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Citrus Notes

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Dear Growers,

Our January "Citrus Roundtable" in Hillsborough County is scheduled for Wednesday, January 6, 2010. We will be meeting at the Gulf Coast Research and Education Center in Balm. There will be a Florida Automated Weather Network (FAWN) Winter Weather School in January at the Polk County Extension Office. We have designated 13 coordinated psyllid control districts (CPCD) for Polk County and information on participating is included in the CPCD article. The weekly citrus leaf freezing point temperatures are available from FAWN and the Winter Weather Watch Program. In pesticide news and information there are a number of interesting articles and information related to pesticide use. Finally, mark your calendars for our Polk County February OJ Break.

Enjoy the issue,

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January Citrus Roundtable in Hillsborough County

On January 6, 2010, we will be back at the Gulf Coast Research and Education Center for our January Citrus Roundtable. The meeting will begin at 10:00 a.m. and the address of the Center is 14625 CR 672 in Balm, although the postal address is Wimauma.

This month Dr. Tim Spann, our Citrus Extension Specialist from the Citrus Research and Education Center in Lake Alfred, will be discussing his work on the effect of citrus greening on fruit size, yield and overall tree condition. He will also be presenting some additional information on nutrient deficiencies associated with citrus greening.

Make plans to join us on Wednesday, January 6, 2010 for OJ, coffee and donuts at the Gulf Coast Research and Education Center in Balm.

FAWN Winter Weather School

On January 12, 2010, the University of Florida, Florida Automated Weather Network (FAWN) will host a winter weather seminar at the Polk County Extension Office from 9 am - 12 pm, with lunch provided. This seminar is free and is being funded by the Alafia River, Coastal Rivers, Hillsborough River, Manasota, Northwest Hillsborough, Peace River, Pinellas-Anclote River, and Withlacoochee River Basin Boards, and the Southwest Florida Water Management District.

Topics covered will include freeze protection for various crops, use of the FAWN Cold Protection Toolkit, and use of instruments and technology to better evaluate cold protection needs.

FAWN is a program of the University of Florida Institute of Food and Agricultural Science (UF/IFAS), and provides weather data and weather-related services to a wide variety of users in Florida.

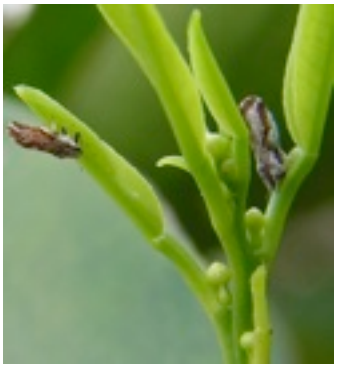
The Polk County Extension Office is located at 1702 Highway 17-98 South, Bartow, FL 33830.

To register (and be counted for lunch) contact Gail Crawford at (863) 519-8677, ext. 111, or at dorothyc@ufl.edu.

February OJ Break in Polk County

Make sure to mark your calendar for Thursday, February 11, 2010, for our Polk County OJ Break. This meeting is our annual citrus pest management guide update. I am in the process of putting the program together and will have additional information in next month's "Citrus Notes". The OJ Break will begin with 9:00 a.m. and run to noon.

Winter 2010 Polk County Coordinated Psyllid Control Districts



Last month at our December Polk County OJ Break the mechanism to get out the word to Polk

County citrus growers interested in coordinating their psyllid control effort this winter was implemented. From this meeting Polk County has been divided up into 13 coordinated control districts (CPCD) with coordinators for each of these districts. If any grower is interested in coordinating their psyllid control efforts to potentially maximize psyllid control, please call me here at the office in Bartow at 863-519-8677. I can then provide you with coordinator information based on the locations of your groves or grove. To date 12 of the 13 districts have set tentative spray dates for their districts beginning as early as **January 10, 2010**. The coordinators can provide additional information on application methods and materials that are being considered for the district. The decision to coordinate the application, material selection and the application method rests solely with the individual grower. This is an effort to provide growers in Polk County with information related to the timing of these coordinated psyllid control applications in the specific districts.

We have also set up a web based mechanism for growers to get additional specific information related to the individual CPCD's. This information is on the web based application called "facebook". You can get a free account on facebook at the following address: http://www.facebook.com/ . I would suggest that you set up a facebook account solely for this purpose, separate from any personal facebook accounts that you may have. This will keep any information not related to the psyllid coordination effort separate and out of the psyllid district group information.

Last month I mentioned at the OJ Break to search for Polk Citrus to gain access to the CPCD's. Since our meeting significant security changes have been made to facebook and this method of entry is no longer available. So, if you want to join the facebook page of "Polk Citrus" you will not be allowed in. You must join a CPCD.

Once you have a facebook account, in the search box located on the top left of the page, search for one of the following Coordinated Psyllid Control District groups (in bold). I have also included a description of the area in parenthesis. If you search and access "Polk Citrus" you will also see a list of the CPCD's under the "wall" tab but, will still need to search for the individual CPCD's to be able to join the group.

South Mulberry CPCD

(Corner of Hwy 60 and the Polk/Hillsborough County line, east on Hwy 60 to US Hwy 17 in Bartow, south on US Hwy 17 to Polk/Hardee County line, west along the Polk/Hardee County line to corner of Polk/Hardee/ Manatee/Hillsborough County line, north on Polk/Hillsborough County line to Hwy 60.)

East Polk CPCD

(Corner of Hwy 60 and Polk/Hillsborough County line, north along Polk/Hillsborough County line to Polk/Pasco County line, along Polk/Pasco County line to Polk/Sumter County line, along Polk/Sumter County line to Polk/Lake County line, along Polk/Lake County line to Hwy 33, south on Hwy 33 to CR 655, south on CR 655 to I-4, west on I-4 to Polk Parkway, west on Polk Parkway to US Hwy 98, south on US Hwy 98 to Hwy 60, west on Hwy 60 to Polk/Hillsborough County line.)

Frostproof CPCD

(Corner of US Hwy 27 and Polk/Highlands County line, north on US Hwy 27 to ABC Rd., east on ABC Rd to Hwy 17, south on Hwy 17 to CR 630, east on CR 630 to Hwy 60, east on Hwy 60 to Polk/Osceola County

line, south along Polk/Osceola County line to Polk/Highlands County line, west along Polk/Highlands County line to US Hwy 27.)

Bereah CPCD

(Corner of US Hwy 17 and Polk/Hardee County line, north on US Hwy 17 to US Hwy 98, east on US Hwy 98 to US Hwy 27, south on US Hwy 27 to Polk/Highlands County line, west along Polk/Highlands County line to Polk/Hardee County line, west along Polk/Hardee County line to County Line Rd, west on County Line Rd to US Hwy 17.)

Babson Park CPCD

(Corner of CR 17 and Golfview Cutoff Rd, north on Golfview Cutoff Rd to Aldo Rd. east on Aldo Rd to Lake Walk-in-the-Water Rd, north on Lake Walk-in-the-Water Rd to Hwy 60, east on Hwy 60 to CR 630, west on CR 630 to CR 17, North on CR 17 to corner of Golfview Cutoff Rd.)

Hachel Hill CPCD

(Corner of US Hwy 17 and US Hwy 98 in Ft. Meade, north on US Hwy 17 to CR 640, east on CR 640 to Sinkhole Rd, East on Sinkhole Rd to Surveyors Lake Rd, east on Surveyors Lake Rd then northeast to corner of ABC Rd and Marsh Rd, east on ABC Rd to US Hwy 27, south on US Hwy 27 to US Hwy 98, west on US Hwy 98 to US Hwy 17 in Ft. Meade.)

Bartow/Alturas CPCD

(Corner of US Hwy 17 and CR 640, north on US Hwy 17 to Hwy 60, east on Hwy 60 to US Hwy 27, south on US Hwy 27 to ABC Rd, west on ABC Rd to Marsh Rd. southwest along a line to Surveyors Lake Rd, west on Surveyors Lake Rd to Sinkhole Rd, west on Sinkhole Rd to CR 640, west on CR 640 to US Hwy 17.)

Highland Park CPCD

(Corner of Hwy 17 and Golfview Cutoff Rd, north on Golfview Cutoff Rd to Aldo Rd, east on Aldo Rd to end. Due east along a line from Aldo Rd, to Lake Walk-in-the-Water Rd, north on Lake Walk-in-the-Water to Hwy 60, west on Hwy 60 to US Hwy 27, south on US Hwy 27 to ABC Rd, east on ABC Rd to Hwy 17, south on Hwy 17 to Golfview Cutoff Rd.)

Mountain Lake/Dundee CPCD

(Corner of Hwy 60 and US Hwy 27, north on US Hwy 27 to a point due west of Lake Hatchineha Rd, east from US Hwy 27 to Lake Hatchineha Rd, east on Lake Hatchineha Rd to Polk/Osceola County line, south along Polk/Osceola County line to Hwy 60, west on Hwy 60 to US Hwy 27.)

Winter Haven CPCD

(Corner of Hwy 60 and US Hwy 98, north on US Hwy 98 to Polk Parkway, east on Polk Parkway to CR 540, east on CR 540 to US Hwy 17, north on US Hwy 17 to Central Ave, East on Central Ave to Dundee Rd, east on Dundee Rd to US Hwy 27, south on US Hwy 27 to Hwy 60, west on Hwy 60 to US Hwy 98.)

Auburndale CPCD

(Corner of Polk Parkway and CR 540, east on Polk Parkway to I-4, east on I-4 to US Hwy 27, south on US Hwy 27 to Dundee Rd, west on Dundee Rd to Central Ave, west on Central Ave to US Hwy 17, south on US Hwy 17 to CR 540, west on CR 540 to Polk Parkway.)

Haines City CPCD

(Corner of US Hwy 27 and due west of Lake Hatchineha Rd, north on US Hwy 27 to Polk/Lake County line, east along Polk/Lake

County line to Polk/Osceola County line, south and east along the Polk/Osceola County line to lake Hatchineha Rd, west on Lake Hatchineha Rd to Hwy 17, Due west on a line from Lake Hatchineha Rd to US Hwy 17.)

Green Swamp CPCD

(Corner of I-4 and CR 655, north on CR 655 to Hwy 33, north on Hwy 33 to Polk/Lake County line, east along the Polk/Lake County line to US Hwy 27, south on US Hwy 27 to I-4, west on I-4 to CR 655.)

Once you have accessed the CPCD group, you will be directed to request entry into the group. If you wish to become a member, click on the join link and I will receive an email indicating that you wish entry into that group. The coordinated psyllid control districts have been setup this way to control who has access to the information i.e., it is a closed group for members only. There is not a limitation to the number of groups you can join, so if you have groves located in multiple districts you can be a member of each group. One advantage to this technology is that any significant changes in district information can be relayed directly to all members of the group by email at the same time.

If you don't wish to use this technology, you can always call me here at the office and I can provide you with the district coordinators contact information.

Citrus Leaf Freezing Point Temperatures for the 2009-2010 Season

With the onset of cooler temperatures, citrus trees cease active growth and become quiescent. This continued quiescence to lower temperatures results in a subsequent increase in citrus tree cold hardiness termed acclimation. Citrus trees continue through many changes during acclimation. These changes include: increases in sugars and amino acids with decreases in starch levels within plant tissues. Tissue moisture decreases along with increases in the stability and binding of cell water. These factors combine to increase the ability of citrus tissues to withstand the formation and presence of ice.

Citrus trees acclimated to cold temperatures have survive temperatures as low as 14°F. Acclimation is affected by exposure temperatures, scion cultivar, rootstock cultivar, rootstock/scion combination, tree nutritional status, crop load and water stress. Acclimation is dynamic and will change during the winter in response to warming exposure temperatures with a possible resumption of growth.

Leaf killing points vary in magnitude in response to the above conditions, although the predominate factor, would be exposure temperatures. Studies of citrus leaf killing point temperatures clearly indicate that citrus trees grown in more northern growing areas acquire greater acclimation than trees grown in growing regions further south. Trees grown in southern regions of the state are also more susceptible to active growth due to favorable growing conditions during the winter.

Non-acclimated citrus leaves will generally survive to temperatures of 24°F. New spring flush leaves formed in April will rarely survive temperatures of 31°F, by mid-May these leaves will have similar leaf killing points to mature leaves. Research studies indicated that citrus leaf killing points can range from 16°F to 24°F during the winter with a Satsuma cultivar reaching 14°F during one year. Field ob-

servations indicated that these leaf killing point values hold up in a number of freezes.

This year, as in past seasons, the citrus leaf freezing point temperatures are now available on the Florida Automated Weather Network (FAWN) under FAWN tools, in the cold protection toolkit, under the heading "determining your critical temperature" or at the following web address: http://fawn.ifas.ufl.edu/tools/coldp/crit_temp_select_guide_citrus.php .

This information is made possible from a grant from the Southwest Florida Water Management District. The purpose of this information is to give growers additional information on the amount of acclimation (cold hardiness) that citrus trees have acquired to date based on winter environmental conditions. This information can then be used to make informed decisions about the proper use of microsprinkler irrigation for citrus tree cold protection.

Pesticide News and Information

Treevix® Approved for Citrus

On November 4, 2009 the FDACS approved the registration of BASF's herbicide saflufenacil (Treevix®) to control broadleaf weeds in non-bearing and bearing citrus and nut trees. The EPA registration number is 7969-276. (FDACS PREC Agenda, 12/3/09).

Danitol® ULV with Oil

Registration SLN No. FL090003 (Danitol® ULV on citrus for Asian citrus psyllid) has been amended such that petroleum oil may be added at one to two quarts per acre as an adjuvant. (FDACS email, 11/25/09).

Pesticide Spray Drift

The EPA has released proposed guidance for new pesticide labeling to reduce off-target spray and dust drift. The new instructions will prohibit drift that could cause adverse health or environmental effects. Also, on a pesticide-by-pesticide basis, EPA will evaluate scientific information on risk and exposure based on individual product use patterns. These assessments will help the agency determine whether no-spray buffer zones or other measures such as restrictions on droplet or particle size, nozzle height, or weather conditions are needed to protect people, wildlife, water resources, schools and other sensitive sites from potential harm. In addition to the draft notice on pesticide-drift labeling, EPA is also seeking comment on a draft pesticide drift labeling interpretation document that provides guidance to state and tribal enforcement officials as well as a petition filed that asks EPA to evaluate children's exposure to pesticide drift and to adopt, on an interim basis, requirements for "no-spray" buffer zones near homes, schools, day-care centers, and parks. (EPA press release, 10/4/09).

Citrus Greening in Puerto Rico

The USDA APHIS announced that citrus greening organism has been detected in Puerto Rico, in the municipalities of Carolina, Ceiba, Culebra, and San Sebaastian. Inter-

state movement of citrus and other rutaceous host plants and their products are restricted. (ProMED-mail, 11/23/09).

Genetically Modified Crop Classification

Herbicide-tolerant and disease-resistant crops could soon be grown in Europe following the discovery of a technique its developers claim should be classified as non-GMO. Developed by Cibus, in San Diego, the technique induces the plant to change the genetic code in its own DNA to produce new traits. Unlike genetically modified crops, it does not introduce new genes from outside the plant species. A group of Belgian scientists reviewing the technology has already concluded that this crucial difference meant the technique could be considered outside the scope of the EU Directives on GMO crops, though they added that the final decision was "ultimately a matter of political and legal choices." Cibus president, Keith Walker, believes the technology is exempt under existing EU regulations. "There is a consensus that it is not GMO technology under the classic transgenic terminology," he said. "Already, the U.S. Department of Agriculture has ruled it is not." If Europe were to follow suit and classify the technology as conventional breeding, that would pave the way for traits similar to those being developed for genetically modified crops, such as drought and herbicide tolerance, to be introduced. (Farmers Weekly Interactive, 11/18/09).