbonate may reduce root health and exacerbate HLB expression
732	Graham	UF	Understanding and reducing early root loss in HLB affected trees
736	Gruber	UF	Expedited Indian River Evaluation of Tetrazyg Rootstocks Surviving the HLB-Gauntlet
749	Li	Univ. of Connecticut	Development of Technologies Important for Creation and Commercialization of Transgenic HLB Resistant Citrus
750	Ma	UC Riverside	Identification of key components in HLB using effectors as probes
752	Moore	UF	Cell Penetrating Peptides for Citrus Genetic Improvement and Disease Resistance
754	Mou	UF	Application of a natural inducer of systemic acquired resistance and engineering non-host resistance in citrus for controlling citrus canker

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759	Santra	UCF	Fixed-Quat: A novel alternative to Cu fungicide/bactericide for preventing citrus canker
766	Stelinski	UF	Biotic and abiotic factors that cause Asian citrus psyllids to accept hosts: potential implications for young plantings and pathogen transmission.
767	Triplett	UF	Rapid identification of antibiotics useful in the control of citrus greening disease
769	Triplett	UF	A team approach to culturing <i>Ca. Liberibacter asiaticus</i>
773	Wang	UF	Control HLB by developing antimicrobial compounds against <i>Candidatus Liberibacter asiaticus</i>
776 C	Albrigo	UF	Frequent Low Rate Application of 2-4,D and Cytokinin to study plant symptom reduction in HLB affected trees
780 C	Wang RSA	UF	Evaluation of Soil-Based Antimicrobials as Control Agents against HLB
803	Duan	USDA-ARS	Characterization and manipulation of the prophages/phages of ' <i>Candidatus Liberibacter asiaticus</i> ' for the control of citrus huanglongbing
805	Long	Stanford U	Functional genomics of <i>Liberibacter</i> in a model system
809	Albrigo	UF	Citrus preharvest drop related to HLB disease-Nature and control
816	Etxeberria	UF	Identification of potential pathways for the spread of HLB through citrus vascular systems: Supplement
834	Duan	USDA-ARS	Optimizing Heat Treatment in the Fields and Understanding the Molecular Mechanism Behind the Success of Thermotherapy for the Control of Citrus HLB
838	Morgan	UF	Effect of selected concentrations of calcium bicarbonate on expression of HLB in the greenhouse and grove
850	Albrigo	UF	Scheduling ACP spring spray selection based on the Citrus Flowering Model
853	Lapointe	USDA-ARS	Why is <i>Poncirus trifoliata</i> resistant to colonization by Asian citrus psyllid?
858	Santra	UCF	New non-phytotoxic composite polymer film barrier as ACP repellent for controlling HLB infection
873	McCollum	USDA-ARS	Application of new technologies to expedite cleaning of new accessions for use in Florida
899	Etxeberria	UF	Strigolactones type growth regulators to combat HLB in Florida
903	Gruber	UF	Establishing citrus nutrition trials for young & mature trees in the Indian River Region to promote plant growth, mitigate HLB, decrease fruit drop, and improve postharvest fruit storage properties
907	Johnson	UF	Zinkicide: A novel therapeutic zinc particulate based formulation for preventing citrus canker and HLB
910	Powell	UF	An integrated approach for establishment of new citrus plantings faced with the HLB threat
916	Wang	UF	Screening and application of antibacterial producing microbes to control citrus Huanglongbing
919	Dewdney	UF	A method to monitor for <i>Guignardia citricarpa</i> (Gc) ascospores in Florida groves
921	Schneider	USDA-ARS	Determining the role of a novel virus in Citrus blight
922	Wang	UF	Control citrus canker by manipulating the EBE (effector binding element) of <i>CsLOB1</i> which is the citrus susceptibility gene for citrus canker disease
925	Dutt	UF	Diaprepes control using a plant based insecticidal transgene approach
926.1C	Lapointe	USDA-ARS	Large-scale mating disruption of citrus leafminer validation and product launch
926.2C	Stelinski	UF	Large-scale mating disruption of citrus leafminer validation and product launch
926.3 C	Urrutia	ISCA	Large-scale mating disruption of citrus leafminer validation and product launch
928.1 C	Sutherland	Glades Crop Care	Field Trials of Soil Microbials to Combat HLB - Indian River Crop Consultant

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928.2 C	Booker	FL Ag Research	Field Trials of Soil Microbials to Combat HLB - Ridge Site Crop Consultant
928.3 C	Yonce	KAC Agricultural Research	Field Trials of Soil Microbials to Combat HLB - SouthWest Florida Crop Consultant
928.4 C	Wang	UF	Field Trials of Naturally Occurring Soil Microbials to Combat HLB
929.2 C	Rucks	Rucks Nursery	Field Trial of HLB Tolerant Rootstocks
931 C	Gonzalez	UF	In vitro testing of chemicals on tree leaves collected from HLB-infected trees to determine their efficacy against HLB
932.1 C	Keesling	UF	Mathematical Modeling to Evaluate Psyllid Shield Concept'
934 C	John Curtis	Better Crops, LLC	Soil drenches of products to combat initial HLB infection in young citrus trees
934.1 C	Wang	UF	Soil drenches of products to combat initial HLB infection in young citrus trees
936 C	Richardson	AgroSource	Firewall Section 18 Grapefruit for control of Canker (and HLB) Field Use Evaluation
937 C	Richardson	AgroSource	FireWall™ Studies to Support a Section 18 for Citrus Canker Control on Round Oranges
938 C	Richardson	AgroSource	Large Scale Laboratory/Greenhouse/Field Trial Evaluation of Citrus HLB Bactericidal Therapies
940 C	Beeson	UF	Propagation of Rootstock Tree Production in Greenhouses by Seed, Stem Cuttings and Tissue Culture to Accelerate Budded Tree Production for Outplanting
941C	Pelz-Stelinski	UF	Influence of Thermal Therapy on Transmission of CLas
943C	Rogers	UF	Support for scale-up of Thermal Therapy Treatment: Evaluation before and after thermotherapy heat treatments to combat HLB
944C	Pelz-Stelinski	UF	Whole Plant antimicrobial evaluation assays (50) to test the efficacy of antimicrobial materials at various rates against CLas, mobility of the material in the plant particularly in the phloem, and phytotoxicity
945C	Gonzalez-Lorca	UF	RSA - Rapid Evaluation method to evaluate drug's effectiveness directly from tree samples
946C	Bewlay	NuFarm Americas Inc.	Mycoshield Magnitude of Residue Study for Citrus Crop Group
15-046C	Curtis	Better Crop Care	Evaluation of GRAS/biopesticide products as a protectant and therapy for HLB on Valencia
15-028	Wang	UF	Control citrus Huanglongbing (HLB) by counteracting the SA hydroxylase of Candidatus Liberibacter asiaticus
15-010	Gmitter	UF	Development and Commercialization of Improved New Disease Resistant Scions and Rootstocks - the Key For a Sustainable and Profitable Florida Citrus Industry
15-025	Stover	USDA-ARS	HLB Resistance and Tolerance in Citrus Scion Breeding
15-009	Gabriel	UF	Exploiting the Las phage for potential control of HLB: year 3
15-005	Dewdney	UF	Asexual inoculum production of Guignardia citricarpa, the causal agent of citrus black spot
15-026	Stover	USDA-ARS	Implementing Transgenic Tools to Produce Commercial Scion Cultivars Resistant to HLB and Canker
15-027	Triplett	UF	Developing a culture medium for Liberibacter asiaticus through comparative multi 'omics analysis with its closest cultured relative, L. crescens
15-008	Etxeberria	UF	Determination of CLas signal in HLB-affected citrus trees
15-002	Bowman	USDA-ARS	Development of Supersour and Other Promising Rootstocks for Florida
15-024	Stelinski	UF	Predicting When, Why, and Where Asian citrus psyllids move to increase effectiveness of insecticide sprays.
15-022	Reuber	Two Blades Fdn.	Engineering citrus for canker resistance
15-023	Schumann	UF	Citrus nutrition studies for improved survival of HLB-affected trees

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15-013	Grosser	UF	Understanding and Manipulating the Interaction of Rootstocks and Constant Nutrition to Enhance the Establishment, Longevity and Profitability of Citrus Plantings in HLB-Endemic Areas.
15-003	Bowman	USDA-ARS	Metabolomic profiling to accelerate development of HLB tolerant rootstocks
15-020	Mou	UF	Create citrus varieties resistant to Huanglongbing (HLB) through transgenic and nontransgenic approaches
15-021	Pelz-Stelinski	UF	Regulation of Las transmission and microbial colonization by the Asian citrus psyllid immune system
15-017	Killiny	UF	Disrupt LuxR solo quorum sensing that mediates plant virulence and insect transmission of <i>Candidatus Liberibacter asiaticus</i> to control the disease
15-042	Wang	UF	Control citrus Huanglongbing using endophytic microbes from survivor trees
938C	Richardson	AgroSource, Inc.	Large Scale Laboratory/Greenhouse/Field Trial Evaluation of Citrus HLB Bactericidal Therapies
937C	Richardson	AgroSource, Inc.	FireWall™ and FireLine Studies to Support Section 18 for Citrus Canker Control in Round Oranges
936C	Richardson	AgroSource, Inc.	FireWall™ Section 18 Grapefruit Field Use Evaluation
15-035C	Rogers	UF	Continuing support of Citrus Health Management Areas (CHMAs)
15-036C	Rogers	UF	Correlating pesticide residue analysis with psyllid feeding to improve protection of young trees
15-038C	Stelinski	UF	Insecticide resistance monitoring and management in Florida citrus to maintain sustainable control of Asian citrus psyllid within Citrus Health Management Areas (CHMAs)
15-030C	Rogers	UF	Continuing Field Trial Support for CRDF CPDC
15-032C	Irey	US Sugar Corp.	Continued Support for the Southern Gardens Diagnostic Laboratory
15-034C	Roberts	UF	Continuation of diagnostic service for growers for detection of Huanglongbing in citrus and psyllids to aid in management decisions
15-040C	Triplett	UF	Rapid turn-around evaluation of up to 1200 promising antimicrobial compounds (or combinations), using the <i>L.crescens</i> assay,
15-043C	Wang	UF	Rapid turn-around evaluation of up to 25 antimicrobial compounds for efficacy in reducing titers of the bacterium <i>Candidatus Liberibacter</i> on diseased 6-year old trees Hamlin on Swingle.
15-037C	Santra	UCF	T-SOL™ antimicrobial for the management of citrus canker and HLB
15-031C	Etxeberria	UF	Development of a laser-based system to deliver antimicrobials to citrus trees: Greenhouse testing
15-016	Hall	USDA-ARS	High-Throughput Inoculation of Transgenic Citrus for HLB Resistance
15-039C	Stover	USDA-ARS	Secure site for testing transgenic and conventional citrus for HLB and psyllid resistance
15-033C	Orbovic	UF	Support role of the Citrus Core Transformation Facility remains crucial for research leading to production of Citrus plants that may be tolerant or resistant to diseases.
15-045C	Zale	UF	Continued Funding for the Mature Citrus Facility to Produce Disease Tolerant, Transgenic Citrus