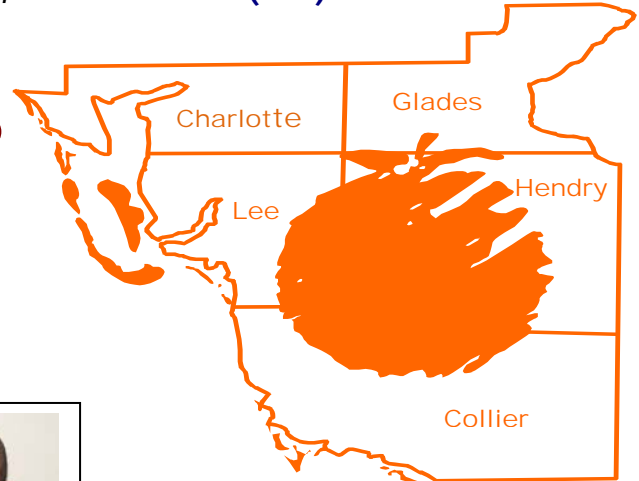


Hendry County Extension, P.O. Box 68, LaBelle, FL 33975 (863) 674 4092

Flatwoods Citrus



Vol. 21, No. 10

October 2018

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



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WORKSHOP

Date: October 17, 2018

Location: Southwest Florida Research and Education Center, Immokalee

Amiad University Irrigation Filtration University of Florida / Southwest Florida REC

October 17, 2018		
8:45 - 9:00	Welcome & Introductions	Jason Schwartz
9:00 - 9:15	Who is Amiad Today?	Jason Schwartz
9:15 - 9:30	Fundamentals of Filtration	Jason Schwartz
9:30 - 10:00	Filtomat Family Models & Applications	Jason Schwartz
10:00 - 10:30	Filtomat Basic Maintenance & Troubleshooting	Oscar Amaral
10:30 - 10:45	<i>Break</i>	
10:45 - 11:15	Sigma Family Models & Applications	Jason Schwartz
11:15 - 12:00	Sigma Basic Maintenance & Troubleshooting	Oscar Amaral
12:00 - 1:00	<i>Lunch + Q&A</i>	

Pre-registration is required. No registration fee and lunch is free. To reserve a seat, call 863 674 4092, or send an e-mail to Dr. Mongi Zekri at: maz@ufl.edu

Special Thanks to sponsors of the "Flatwoods Citrus" newsletter for their generous contribution and support. If you would like to be among them, please contact me at 863 674 4092 or maz@ufl.edu



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EL NIÑO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION

issued by

CLIMATE PREDICTION CENTER/NCEP/NWS
and the International Research Institute for Climate and Society
13 September 2018

ENSO Alert System Status: El Niño Watch

Synopsis: There is a 50-55% chance of El Niño onset during the Northern Hemisphere fall 2018 (September-November), increasing to 65-70% during winter 2018-19.

ENSO-neutral continued during August, as indicated by a blend of slightly above- and below- average sea surface temperatures (SSTs) across the equatorial Pacific Ocean (Fig. 1). Over the last month, the westernmost Niño-4 region was the warmest (latest weekly value was +0.5°C), while the Niño-3 and Niño-3.4 regions were weakly positive, with Niño1+2 remaining negative (Fig. 2). Subsurface temperature anomalies (averaged across 180°-100°W) were positive (Fig. 3), with an increase in above-average subsurface temperatures in the central Pacific and slight expansion of negative anomalies in the eastern Pacific (Fig. 4). Convection returned to near average over the Date Line, and was slightly enhanced over Indonesia (Fig. 5). Low-level westerly wind anomalies re-developed across the east-central and western Pacific, although they were only slightly evident in the monthly average. Upper-level wind anomalies were westerly over the eastern Pacific. Overall, the oceanic and atmospheric conditions reflected ENSO-neutral.

The majority of models in the IRI/CPC plume continue to predict the onset of El Niño sometime during the Northern Hemisphere fall and continuing through the winter (Fig. 6). The forecasters also favor El Niño formation during the fall, and are leaning toward the more conservative model guidance that indicates a weak El Niño event. The persistence of above-average subsurface temperatures and continuing flare-ups of westerly wind anomalies also support the eventual development of El Niño. In summary, there is a 50-55% chance of El Niño onset during the Northern Hemisphere fall 2018 (September-November), increasing to 65-70% during winter 2018-19 (click [CPC/IRI consensus forecast](#) for the chance of each outcome for each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Forecasts are also updated monthly in the [Forecast Forum](#) of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an [ENSO blog](#). The next ENSO Diagnostics Discussion is scheduled for 11 October 2018. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso.update@noaa.gov.

Climate Prediction Center
National Centers for Environmental Prediction
NOAA/National Weather Service
College Park, MD 20740



Information for the next Certified Pile Burners Course:

The Florida Forest Service and University of Florida Cooperative Extension Service will be conducting a Certified Pile Burners Course on **Wednesday, February 6, 2019**. This course will show you how to burn piles **legally, safely and efficiently**. Most importantly, it could save a life. 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 **Southwest Florida Research and Education Center, Immokalee, Florida**. Included are a registration form and program agenda.

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 Florida Forest Service Customer Number (It is the number that you are required to give the FFS when you call in for your burn permits. If you do not know it please call the local FFS office and ask them to create one for you).
4. Your email address (if you have one) and/or contact phone number.
5. A check made out to: Hendry County 4-H for \$50.00.

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 FFS 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 FFS office will set one up for you. Fill out the registration form on the next page and return as directed.

Sincerely,

Mongi Zekri

For Questions Contact: Dr. Mongi Zekri at maz@ufl.edu or 239-595-5494

Registration Form

Florida's Certified Pile Burner Program
Wednesday, February 6, 2019

Hendry County Extension Office
P.O. Box 68, LaBelle, FL 33975
(863) 674-4092

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

Mail to: Dr. Mongi Zekri
Hendry County Extension Office
P. O. Box 68
LaBelle, FL 33975

Name

Mailing address

Email address

Phone Number

Florida Forest Service Customer Number, <https://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/Field-Operations/County-Foresters/Find-a-County-Forester>



Florida's Certified Pile Burner Training

Wednesday, February 6, 2019

Location: Southwest Florida Research and Education Center

2685 State Road 29 North, Immokalee, FL 34142

(239) 658-3400

All Times Are Local

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. Open Burning Regulations	11:20 – 12:15
6. LUNCH (provided)	12:15 – 01:15
7. Planning and Implementation	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!



Location & Contact Information

**Location: Southwest Florida Research and Education Center
(Immokalee IFAS Center)**

2685 State Road 29 North, Immokalee, FL 34142 (239) 658-3400

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

Office Phone: 863 674 4092

Cell: 239 595 5494

E-mail: maz@ufl.edu



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*. Most importantly, it could save a life. Also, when the weather is dry, certified pile burners will receive priority for authorization to burn by the Florida Forest Service (FFS). 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 FFS 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 FFS 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, and how long do I have to complete the certification from the time I finish the class?

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. You **MUST** complete the certification burn within a year of taking the class.

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 FFS to become certified. You will need to complete a simple burn plan, have it reviewed and approved locally by the FFS and also have the burn itself reviewed and approved by the FFS.

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.

Citrus Spray Programs for 2018-2019

Dr. Phil Stansly, UF IFAS- Immokalee

Asian citrus psyllid (ACP) control has been the main objective of Florida citrus growers for more than 10 years. In fact, 2018 marks the 10th year of cooperative area-wide dormant sprays in the Gulf region. While some may question the value of controlling ACP in trees with high HLB incidence, replicated field studies have shown the economic benefit of maintaining young flush pathogen free. Good ACP control starts with effective dormant sprays that will control ACP when populations are low, reducing ACP infestation and thus HLB infection of the all-important spring flush. Recommended products for winter applications are the pyrethroids (Danitol, Baythroid or Mustang) and organophosphates (dimethoate, chlorpyrifos, or Imidan). Best not to use pyrethroids or OPs again during the year except for border sprays which will reduce the need for whole block applications. Follow up with bloom sprays of labeled products to clean up stragglers. Subsequent whole block sprays should target ACP as well as other pests like rustmites and leafminers that may be problematic.

The table below offers alternative products for different months, depending on which pests are of major concern at the time. Neonicotinoids like imidacloprid, thiamethoxam or clothianidan have not been included as spray options due to their importance for controlling ACP in young trees. Superscripts after the pesticide name are now in sequential order to facilitate use and correspond to superscripts after pests controlled. Make choices based on: (1) effectiveness against ACP and other pests that may be problematic, (2) avoiding repetition of any insecticide mode of action in the interest of resistance management, and (3) rebuilding and maintaining an effective natural enemy complex in the grove. Confining the broad-spectrum insecticides (pyrethroids and organo-phosphates) to the dormant season and border sprays will help conserve these products as well as populations of beneficial insects and mites.



Spray Options for Citrus Pest Management

Dormant Season

Growing Season

Months	Nov-Dec	Jan	Feb-Mar	Apr	May - June	July - Aug	Sep-Oct	
Products	OP ¹ (e.g. Imidan, Dimethoate, chlorpyrifos)	Pyrethroid ² (Mustang Danitol Baythroid)	*Sivanto ³ *Movento ⁴ *Portal ⁵ *Micromite ⁶ Intrepid ⁷ Exirel ⁸ MinectoPro ⁹	Portal ⁵ Micromite ⁶ Exirel ⁸ Apta ¹⁰ Sivanto ³	Movento ⁴ Delegate ¹¹ Abamectin ¹² Knack ¹³ Exirel ⁸ Apta ⁹ Sivanto ³	Oil ¹³ Sivanto ³ Apta ⁹ OP ¹	Movento ⁴ Delegate ¹⁰ Apta ⁹ Sivanto ³	
Pests	ACP Weevils	ACP Weevils	ACP Mites Leafminer Weevils Scales Aphids	ACP Mites Leafminer Weevils Aphids	ACP Rustmite Leafminer Scales	ACP	ACP Rustmite Leafminer	
	ACP ^{+++1,2,3,4,8,9,10}	ACP ^{++5,11}	ACP ^{+6,12}	Leafminer ^{,6,7,8,9,11,12}	Rustmite ^{4,12}	Scales ^{4,13}	Aphids ^{3,4}	Mealybugs ^{3,4}

Insecticide alternatives for different times of the year based on pest controlled, efficacy against ACP (+++ excellent, ++ good, + fair) resistance management, conservation of beneficials and cost. Subscripts on products indicate pests controlled. Neonicotinoids and premixes not included. * Permitted on bloom



RESETTING IN CITRUS GROVES



For maximum efficiency of a production unit or grove, it is essential that every tree space is occupied by a healthy and productive tree. The average annual tree loss across the Florida citrus industry is currently around 6%. However, the extent of tree loss among individual groves can vary from 2 to 12% or more. Prompt replacement of unproductive trees means higher average long-term returns from the grove. If the declining trees remain in the grove, they keep getting weaker and yield less fruit each year and therefore the potential production capacity for the grove keeps declining even though production costs remain the same or even increase. It is very important to remove and replace such trees once it is clear that they are declining and they are no longer economically profitable. However, the reason for the decline should be determined and the condition should be corrected so that the replacement tree does not suffer the same fate.

Resetting should be considered if the tree is affected by an incurable disease such as blight, tristeza, or citrus greening. The resetting program should be conducted regularly rather than being delayed until serious losses in production have occurred. Resets should be planted with the same cultivar already in the block. Usually, it is more economical to keep resetting and not to push the entire block unless the cultivar and/or the tree spacing between rows is an undesirable one. Replanting in a mature grove seems justified only when a minimum of 8 ft between canopy driplines, (not from trunk-to-trunk), is available for canopy development of the new trees.

Replacement of dead, diseased, and declining trees in Florida citrus groves should always be an important part of the total production program. Today, tree replacement is more important than ever since overhead and production costs are dramatically increasing and a full stand of productive trees is essential to maximize production and profits. Freezes, blight, tristeza, *Phytophthora*, *Diaprepes*, and other pests and diseases have been particularly troublesome to Florida citrus growers for the last two decades. Citrus canker and greening have been devastating citrus groves since their introduction to Florida. Extensive tree losses coupled with the economic necessity of regular resetting have caused many growers to investigate ways to achieve new efficiencies in reset management.

NOT AN EASY TASK

Caring for young citrus trees is always troublesome because they require far more attention than larger, established trees. Florida's sandy soils, high summer temperatures, possible low winter temperatures, and scattered rainfall patterns complicate young tree care by forcing growers to protect, fertilize, and weed young trees regularly or face extensive losses. Young trees are more sensitive and more attractive to pests than mature trees due to high levels of vegetative growth. Therefore, special care is needed to insure pests are adequately controlled. Resets often present an even greater problem because trees are usually scattered throughout a block of larger trees, where they compete with large, full-grown trees for limited supplies of water, nutrients, and sometimes sunlight. Scattered resets frequently have serious weed problems since removal of the previous tree allows the area to receive more sunlight and provides more favorable conditions for weed growth. Since resets are usually scattered throughout a block of much larger trees, they are often difficult to locate and may be accidentally overlooked, resulting in inadequate care. Researchers, growers, and production managers are continually developing and improving methods of dealing with reset care.

PLANNING THE RESET PROGRAM

Grove managers should include tree removal and resetting as a routine part of the production program and assign special crews to deal specifically with young tree care. Planning ahead is very important because there is often a lag period between the time when replacement trees are ordered and when they are received. The wait time for the most desired rootstock and scion combination may be as great as 1 to 2 years, so replacement tree needs should be anticipated (when possible) and orders placed so they can be obtained when needed.

PURCHASING TREES

High quality reset trees are essential for maximum young tree growth. These young trees will be placed in an intensely competitive situation and may sometimes receive less than ideal care, so there is no room for compromising tree quality. Only healthy and properly sized trees from registered sources should be purchased since the initial cost is only a small fraction of the total cost of bringing such a tree into production.

SITE PREPARATION

The planting site should be well prepared. Weeds should be removed before planting. At a minimum, a non-residual herbicide should be applied to the reset area to get weeds under control before the young tree is planted.

Planting sites should be prepared well in advance of receipt of the trees. Ideally, trees should be planted on the same day they are received. Under no circumstances should trees be allowed to dry out. To minimize root desiccation and damage, they should be kept cool and moist until they are planted.

PLANTING THE TREES

Trees should be removed from the container and inspected for evidence of pot-binding. Make several vertical slashes about one inch deep through the root ball to encourage root branching. These slashes also allow the potting soil and roots to interface more closely with the soil in the planting site. It may be easier to cut some of the roots with pruning shears and pull them so they protrude from the ball.

A common problem with nursery trees is that the potting mixture is often highly organic. Such materials form areas, which are difficult to permeate with water after the young tree is planted in sandy soils and irrigated. The outer third of the organic ball should be removed so that the outer roots are exposed and can extend into the soil in which the tree is planted. Otherwise, the tree may not grow off quickly and satisfactorily.

WEED CONTROL

Keeping weeds under control during the establishment period of the reset is very important. Weeds compete with young citrus trees for water, nutrients, soil applied pesticides, and sunlight and

they must be properly controlled. Weed control around a reset site should be considered at pre-plant, early post-plant, and after the tree is established. Control of weeds prior to planting should be provided. If residual herbicides are used, they should be used at proper rates and at least 30 days in advance of planting so that residues do not impact reset growth. Prior to planting, contact or growth regulating herbicides may be preferred since they do not leave residual effects in the soil.

Weed control during the establishment period or approximately the first year is frequently quite difficult. Hand labor is scarce and expensive. Trunk damage by hoes or other cultivation equipment further compounds the problem. Chemical weed control provides at least a partial solution to the problem during this establishment period. There is now a fairly wide selection of residual herbicides available, which can be used around young trees. These materials should be applied at reduced rates. Be sure to read labels carefully for restrictions on the use of herbicidal materials around young trees.

After the reset has been planted for a year or more, modifications of the weed control program can be considered. Labels of materials under consideration should be checked carefully for restrictions prior to use. Some herbicides require reduced rates around young trees to minimize potential damage to resets planted among older trees. Specially modified herbicide applicators are available which enable the equipment operator to deliver reduced rates or a different herbicide mix around young trees.

To minimize herbicide contact to young trees, many growers apply a wrap or guard around the lower 12 to 16 inches of the tree trunk. When using these wraps be sure to monitor the protective structure for ants or other pests that may damage the tree trunk.

SPROUTING

Resets require periodic sprout removal. The use of tree wraps usually reduces the need for sprout control. Wraps often stay in place for up to 3 years. They should, however, be checked periodically for the presence of ants or fungal diseases. Reduced sprouting may be enough to justify their use. There are no simple answers to the use of wraps. Each situation is different and requires careful horticultural and economic consideration to arrive at the best procedure of maintenance, inspection, and management.

IRRIGATION & DRAINAGE

Young citrus trees require frequent but moderate water application for survival and proper growth. Competition for water is accentuated by nearby older trees or if weeds are allowed to grow close to the young trees. Anything that can be done to discourage competition for available water should be beneficial to the young tree. Irrigation systems should be in place before planting trees. Special modifications to the irrigation pattern by inverting the micro-sprinkler so that the surface wetting area is reduced or by increasing irrigation frequency can be good strategies to supply water for resets. However, the irrigation frequency necessary to sustain a mature grove is rarely adequate for good growth of newly-set trees, and young trees should be checked frequently to be certain they are receiving sufficient water. Drainage is as important as irrigation. Excess water must be removed from the rootzone. The concept of total water management must be practiced. If either system -irrigation or drainage- is not designed, operated, and maintained properly, then the maximum profit potential of a grove cannot be achieved. In Florida, both surface and subsoil drainage is necessary to obtain adequate root systems for the trees.

FERTILIZATION

Reset fertilization requires an extra effort beyond the needs of the bearing grove. Frequent application of water-soluble fertilizers with irrigation water (fertigation) can increase overall fertilizer use efficiency. If the grove is under a fertigation program, there is no need for special care in terms of nutrition for resets. Great care must be taken to ensure that proper rates of fertilizer materials are dispensed to prevent nutritional deficiencies or toxicities. Frequent light applications usually produce best results and lessen the danger of leaching but these practices need to be evaluated for cost

effectiveness. The use of controlled-release fertilizers for resets is a better option than making multiple trips throughout the year to scattered resets throughout large blocks.

PEST CONTROL

Because young trees have more frequent flushing cycles than mature trees, they are more attractive and sensitive to pests. Therefore, special care is needed to keep the citrus psyllid and leafminer under control to reduce their damage to new leaves and to reduce the severity of citrus canker and the spread of citrus greening. Relying solely on foliar contact insecticides for resets is not a good strategy. Soil-applied systemic insecticides (neonicotinoids) which provide 6-8 weeks of control are the most effective tool for managing psyllids and leafminers on resets. Currently, three neonicotinoid products are registered for use in citrus: imidacloprid (Admire, Alias, Couraze, Nuprid), thiamethoxam (Platinum), and clothianidin (Belay). Various generic formulations are also available. Resets should also benefit from foliar contact pesticides and from foliar nutrition used on mature trees.

GROVE PLAT

Since resets are usually scattered throughout a block of much larger trees, they are often difficult to locate and may be accidentally overlooked, resulting in inadequate care. An annually updated grove plat is probably the best method for assessing general grove condition and productivity. Plats can be prepared by hand or with the assistance of a computer. This can help determine the number of trees which will be needed and where they should be placed. Reset plats can be prepared to later help equipment operators locate newly-planted trees for periodic care.

Scattered resets in a citrus grove.





United States Department of Agriculture
National Agricultural Statistics Service



CITRUS COMMERCIAL CITRUS INVENTORY
PRELIMINARY REPORT

Cooperating with the Florida Department of Agriculture and Consumer Services
2290 Lucien Way, Suite 300, Maitland, FL 32751-7058
(407) 648-6013 · (855) 271-9801 FAX · www.nass.usda.gov/fl

All Citrus Acreage, by Variety and Survey Year, and Changes Between Surveys – Florida: 1990-2018

Survey ¹ year	Oranges ²	Grapefruit	Specialty ² fruit	Total	Change		Net change
					Gross loss	New plantings	
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
1990 ³	564,809	125,300	42,658	732,767	85,858	120,696	+34,838
1992.....	608,636	135,166	47,488	791,290	74,704	133,227	+58,523
1994.....	653,370	146,915	53,457	853,742	45,214	107,666	+62,452
1996.....	656,598	144,416	56,673	857,687	35,947	39,892	+3,945
1998.....	658,390	132,817	54,053	845,260	49,325	36,898	-12,427
2000.....	665,529	118,145	48,601	832,275	59,516	46,531	-12,985
2002.....	648,806	105,488	43,009	797,303	77,197	42,225	-34,972
2004.....	622,821	89,048	36,686	748,555	88,875	40,127	-48,748
2006 ⁴	529,241	63,419	28,713	621,373	150,805	23,623	-127,182
2008.....	496,518	56,881	23,178	576,577	66,924	22,128	-44,796
2009.....	492,529	53,863	22,422	568,814	19,918	12,155	-7,763
2010.....	483,418	50,189	20,430	554,037	25,109	10,332	-14,777
2011.....	473,086	48,990	19,252	541,328	21,769	9,060	-12,709
2012.....	464,918	48,191	18,384	531,493	19,383	9,548	-9,385
2013.....	459,311	47,656	17,673	524,640	15,115	8,262	-6,853
2014.....	452,364	45,922	16,861	515,147	21,041	11,548	-9,493
2015.....	441,628	43,962	15,806	501,396	26,094	12,343	-13,751
2016.....	425,728	40,316	14,077	480,121	31,365	10,090	-21,275
2017.....	405,832	36,084	13,057	454,973	36,863	11,715	-25,148
2018 ⁴	403,457	30,923	12,632	447,012	20,114	12,153	-7,961

¹ One year survey beginning in 2009.

² Temples in specialty fruit through 2006 survey, then included in oranges through 2016 survey. Reclassified as Royal tangerines in 2017 survey.

³ December freeze in 1989.

⁴ August and September hurricanes in 2004. October hurricane in 2005. October hurricane in 2017.

All Citrus Acreage and Trees, by County and Year of Inventory – Florida: 2015-2018

County	2015	2016	2017	2018	2015	2016	2017	2018
	(acres)	(acres)	(acres)	(acres)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)
Brevard.....	2,100	2,055	890	771	261.9	257.2	118.7	106.7
Charlotte.....	13,492	13,655	14,538	14,674	1,928.9	1,963.6	2,179.7	2,299.4
Collier.....	29,893	29,253	29,310	30,752	4,393.4	4,317.2	4,330.2	4,550.7
DeSoto.....	66,302	66,672	67,610	67,604	8,921.9	8,973.3	9,188.8	9,308.7
Glades.....	7,118	6,163	6,073	5,490	1,103.4	877.2	862.9	783.6
Hardee.....	47,121	44,476	42,813	44,347	5,954.3	5,692.5	5,551.9	5,849.5
Hendry.....	64,063	64,575	64,834	64,226	9,680.0	9,955.2	10,057.1	9,985.0
Hernando.....	766	693	489	437	92.5	84.8	60.4	52.8
Highlands.....	58,287	57,921	54,244	58,829	7,671.9	7,651.8	7,258.0	8,514.0
Hillsborough.....	5,902	3,963	3,653	3,038	739.7	514.6	476.6	401.1
Indian River.....	29,500	26,218	23,761	19,228	3,294.8	3,060.5	2,784.9	2,358.0
Lake.....	9,719	8,766	7,342	6,567	1,399.8	1,264.4	1,073.4	966.0
Lee.....	10,571	10,267	10,263	9,369	1,440.4	1,398.8	1,397.3	1,276.6
Manatee.....	16,974	16,231	15,666	14,658	2,208.7	2,110.7	2,029.8	1,960.2
Marion.....	1,063	1,047	1,043	986	128.0	125.0	125.0	123.3
Martin.....	3,219	2,530	2,126	1,995	555.5	447.0	385.0	361.7
Okeechobee.....	6,253	6,000	4,320	3,664	749.4	750.8	565.7	529.4
Orange.....	2,315	1,993	1,300	1,130	282.8	248.1	170.0	150.2
Osceola.....	8,502	8,172	8,089	6,925	1,066.2	1,033.0	1,023.6	887.5
Pasco.....	5,529	3,722	1,928	1,900	788.8	531.3	279.2	273.0
Polk.....	80,488	76,455	69,950	67,770	9,915.1	9,544.7	8,951.1	8,827.5
St. Lucie.....	29,559	26,744	22,355	20,562	3,973.8	3,615.6	3,057.2	2,842.3
Sarasota.....	1,197	1,173	1,134	1,047	142.5	143.1	139.4	129.0
Seminole.....	362	354	319	307	44.7	44.1	41.5	40.3
Volusia.....	785	784	703	570	85.9	86.9	81.1	65.6
Other Counties ¹	316	239	220	166	42.8	31.6	28.8	21.9
Total.....	501,396	480,121	454,973	447,012	66,867.1	64,723.0	62,217.3	62,664.0

¹ Includes Citrus and Putnam in 2015 and 2016; includes Alachua, Citrus and Putnam beginning in 2017.

Florida Department of Agriculture and Consumer Services

From the Florida Citrus Budwood Annual Report 2017-2018

July 1, 2017 – June 30, 2018
 Bureau of Citrus Budwood Registration
 Ben Rosson, Bureau Chief

Citrus Nursery Activity		The 2017-2018 annual report was based on information from 41 registered citrus nurseries. Nursery propagations were obtained from the amount budded on the budwood cutting reports, not including research facilities and out of state.						
		Nursery Size		Number of Nurseries				
3,896,085* nursery propagations in 2017-2018 from 41 active citrus nurseries *based on information reported	# of Propagations	2018	2017	2016	2015	2014	2013	
	<1,000	5	3	4	3	3	3	
	1,000-10,000	8	10	18	11	9	7	
	10,000-25,000	6	9	6	9	9	8	
	25,000-50,000	5	7	6	10	8	7	
	50,000-75,000	3	3	3	5	5	5	
	75,000-100,000	2	0	4	4	5	5	
	100,000-200,000	4	6	8	6	6	6	
	200,000-400,000	6	4	3	4	5	4	
	400,000-600,000	2	2	1	1	2	3	
	>600,000	0	0	1	1	0	0	
		41	44	54	54	52	48	

Top Rootstocks						
	2018	# Budded	2017	2016	2015	2014
1	Swingle	683,378	Swingle	Kuharske	Kuharske	Swingle
2	US-942	661,003	US-942	X-639	X-639	Kuharske
3	Kuharske	504,639	X-639	S/O	Swingle	Sour Orange
4	Sour Orange	418,407	Kuharske	US-897	Sour Orange	X-639
5	X-639	349,046	Sour Orange	SWG	Cleopatra	US-802
6	US-897	243,781	US-802	US-942	US-802	US-812
7	US-802	169,465	US-897	US-802	US-897	US-897
8	Own Root	163,966	UFR-04	US-812	US-942	Cleopatra
9	US-812	146,410	US-812	Cleopatra	US-812	Carrizo
10	Volkamer	119,276	C-35	UFR-04	C-35 Citrange	Volkamer
11	C-35	86,181	Cleopatra	Volkamer	Carrizo	US-942
12	UFR-04	71,231	Volkamer	Kinkoji	Volkamer	C-35 Citrange

Top Clones Propagated 2017-2018

Variety Clone	# Budded	Description
1 Valencia SPB-1-14-19	1,317,259	A Hughes nucellar line, entered budwood program in 1955. They have become the most popular Valencia selections in Florida.
2 Vernia UF 35-15	483,037	This is Dr. Bill Castle's nucellar selection planted at Ori Lee's, St. Cloud. The season is several weeks earlier than Valencia.
3 Hamlin 1-4-1	355,505	An old-line selection entered into the budwood program by Ward's Nursery in Avon Park. Still remains the most widely propagated early orange.
4 Bearss Le SPB-341-95-33	255,531	Entered into budwood program, 11/1/1966 from the Coca Cola Hodgson grove at Indiantown. Bearss is the major lemon selection grown in Florida. Season: July-December, summer bearing.
5 Sweet Orange UF OLL8	161,707	Restricted University of Florida selection – proprietary – Description will be provided by IFAS.
6 Valencia SPB-1-14-31	136,281	Similar to SPB-1-14-19 above.
7 WG Mandarin 911-C-37	127,334	Private (proprietary) selection.
8 Valencia F-55-4	122,199	The "55 series" are DPI nucellar lines. Trees are a little more vigorous than old line and Hughes nucellar selections. Fruit production has been slightly better than the Hughes selections.
9 Sweet Orange UF OLL4	63,886	Entered by Dr. Jude Grosser CREC, High quality processing sweet orange, also attractive for fresh market. Trees are more cold hardy and drought tolerant than Valencia, also has higher juice %, solids, and color than standard Valencia. This clone is repeating for exceptional yield and large fruit size.
10 Florida EV1 UF B7-70	49,634	Somaclone of Valencia (derived from tissue culture), matures in January/February with typical Valencia quality and characteristics. Less thorny than Valquarius. Previously cleaned up by CGIP via thermotherapy (Lisa Williams).
11 Meyer Le US	49,280	Received budwood from the USDA 1/26/1996 for this selection. It is a typical Meyer lemon type popular with homeowners. The fruit is round, yellow and more cold hardy than typical lemons. Season: Fruit throughout the year, mainly winter, November-March.
12 Harvey Le F-41-39	48,915	Entered into program in 1964 from seed from Kendall Groves, Goulds, FL. Fruit is reported to be similar to Eureka. Tree hardy, upright, thornless. Season: August-October.
13 Persian Lime SPB-7	45,811	The variety is also known as a Tahiti lime. Seedless, most likely a hybrid, fruit medium small, smooth, thin rind, juicy. Season: Everbearing, mainly winter, June-September.
14 Early Pride US 1-62-122	45,479	A USDA selection released for evaluation in 2009. Originates from Fallglo budwood that Dr. Jack Hearn had irradiated in 1991. Seedless (0-4 seeds) and slightly smaller sized fruit. Mid-October maturity thru mid-November.
15 Ruby Red Gft F-58-39	36,725	Excellent fruit yields with typical fruit shape and color of the Ruby variety. Deeper flesh coloration than Thompson, blush in peel, flesh fades to pink later in the season. Season: November-May.
16 Bingo UF 7-6-27	34,063	A completely seedless mandarin, very easy to peel fruit, small to medium size, red-orange external color, excellent flavor with high Brix and adequate acid to balance. November maturity. Greater tolerance of HLB than most of the other seedlings in this family.
17 Florida EV2 UF SF14W-65	33,254	Somaclone of Valencia (derived from tissue culture), matures in January/February with typical Valencia quality.
18 Sugar Belle UF LB8-9	28,904	Released in 2009 by Dr. Fred Gmitter, IFAS. It is a seedy variety resembling Mineola tangelo although smaller in size and having a late November maturity. Fruit color, flavor, tolerance to alternaria and earlier maturity are its main attributes.
19 Key Lime SPB-51-12	27,640	This is the main Key Lime clone utilized in nursery industry. Very small fruit, thin rind, smooth, moderately seedy 3-5, greenish yellow. Season: Ever bearing, mainly winter.
20 Flame Gft US 1-26-71	25,987	The fruit color is nearly as good as Star Ruby and has a decent blush. Holds flesh color well into season.
21 Owari Sat 874	23,818	This is the Glen St. Mary Nursery's Owari Satsuma selection that was entered into the budwood program in 2005 by Mr. Barwald of Flying Dragon Citrus Nursery.
22 W Murcott CGIP-122	19,786	Low seeded mandarin from Morocco that will be seedy in the presence of pollinators. W Murcott is different from the Murcott variety in flavor and earlier maturity. Season: November in FL.
23 Eureka Le DPI -	19,500	Virtually thornless, precocious, productive compared to other varieties, more sensitive to cold, less vigorous, shorter lived, incompatible with PT and hybrids, Season: Ever bearing, mainly August-December.
29 Tango CGIP-168	16,333	Developed by the University of California Riverside citrus breeding program (patented). This is a seedless version of the W Murcott achieved by irradiating budwood.

FLATWOODS CITRUS NEWSLETTER EVALUATION FORM

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 **Fax to 863 674 4636** or E-mail to maz@ufl.edu Thank you for your input!!!

Please circle or **bold** your answer

- | | | | |
|---|------------------------------------|----|--------------|
| 1 Was the information 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? | | | |
| Satisfied | Neither Satisfied Nor Dissatisfied | | Dissatisfied |

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?
- | | | |
|--------------------------|-------------------------|------------------------|
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| _____ 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

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Multi-County Citrus Agent
Hendry County Extension Office
P.O. Box 68
LaBelle, FL 33975

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__ Asian American

__ Hispanic

__ White, non-Hispanic

__ Black, non-Hispanic

Gender

__ Female

__ Male