CRDF Research Goals- HLB

• NAS recommendations for HLB research (2010)
  • Communicate impact of HLB
  • Near term solutions – Commercial Product Delivery
  • Intermediate solutions
  • Long-term solutions - Research projects
CRDF Research Topical Areas

• Bactericides
• ACP Vector intervention technologies
• Citrus plant improvement
• Horticultural solutions
• Other Citrus Diseases
Bactericide Projects – 40

• Bactericide Identification and Screening
  • Petri plate, small plant and field tree assay for screening

• Bactericide Field Testing
  • Testing botanical oils, antimicrobial microbes, OTC and streptomycin, other bactericidal chemicals

• Bactericide Delivery
  • Evaluation of new adjuvants or formulation modifications
  • New delivery methods
  • Uptake and movement in the plant
ACP Vector Intervention Projects – 87

• ACP Biology and Behavior
  • Development and movement
  • Acquisition and transmission of CLAs

• ACP Conventional Management Tools
  • Increase available tools
  • CHMAs
  • Insecticide resistance and monitoring

• ACP Management- novel approaches
  • Target discovery, RNAi
  • Insecticidal proteins, incompetent ACP
Citrus Plant Improvement Projects- 73

• Citrus genome characterization
  • Genome mapping
  • Gene expression response to ACP and HLB

• Phenotypic and molecular characterization
  • HLB tolerant citrus relatives
  • Commercial cultivars
• HLB Resistance – Conventional breeding
  • Development of new varieties- HLB
  • Field trial establishment and data collection
  • Develop propagation methods

• HLB Resistance: Engineered
  • Identify disease resistance - HLB, Canker and Diaprepes
  • Genetic transformation and characterization
  • Tools for rapid deployment
  • Support facilities- Lab and field
Horticultural Projects – 76 Projects

• Disease detection methods
• Host response to infection
  • Symptoms, Clas movement, phloem plugging
• Nutrition
  • Enhanced nutrition programs
  • Improving tree performance- reflective mulch
• Soil microbial amendments
• Plant growth regulators
• Thermotherapy
2018 CRDF Request for Proposals Activities

• Current portfolio maturation
  • Portfolio review
  • NAS review – Report published April 2018

• Determine priorities for RFP
  • Grower meetings
  • Research community
  • CRDF Committees and Board meetings

• RFP Targets
  • Near term HLB solutions – Product Development
  • Longer-term HLB solutions – Research hypothesis
• CRDF Funding Prioritization
  • Commercial Product Delivery Committee meetings
  • Research Management Committee meetings
  • Board meeting – Decisions list of priorities for RFP
  • RFP call posted on website, April 2018
Thank you!

CRDF is proud to provide support to the Florida citrus industry