HLB MAC Projects Funded During FY2019

Project Title	Principal Investigator	State(s)	Affiliation	Total Amount	Producer Benefits
Citrus Nutritional Therapies for Improving Nutrient Accumulation, Root Health, Yield and Fruit Quality on Huanglongbing-Affected Citrus	Kadyampakeni, D.	FL	University of Florida	$ 946,747	Improve citrus yields and fruit quality for Huanglongbing-affected citrus
UAV and ground-based high throughput phenotyping in citrus utilizing artificial intelligence	Ampatzidis, Y.	FL	University of Florida	$ 182,331	Improve management of HLB-infected citrus trees
Development and validation of antimicrobials as potential treatments for directly and indirectly managing HLB	Adaskaveg, J. E.	CA	University of California Riverside	$ 55,274	Development of a treatment for trees infected with HLB
Optimization of ACP Biological Control Agent Production	Morgan, D. and Mellano V.	CA	California Polytechnic University Ponoma	$ 285,000	Increase production of biological control for HLB
Evaluation of citrus tree delivery of neuropeptide mimics to control the Asian citrus psyllid	Heck, M.	NY	Agricultural Research Service	$ 606,426	Development of a novel tool for insect vector management
Evaluation of a novel device for releasing volatile repellents against Asian citrus psyllid: optimizing active ingredient and deployment strategies for field-scale use	Diepenbrock, L.	FL	University of Florida	$ 586,924	Development of ACP repellent to reduce the number of trees infected with HLB
Establishing healthy plantings in the face of persistent HLB pressure	Diepenbrock, L.	FL	University of Florida	$ 665,471	Improved management of young citrus groves in Florida
Field deployable leaf sensor for rapid asymptomatic screening of HLB	Edwards, P. and Kunta, Madhurababu	TX	Texas A&M Kingsville	$ 349,996	Monitor and mitigate disease spread of HLB
Fumigating trailer loads of California fresh citrus with eFUME™ for control of Asian citrus psyllid, Diaphorina citri	Walse, S.	CA	Agricultural Research Service	$ 111,796	Development of fumigant for insect vector management
Asian citrus psyllid and CLas reductions from psyllid sprays timed to spring and summer flushes in citrus	Albrigo, G.	FL	University of Florida	$ 252,413	Improve ACP management to reduce the number of trees infected with HLB

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Expansion space for a Southern California Citrus Containment Lab for Huanglongbing Research and the Implementation of Disease Management Technologies	Nelsen, J.	CA	California Citrus Research Foundation	$ 187,200	Provide further insight into HLB and disease management technologies
Asian Citrus Psyllid Detection Canines for California	Finke, L.	CA	University of California Riverside	$ 247,095	Minimize spread of HLB in San Joaquin Valley
Field implementation of an advanced multimodal attract-and-kill device (CAPUT trap) for sustainable management of Asian citrus psyllids	Stelinski, L.	FL	University of Florida	$ 721,000	Improve management of HLB-infected citrus trees
An Integrated Grapefruit Production System for HLB-endemic Florida	Schumann, A.	FL	University of Florida	$ 145,000	Increase grapefruit production
Artificial intelligence apps for smartphones: a modern diagnostic extension tool for citrus growers and home owners to rapidly identify nutrient deficiencies and HLB symptoms in Florida groves	Schumann, A.	FL	University of Florida	$ 27,000	Improve detection of HLB in order to minimize spread of the disease
Area-Wide Control of ACP in Urban-Commercial Citrus Buffer Zones and HLB Quarantine Area	Stouthamer, R.	CA	University of California Riverside	$ 732,000	Minimize spread of HLB
Effect of antibiotic usage on citrus for HLB management on the selection of antibiotic resistance in nontarget bacterial microflora	Sundin, G. W.	MI	Michigan State University	$ 450,000	Management of HLB infected citrus
Field Evaluation of Brassinosteroid for improving health and productivity of Huanglongbing-affected sweet orange	Vashisth, T.	FL	University of Florida	$ 586,000	Mitigate HLB

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Biological Control of Citrus Greening with a Benign Strain (EB92-1) of Xylella fastidiosa	Hopkins, D.	FL	University of Florida	$ 325,196	Improve production of HLB infected citrus through biological control
Scaling up of a novel, low cost and green technology for the extraction of cranberry and other plant materials for field scale assessments	Soumya, R.	FL	Ocean Spray Inc. and University of Florida	$ 367,679	Reduce HLB infection and improve tree health, yield, and quality of HLB infected citrus
Monitoring for insecticide resistance in Asian citrus psyllid populations in California citrus	Byrne, F.	CA	University of California Riverside	$ 193,264	Safeguard continued effectiveness of chemical control of ACP to minimize HLB spread
Development of a Virus-induced gene silencing/RNAi system using psyllid-specific viruses to control the spread of HLB by targeting the vector D. citri	Falk, B.	CA	University of California Davis	$ 294,735	Reduce insect vector populations
Installation of a modular plant growth unit (MPGU) for the expedited production of clean citrus materials for HLB research	Vidalakis, G.	CA	University of California Riverside	$ 218,259	Improve research to minimize spread of HLB
Pre-symptomatic detection of HLB using commercially available, and economically scalable, remote sensors mounted to drones.	Zermas, D.	CA	Sentera. California Citrus Mutual	$ 233,176	Detect and minimize the spread of HLB through imaging technologies
Implementation of HLB Detector Canines in California	Schnieder, W.	CA	Citrus Research Board	$ 718,457	Minimize the spread of HLB through the use of detector canines
Deploy digital data management systems for CRAFT	Ippolito, J	CO	Colorado State University	$ 1,000,000	Enhanced data collection and reporting platform for CRAFT results
Citrus Research and Field Trials	Smith, T.	FL	Florida Department of Agriculture and Consumer Services Division of Plant Industry	$ 6,276,400	Improved management of citrus in the face of HLB