## Determining Key HLB Research and Delivery Projects



By Harold Browning

ast month, I provided a glimpse of activities that are underway to focus Citrus Research and Development Foundation (CRDF) efforts in delivering solutions to huanglongbing (HLB). This month's column is a follow-up on how the work is progressing.

The situation at present includes the following:

- A broad range of projects has been supported on all aspects of HLB and plant/ bacterial/insect vector relationships. In fact, CRDF has funded more than 300 projects since the first cycle in 2008. At present, there are 95 active projects, including a handful that address other diseases, such as citrus canker, citrus black spot and postbloom fruit drop.
- Many (most) of these projects target individual components of the disease system.
- While our understanding of HLB and its interaction with citrus has come a long way, we still lack the complete understanding to either imagine or deliver a fully competent, economical management system for growers to adopt. Costs and uncertainties about effectiveness of practices confound growers' decisions on which strategies to adopt.
- As the puzzle that HLB poses in Florida and elsewhere continues to be addressed one small piece at a time, the impact of HLB on Florida's industry continues to deepen.

CRDF and its staff, science advisors, committees and board agree that there is a need to characterize and validate the known puzzle pieces into usable strategies and to take collective steps to integrate individual progress pieces into effective management tools. Over the next several months, CRDF plans to accomplish the following to refine its portfolio going forward:

- Bring consensus to short-term (less than three years to handoff to growers) and intermediate-to-long-term solutions (more than three years to handoff) so that future directions and investments can reflect an appropriate balance of these timelines. While short-term tools are necessary to keep current plantings productive and allow new plantings to mature, longer-term solutions will provide the tools for economically managing HLB in Florida citrus into the future.
- Review and evaluate all projects that are currently underway, recently ended or being presented as new ideas with the following criteria:
  - Is the work progressing as proposed and meeting its objectives?
  - Is the priority for the work still relevant?
  - Are there other projects with similar objectives or approaches? Is there value to using CRDF resources to bring parallel projects into an integrated approach?
  - o Are there projects with progress or objectives that should be deprioritized?
  - Do (all) projects have the correct range of participants and goals to allow for progression from discovery to field evaluation to delivery?

These criteria will allow the emerging recommendations for project continuation, approval of new projects, and modification or termination of projects to streamline the portfolio, focusing on projects that will contribute most to HLB solutions.

Harold Browning is Chief Operations Officer of CRDF. The foundation is charged with funding citrus research and getting the results of that research to use in the grove.



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