

CHMAs: They work and are our best tactic for Asian citrus psyllid control

By Brandon Page

The Citrus Health Management Areas (CHMAs) Program has undergone a much-needed surge in participation in the past year. The theory of conducting coordinated sprays to control Asian citrus psyllids (ACP), the vector of huanglongbing (HLB), has now become a standard practice among many growers in the state. The resulting control of ACP populations in CHMAs which have fully adopted the area-wide control practices are unmatched.

Statewide ACP populations have been declining for more than a year (Figure 1). This reduction in ACP population is very evident in CHMAs that are actively conducting coordinated sprays. Even though most of the CHMAs throughout the state are gaining ground in terms of reducing ACP populations, some CHMAs that have remained inactive have seen no change in the ACP population, and in some situations, there has been an increase in ACP populations. Let's

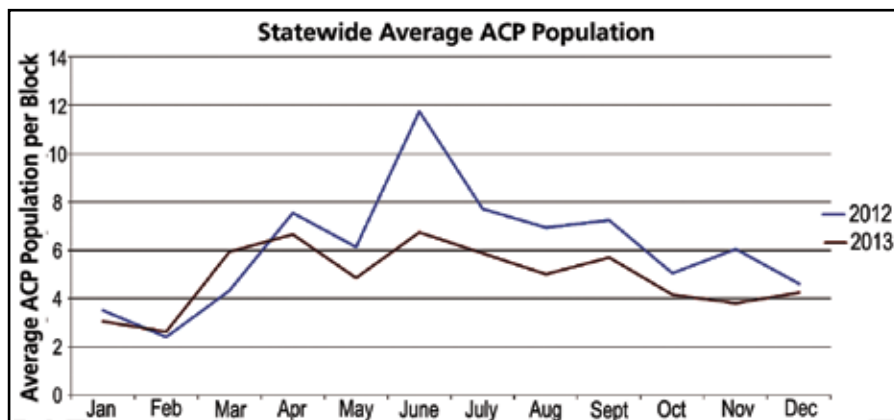


Figure 1. Statewide average Asian citrus psyllid population comparing 2012 to 2013.

look at foundations that make the active CHMAs successful.

CHMA FOUNDATIONS

When looking at CHMAs that are successful, there are three features which they all possess.

The first is leadership. Every CHMA must have one or two people who are willing to provide guidance but, most importantly, facilitate the

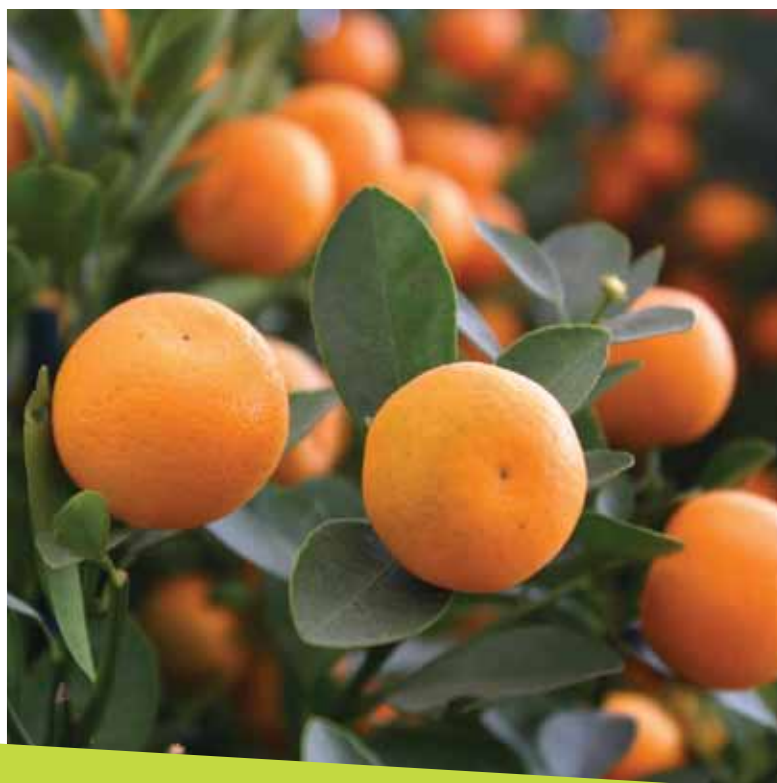
activities of the CHMA. This person does not have to make every decision about the CHMA activities because those decisions should be made by the collective group of growers that comprise the CHMA.

The second critical feature is grower participation. A CHMA can have the best leadership possible and the best spray plan ever devised, but

For The Best Crop Start With The Roots

Actinovate® AG is a powerful biofungicide for soil-borne diseases in orange, tangerine, grapefruit and other citrus trees. As a soil treatment, Actinovate® AG colonizes the root system utilizing several anti-fungal modes of action. Actinovate® AG is the perfect tool for resistance management and works effectively as a rotational or tank-mix partner. Actinovate® AG is labeled for *Phytophthora*, *Rhizoctonia*, *Pythium*, *Fusarium* and other diseases.

Contact your distributor today and see what Actinovate® AG can do for your trees.



Actinovate® AG

Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow's industrial biosolutions, improving our customers' business and the use of our planet's resources. Read more at www.novozymes.com.



Actinovate® AG is a registered trademark of Natural Industries, Inc. 2013. All rights reserved.

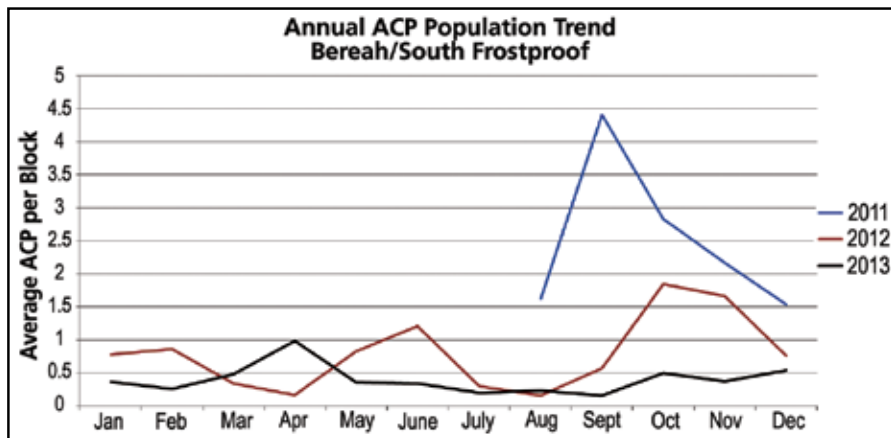


Figure 2. Average Asian citrus psyllid populations in the Bereah/South Frostproof Citrus Health Management Area for 2011, 2012 and 2013.

ultimately it will be unsuccessful if the vast majority of the growers in the CHMA do not participate in the regional effort.

The third common feature is communication. Growers in successful CHMAs are in constant communication about the current production practices occurring in the grove and also about what future events are planned (coordinated sprays). Some companies and individuals have begun to release private scouting data to other members of the CHMA in an effort to facilitate more communication about ACP populations and needed control measures.

PLANNING FOR A COORDINATED SPRAY

Within a CHMA, growers should decide when to perform coordinated sprays based in part on when psyllid populations are expected to begin increasing. Equally important is selecting times when the most growers will agree to participate. Once the timing is decided, a particular insecticide mode of action (MOA) for use should be decided on. Using a common MOA will help reduce the likelihood of pesticide resistance developing in the psyllid population. Growers are free to choose which insecticide will be used once the MOA is agreed upon.

The choice of application method used is up to each grower. Although most coordinated sprays will have an option for aerial application, any application method is acceptable. Growers have found better results utilizing aerial applications when a single insecticide is sprayed. If a grower wants to apply additional materials (nutritionals, miticides, fungicides, etc.) along with an insecticide from the agreed upon MOA, that is a decision for the individual grower.

CHMA SUCCESS STORIES

Throughout the state, there are examples of CHMAs that have successfully implemented a coordinated spray program, resulting in significant reductions in overall ACP populations. For example, CHMAs located in Polk, Highlands and DeSoto counties have shown consistent reductions in ACP populations since they began their area-wide coordinated spray program.

An outstanding example of what coordinated ACP control can accomplish in Florida is the Bereah/South Frostproof CHMA (Figure 2). This CHMA is constantly achieving some of the lowest ACP populations in the state. All of the foundations of a CHMA, as outlined earlier, are incorporated into the overall functions of

Keep your investments growing with SPROUT GUARDS

Sprout Guards may also be custom ordered to any size needed, regarding mechanical harvesting.

★ 30+ YEARS EXPERIENCE ★

★ BEST WRAP, BEST PRICE ★ AND BEST SERVICE

Black Sprout Guards, 8" x 20"

Available in 8" x 14" and 8" x 18"

Mike Hurst Citrus Services, Inc.
(863) 452-6469 • Cell (863) 443-0531

Blue Goose Growers
Florida Grove and Crop Management

Blue Goose has the people, experience and resources to improve your return on your investment

<p>Growers</p> <ul style="list-style-type: none"> • Installation • Grove care • Crop management • Property management 	<p>Cutting services</p> <ul style="list-style-type: none"> • Hedging • Topping • Skirting • Cross Hedging 	<p>Heavy equipment</p> <ul style="list-style-type: none"> • Services for Agricultural and Commercial construction • Excavation • Grading • Land clearing • Waterway maintenance – Water control structure installation
--	--	--

Real estate

- Leasing Services
- Agricultural sales and purchases

FORT PIERCE
772-461-3020 Main Office
9901 Okeechobee Rd. 34945

ARCADIA **CLEWISTON**
863-993-9661 863-677-1125
6057 Nichols St. 34266 2550 Witt Rd.. 33440

Safer PN for summer sprays!

Haifa BONUS
13-2-44

New breakthrough Foliar Fertilizer for citrus and fruit crops

Haifa Bonus, an innovative potassium nitrate fertilizer with special adjuvant for optimal foliar nutrition, allows for concentrated spray applications

- Improved nutrient uptake
- Better fruit size and quality
- Better plant health
- Application savings for growers

Talk to your nearest Haifa distributor today!
Haifa North America, (800) 649-4944
NorthAmerica@haifa-group.com

Haifa www.haifa-group.com
Pioneering the Future

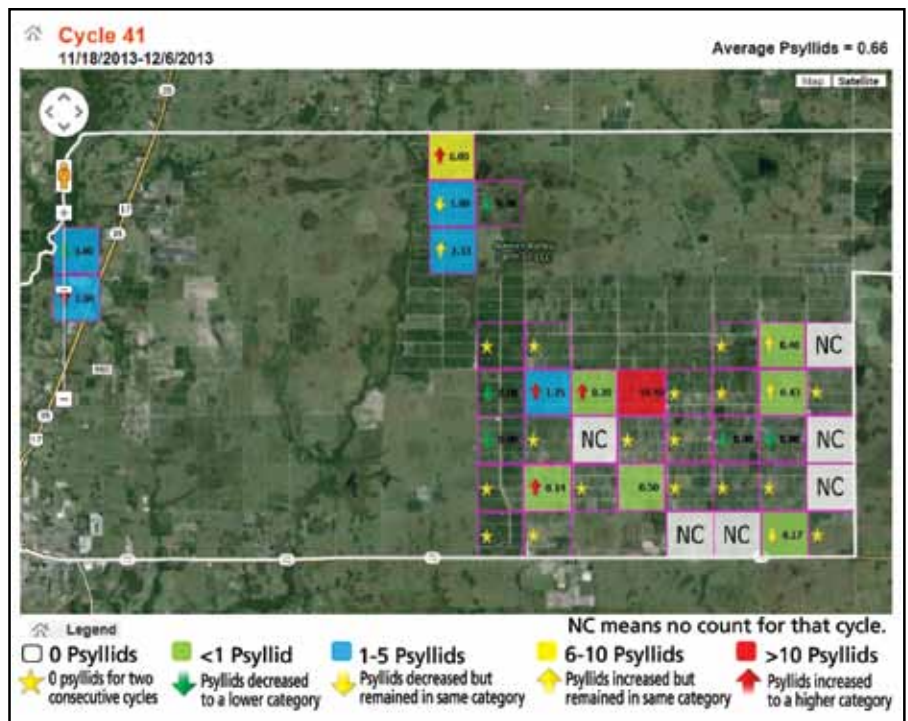


Figure 3. Aerial map from the CHMA Sectional Mapping program showing the average Asian citrus psyllid for each township, range and section in the Northeast DeSoto CHMA.

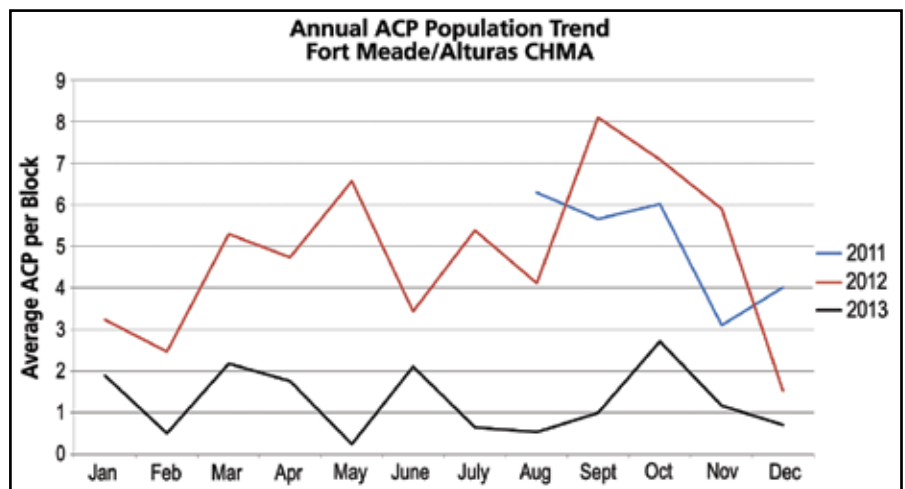


Figure 4. Average Asian citrus psyllid population in the Fort Meade/Alturas Citrus Health Management Area for 2011, 2012 and 2013.

this CHMA. The growers that comprise this CHMA aim for five to six coordinated sprays per year. These sprays are scheduled well in advance of the actual spray date, and all the participants are in agreement about what insecticide MOA is to be used and when the coordinated spray will take place.

The Northeast DeSoto CHMA has also been a constant leader. This CHMA has more than 30,000 acres of commercial citrus within its boundaries and maintains low ACP populations (Figure 3). The growers who make up this CHMA have utilized many approaches to coordinated ACP control. This year, a plan was devised to simplify the area-wide approach to six sprays, utilizing a single insecticide

MOA per spray with a predetermined start and completion date.

In the past year, the Fort Meade/Alturas CHMA has shown what can happen when growers make a conscious effort to control ACP in an area-wide fashion. Prior to October 2012, this CHMA routinely produced an average ACP population of five or more per block (Figure 4). Following a review of the CHMA's performance, the leaders in this region made adjustments to the operations of the CHMA. The leaders worked on all of the foundations previously mentioned. As a result, they significantly reduced the ACP population in the CHMA and have maintained these low populations over the course of more than a year. The average ACP population

following the changes in this CHMA is now around two ACP per block.

CHMA ADVANCEMENTS IN THE GULF REGION

The Gulf CHMA, located in the southwestern part of the state, was previously comprised of more than 135,000 acres of commercial citrus. In the past six months, the leaders in this area made the decision to divide the Gulf CHMA into smaller, easier to manage CHMAs (Figure 5). There are now 11 CHMAs where there used to be only the one larger Gulf CHMA. The CHMAs that are now in this region occupy Lee, Hendry and Collier counties with Charlotte County being added as an individual CHMA.

The new divisions to this region allow coordinated sprays to be completed in a much more focused manner than was previously possible. Most of the growers in this region are actively controlling ACP on a monthly basis. The new CHMAs in southwest Florida have a great opportunity to achieve levels of ACP control that have only been accomplished in a few CHMAs in the state. The combination of smaller, easier-to-manage CHMAs, being led by an aggressive group of growers who are dedicated to ACP control, will likely result in lower ACP populations than was previously achieved as a larger CHMA.

GROWERS SEEING THE NEED FOR CHMA SPRAYS

For roughly two years, the CHMAs in Lake and Orange counties have had some of the highest ACP populations recorded in the state. Implementation of coordinated sprays in this region is complicated by the large number of small groves and the ever-expanding urban environment. Regardless of the challenges, the growers in the South Lake/West Orange, Central Lake/North Orange and Green Swamp CHMAs have created a four-application coordinated spray plan (Figure 6). In order to expedite the application process, the services of a helicopter have been arranged. Growers can utilize the helicopter aerial application if they wish, but all growers are highly encouraged to participate regardless of their application method.

The newly adopted coordinated approach was spearheaded by a small group of leaders in the region with the idea that sprays needed to be simple, inexpensive and well-timed. The next coordinated spray for this area will take place following petal fall in late April.

RESOURCES

There is a wealth of resources and information available to help aid in the operations of CHMAs throughout the state. The best resource available is the CHMA website, www.flchma.org. The CHMA website contains a wealth of information about all 48 CHMAs in the state along with USDA/FDACS scouting data. Everyone is encouraged to visit the website and explore the specific webpages of the CHMAs mentioned earlier.

In addition to the CHMA website, growers can access the Sectional Mapping Program via www.flchma.org (Figure 7, page 12). In the past, the information on the Sectional Mapping Program was password protected; the password requirement has since been removed. You can still provide an e-mail address if you would like to receive alerts when the program is updated with the latest USDA/FDACS scouting data. The mapping program is intended to give growers a focused look at the ACP populations surrounding their areas

of production. The mapping program will plot the USDA/FDACS scouting data according to the township, range and section location for each grove block being scouted. It is imperative that growers identify the location of blocks producing high ACP populations and take corrective action to lower the high ACP population.

CHMA IMPORTANCE

We are at a point in our industry where ACP control must be the number-one priority of every citrus grower. The threat of HLB is clearly evident in Florida and every other citrus-producing region where this bacterium is present. Don't let anyone persuade you into thinking there is a cure for HLB, because at this time, there is none. The best option we have for saving our industry is a coordinated attack against ACP.

A comparison between coordinated control of ACP and an individual grower approach will demonstrate that coordinated control is the most effective method for maintaining ACP populations at low levels

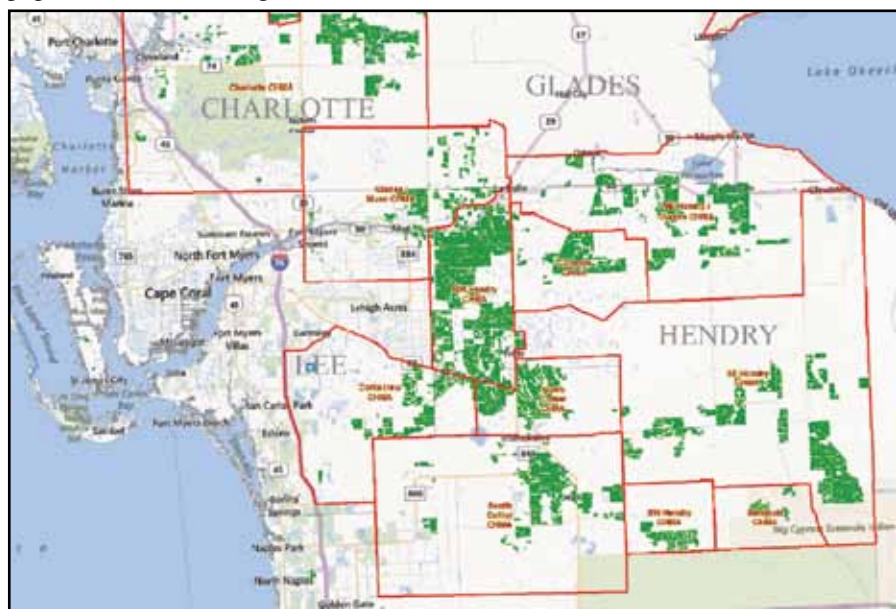


Figure 5. New Citrus Health Management Areas in southwest Florida outlined in red.

Proposed Date of Application	Mode of Action	Notes and/or Comments
First week of February	Pyrethroid	Second dormant spray. Before the first flush. Attacking the overwintering population prior to the first flush. Beware of the pre-harvest interval and re-entry interval times due to harvest activities.
Late April – Early May	Organophosphate	Post-bloom. Attacking any psyllids that developed during the spring flush and bloom period.
August	Organophosphate	Late summer. Attacking any psyllids that developed during the growing season.
November	Pyrethroid	First dormant spray. Attacking psyllids that developed on fall flush.

Figure 6. 2014 coordinated spray plan for South Lake/West Orange, Central Lake/North Orange, and Green Swamp Citrus Health Management Areas.

THE ORIGINAL
Tropicana
PURE PREMIUM

Tropicana Procurement Manager
Eddie Wertz
Office: (941) 742-2646 or (863) 494-1628
Mobile: (863) 990-1852



Buyer
Steve Riffle
Office: (863) 453-4359
Mobile: (863) 214-3222

Figure 7. Citrus Health Management Area website — www.flchma.org

throughout the year.

In a time when boxes per acre are on the decline and production prices are increasing, growers must make decisions that yield the best results for each dollar spent. If we wish to see a day when we have achieved a final

solution to huanglongbing, our focus at this time must be on coordinated ACP management.

Brandon Page (Bpage@ufl.edu) is the CHMA program assistant at the University of Florida-IFAS's Citrus Research and Education Center. 🍊

Carden & Associates, Inc.
We Keep You Growing

Citrus Crop Insurance Specialists
25+ years experience
Florida's largest citrus crop insurance provider
Knowledgeable and Professional Service

Carden & Associates
Toll Free: 888-296-7533
info@cardeninsurance.com Winter Haven, Florida



DuPont™ Verimark™ and Exirel™ insect control have received federal registration approval from the U.S. Environmental Protection Agency; state registrations are in process.

Former University of Florida-IFAS citrus researcher Tim Spann in August will become the first person to hold the Roger B. Jensen Endowed Professorship in Pistachio Physiology and Pomology at Fresno State in California.

The position was created last year with a \$1.5 million pledge from the California Pistachio Research Board. Spann is currently research project manager for the California Avocado Commission. He worked as a researcher at the Citrus Research and Education Center in Lake Alfred until the fall of 2012. 🍊



Spann