



NURSERY • CITRUS • GOLF COURSE

GREEN-UP NEWS



By Dana Venrick, Commercial Horticulture Agent II

Bi-Monthly Newsletter

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FOLIAGE FORUM

4 CEUs

Tuesday, December 6, 2005

9:00 a.m. – 3:00 p.m.

Pierson Lions Club

143 W. First Avenue, Pierson

9:00-9:30 IPM and Control of Pests in Ferneries and Nurseries Dr. Jennifer Gillett, Assistant Professor and Assistant Program Director of IPM with the Entomology Department of the University of Florida, will discuss the latest in Integrated Pest Management strategies and methods. 0.5 CEU Private/O&T

9:30-10:00 Practical Control Methods for Insect and Disease Problems in the Field Rik Davis, with the Central Florida Fern Co-op, will talk about use of some of the latest pesticides to control insects, mites and diseases and will tell how to avoid pest resistance. 0.5 CEU Private/O&T.

10:10-10:40 Nursery Crop Insurance Overview Jeff Albritton, General Manager of Stallings Crop Insurance will present a program highlighting the costs and benefits of crop insurance. Travis Tucker, Sales Agent, will also assist.

10:40-11:30 Psyllids and the Devastating Citrus Greening Disease Susan Halbert, Taxonomic Entomologist with FDACS/Division of Plant Industry will talk about the spread of Citrus Greening Disease in Florida and the psyllid vector and the hosts, to include citrus, orange jasmine (coffee), limeberry and *Fortunella*, spp (Kumquat). Control strategies will also be discussed 1.0 CEU Private/O&T

1:00 – 3:00 Train the Trainer Become certified to train your employees. New requirements of the Florida agricultural Worker Safety act and WPS training for farms, forests, nurseries and greenhouses will be presented. 2 CEUs Private/O&T/Forestry/Row Crops/Ag Research

INSIDE THIS ISSUE

Down Citrus Lane.	2
Citrus Greening Disease.	3
Fabric Containment Stops Encircling Roots.	3
Rating Cathedral, Mellenium & Highrise Oaks.	4
Alternate St. Augustinegrass. . . .	4
What is Hardening-Off.	5
Product Review.	5

FNGLA MEETS

Wednesday, December 7, 2005

The next meeting of the Central East Coast Chapter
of FNGLA will be at

The SNPJ LODGE

Located at

421 N. Samsula Dr.

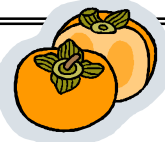
(1.6 miles north of S.R. 44 in Samsula).

Meet & Greet at 6:00 PM

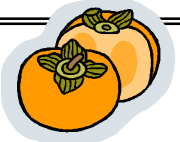
Dinner at 7:00 PM

R.S.V.P. Curtis Davis

(407) 322-5133



DOWN CITRUS LANE



Canker Compliance Agreement Number Must be on Trip Tickets

Starting immediately , all trip tickets for citrus hauling must have the grower Compliance Agreement number on them. This FDACS way of assuring that all growers have submitted Compliance Agreements. The latest agreements are now available in three different formats, each of which are acceptable. If you have not received forms and instructions, go to the FDACS official web site: www.doacs.state.fl.us/canker/index.htm Or call Olive Mackey in the Regulatory office in Tavares at 352-253-4547.

The enforcement of the new rules will be phased in through March 15, 2004 with present agreements enforced through that date (or the new signed agreement). This agreement must be renewed every year prior to the harvest season (between August 1 and October 31).

As part of the Compliance Agreement, every grower, agent and caretaker must have a detailed business Plan in place.

The compliance agreement form can be found at:

<http://www.doacs.state.fl.us/onestop/forms/08316.pdf>

The Business Plan can be found at

<http://www.doacs.state.fl.us/pi/canker/pdf/bizplan.pdf>

As part of the Compliance Agreement Business Plan, training programs (of 2 hours duration) are being held.

Call 1-800-282-5153 for information or check at

<http://www.doacs.state.fl.us/pi/canker/pdf/ccepctraining.pdf>.

Part of the Business Plan involves self-inspection.

Growers need to inspect their own groves as part of the canker eradication program.

Citrus Greening Disease Hits Florida

*Thanks for information from Dr. Mongi Zekri, UF
and Susan Halbert, FDACS*



Citrus Greening Disease has been found in Southeast Florida from Miami to Ft. Pierce. Now is the time to learn about this deadly disease.

Citrus greening is caused by a systemic phloem-inhabiting bacterium, *Candidatus liberobacter*. The African form causes symptoms under cool conditions while the Asiatic form expresses symptoms under warm conditions. Nearly all citrus species and some citrus relatives can be affected, including kumquat and orange jasmine/"coffee" (*Murraya paniculata*). sweet orange and mandarins are the most susceptible. Lemons, grapefruits and pummelos are moderately susceptible. Mexican lime, trifoliolate orange, citranges and citrumelos are more tolerant, often expressing foliar symptoms but little twig dieback.

Early symptoms usually appear on sections or branches of the tree. Chlorosis symptoms, resembling zinc deficiency symptoms, spread and twig dieback leads to decline. Fruit becomes very small and lopsided, with the stem end often remaining dark green, and the seeds are aborted.

The citrus greening bacteria are transmitted by the citrus psyllid, which is found throughout the state. Once infected, psyllids are capable of transmitting the disease throughout their life.

The greening bacteria may infect one part of the tree but not another. Not all buds contain the disease. Young flush tissue is the most susceptible to infection as this is where the psyllid prefers to feed.

The best control of greening is to exclude it in the first place. When infections occur, it may take some time before symptoms are noticed. Look for chlorotic areas that are confined to a small part of the tree. Infected areas of the tree should be pruned out.

Methods for controlling the citrus psyllid are still being developed. Admire 2F and Provado 1.6F are pesticides registered for psylla. Parasites for psyllids are present in Florida but have not stopped the spread of citrus greening in the state.

Citrus greening may devastate citrus production in Florida if left unchecked. If young trees are infected, they often never produce.

Growers need to use tolerant varieties, destroy diseased trees, replant non-infected stock, and spray against the presence of psyllids in the grove. With the combination of efforts, citrus production will still be strong in Florida even with the presence of citrus greening disease.

Fabric Containment Stops Encircling Roots

According to research presented by Dr. Ed Gilman at the Tree In-Service training in Gainesville on October 13, 2005, fabric containment of tree roots is the only way to stop encircling roots. Encircling (girdling) of roots is a major reason for culling otherwise marketable trees.

One fabric system was originally marketed as Root Control Bags by Root Control, Inc. the company is now called the High Caliper Growing Systems™. The trademark Smart Pot name is now used on all products, with the Root Control Bag being re-named the Smart Pot – In ground.

Another company with a fabric system is Florida Cool Ring®. This company makes an air-root pruning container with fabric sidewalls and a non-woven fabric bottom that allows some rooting into the ground.

Rating Cathedral™, Mellenium™ and Highrise® Oaks.

Growing one of the new clonal cultivars of live oaks is becoming very popular. Not only are the tree forms consistent and uniform but the cost of pruning is reduced. In addition, these cultivars are easier to sell and bring a better price.

Let's look at some characteristics that might influence your choice of growing one (or more) of these cultivars.

Mellenium™ is a beautiful tree, but it is hard to root and is available in limited supply. Growing Mellenium™ may be the more difficult choice of the three because of these drawbacks.

Highrise® is relatively easy to root from tip cuttings in June or July and has the most upright shape of the three. It may be best suited where less tree spread is desired. However, the tree does not look as good as the other two cultivars at an early age.

Cathedral™ may be the best choice in many situations. It is relatively easy to root from tip cuttings in June or July and it looks good at an early age.

Dr. Gilman also reported that, in the several years of growing these oaks in-ground at the Gainesville Tree Research Unit, there was no difference in growth or appearance of trees grown with or without fertilizer. **Another reason to take it easy with the fertilizer bucket!**

So, if you have made a decision to grow oaks, how big should you grow them? Demand is highest for trees with 8 feet of clear trunk having an 8-inch caliper.

Remember, to grow your trees to be Florida Fancy or Florida #1. "Grades and Standards for Nursery Plants" is a key reference manual for your tree farm or nursery. It is an essential guide to what standards must be met in order to have a high demand, quality tree. This manual is available from FDACS Division of Plant Industry, P.O. Box 147100, Gainesville, FL 32614-7100. For price and information call 352-372-3505.

GREEN TURF



Alternate St. Augustinegrass Choices

Adapted from an article by Laurie E. Trenholm, Ph.D., Associate Professor, Environmental Horticulture UF "Lawn grasses for Florida: are You Stuck in Floratamville?"

Floratam St. Augustine is widely used, but is very coarse and has the least shade tolerance of cultivars tested. It requires at least 6 hours of sunlight daily (and prefers 8) to maintain color. Also, care must be taken when spraying herbicides (burn is common!) as many of them may say "not for use on Floratam".

So what are some alternatives that may be better?

Palmetto is a semi-dwarf with better drought and shade tolerance than Floratam but not as good as some of the dwarf cultivars.

Raleigh was developed at North Carolina State, so it has very good cold tolerance. It is often used in North Florida.

Classic is a new cultivar released by Woerner Turf. It appears to have better cold tolerance than most of the other cultivars. Shade tolerance has not been tested.

Delmar is a dwarf cultivar with smaller leaf blades and a dense growth habit. It has excellent shade tolerance and is one of the most cold tolerant varieties of St. Augustines.

DeltaShade is a new release with better shade tolerance than Floratam or Palmetto, but not as good as the dwarf types. It grows rapidly and persists well in trials to date.

Seville is another dwarf that grows well in shade. It's cold tolerance is almost as good as Delmar, grows densely, has small leaf blades and has a dark green color.

It appears that a number of choices may be preferable to Floratam St. Augustine. Enough information is now available to venture into unknown territory and try one of these promising new cultivars.

What is Hardening-Off?



From: Environmental Horticulture Issues by Celeste White, Orange County Commercial Horticulturist

Quality field-grown trees should be hardened-off, or cured, after harvesting. This hardening-off process lasts 3 to 4 weeks and it simply involves providing the tree with optimum irrigation during the few weeks after harvesting. After the tree is hardened-off, it is ready to ship to the landscape site. New roots that have begun to develop are ready to grow immediately into the landscape. This may sound like a simple idea but research has shown that hardened off field grown trees are a superior performer in the landscape. Research conducted from Florida to Italy continues to confirm that quality field grown trees outperform container grown trees in landscape settings. Research has shown that field grown trees use water more efficiently at planting (need to be watered less), establish faster after planting (start growing in your landscape faster), and when planted with container trees in a situation of limited water or irrigation will have dramatically higher survival rates. All of these results are from peer reviewed research that has been published in various trade journals.

The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition. All chemicals should be used in accordance with directions on the manufacture's label. Use pesticides safely. Read and follow directions on the manufacture's label.

PRODUCT REVIEW

Essential Plus ®

Many growers have reported positive results with the use of this biostimulant and rooting hormone from Growth Products. Much improved rooting of plants from cuttings in regard to rooting percentage and rooting time is one of the key findings. Other benefits reported include increased root mass and branching, chelation of micronutrients, neutralization of salt buildup, improved water absorption and retention in difficult soil-less media, adding organic matter to the soil, improved crop quality, deepened color of leaves, flowers and fruits and improved plant strength and longer shelf life of harvested crops. University trials at Iowa State show a 50% to 70% increase in seed germination and rooting with Essential Plus over both phosphorous and IBA products.

Essential Plus is derived from Humic Acid (Potassium humate), plant Extracts, simple and complex sugars, North Atlantic Kelp extract, Hydrolysed Organic Proteins, natural wetting agent (*Yucca Schidigera*) and carbohydrates. It has an agronomically correct ratio of Humic Acid to Seaweed (60:1). It also contains Gibberellic Acid and natural rooting extract.

For more information, Call Trish Miller at 561-585-0150 or 914-497-3315 or e-mail: tmiller@growthproducts.com



Volusia County Extension
3100 E. New York Avenue
DeLand, FL 32724

DATES TO REMEMBER

NOVEMBER

- 8 **OJ Weather School** – “How to Protect Your Citrus and Other Crops” Apopka: Mid FL. Research & Education Center 9:30 am – 12:30 pm. Lunch will be provided! Contact John Jackson or Kay Shields (352) 343-4101.
- 14 **CEU Days & WPS Standards** Apopka – 8:30 a.m., \$20.00 per 2-hour session. Call Celeste White (407) 836-7570.
- 16 **Heating Your Greenhouses & Severe weather Predictions** Apopka: Mid FL. Research & Education Center Call Betty Penalosa (407)836-7570.

DECEMBER

- 1 & 2 **Great Southern tree Conference** Gainesville, FL Contact FNGLA, 800-375-3642
- 6 **IPM, Crop Insurance, Citrus greening Disease & Train the Trainer** 9:00 a.m. See details on front page.
- 7 **Central East Coast FNGLA Meeting** See page 2 for details.
- 14 **Nursery BMP Workshop.** Apopka MREC. Contact Kay Shields (352) 343-4101.

JANUARY

- 10 **Florida Turfgrass Association Reginal Conference.** Contact FTGA (407) 291-9415.
- 19-21 **Tropical Plant Industry Exhibition(TPIE)** Ft. Lauderdale Contact FNGLA, 800-375-3642
www.tpie.org.

If you would like more information on upcoming programs or want to receive publications please call, fax, or e-mail me. All Extension Service programs and information are free and open to the public regardless of race, color, sex, age, disability, religion, or national origin.

Sincerely,


Dana Venrick
Extension Agent II – Commercial Horticulture