

Commercial product development



By Harold Browning

In last month's column, we answered a few commonly-asked questions about the work of CRDF, and more importantly, the citrus disease research which it supports. This column is focused on an important component in delivering the solutions that emerge through research, Commercial Product Development.

How does Commercial Product Development contribute to efforts to deliver solutions for HLB and canker? An important goal of CRDF is to assist in delivering research results to the growers. The Commercial Product Development Committee (CPDC) currently is addressing eight separate projects that are moving from research to delivery stages. These projects are being managed to identify and address regulatory requirements as well as to identify potential partners in cases where a commercial product is likely to be the delivery method. The list of projects currently being considered for advancement through the CPDC includes:

- ❑ **Psyllid control: neonicotinoid label modification** to allow for additional applications per season. This will be particularly important for protection of new plantings from HLB infection.

- ❑ **Psyllid control (RNAi)** to continue research and development toward creation of new psyllid control products based on gene disruption to combat HLB transmission.

- ❑ Identifying, testing and development of new **antibacterials** to suppress HLB.

- ❑ Increasing **genetic disease resistance** to citrus canker through advances in canker resistance traits and mature tissue transformation research and development.

- ❑ **Citrus gene therapy** using citrus tristeza virus (CTV) vectors to test the ability of various antimicrobial genes to interrupt or prevent HLB disease.

- ❑ **Advanced citrus production systems** for high density plantings and related horticultural intensification to assist plantings to reach production and profitability earlier in time, a major defense against the effects of HLB and other diseases.

- ❑ **Disease detection: canine "scouting."** Progress in detection of citrus canker using canine "scouting" may have specific applications, and opportunities to use this technology are near term.

- ❑ **Diaprepes root weevil control.** Pheromone development has advanced through research and is close to commercialization. Root injury by weevils is part of the complex interaction that leads to tree health decline, and the impact is greater in presence of root insects and disease.

These projects have specific requirements and timelines, and vary in their potential to affect citrus health in the near to longer term. The Commercial Product Development Committee will continue to play a role in moving research to solutions on these and other fronts. At its June board meeting, CRDF approved the establishment of a Commercial Product Development program manager to ensure that these projects effectively move forward. Dr. Jim Dukowitz has been contracted to serve in this role, and is developing outlines of the steps and timelines associated with each of the projects. Quarterly reports will be generated for each project, and monthly updates will be communicated as well to keep the industry informed of progress. We invite you to follow the progress on these Commercial Product Development projects by visiting the CRDF CPD webpage (<http://www.citrusrdf.org/blog/committees/commercial-product-development-committee>).

As these projects move forward, there may be opportunities for growers, nurseries, processors and packers to participate in pilot programs and other development activities. If you have interest in participating further in these project areas, please visit the CPDC web page mentioned above or email the CPDC program manager at CPD@citrusrdf.org.

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

