What Can Growers Do to Improve Asian Citrus Psyllid Control?

By Harold Browning

"What are the best practices for Asian citrus psyllid (ACP) control?" is a frequently asked question. With spring flush and bloom periods passing, growers are interested in new control strategies and how they can combat ACP and reduce the spread of HLB. There is no short answer, but this is an area where the outstanding research being conducted in Florida with ACP has provided tools for use in the industry. A synopsis of this effort follows:

• Prior to discovery of HLB in Florida, little emphasis was placed on treatment of ACP except in young plantings where cupped leaves and other physical damage slowed plant growth.

o Researchers evaluated currently available pesticides in field experiments and communicated results through the IFAS Florida Citrus Pest Management Guide.

o In 1999, the first releases of the parasitoid, *Tamarixia radiata*, were made.

• Once HLB was known to be present, early emphasis was placed on ACP control as a way to reduce spread. Effort focused on development of the following tools, and this work continues today.

o All available pesticides against ACP are evaluated for activity, including those available for organic growers. Many new compounds have emerged and information on rates and effectiveness are now available. Applications have advanced from earlier high-volume ground application to low-volume, ultra-low-volume, and aircraft applications.

o Sampling tools for ACP have evolved to include tap samples and yellow sticky traps. These methods have been used to better understand seasonal and spatial patterns of ACP dispersal.

o Research has also studied movement of psyllids between trees and between blocks, adding to our ability to time treatments and to recommend border treatments.

o Sampling of ACP for presence of *Candidatus Liberibacter asiaticus* using PCR informs growers of the distribution of "hot" ACP.

o Attractants, repellants, and trap plants have been investigated to augment current methods.

o The search for improved biological control continues with additional strains of *T. radiata* being introduced and released in various locations.

• Grower-led organization of Citrus Health Management Areas (CHMAs) — more than 30 such cooperative management areas are in place now with the following support:

o Recommended timing and selection of treatment options is provided by UF, IFAS Extension.

o CHMA organization is supported by the Florida Department of Agriculture and Consumer Services (FDACS), Division of Plant Industry.

o ACP monitoring in CHMAs is reported by FDACS and USDA, APHIS Citrus Health Response Program.

Progressively, most growers have increased the intensity of their efforts to control ACP. Evidence for success in putting all of the above tools to work is the significant reduction in ACP populations across the state. With new plantings and resets at stake, current ACP levels, often orders of magnitude less than pre-HLB populations, are still high enough to allow spread of HLB.

What is the next step to lower ACP populations? More growers need to work aggressively and cooperatively to attack ACP using all of the available tools, including intensifying efforts to keep ACP population low around grove margins. This can be done with available tools while research is developing additional methods, and now is the time to do your part to lower ACP populations further. Join in the fight against ACP and participate in your local CHMA!

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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