

## COMMITTEE ON THE STRATEGIC PLANNING FOR THE FLORIDA CITRUS INDUSTRY: Addressing Citrus Greening Disease

Shaped by the key findings and its study of scientific opportunities to address HLB, the Committee's strategic plan consists of 23 recommendations, grouped according to objective:

Organizational (O); Informational (In); Near- to Intermediate-Term; Research and Technology (NI); and Long-Term Research and Technology (L).

The recommendations are listed in approximate order of importance within each group. However, the success of some recommendations is dependent on other recommendations, requiring coordination in their implementation.

### Organizational (O) Recommendations

- O-1. Create "Citrus Health Management Areas" in Florida.
- O-2. Identify one organization and empower it to have oversight responsibility over Huanglongbing (HLB) research and development efforts.
- O-3. Create a centralized HLB website and data bank that is accessible to researchers and the public.
- O-4. Commission an analysis of the economics of the citrus industry's responses to HLB.
- O-5. Organize an enhanced annual international symposium on all aspects of HLB.

### Informational (In) Recommendations

- In-1. Expand extension efforts emphasizing the importance to HLB management of removing infected trees from groves.
- In-2. Encourage homeowners to remove and properly dispose of backyard citrus trees, particularly HLB-affected trees.
- In-3. Communicate information on HLB and its potential economic impact to government officials at the federal, state, county, and city level.

### Research and Technology Recommendations: Near- to Intermediate-Term (NI)

- NI-1. Improve insecticide-based management of Asian citrus psyllid (ACP).
- NI-2. Support searches for biomarkers that may be exploited to detect CLas-infected citrus.
- NI-3. Establish citrus orchard test plots for evaluation of new scouting and therapeutic methods.
- NI-4. Accelerate the sequencing, assembly, annotation and exploitation of a sweet orange genome to provide a powerful tool for all future citrus improvement research.
- NI-5. Support development of HLB model systems.
- NI-6. Exploit the CLas genome sequence for new strategies of HLB mitigation.
- NI-7. Support research aimed at developing alternative ACP management strategies.
- NI-8. Support small-scale studies on the feasibility of alternative horticultural systems suited to endemic HLB.
- NI-9. Support demonstration of RNA interference (RNAi) effects for possible suppression of ACP.
- NI-10. Develop *in vitro* culture techniques for CLas to facilitate experimental manipulation of the bacterium for insights into gene function.
- NI-11. Sequence, assemble and annotate the ACP genome to provide basis for new approaches to ACP management.

### Research and Technology Recommendations: Long-Term (L)

- L-1. Support development of transgenic HLB-resistant and ACP-resistant citrus.
- L-2. Support development and testing of bactericides, therapeutics or SAR activators.
- L-3. Support analysis of ACP behavior, ACP-plant interactions and ecology to enhance the knowledge base available for new ACP management strategies.
- L-4. Explore possible control strategies based on release of modified psyllid males.

The full report can be found at [http://www.nap.edu/catalog.php?record\\_id=12880](http://www.nap.edu/catalog.php?record_id=12880)