

IFAS Extension

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Institute of Food and Agricultural Sciences

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Flatwoods Citrus

Vol. 13, No. 12

December 2010

Dr. Mongi Zekri Multi-County Citrus Agent, SW Florida

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Previous issues of the Flatwoods Citrus newsletter can be found at: http://irrec.ifas.ufl.edu/flcitrus/ http://citrusagents.ifas.ufl.edu/agents/zekri/index.htm

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Get Familiar with the

CITRUS HEALTH MANAGEMENT AREAS (CHMA's)

It is now online: <u>http://www.crec.ifas.ufl.edu/extension/chmas/index.htm</u> See page 7 for more details

International Research Conference on Huanglongbing (HLB) January 10-14, 2011, Orlando Registration started on Sept. 1, 2010; Registration fee: \$350. Registration/Abstract Submission: www.irchlb.org

Annual Certified Pile Burners Course in SW Florida Thursday, 17 February 2011, 8:30 AM – 4:30 PM.

The Florida Division of Forestry and University of Florida Cooperative Extension Service will be conducting a Certified Pile Burners Course that will show you how to burn piles *legally, safely and efficiently*. <u>Most importantly, it could save a life</u>. If you burn piles regularly, don't put off registering for this training. Don't wait. **The number of trainings offered and attendance at each training is LIMITED.** This training will be held from 8:30 AM till 4:30 PM at the Southwest Florida Research and Education Center located in Immokalee, Florida. **See pages 10 - 14**. **Registration starts at 7:30 AM. See below for more details and registration.**



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Flower Bud Induction Overview and Advisory

http://www.crec.ifas.ufl.edu/extension /flowerbud/index.htm



Gene Albrigo, Horticulturist Emeritus Citrus Research & Education Center, Lake Alfred, FL CURRENT FLOWER BUD INDUCTION ADVISORY #1 for 2010-2011-11/18/10

This is a fortnightly service to our citrus growers posted on the CREC website. The indicated Expert System on intensity and time of bloom can be accessed anytime at the designated Web Site. Overview of flower bud induction in Florida -Citrus flower bud induction starts in the fall and usually is completed by early January. Low temperatures first stop growth and then promote induction of flower buds as more hours of low temperatures accumulate (below 68 degrees F). A period of high temperatures in winter can then initiate bud differentiation which after sufficient days of warm springtime temperatures leads to bloom. The meteorologists predict that this winter in Florida will be an ENSO-La Niña year, above average temperatures and lower than average rainfall. Under these conditions, enough hours of low temperatures below 68 degrees F. usually accumulate to induce an economic level of flower buds. Conditions that can interfere with good flower bud induction include: 1) several warm periods interrupting the induction process or 2) the previous crop was exceptionally high or 3) leaf loss

from hurricanes, freezes or other causes (canker) were excessive and tree recovery was not complete. Excessive leaf loss leads to low carbohydrate levels in developing buds which reduces their ability to become flower buds. Except for a few trees with freeze damage, none of these adverse conditions appear to be in play for the coming season's flower bud induction. Under normal Florida weather conditions but with a moderate to heavy previous crop, sufficient flower bud induction should be achieved when total accumulated hours of low temperatures exceed 800 hours below 68 degrees F. If the crop load is light, sufficient flower bud induction may occur after 700-750 hours of accumulated low temperatures. A warm period of 7 to 12 days, with maximum temperatures > 80 to 85 degrees F., can trigger growth (bud swelling) if a minimum total hours of low temperatures have accumulated (300-400 hours below 68 degrees F). Later in the winter when the accumulated cool temperature induction hours are high, fewer days and lower daytime highs (75 degrees F.) are required in a warm period to stimulate growth of buds. Weather information relative to Florida citrus flower bud development for the current and several previous years (back to 1998) can be obtained from the Florida Automated Weather System (fawn.ifas.ufl.edu) for locations near you. An 8 day forecast from the National Weather Service predicts Florida weather for several sites around the citrus belt for the next week. Find this information at:

http://www.nws.noaa.gov/mdl/forecast/text/state/FL .MRF.htm. This is an easy way to see if a warm period, which could trigger flower bud growth, is predicted for your specific area in Florida. Some flower buds will be induced in the range of 300 to 450 accumulated hrs < 68 degrees F. Warm events just after these levels of induction result in weak flowering intensity, and therefore many buds remain that can be induced by later cool periods, or these buds may sprout as vegetative shoots if warm weather continues and the trees are well watered. The first situation results in multiple cohorts of flower buds

developing to different bloom dates. The second condition leads to low flowering-fruit set and excessive early spring vegetative growth. During the years from 1963 to 2003, multiple blooms occurred in over half of the years. Historically, the time period in which an early warm period (7-12 day) can lead to an initial low number of buds growing and flowering is roughly mid-November to mid-December. Then after more cool temperatures additional flower buds are induced and a later warm period starts their growth and repeats of this process result in multiple blooms. Presently, the only management tool available to eliminate or reduce the chance of multiple blooms is sufficient drought stress to stop growth. This water stress may be provided by stopping irrigation well before these predicted warm periods occur. If the warm periods(s) are of the typical 7 to 10 day duration, a coincident short period of drought stress will have little impact on current crop development or guality. Sufficient drought stress may be interpreted as leaf wilt observed by 10 or 11 am, but leaves recovering by early the next morning. If no rains interrupt a drought stress condition in citrus trees, buds will not grow in response to high temperatures. If a warm period has passed, trees again can be irrigated to minimize current crop stress. Although no weather prediction is guaranteed, rains in the winter usually come on the fronts for cool periods. Sufficiently cool temperatures after a cold front rain will usually prevent growth even though soil moisture is adequate for growth. Since winter rains usually occur just before cool temperatures, the chances that drought stress will prevent an early flower bud differentiation event are reasonably good for many warm periods. Even so, growers in some growing districts have often found it difficult to maintain winter drought stress.

In the shallow soils of bedded groves, it is relatively easy to create sufficient water stress to suppress growth by withholding irrigation for a few days if no rains occur. In deeper, sandy soils, 2 or more weeks without irrigation or rainfall may be required. To minimize the time required for soil to dry sufficiently to initiate water stress, the soil should be allowed to dry out by mid-November so that trees show wilt by mid-day. For bedded groves, minimum irrigation can then be applied at low rates as needed until a weather prediction indicates a warm period is expected. At this time, irrigation should be shut down. For deep sands, the soil needs to be dried out and kept nearly dry below 6 to 8 inches of depth until at least Christmas so that no growth can occur. Minimum irrigations that re-wet perhaps the top 6 to 8 inches of the root zone may minimize excessive drought, while allowing quick return to a water stress condition if a high temperature period is forecast. Soil moisture monitoring can help to achieve these goals. Prolonged late-fall, early-winter drought may be risky for 'Hamlin' or other early maturing cultivars not yet harvested that tend to drop fruit near harvest. In recent studies, Valencia trees in Central Florida have had good flowering and no apparent impact on current crop when irrigation was stopped in early December and resumed in the Spring. Much of what has been stated above has now been incorporated into a 'Flowering Expert System for Florida Citrus'. The system is available on-line: http://orb.at.ufl.edu/DISC/bloom. Additional advisories will follow this preliminary one, roughly bi-weekly) and update the reader on accumulating hours of related cool or warm temperatures and other weather effects on flower bud induction. Methods for enhancing (urea or PO3 sprays) or reducing (GA3 sprays) flowering intensity as conditions and cultivars dictate will be discussed in later advisories. Read the archived advisories from previous years (link at top of this page) for more background.

Please remember when warm temperatures are predicted (mid-80s or higher) for the southern areas (Sebring south) by the last week in December to the first week of January, you should consider applying urea or phosphite (PO3) within the first 3 to 4 days of the warm weather to groves in this area. These products are recommended at 25-28 lbs N as urea or 1½ -2½ quarts (high to low % product) of a phosphite salt per acre to increase bloom.

COLD HARDINESS AND COLD PROTECTION

Two major environmental factors in Florida citrus that regulate cold hardiness are temperature and water.

At 55° F, citrus plant growth slows. As temperatures remain below 55° F, citrus trees will continue to acquire acclimation to these cooler temperatures. This process is reversible during warm winter periods, and de-acclimation (loss of acclimation) can occur. The greatest amount of citrus acclimation occurs during consistently cool fall and winters. Once de-acclimation occurs citrus trees will generally not re-acclimate to the same level prior to the onset of de-acclimation.

Irrigation and fall/winter rainfall can have a pronounced effect on the citrus acclimation process. Drought induced stress has been shown to increase the tolerance of citrus trees to freezing temperatures when compared to well watered or over watered citrus trees in Florida. However, excessively drought stressed trees are more susceptible to freeze damage.

Critical Temperatures for Florida Citrus

It is very important to know the critical temperature at which freezing temperatures can damage citrus. Minimum temperature indicating thermometers are a wise investment for any grower concerned with freeze/frost protection. Thermometers should be installed in the coldest grove locations. They should be placed at a height of 42 inches (4.5 ft) on a stand, sheltered at the top and facing north. In citrus trees, there can be a great deal of variation in the minimum temperature at which plant damage will occur.

The reference temperature and duration for the initiation of the freezing process in round oranges is 28° F for four hours. Tangerines and fruit with smaller mass would receive freeze damage after shorter durations, while grapefruit would require longer durations.

Minimum temperatures of 26° F will damage fully mature, harden-off leaves that have not received any acclimation. Minimum temperatures of 30° F can significantly damage unhardened new flush leaves. Leaves that have received extensive acclimation have been shown to survive temperatures as low as 20° F in Florida.

Protecting citrus trees from cold damage

Cultural practices can have a major influence on the cold hardiness of citrus trees. A clean, hard-packed soil surface intercepts and stores more solar radiation during the day and releases more heat at night than a surface covered with vegetation or a newly tilled area. Irrigation should be applied minimally during the fall and winter. Reducing irrigation results in an increase in the cold tolerance of citrus trees and enhances tree stress resulting in an increase in the formation of flower buds. Excessive application of nutrients should be avoided late in the fall especially with young citrus trees. Heavy hedging or topping during the winter can reduce citrus cold hardiness by reducing canopy integrity that would trap heat released by the soil. This should be avoided.

Water from micro sprinkler irrigation protects young trees by transferring heat to the tree and the environment. The heat provided is from two sources, sensible heat and the latent heat of fusion. Most irrigation water comes out of the ground at 68° to 72°F, depending on the depth of the well. The major source of heat from irrigation is provided when the water in the liquid form changes to ice (latent heat of fusion).

As long as water is constantly changing to ice, the temperature of the ice-water mixture will remain at 32°F. The higher the rate of water application to a given area, the greater is the amount of heat energy that is applied. When expecting a freeze, turn on the water early before the air temperature reaches 32°F. Remember that in cold pockets, the ground surface can be colder than the air temperature reading in a thermometer shelter. Once irrigation has begun, the system must run for the duration of the time plant temperatures are below the critical temperature. Growers are recommended to use the information at the FAWN website (http://fawn.ifas.ufl.edu) to determine when it would be safe to turn off or on their micro-sprinkler irrigation system. For more details, go to http://edis.ifas.ufl.edu/HS179, http://edis.ifas.ufl.edu/CH182, http://edis.ifas.ufl.edu/CH054

In bedded groves to provide additional cold protection, water should also be pumped high in the ditches the day before and during the time of freezing weather.



FAWN (Florida Automated Weather Network)

Go to http://fawn.ifas.ufl.edu/

Click on Tools, then click on Cold Protection Toolkit or go directly to

http://fawn.ifas.ufl.edu/tools/coldp/

Then Select a Tool.

New! Graphic Forecast data for FAWN sites

National Weather Service (NWS) forecast data for next 96 hours. Updated hourly. Fruit Frost Station Forecasts

With the demise of the NWS agricultural program in April of 1996 the minimum temperature forecast and winter summaries went away. An opportunity now exists to once again provide temperature forecasts for the old Fruit Frost locations with the development of the Point forecast by NWS.

Minimum Overnight Temperature

Estimates based on the Brunt equation and the air & dew point temperatures at sunset. Forecast Tracker for FAWN sites

Plots the actual temperature and forecasted temperature for the previous twenty four (24) hours and the forecasted temperature for the next twenty four (24) hours in order to show how well the forecast is tracking the actual temperature. The Forecast Tracker is easy to use with a drop down menu to select the desired FAWN site.

FAWN does not make weather forecasts, but utilizes the National Weather Service products, especially the pin point forecasts. For more information see **JETSTREAM**, an online weather school, Pinpoint Forecasts.

Evaporative cooling potential

Determining the risk of using irrigation for cold protection, and see the risk calculated at FAWN stations.

There is always a risk when using water systems, micro-sprinkler or conventional sprinkler, for cold and/or frost protection. Low humidity and wind can produce evaporative cooling which can chill plant surfaces to the wet bulb temperature. Dry and windy conditions can result in wet bulb temperatures 5F to 6F degrees lower than air temperature. Therefore, wetted plant surfaces that experience evaporation would be 5F to 6F degrees cooler than air temperature. Evaporative cooling may result in plant damage when water is used for cold protection during dry windy conditions. Evaporative cooling should always be taken into consideration.

It is possible that, on nights when temperatures are close to critical levels, introduction of water could produce more damage than would result if no action was taken!

Wet-Bulb Based Irrigation Cutoff Temperature

The safe cutoff temperature based on current FAWN conditions.



Fax: (863) 674 4636 Cell: (239) 595-5494



Information for the next Certified Pile Burners Course:

The Florida Division of Forestry and University of Florida Cooperative Extension Service will be conducting a Certified Pile Burners Course on Thursday, **17 February 2011**. This course will show you how to burn piles *legally, safely and efficiently*. <u>Most importantly, it could save a life</u>. If you burn piles regularly, don't put off registering for this training. When the weather is dry, certified pile burners will receive priority for authorization to burn. Also, certified pile burners are allowed to burn up to two hours longer per day and get multiple day authorizations. Don't wait. The number of trainings offered and attendance at each training is LIMITED. This training will be held from 8:30 am till 4:30 pm at the South West Florida Research and Education Center located in Immokalee, Florida. Included are a registration form and program agenda. See http://www.imok.ufl.edu/ for directions to facility.

Registration is required to attend and class size is limited. To attend please send the following information (see form on next page):

- 1. Your full name (as wanted on your pile burning certificate).
- 2. Your mailing address (where you want the certificate mailed).
- 3. Your Division of Forestry Customer Number (It is the number that you are required to give the DOF when you call in for your burn permits. If you do not know it please call the local DOF office and ask them for it).
- 4. Your email address (if you have one) and/or contact phone number.
- 5. A check for \$50.00 made out to Hendry County 4-H.

The first fifty individuals to provide these five requirements will be registered; there will be a 7-day non refundable fee limit. If you do not make the training and did not contact our office at least one week before the class, you will not receive a refund. There will be a test at the end of the session. You must receive a grade of 70% or higher on the exam and demonstrate a proper pile burn with your local DOF office to become certified. Once you are certified it will be noted with your customer number, thus it is important for us to have the proper number. If you do not have a customer number the DOF office will set one up for you. Fill out the registration form on the next page and return as directed.

Sincerely,

Dr. Mongi Zekri Multi County Citrus Agent 863/ 674-4092 Cell: 239/ 595-5494 maz@ufl.edu

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Employment Opportunity – Affirmative Action Employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin. U.S. DEPARTMENT OF AGRICULTURE, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF FLORIDA, IFAS, FLORIDA, & M. UNIVERSITY COOPERATIVE EXTENSION PROGRAM, AND BOARDS OF COUNTY COMMISSIONERS COOPERATING.

REGISTRATION FORM Florida's Certified Pile Burner Program

February 17th, 2011 c/o Dr. Mongi Zekri UF-IFAS Hendry County Extension Office P.O. Box 68 LaBelle, FL 33975-0068

Please send this form and a check for \$50.00, payable to Hendry County 4-H to:

Dr. Mongi Zekri University of Florida IFAS Hendry County Extension Office P.O. Box 68 LaBelle, FL 33975-0068

Name

Mailing address

Email address

Phone Number

DOF Customer Number

Florida's Certified Pile Burner Training February 17th, 2011 UF-IFAS Southwest Florida Research and Education Center 2685 SR 29, Immokalee, FL 34142 See: http://swfrec.ifas.ufl.edu/ for directions

1. Opening Comments and Introduction	08:30 - 09:10
2. Fire Weather	09:10 - 09:50
3. BREAK	09:50 - 10:00
4. Smoke Management	10:00 - 11:20
5. Planning and Implementation	11:20 - 12:15
6. LUNCH (provided)	12:15 - 01:15
7. Open Burning Regulations	01:15 - 02:30
8. Safety	02:30 - 03:10
9. BREAK	03:10-03:20
10. Public Relations	03:20 - 04:00
11. Wrap Up & Test	04:00 - 04:30

Please bring a Pencil for the Exam!





Immokalee, staying on SR-29. SWFREC is about 2 mile North of Immokalee on the left.

Exit on SR-29 (Exit 80) and head North. Pass through Immokalee, staying on SR-29. SWFREC is about 2 miles North of Immokalee on the left.

Florida's Certified Pile Burner Training Frequently Asked Questions



Q: Why should I be a certified pile burner?

A: Certified pile burners are trained to burn piles *legally, safely and efficiently*. <u>Most</u> <u>importantly, it could save a life</u>. Also, when the weather is dry, certified pile burners will receive priority for authorization to burn by the Florida Division of Forestry (DOF). Also, certified pile burners are allowed to burn up to two hours longer per day and get multiple day authorizations.

Q: What is a Pile Burner Customer Number?

A: When you call the DOF for an authorization to burn, you will be assigned a personal customer number. This number references your information so it doesn't need to be gathered each time you call for an authorization. You must have your individual DOF customer number in order to be certified.

Q: Is there a test?

A: Yes, the test is 20 questions and open-book. You must receive a score of at least 70% to pass.

Q: What if I don't pass?

A: Very few people fail the test but if you do, you will be provided another opportunity to take the test at a later date. If you fail the second time, you must re-register and take the training again.

Q: Why do you ask for my email on the application form?

A: Email is the fastest and most convenient method to inform registrants of their registration status. If no email address is provided then all correspondence will be sent through the federal mail. This can take several days to relay messages and this may not be practical if changes are made to the course schedule or for last minute registrations.

Q: How much does it cost to register for the training?

A: Registration for the training is \$50 per person and includes lunch, training materials and testing.

Q: How long does my certification last?

A: As long as the person with the certification uses their number at least 5 times in a period of 5 years their certification will not expire under the current program.

Q: Will certified burners be notified if their certification expires?

A: Yes, notification will be sent out to them to let them know of their upcoming certification expiration date.

Q: Will I be certified at the end of the one day training?

A: No, you will need to follow the written instructions that you will receive from the Division to become certified. You will need to complete a simple burn plan, have it reviewed and approved locally by the DOF and also have the burn itself reviewed and approved by the DOF. From that point, the local DOF office will send the expected documentation to Tallahassee to recommend certification for you.

Q: Is there a minimum age to be a certified pile burner?

A: Yes, you must be at least 18 years old to take the test and be a certified pile burner.



Hendry County Extension • P.O. Box 68 • LaBelle, Florida 33975-0068 • (941) 674-4092

Flatwoods Citrus

TOPICS DISCUSSED IN THE FLATWOODS CITRUS NEWSLETTER -YEAR 2010-

	see
January	Scouting for pests, Current flower bud induction advisory, El Niño & the Winter of 2009-10, Importance of fertilizers-Let us talk about sulfur (S), Florida citrus producers approve research order in referendum, UF researchers find lone culprit behind greening, UF releases first citrus cultivar; sugar belle, Fresh fruit shipment procedures effective October 22, 2009, Shipping home grown citrus fruit from Florida, Certified pile burners course
February	Current Flower Bud Induction Advisory #7, Freeze Damage to Citrus Trees, Care of Freeze-Damaged Trees, Factors Affecting Bloom, Fruit Production and Quality, Certified Pile Burners Course, Importance of Fertilizers - Let's Talk About Calcium (Ca), Recommended Fertilizer Rates and Timing, Microsprinkler Irrigation & Fertigation, Fungicide Effectiveness
March	Current Flower Bud Induction Advisory #8 and #9, Pollination of Citrus by Honey Bees, Protecting Bees from Pesticides, Africanized Honeybees, Do Not Forget Alternaria Brown Spot, Do Not Forget Citrus Scab, Prioritizing Citrus Nutrient Management Decisions, Irrigation, Scale Insects are back, CHRP Compliance for 2009-2010, Information for the Certified Pile Burners Course, Citrus Mechanical Harvesting Field Day and Workshop, Kill Ants. Save Cash!
April	Low Volume Sprayer Contractors, Foliar Feeding, Sri Lanka Weevil, Importance of Sprayer Calibration, Importance of Fertilizer Spreader Calibration and Maintenance, Pesticide Recordkeeping Benefits & Requirements, Water District Agrees to Extend Deadline for U.S. Sugar Land Deal, The Twentieth Annual Farm Safety Day, Information for the Certified Pile Burners Course
May	USDA Confirms New Citrus Disease in Florida, Black Spot is Here in Florida, Citrus Black Spot Identified in Collier County, Stipulations for Movement of Fruit from EAN Regulated Areas for Black Spot, Greasy Spot, Citrus Rust Mites, One of the Many Psyllid Management Programs for Mature Citrus Trees, The Twentieth Annual Farm Safety Day
June	Black Spot- Management Recommendations in Brazil, SECC Summer Climate Outlook, Extended Range Forecast of Atlantic Seasonal Hurricane Activity, Florida Subtropical Peaches, Leaf and Soil Sampling and Analyses to Adjust Fertilizer Programs, Environmental Assessment for Biological Control Agent for Psyllid, Weed Control in Citrus Groves
July	Preparing for a Hurricane, Prepare and Stay Aware!, Pre-Storm Preparation, Lovebugs in Florida, Flooding Injury, Drainage, Importance of Fertilizers-Let Us Talk About Zinc (Zn), Florida Gulf Citrus Growers Association, Final Market News Bulletin for the 2009-2010 Season, 2011 International Research Conference on Huanglongbing (HLB)
August	Aquatic Weeds in Flatwoods Citrus Groves, Brown Rot, Other Phytophthora Fungal Diseases, Importance of Fertilizers-Let Us Talk About Manganese (Mn), Citrus Production-USDA Agricultural Statistics Service, Growers Laud Senate Effort to Fund Citrus Research, Citrus Research & Education Foundation (CRDF), La Niña Conditions are Likely to Develop During July-August 2010, Packinghouse Day & Postharvest Workshop
September	Bayer Agrees to Terminate All Uses of Aldicarb (Temik), Get Ready for Citrus Black Spot, Danger of Heat Stress, Algae, Where Florida's Water Comes From?, Fall Nutrition of Citrus Trees, USDA Confirms Citrus Disease in Texas and Louisiana, Fire Ants, Seminar Program- Citrus Management Strategies in a New Disease Era
October	Cooperative Dormant Spray Program Against Asian Citrus Psyllid In SW FL, Certified Crop Adviser Educational Seminar And CEU Session, Low Volume Applications For Psyllid Control Are Becoming Popular, Florida Citrus Production, Acreage, Tree Number, Keep An Eye On Citrus Canker
November	Cooperative Dormant Spray Program Against Asian Citrus Psyllid In SW FL, Certified Crop Adviser Educational Seminar And CEU Session, Low Volume Applications For Psyllid Control Are Becoming Popular, Florida Citrus Production, Acreage, Tree Number, Keep An Eye On Citrus Canker
December	Flower Bud Induction Overview and Advisory, Cold Hardiness and Cold Protection, FAWN (Florida Automated Weather Network), Certified Pile Burners Course, Winter Weather Watch, Gulf Citrus Growers Association Scholarship Foundation, Inc.



UF/IFAS Polk County Cooperative Extension Service

The 2010-11 version of the Winter Weather Watch will begin on Monday, November 15, 2010. Time is short so send in your subscription form to receive timely agricultural winter weather forecasts and information.



The 2010-11 edition of the Polk County Winter Weather Watch program will begin on November 15, 2010. The program provides growers with winter weather forecast

information specifically geared toward agricultural interests in West Central and Southwest Florida. The program provides subscribers with an unlisted phone number for (24 hour/7 days a week) access to daily weather forecasts. The zone forecasts are from the National Weather Service (NWS) and are listed on the automated phone menu, so you can select the products you are interested in. Forecasts include the zone forecasts, 6-10 and 8-14 day outlook forecasts. In addition to the forecasts we have special weather narratives provided as needed in the event of freezing temperatures and a weekly outlook. When freezing temperatures are predicted in our area additional updates will include the afternoon zone forecast and the modified sunset brunt minimum temperature equation. If this is not enough we will also provide the weekly citrus leaf freezing

temperatures and the 2010-11 Winter Weather Watch manual.

Subscriptions for the Winter Weather Watch program are only \$100.00 for the entire 4 month period (Nov 15 to Mar 15). The cost is about the same as one tank of gas for your pickup truck. You can subscribe to the Winter Weather Watch by completing and returning the enclosed "subscription form".

Forecast Schedule

The following schedule lists the products available



from the Winter Weather Watch. The times and specific days of week and the forecasted minimum temperature dictate when these forecasts products will be

updated. Our Winter Weather Watch area includes the following areas by county: Pasco, Hillsborough, Polk, Highlands, Hardee, Manatee, Sarasota, DeSoto, Charlotte, Lee, Glades, Hendry and Inland Collier Counties.

FORECAST SCREDULE

Forecast Product	Above 32 ⁰ F	32º-29ºF	Below 28 ⁰ F
Zone	Daily 8:30 a.m.	Daily 8:30 a.m.	Daily 8:30 a.m.
6-10 & 8-14 Day Outlooks	Mon/Wed/Fri 8:30 a.m.	Mon/Wed/Fri 8:30 a.m.	Mon/Wed/Fri 8:30 a.m.
Weekly Outlook	Friday 5:00 p.m.	Friday 5:00 p.m.	Friday 5:00 p.m.
Leaf Freezing Temperatures	Friday 5:00 p.m.	Friday 5:00 p.m.	Friday 5:00 p.m.
Special Weather Narratives	As Needed	Daily 4:00 p.m.	Daily 4:00 p.m.
Afternoon Zone	None	Daily 5:30 p.m.	Daily 5:30 p.m.
Sunset/Brunt	As Needed	As Needed	Daily 7:00 p.m.

2010 – 2011 WINTER WEATHER WATCH PROGRAM

NOVEMBER 15, 2010 TO MARCH 15, 2011 REGISTRATION FEE: \$100.00

It's once again time to register for the upcoming 2010 - 2011 Winter Weather Watch Program. Upon receiving your \$100.00 registration payment, you will be sent an unlisted telephone





number with which you can retrieve the latest <u>Ag</u> <u>Forecasts</u>, 24 hours a day. <u>Please do not give this</u> <u>number to others</u>. The *Winter Weather Watch Program* is funded by the registration fees to pay for telephone equipment rentals, long distance calls, repairs and our meteorologist.

2010 - 2011 Winter Weather Watch Program

NAME:	PHONE NUMBER:
COMPANY:	
MAILING ADDRESS:	
EMAIL ADDRESS:	
CITY:	ZIP CODE:

REGISTRATION FEE \$100.00

PLEASE RETURN THIS REGISTRATION FORM AND YOUR CHECK PAYABLE TO:

POLK COUNTY CITRUS ADVISORY COMMITTEE PO BOX 9005, DRAWER HS03 BARTOW, FL 33831-9005

Florida Gulf Citrus Growers Association



Florida Gulf Citrus Growers are good neighbors and good stewards of the land. They are keenly aware that they must carefully balance the needs of the environment and the needs of citrus growing. This delicate balance starts in the basic design

of the groves, and then to the use of the latest technology and the most progressive management practices. All these factors enable Florida Citrus Growers to be sustainable in this region. Growers carefully manage the water resources through state-ofthe-art low volume computerized irrigation systems, spraying water directly to the root zone. There are many other positive impacts that citrus groves have on the environment. Go to http://www.gulfcitrus.org/ and become a member or an associate member.

GULF CITRUS GROWERS ASSOCIATION SCHOLARSHIP FOUNDATION, INC.



Membership:

Membership in the Scholarship Foundation is open to all Gulf Citrus Growers Association (GCGA) members for just \$25 per year. Members are able to vote for and serve on the Board of Directors for the Foundation.

Donations:

Donations are a crucial source of funding for scholarship awards and may be made to the Foundation at any time during the year in any denomination, **regardless of membership status**. Checks should be made payable to the Foundation. For more details, please call the GCGA office at **863 675 2180**.

The GCGA Scholarship Foundation is a non-profit corporation operating under Section 501 \bigcirc (3) of the Internal Revenue Code. Contributions are tax deductible as allowed by law.



Gulf Citrus Growers Association Scholarship Foundation, Inc.

P. O. Box 1319, LaBelle, Florida 33975 (863) 675-2180 / Fax: (863) 675-8087 / Email: gulfcitrus@embargmail.com

About the Gulf Citrus Growers Association

The citrus growers of southwest Florida are committed to supporting education as a longterm investment in the future of our industry. The first Gulf Citrus scholarship was awarded in 1992 through the Gulf Citrus Growers Association, a trade organization representing growers in Charlotte, Collier, Glades, Hendry and Lee Counties.

The Gulf Citrus Growers Association Scholarship Foundation was established in 2000 as a non-profit entity to oversee the distribution of these awards. Scholarship applications are accepted throughout the year and are reviewed semi-annually by a Scholarship Selection Committee comprised of academic and industry members. The number and amount of awards vary depending upon the number of applications received and available funds.

Applicants who are not selected may submit a new application for consideration in the next selection cycle. Previous award winners may also reapply.

Scholarship Criteria

Preferred requirements for scholarships are as follows:

AA, BS, MS and PhD Degrees:

- Completion of all placement testing and a **declared major** in agriculture or related major.
- Completion of **12 credit hours** towards agriculture or related degree.
- Minimum overall grade point average of **2.5** for a BS degree; **3.0** for MS and PhD degrees.
- A demonstrated **commitment** to complete the degree at a state college, community college or university.

Applicants must complete the attached application, which includes a statement of release giving the selection committee permission to verify information submitted.

*****APPLICATION DEADLINES ARE DECEMBER 31 AND JULY 31*****



Gulf Citrus Growers Association Scholarship Foundation, Inc.

P. O. Box 1319, LaBelle, Florida 33975 (863) 675-2180 / Fax: (863) 675-8087 / Email: gulfcitrus@embargmail.com

Personal Data			
Name:	Studer	nt # or SS #:	
Home Address:			
City/State:	Zip:	Phone:	
Mailing Address:			
City/State:	Zip:	Phone:	
E-mail:			
Employer:			
Address:			
City/State:	Zip:	Phone:	
Educational Information	105 100		
College or University in which ye	ou are enrolled:		
Department / Degree Program: _			
I am working toward the following	ng: AA BS M	IS PhD	_ Other
Courses Taken in Major (complete	<u>ted):</u>		
Courses (in which you are curren	ntly enrolled):		
Total Credit Hours Toward Degr	ee: Cumulative Gra	de Point Average (GP	A):
Expected Date of Graduation:			

Scholarship Application

Please answer the following questions in complete sentences with as much detail as possible.

What are your career goals? _____

What is the potential value of your education to the citrus industry *in southwest Florida*?

I authorize the release of this application and any relevant supporting information to persons involved in the selection of recipients for Gulf Citrus Growers Association scholarships.

Applicant's Signature

Date

*****APPLICATION DEADLINES ARE DECEMBER 31 AND JULY 31*****

Please return this application with your official transcripts to:

Gulf Citrus Growers Association Scholarship Foundation, Inc. Dr. Mongi Zekri, Application Coordinator Hendry County Extension Office P. O. Box 68 LaBelle, FL 33975 Phone: (863) 674-4092 / Fax: (863) 674-4636 E-mail: maz@ifas.ufl.edu

FLATWOODS CITRUS NEWSLETTER EVALUATION FORM

If you have not done so, please take a moment to rate the quality and usefulness of the information presented in the Flatwoods Citrus newsletter. Please send back the form to: Dr. Mongi Zekri

University of Florida, IFAS Hendry County Extension Office P.O. Box 68 LaBelle, FL 33975 or e-mail it to maz@ufl.edu or fax it to: 863 674 4636. Thank you for your input!!!

Please circle or **bold** your answer

1	Did the information seem up to date and accurate?	Yes	No	Uncertain
2	Was the information delivered on time to be useful?	Yes	No	Uncertain
3	Was the information relevant to your situation?	Yes	No	Uncertain
4	Was the information easy to understand?	Yes	No	Uncertain
5	Have you had an opportunity to use the information?	Yes	No	Uncertain
6	Have you shared the information with someone else?	Yes	No	Uncertain
7	Overall, how do you feel about the Flatwoods Citrus Newsletter?			
S	Satisfied Neither Satisfied Nor Dissatisfied		D	issatisfied

8 **Do you have any suggestions that might improve the newsletter?**

(Please write in any comments)

9. How many years have you been using the Extension Service? _____ Years

10. What is your employment status?

Grower	Chemical Industry	Service Provider
Production Manager	Regulator	University
Consultant	Association	Other

We appreciate your reactions and the time you have given us. Thank you, and please contact us when we may be of service to you.

Flatwoods Citrus

☐ If you did not receive the *Flatwoods Citrus* newsletter and would like to be on our mailing list, <u>please check this box</u> and complete the information requested below.

☐ If you wish to be removed from our mailing list, <u>please check this box</u> and complete the information requested below.

Please send: Dr. Mongi Zekri Multi-County Citrus Agent Hendry County Extension Office P.O. Box 68 LaBelle, FL 33975

Subscriber's Name:			
Company:			
Address:			
City:	State:	Zip:	
Phone:			
Fax:			
E-mail:			-

Racial-Ethnic Background

American Indian or native Alaskan	White, non-Hispanic
Asian American	Black, non-Hispanic
Hispanic	

Gender

_Female

__Male