October 26, 2012

After a long hot summer, South Florida finally saw temperatures moderate with the passage of a frontal system in mid-October, which bought cooler drier air and saw night-time temperatures drop into the upper 50’s and low 60’s for the first time in many months.

Average high temperatures in most areas were in the med to upper 80’s with only Immokalee and some interior locations reaching the low 90’s. Lows ranged from mid to upper 50’s, 60’s and 70’s.

After the first few days of the month, October was much drier than September marking the beginning of the end of the rainy season. Most locations received between two to four inches of rain for the month. Fort Pierce was the exception recording over 5 inches. A number of foggy mornings helped keep diseases active.

FAWN Weather Summary

<table>
<thead>
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<th>Date</th>
<th>Air Temp °F</th>
<th>Rainfall (Inches)</th>
<th>Ave Relative Humidity (Percent)</th>
<th>ET (Inches/Day) (Average)</th>
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Some East Coast locations including parts of Miami-Dade, Broward and Palm beach Counties have received near record rainfall for the year.

Drier conditions are helping growers catch up on planting schedules. Planting has been greatly hampered by rains and wet weather in a number of areas particularly Homestead and the Glades. Strawberry planting is nearly complete around Plant City. Crops coming to market include cucumbers, eggplant, okra, tomatoes, watermelon and various specialty items. Winds and rain from Hurricane Sandy have lashed South Florida over the past two days particularly east coast locations raising concerns about continuing disease issues.

The National Weather Service forecast calls for conditions gradually improving over the weekend following the passage of Hurricane Sandy off the East Coast. By early next week, a big change in the weather pattern will be developing. A mid-level trough will continue to deepen over the central and eastern US, which will bring in much drier and cooler air to South Florida with the coolest air of the season thus far for Tuesday and Wednesday. In fact, temperatures Tuesday and Wednesday morning could range from around 50 along the west portion of Lake Okeechobee and the 50s elsewhere except lower 60s along the southeast coast.

For additional information, visit the National Weather Service in Miami website at http://www.srh.noaa.gov/mfl/newpage/index.html

Insects

Worms

Around Belle Glade, fall armyworm and corn ear worm numbers in sweet corn continue to be very high with new egg masses being found daily.

On the East Coast, growers and scouts report that worm pressure has been pretty high the last week or so with growers battling a mix of beet armyworm, fall armyworm, southern armyworm, corn ear worms, loopers and melonworms. Reports indicate that fall armyworm is getting into some peppers. Growers indicate pressure is sufficient to let you know pretty quickly how well your spray program is doing. Any deficiencies will be come quickly apparent.

Around Southwest Florida, worm pressure has increased (some respondents have called them horrible) and growers are finding all kinds on a variety of crops including southern, beet and fall armyworms, fruitworms, loopers and melonworms. Scouts report that worm eggs have been common the past few of days.

Reports from the Manatee County area indicate that worm pressure has been steady and worm numbers continue to be on the high side in pepper and tomato. Beet and southern armyworms can be found relatively easy and fruit worms have started to become a concern over the past two weeks.

Although armyworms are active year round in our area, numbers are typically highest from August through October as cooler weather to our north pushes migrating moths southward. Pheromone traps can help provide relative estimates of moth activity within an area.

Hosts include many vegetables, agronomic crops and grasses. Most armyworms go through five larval stages within 14 to 21 days (species and temperature dependent). Young caterpillars tend to congregate in the vicinity of hatching for about 24 to 48 hours, after which they migrate to different plants and/or feeding sites. Young worms scarify the leaves as they feed, leaving a thin, windowpane appearance. As they grow, their ability to consume plant tissue increases and they can chew large holes in leaves or strip an entire plant. Damage can be extensive.
The different armyworms are similar in color, size and markings and can be difficult to tell apart.

- The fall armyworm, *(Spodoptera frugiperda)*, is probably the most damaging Florida armyworm. It may be light tan to shades of gray or green. The head capsule is usually shiny black or brown, with a prominent yellow or white inverted Y marking on the front. The body has many black tubercles, or round, mole like structures. When fully grown, the caterpillar reaches 1 1/2”.

- The beet armyworm, *(Spodoptera exigua)*, is about 1 1/4” long when mature. The body is usually some shade of green but can vary, with prominent dark lateral bands running its full length. There is a single prominent black spot behind the head, about halfway up the side of the body and right above the second pair of true legs. Beet armyworms are often the most difficult to control.

- The southern armyworm, *(Spodoptera eridania)* is one of the more robust armyworms and is often called a "climbing cutworm." The mature larva can exceed 1 1/2" in length and can be either gray or pinkish. It strongly resembles the yellowstriped armyworm. The head capsule of the southern armyworm is usually yellow to orange in color. The lateral stripe on the side of the body is interrupted by a large dark patch at the beginning of the abdomen.

- The yellowstriped armyworm, *(Spodoptera ornithogalli)*, has a brownish head with a pale yellow inverted V on the upper front. It has distinct bright yellow lines on the top of the sides of the body. It has two rows of black triangle shaped markings running the length of the body. A thin white line runs lengthwise through each series of dark triangles. The yellowstriped armyworm is more common in north Florida.

- **Tomato fruitworm/corn earworm**: *(Helicoverpa zea)* Larval color is variable, ranging from very dark to light green or pink with alternating longitudinal dark and light stripes. The skin is covered with short sharp micro spines. Adults are active at night, with a 1-1/2 in. wing span. Males display a cream colored forewing with orange or olive cast, while females have a light yellow brown forewing with indistinct vertical lines. Eggs are waxy white and ribbed, with a flat base, and are deposited singly usually on lower surfaces of leaves adjacent to or near flowers. Eggs hatch in 2 3 days.

- **Cabbage or soybean looper**: *(Trichoplusia ni or Pseudoplusia includens)* Larva are pale green with white line alongside of body and only 3 pair of prolegs. Mature size 1 – 1 1/4 in. Adult is a grayish brown moth that is active at night. Front wings marked near center with a figure 8 shaped, silver white spot. Eggs are greenish white, ridged but flattened laterally and are found singly on upper or lower leaf surfaces of upper canopy leaves. Hatches in 2 3 days.

The Florida Tomato Scouting Guide has excellent color photographs to help you identify these and other common tomato pests. It can be found on the web at [http://FTSG.ifas.ufl.edu/intro.htm](http://FTSG.ifas.ufl.edu/intro.htm)

Scouting is extremely important in detecting worms early before they can do significant damage. The Florida Tomato Scouting Guide indicates a pre-bloom threshold of 1 larva/6plants and post-bloom threshold of 1 egg mass or larva/field.

Over the past few years, chemical manufacturers have produced a variety of new tools in the battle against armyworms so that growers now have a wide array of excellent worm control materials at their disposal these days.

Growers are reminded to rotate between products of different chemical classes to avoid the buildup of possible pest resistance. The range of materials available to choose from makes this task relatively easy to do.
Consult UF/IFAS recommendations for currently labeled insecticides for worm control in Florida vegetables.

**Whiteflies**

Reports from Homestead where planting is increasing indicate that whitefly numbers are high in green beans.

Respondents in the Manatee/Ruskin area report that whiteflies are widely present with numbers increasing in many places. Scouts report finding nymphs and pupae in a number of fields.

Around Immokalee, whitefly numbers continue to fluctuate depending on day and location with some farms reporting very high numbers. Over all, pressure appears to be high than usual for this time of year. Scouts also report finding low levels of nymphs developing on some of the older crops in the area.

Reports from Palm Beach indicate that whitefly numbers remain fairly in low in most areas. Some early plantings of tomatoes and eggplants are being treated with growth regulators to hinder reproduction.

For more information on control see Management of Whiteflies, Whitefly-Vectored Plant Virus, and Insecticide Resistance for Vegetable Production in Southern Florida at [http://edis.ifas.ufl.edu/in695](http://edis.ifas.ufl.edu/in695)

**Broad Mites**

Broad mite numbers in both peppers and eggplants continue to climb in the Immokalee area.

On the East Coast, broad mites are becoming common in older pepper. In addition scouts report they are still seeing some broad mites coming in on pepper transplants as well.

Broad mites can affect a large number of hosts including vegetables such as basil, eggplant, green beans, potato, and tomato as well as a variety of fruits and ornamental plants.

Growers and scouts in the Manatee/Ruskin area indicate that broad mites are present on pepper in a number of places.

Around Homestead, low numbers of broad mites are present on over-summered crops.

This destructive pest attacks terminal leaves and flower buds and causes them to become malformed. Broad mite feeding distorts plant tissue, causing leaves to become hardened, thickened and narrow, giving them a “strappy” appearance. The blooms abort and plant growth is stunted when heavy pressure is present.

Mites are usually seen on the newest leaves and small fruit. Leaves turn downward and turn coppery or purplish. Internodes shorten and the lateral buds break more than normal.

Malformed terminal buds and stunted growth is often a telltale sign that broad mites are present. Broad mites are extremely tiny and are impossible to see without a 10X or stronger hand lens. The mites may crowd into crevices and buds. Mites prefer the shaded side of fruit and the underside of leaves, which usually faces the plant, so scouts must be diligent and carefully inspect affected plants to detect these tiny creatures.

A number of products such as AgriMek Oberon and Portal are labeled for control of this pest. Sulfur, insecticidal oils or soaps are also effective and can be used by organic producers. Due to short life cycles, frequent repeated sprays may be necessary to obtain control.
Leafminers

Around Immokalee, leafminer pressure is gradually increasing with some scouts indicating that leafminer numbers appear to be higher than previously seen this early in the fall.

Leafminer pressure remains light in other areas

As we approach the time of year that leafminer become more prevalent, growers and scouts should be aware that leafminer populations tolerant to chlorantraniliprole, the active ingredient in Coragen and other products have been detected in a number of places including SW Florida.

Dr. Phil Stansly, Entomologist at UF/IFAS SWFREC writes it is important to realize, that Coragen, just like all other insecticides, is subject to selection for resistance.

He advises that it is a good rule of thumb not to use it more than once in a crop and not to apply it to successive generations of pests. Coragen is a terrific product and as such has been used frequently by many growers. The result is that we are seeing some tolerance to the product cropping up in vegetable leafminer populations. The best strategy would be to not make that second application of Coragen or any other product containing chlorantraniliprole such as Voliam Flexi or Durivo or other group 28 products such as Belt. In addition, he reminds growers that the next generation of group 28 products containing cyantraniliprole will soon be available but could likely be compromised by the over-exposure of pest populations to chlorantraniliprole.

Pepper Weevils

Growers and scouts have reported pepper weevil becoming established in several fields around SW Florida with scouts finds both adults in larvae in these locations.

Around Homestead, respondents report over-summering pepper weevils in home gardens.

Scouting efforts should concentrate on a search for adults in leaf whorls, flowers and fruit during morning hours. Commercially available pheromone traps may also aid in early detection. Fruit and flower buds should be examined for damage and fallen fruit and buds examined for presence of larvae. Pheromone traps may also help growers detect first adult emergence or migration into the field.

Spraying should commence at the first sign of weevils or with flowering in fields with a history of problems. Vydate has been the standard control and has given pretty good results when sprayed weekly in trials at the Southwest Florida Research and Education Center although reduced susceptibility has been reported by some producers. A total of 24 pints can be applied for the season.

Other products that have performed well in trials include Belay (Clothianidin), Capture (bifenithrin), Kryocide (cryolite), Assail (acetamiprid), Actara (thiomethoxam) and Venom (Dinotefuran).

Organic growers have few options – Pyganic may provide some control of adults. Some growers report that tank mixes of Pyganic and diatomaceous earth may provide some synergy and enhance control. Application of products like Surround (kaolin clay) may help reduce egg-laying. Sanitation including removal and destruction of damaged and fallen fruit is an important control measure.

Cornsilk fly

Around Belle Glade, cornsilk fly adult numbers are relatively stable but remain on the high side in sweet corn.
Around Homestead, reports indicate that cornsilk fly is present on alternate hosts.

Dr. Gregg Nussle, Entomologist at UF/IFAS EREC advises that he is very concerned that if growers don’t make changes now to their pyrethroid use in sweet corn that they will have very few to no alternatives to control cornsilk flies in corn in the very near future.

He advises that when using a pyrethroid during ear stage sweet corn, always use the maximum labeled rate. Never use below label rates for pyrethroids at any time in sweet corn. Do not add pyrethroids to another chemical unless it is directly needed for control of something that the other product does not control. If growers need to control armyworm or earworm, but no cornsilk flies are present, then they should not use pyrethroids to control these Lepidoptera, because there are many alternative choices.

Growers need to eliminate the use of "insurance sprays" of pyrethroids, because the continuous low residual levels of pyrethroids on corn are leading to resistance development in cornsilk flies to pyrethroids. If there were many other products for control of these flies, then this would not be as critical.

However, there is only one other material that provides good control of the flies and that is the organophosphate, chlorpyrifos. While some contact control is provided by methomyl, this product has no residual control of the cornsilk flies. To conserve the remaining effectiveness and to try to regain previous levels of effectiveness of pyrethroids, growers must eliminate unnecessary pyrethroid treatments.

**Aphids**

In most areas, only a few winged aphids are showing up here and there but are little cause for concern except for watermelon growers where papaya ringspot virus is a concern.

Respondents report high aphid numbers on host crops around the Homestead area.

**Diseases**

**Bacterial Spot**

Around Immokalee, growers and scouts report that the drier weather the past few weeks has helped slow down bacterial spot spread after getting pretty bad in some tomato fields. Respondents note that new infections are still being found in tomato and some pepper. Many tomato fields suffered significant foliar damage but fruit remains mostly clean.

Respondents on the East Coast report that bacterial spot is common in tomato and increasing due to recent weather. Growers are fearful that winds and rains from Hurricane Sandy will make things worse.

Reports from the Manatee/Ruskin area indicate that bacterial spot is widespread in pepper and tomato but report that most areas are growing out now, except where the dew has been heavy.

Growers and scouts report that some bacterial spot infected plants are still coming out of greenhouses.

**Target Spot**

Low levels of target spot are showing up on tomato in a number of locations around South Florida.

Around the Manatee/Ruskin area, while target spot remains mostly light some fruit infections have been reported.
Target spot is frequently misdiagnosed as in its early stages as symptoms are difficult to recognize and can be confused with bacterial spot and early blight.

The name derives from the bull’s eye appearance that is often displayed in lesions caused by the disease. Since concentric rings are not always visible and not all lesions with concentric rings are target spot, it is recommended that a laboratory diagnosis be obtained to ensure that a correct diagnosis is made.

On tomato leaves and stems, foliar symptoms of target spot consist of brown-black lesions with subtle concentric rings giving them a target-like appearance. These can sometimes be confused with early blight. With early blight, the lesions are often associated with a general chlorosis of the leaf.

On tomato fruit, lesions are more distinct. Small, brown, slightly sunken flecks are seen initially and may resemble abiotic injury such as sandblasting. As fruits mature the lesions become larger and coalesce resulting in large pitted areas.

As we move into the season and plant canopies develop, we often see target spot take over from bacterial spot as the predominant foliar problem in tomatoes.

Currently, target spot is controlled primarily by applications of protectant fungicides. It should be noted that tank-mix sprays of copper fungicides and maneb do not provide acceptable levels of target spot control. In recent trials, at the University of Florida fungicides were rated for efficacy as follows:

1) Switch, Inspire Super
2) Revus Top, Scala
3) Tanos, Endura, Quadris (and other strobilurins), Reason
4) Bravo (chlorothalonil)
5) Mancozeb, Copper

Dr. Gary Vallad Pathologist at UF/IFAS GCREC advises growers to not use strobilurins for target spot management due to widespread resistance to strobilurins and notes that in some instances it can actually make disease worse.

Early Blight

Early blight is also showing up on tomato at very low levels in several locations around South Florida.

Dr. Vallad expresses similar concerns with strobilurin resistance in Alternaria although he indicates that he has not tested FL isolates yet, but notes that wide-spread resistance has been documented in production areas to our north.

Anthracnose

Growers in the Manatee Ruskin area are reporting a higher than usual incidence of anthracnose on tomato this fall. Foliar symptoms are widespread with some fruit infections being reported.

Anthracnose is a fungal disease, which can be caused by several species of Colletotrichum including C. coccodes. It can be a serious disease of tomato and can impact yields causing rotted fruit in warm, moist weather.

Foliar symptoms are usually mild and may be overlooked. They consist of small tannish-lesions with a brown margin and some chlorosis around the lesion. The chlorosis may expand as the lesions coalesce.
Small raised fruiting bodies may be observed within the lesion with a hand lens. These exude spores in the presence of water. The spores are easily dispersed throughout the canopy with rain.

The fungus can infect both green and red fruit and is able to penetrate the cuticle of uninjured fruit. When green fruit is infected, it is not apparent until it begins to ripen. On ripe fruit, lesions become visible within a few days of infection.

Lesions consist of small water-soaked areas that develop under the skin of fruit. The lesions collapse as they develop and become sunken and dark. Numerous dark specks, the fruiting bodies of the fungus, known as acervuli, develop in concentric circles in the center of the lesion and make the lesion dark brown to black in color. In moist, warm weather, these black bodies ooze gelatinous pink spore masses.

In warm weather, the fungus along with secondary pathogens including soft rot bacteria enter the lesions spread causing a soft rot which renders the fruit worthless.

Fungicides are most effective when used in combination with cultural control strategies.

Cultural controls include: 2-3 year rotations between susceptible hosts as well as elimination of weeds, volunteers, and culls that serve as survival medium for the anthracnose pathogen by deep burial. Staking and irrigation practices that promote rapid leaf drying and reduce extended periods of leaf wetness will also help reduce infections.

If conditions favor development of anthracnose, a preventative spray program may be required to give adequate control of this disease. Applications to tomatoes should begin when the first fruit the size of a quarter.

Many products labeled for the management of early blight and target spot will also control Anthracnose when applied preventatively. Chlorothalonil has given good control of the disease on pepper; similar effectiveness is expected on tomato as well.

Consult UF/IFAS recommendations for currently labeled fungicides for Florida tomatoes.

**Pythium**

Pythium is present on beans, tomato, peppers and watermelons around South Florida and has caused stand loss in places affected by heavy rains.

Around Belle Glade, growers are reporting heavy rains and wet soils have caused significant stand loss from pythium damping off in beans and leafy vegetables.

Pythium is often associated with root rots and pre-emergent and post-emergent damping off. One of the characteristics of tissue infected with Pythium spp. is the presence of water-soaked or greasy appearing tissue. This is in contrast to the orange to red to dark, sunken lesions caused by *Rhizoctinia solani*.

Excess fertilizer, flooded soils, insect feeding, and nematode feeding may also contribute to dysfunctional roots. For accurate diagnosis, it is best to submit samples to a reputable diagnostic laboratory.

Pythium is one of the Oomycetes or “water molds.” It thrives in moist soils and multiplies and spreads rapidly under wet conditions. Although Pythium is capable of producing several spore types, zoospores and oospores are most important.
Zoospores are mobile. They are produced rapidly and in great numbers and contribute to the organism’s ability to cause disease almost “over-night.” Zoospores may be detected within half an hour after a site is flooded and can “swim” for up to 30 hours and move three or more inches through soil.

Oospores are extremely durable and can survive in soil and infected crop debris for more than 10 years. A number of broadleaf and grassy weeds may host Pythium spp. and serve as important sources of inocula.

Resistant cultivars do not exist so control of Pythium depends on a variety of tactics. Crops should be planted on raised beds in well-drained soils.

Pre-plant soil fumigation is effective if applied correctly. Soil solarization has successfully suppressed Pythium in some cases. Fumigant formulations containing chloropicrin are be most effective in providing control.

If a solarization or a soil fumigant is used, raised beds are important since fumigated soil has minimal or no beneficial organisms to compete against pathogens. Control is at best temporary as under the right conditions zoospores from un-fumigated soil may readily re-infest treated bed.

A number of chemical treatments are available for the control of damping off. Seed treatments containing mefenoxam (Apron) work best.

Fungicidal drenches such as Ridomil Gold (mefenoxam) are effective for the suppression of seedling blights and root rots if applied before infection occurs.

Several biological control agents, including actinomycetes and other bacteria and fungi, are available commercially for suppression of Pythium and other soil borne pathogens. Biological products like SoilGuard and Serenade Soil may also provide some control.

Some aerial pythium has been reported on beans in the Glades and tomatoes around SW Florida. Infections have abated with recent drier weather.

Aerial pythium can also affect other crops including tomato and pepper where symptoms appear as a watery rot on leaves, petioles, and stems. Severe aerial pythium infections can result in plant death. Microscopic examination of symptomatic tissue will reveal the presence of mycelium and oogonia typical of Pythium spp. Aerial pythium is typically restricted to periods of unusually high rainfall.

Rhizoctonia

Grower and scouts around Belle Glade report significant issues with rhizoctonia in green beans. They report damping off as well as poor growth and stand establishment in affected fields. PCNB fungicides are labeled for control.

Southern Corn Leaf Blight

Reports from Belle Glade indicate that southern corn leaf blight, caused by the fungus Bipolaris maydis, is present in sweet corn.

Lesions are light tan in the center with a reddish-brown border. A greenish growth near the center of the lesion may be evident if spores are present. Mature lesions range from 1/4 to 1 1/2 inches in length and may be tapered, flat or serrated on the ends.
Lesions caused by southern corn leaf blight are much smaller (up to ½ inch wide and 1 inch long) than those caused by northern corn leaf blight. Southern blight lesions are also lighter in color (light tan to brown), and have parallel sides rather than the tapering sides of lesions caused by *E. turcicum*.

When severe, lesions may become so numerous that they coalesce and turn the entire leaf necrotic. Southern blight, like northern blight, moves from the lower canopy to the upper canopy. Fungal sporulation may be observed with a simple hand lens on foliar lesions following periods of high humidity.

Southern corn leaf blight is most prevalent during the fall growing season in south Florida, but may also appear at the end of the spring growing season, particularly if unseasonably warm.

Disease development is favored by warm to hot temperatures (68-90° F) and periods of extended leaf wetness. With optimal weather conditions, the time from infection by germinating spores to lesion formation with new spores may be as short as 3 to 5 days.

Control of Southern corn leaf blight is best achieved with resistant varieties. Resistant varieties are available and should be considered, particularly for fall plantings.

Where resistance is lacking, spraying with fungicides may be necessary, particularly with sweet corn produced in peninsular Florida. Spray programs with recommended fungicides should commence at the first sign of disease if favorable weather is likely.

Fungicides should be applied early, particularly if the forecast is for warm, humid weather. As with northern corn leaf blight, the sterol inhibitors and strobilurin fungicides are most efficacious. These products should be used together with a broad spectrum protectant to minimize development of fungal resistance.

**Southern Blight**

Growers and scout report find low levels on southern blight mostly consisting of single scattered plants in several locations.

**Tomato Yellow Leaf Curl Virus**

Around Immokalee, TYLCV incidence has been increasing but remains mostly low. A few respondents indicate that it starting to go wild in some locations where it has reached 30% or more (some organic fields are reported to have even higher levels).

In the Manatee Ruskin area, tomato yellow leaf curl virus is present at mostly low levels with some exceptions where it is worse. Some fields in the Plant City area have reportedly reached fairly high infection levels.

TYLCV remains mostly low on the East Coast although some infections have been reported despite mostly low whitefly numbers.

**Downy Mildew**

Respondents in the Manatee/Ruskin area report that downy mildew is widespread on watermelons and other cucurbits.

Downy mildew is also showing up on watermelons and other cucurbits in SW Florida.
Powdery Mildew

Powdery mildew is beginning to show up on squash and cucumbers in Palm Beach and Immokalee.

Dr. Gary Vallad notes that the new Gowan product, Torino, will be a great management tool for powdery mildew, especially on edible-peel cucurbits where Quintec can’t be used.

Gummy Stem Blight

Gummy stem blight has been rough on watermelons fields around SW Florida. Between downy mildew and gummy stem blight it is easy to see why most melons are grown in the spring.

Respondents in Palm Beach report finding some gummy stem blight in young cukes.

Cucurbit leaf crumple virus

Cucurbit leaf crumple virus is widely present on squash and watermelon in several locations from Plant City to Immokalee. Incidence is mostly low.

News You Can Use

2012 Florida Constitutional Amendments series

In addition to 2012 being a presidential election year, Florida voters will be asked to vote on 11 proposed amendments to their state constitution. To help voters make informed choices regarding the effects and impacts of the proposed constitutional amendments, a series of six fact sheets was written by Rodney L. Clouser, Professor and Associate Chair, University of Florida (UF) Department of Food and Resource Economics.

Florida’s 2012 Constitutional Amendments. Be “in the Know” with These UF/IFAS Fact Sheets.

Publications

• 2012 Florida Constitutional Amendment 2: Veterans Disabled Due to Combat Injury; Homestead Property Tax Discount
• 2012 Florida Constitutional Amendment 3: State Government Revenue Limitation
• 2012 Florida Constitutional Amendment 4: Property Tax Limitations; Property Value Decline; Reduction for Nonhomestead Assessment Increases, Delay of Scheduled Repeal
• 2012 Florida Constitutional Amendment 9: Homestead Property Tax Exemption for Surviving Spouse of Military Veteran or First Responder
• 2012 Florida Constitutional Amendment 10: Tangible Personal Property Tax Exemption
• 2012 Florida Constitutional Amendment 11: Additional Homestead Exemption; Low-Income Seniors Who Maintain Long-Term Residency on Property; Equal to Assessed Value

All six factsheets are available at: [http://edis.ifas.ufl.edu/topic_2012_florida_constitutional_amendments](http://edis.ifas.ufl.edu/topic_2012_florida_constitutional_amendments)

In addition here are two non-partisan documents that attempt to explain what the Amendments will do if you vote YES or NO.

The Collins Center for Public Policy - [http://collinscenter.org/2012flamendments/home-2/](http://collinscenter.org/2012flamendments/home-2/)
Developing tomato traits for yield, shipping ability, and disease resistance are all important to the tomato industry. But what about flavor?

In the latest Focus on Tomato webcast, titled “Factors for Developing Tomato Varieties with Improved Flavor”, Dr. John (Jay) Scott at the University of Florida, helps individuals in the tomato industry better understand the components of tomato flavor along with some of the major constraints to improving these in different types of tomatoes.

Dr. Scott pulls from his experience with the Tasti-Lee variety to illustrate some major characteristics that are required for commercial production of a labeled tomato variety with improved flavor. He also talks about the difficulties in making further flavor improvement in this variety.

This presentation is open access through February 28, 2013. Go to http://www.plantmanagementnetwork.org/edcenter/seminars/tomato/DevelopingTomatoVarieties/

View PMN’s full collection Tomato webcasts in the Focus on Tomato resource at http://www.plantmanagementnetwork.org/infocenter/topic/focusontomato/

Focus on Tomato is a publication of the Plant Management Network (PMN), a nonprofit online publisher whose mission is to enhance the health, management, and production of agricultural and horticultural crops. It achieves this mission through applied, science-based resources. PMN is jointly managed by the American Society of Agronomy, American Phytopathological Society, and Crop Science Society of America.

Minimum Wage in Florida

The 2013 minimum wage in Florida is $7.79 per hour, effective January 1, 2013, with a minimum wage of at least $4.77 per hour for tipped employees, in addition to tips.

Florida law requires the Florida Department of Economic Opportunity to calculate a minimum wage rate each year. The annual calculation is based on the percentage increase in the federal Consumer Price Index for Urban Wage Earners and Clerical Workers in the South Region for the 12-month period prior to September 1, 2012.

On November 2, 2004, Florida voters approved a constitutional amendment which created Florida's minimum wage. The minimum wage applies to all employees in the state who are covered by the federal minimum wage.

Employers must pay their employees the hourly state minimum wage for all hours worked in Florida. The definitions of employer, employee, and wage for state purposes are the same as those established under the federal Fair Labor Standards Act (FLSA). Employers of tipped employees, who meet eligibility requirements for the tip credit under the FLSA, may count tips actually received as wages under the Florida minimum wage. However, the employer must pay tipped employees a direct wage. The direct wage is calculated as equal to the minimum wage ($7.79) minus the 2003 tip credit ($3.02), or a direct hourly wage of $4.77 as of January 1, 2013.

Employees who are not paid the minimum wage may bring a civil action against the employer or any person violating Florida's minimum wage law. The state attorney general may also bring an enforcement action to enforce the minimum wage. FLSA information and compliance assistance can be found at: http://www.dol.gov/dol/compliance/comp-flsa.htm.

Florida Statutes require employers who must pay their employees the Florida minimum wage to post a minimum wage notice in a conspicuous and accessible place in each establishment where these employees
work. This poster requirement is in addition to the federal requirement to post a notice of the federal minimum wage.

Florida's minimum wage poster is available for downloading in English and Spanish from the Florida Department of Economic Opportunity’s website at: http://www.floridajobs.org/business-growth-and-partnerships/for-employers/display-posters-and-required-notices

### Up Coming Meetings

**October 30, 2012**  
UF/IFAS Farm Labor Supervisor Core Training Program*  
8:00 AM—5:00 PM

Bert J. Harris Ag Center, Auditorium  
4509 George Blvd  
Sebring

*Multiple locations and dates as below.

**November 1, 2012**  
Agriculture Labor Compliance Seminar  
9 AM – Noon

UF/IFAS SWFREC  
2685 SR 29 N  
Immokalee

RSVP to Julie Carson at (239) 658-3462

**November 4-6, 2012**  
21st International Pepper Conference

Naples Grande  
Naples, Florida

For more information, go to [http://www.conference.ifas.ufl.edu/pepper2012/](http://www.conference.ifas.ufl.edu/pepper2012/)

**November 7, 2012**  
Florida Ag Expo: Gulf Coast Research and Education Center

Registration is now open. For more information and to register please visit: [http://www.floridaagexpo.com/](http://www.floridaagexpo.com/)

**November 8th, 2012**  
Florida Lettuce Advisory Committee  
12 Noon - 2 PM

Everglades Research & Education Center  
3200 E Palm Beach Rd.  
Belle Glade, Florida

For more information, contact: Chris Miller - 561-233-1718
November 19-20, 2012  Primus GFSI Food Safety Workshop

SW Florida Research and Education Center  
SR 29 N  
Immokalee, Florida

For more information, contact 863-674-4092 or email gmcavoy@ifas.ufl.edu

December 10, 2012  Core and Private Applicator Training and Exam

Manatee County Extension Service  
1303 17 St W  
Palmetto, Florida

For details and registration visit: http://coreprv121012.eventbrite.com/

UF/IFAS FARM LABOR SUPERVISOR CORE TRAINING PROGRAM

This program will provide farm labor contractors and others involved with farm labor management with training in knowledge and understanding of legal compliance issues in four key areas:

Agenda  8:00 am—5:00 pm

MORNING SESSION

WAGE & HOUR - 2 hours - 8:00 am—10:00 am

Violations, disclosure of pre-work conditions and rules of deductions, wage summary, minimum wage, hours worked

HR COMPLIANCE - 2 hours - 10:00 am—12:00 pm

Discrimination, temporary disabilities, pregnant women, sexual harassment, child labor, human trafficking

LUNCH—12:00—1:00 pm

AFTERNOON SESSION

WPS, FIELD SANITATION, FOOD SAFETY - 2 hours - 1:00 pm—3:00 pm

Pesticides, decontamination, postings, field sanitation regulations, food safety

SAFE DRIVING - 2 hours - 3:00 pm—5:00 pm

Vehicle maintenance, inspections, defensive driving, rural driving

Lunch provided with registration for at least 2 “Core” classes.
DATES and LOCATIONS

Sebring - Tuesday Oct. 30th
Bert J. Harris Ag Center, Auditorium
4509 George Blvd
Sebring, FL 33875-5837
(863) 402-6540

Belle Glade - Wednesday Oct. 31st
Everglades Research & Education Center
3200 E Palm Beach Road
Belle Glade, FL 33430-4702
(561) 993-1500

(Additional dates and locations can be added on request)

WHO: Supervisors of farm workers: Labor contractors, crew leaders, growers, bus and van drivers, office staff: payroll and HR.

LANGUAGE: English or Spanish

FEE: $ 10.00 per unit - $ 40.00 per complete day

2012 Florida Ag Expo Program & Speakers

UF/IFAS Gulf Coast Research and Education Center (GCREC)
Balm, FL
November 7, 2012

7:30 - 8:15 a.m. Registration and Complimentary Breakfast/Vendor Booths Open

8:15 - 8:20 a.m. Welcome and Overview
Jack Rechcigl, Director, UF/IFAS, GCREC

8:20 - 9:00 a.m. Adam Putnam, Commissioner of Agriculture (Invited)

Marketing Forum

9:00 - 10:00 a.m. Session I - Developing New Market Potentials for Growers
Moderator - Mike Stuart, FFVA

• How to make your product stand out to buyers (TBD)
• Farm to School Marketing Program - Robin Safley, FDACS
• Local Choice - Tracy Irani, UF/Scientific Thinking Educational Partnership (STEP), AEC Department

10:00 - 10:30 a.m. Refreshments/Vendor Booths Open

10:30 - 11:30 a.m. Session II - How To Make Your Product Stand Out
Moderator: Ted Campbell, Florida Strawberry Growers Association

• Gary Wishnatzki, Wish Farms (social media)
• Jessica Kerstein, Lipman Produce
• Greg Styers, Bejo Seeds
11:30 a.m. - 1:00 p.m. Lunch/Vendor Booths Open

New UF Varieties
Moderator: Crystal Snodgrass, County Vegetable Agent, Manatee County Extension

1:00 - 1:15 p.m. Tomatoes, Sam Hutton, UF/IFAS, GCREC
1:15 - 1:30 p.m. Strawberry, Vance Whitaker, UF/IFAS, GCREC
1:30 - 1:45 p.m. Peaches, Jose Chaparro, UF/IFAS, Horticultural Sciences Dept.
1:45 - 2:00 p.m. Blueberries, James Olmstead, UF/IFAS Horticultural Sciences Dept.
2:00 - 2:15 p.m. Potatoes, Lincoln Zotarelli, UF/IFAS Horticultural Sciences Dept.

2:15 - 3:00 p.m. Refreshments/Vendor Booths Open

Pest Management (CEUs available for the Pest Management session)

Moderator - Alicia Whidden, UF/IFAS

3:00 - 3:15 p.m. The Potential of Oil Seed Crops As Beneficial Rotation Crops For Florida Fruit and Vegetable Growers, Dan Chellemi, USDA ARS
3:15 - 3:30 p.m. Disease Update, Gary Vallad, UF/IFAS, GCREC
3:30 - 3:45 p.m. Insect Update, Hugh Smith, UF/IFAS, GCREC
3:45 – 4:00 p.m. Weed Management, Peter Dittmar, UF/IFAS Horticultural Sciences Dept.

Field Tours 10:30 a.m. and 1:00 p.m.

• Plant Pathology, Gary Vallad
• Entomology, Hugh Smith
• Tomato Breeding and Genetics, Jay Scott and Sam Hutton

Walking tours of the greenhouses and horticultural crop research areas tour stops include:

• Vegetable and small fruit horticulture mechanical harvesting
• Caladium variety trials
• Plant diagnostic laboratory operations
• Greenhouse studies for insect management on strawberry plants
• Greenhouse studies for whitefly management on tomato plants
• On-site wastewater (septic system) for passive removal of N
• Soilless culture for strawberry and vegetable production
• Demonstration of fruit and vegetable cooling methods

For the Record….

Pesticide Registrations and Actions

• Torino Fungicide – Gowan U.S.A. advises that Gowan has received Florida registration for Torino fungicide recently. Torino contains the active ingredient cyflufenamid, which provides a new mode of action for control of powdery mildew in grapes, strawberries and cucurbits. Torino is highly effective in controlling various powdery mildew species and exhibits no cross-resistance with fungicides in other chemical groups such as the aminopyrimidines, DMI’s, strobilurins, morpholines, anilinopyrimidines, and MBC’s.
Torino has displayed some curative activity, though very limited, and should be used as a protectant for the control of powdery mildew.

Personal Protective Equipment (PPE) - Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves.

Strawberries and Cucurbit Vegetables:
- Use rate 3.4 oz /acre (0.022 lbs)
- Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground
- Do not make more than two (2) applications per year.
- Do not apply more than once every seven (7) days on cucurbits or every 14 days – strawberries, grapes and other low growing berries.
- Do not exceed a total of 0.044 lbs. active ingredient (3.4 oz product/A X 2 applications) per acre per year.
- Applications may be made up to and including the day of harvest; (PHI = 0 days).
- 4 hour REI

To maintain the efficacy of Torino and all fungicides, follow these basic resistance management guidelines:

• Use the recommended application rates
• Do not exceed the recommended number of applications
• Regularly alternate treatments with fungicides know to have different modes of action as defined by the Fungicide Resistance Action Committee (FRAC) at www.frac.info.com.
• Follow a protectant application schedule whenever possible and stay within the re-treatment interval recommended by the manufacturer.

• Voliam Xpress Insecticide - Effective immediately tuberous and corm vegetable uses have been removed from the Voliam Xpress Insecticide label and have been migrated to the Besiege Insecticide label. This would be of local interest mainly to potato and sweet potato growers. Besiege Insecticide is an alternate brand of Voliam Xpress and contains the same amounts and ratios of active ingredients.

If you have any questions regarding this label change, please contact:

John Taylor, Agronomic Service Representative
Syngenta
Phone 561-694-8671
Mobile 561-718-9492
john.taylor@syngenta.com

Employment Opportunities

Sprayer Operator

Watercress Farms is a Florida agribusiness producing watercress and baby leaf salad crops. We are based in Myakka City and are looking for a sprayer operator with a current Private Applicators License. Experience with calibrations would be advantageous.

The hours will be variable through the season with the need to work weekends and holidays. Wage is negotiable given prior experience.
Irrigation Sales Position

Job Title:  Regional Accounts Sales Manager  
Function:  Sales  
Reports to:  Director of Sales  

Direct Reports:  None  
Job Location:  Field Based – Central / East Coast of Florida  
Revision Date:  October 2012  

POSITION QUALIFICATION SUMMARY

• The Regional Accounts Sales Manager Position is the main technical support and liaison for the existing company irrigation sales as well as direct account Sales responsibilities for assigned territory.  
• This position is responsible for the marketing and sales of all products and services to new and existing clients within a defined sales territory/list of accounts. The Regional Account Manager is responsible for a minimum annual quota dependent upon territory assignment.  

POSITION DETAILS

• Responsible for the total irrigation strategic sales plan for assigned territory in Florida.  
• Provides technical assistance for existing sales force and will be main liaison for all irrigation needs.  
• Manage existing account portfolio, growing the business through account penetration as well as sign up new accounts  
• Work closely with Sales Finance, Logistics and Transportation, managing sales cycle from start to finish.  
• Establish and maintain relationships with existing and new accounts.  
• Meet/exceed all agreed upon volume, revenue, margin, and other SIP objectives through the development and execution of strategic plans  
• Responsible for improving customer satisfaction, and delivering internal and external value.  
• Serving as a first point of contact for all customer requirements.  
• Regular activities include face to face account visits, utilizing the sales process; follow-up letters/e-mails, prospecting via phone, e-mail or other medium; face-to-face sales calls; interaction with accounts and potential accounts at industry-sponsored events and trade shows.  
• Entering client data into a CRM system and leveraging the system to generate additional contacts and sales  
• Responsible for the accurate completion of paperwork as required by management.  
• Participation in and completion of all applicable training -- including ongoing skill and knowledge development beyond initial sales training.  
• Performs other duties as assigned.  
• Monitor A/R monthly and immediately resolve outstanding A/R issues as needed  
• Develop agendas, proposals, presentations for customer business reviews.  
• Ensure weekly and monthly reports are accurate, complete and submitted on time.
• Update sales forecast monthly.
• Willingness to travel (up to 60%)

QUALIFICATIONS

Education Requirements and/or Preferences:
• Requires four-year college degree or equivalent experience. Agricultural Degree preferred
• Requires previous outside business to business sales experience
• Highly desirable 5+ years’ experience in micro-irrigation

Technical Skill Requirements:

• 5-10 years agriculture sales, preferably in micro-irrigation.
• Strong technical skills in drip irrigation systems and products
• Prior industry experience and account management preferred
• Demonstrated account relationship management skills
• Effective verbal and written communication skills, tactful
• Effective presentation and negotiation skills
• Strong interpersonal skills
• Organized and self-motivated
• Strong leadership skills

Computer System/Skill Requirements:

• Strong MS Office skills required – with focus on Excel and PowerPoint
• Salesforce.com experience helpful

Please send resumes to: flirrigationresumes@gmail.com

Farm Land for Lease

Farm Land for lease in LaBelle area – contact Clyde Lavender at 863-673-2338
Farm Land for lease on Babcock Ranch, Hwy 31, Charlotte County. Rotational fields or permanent locations, phone 941-639-3958

Websites

Tomato Institute Proceedings are available at http://swfrec.ifas.ufl.edu/vegetable_hort/tomato_institute/

2012-2013 Vegetable Production Handbook for Florida - provides complete information on Florida vegetable production, ranging from seed technology to integrated pest management to irrigation and pesticide safety. The handbook is produced as a reference for all individual vegetable commodities and cultural practices used and recommended in the state of Florida. Check it out at http://www.thegrower.com/vegetable-production-handbook-for-florida/pdf/

Food Poison Journal - http://www.foodpoisonjournal.com – is a site that provides information about food poisoning, and some of the most common causes of foodborne illness. Information includes the symptoms and risks of infection, testing/detection of foodborne illness, and how to prevent food poisoning outbreaks. Marler Clark is a national law firm with a practice dedicated to representing victims of food poisoning.
Sakata Vegetables Debuts New Website - http://www.sakatavegetables.com The Sakata Vegetables website has undergone major overhaul. Visitors to the site can find everything they need to know about Sakata’s vegetable line-up (for both commercial and home grown) at one new web address.

Quotable Quotes

Farming looks mighty easy when your plow is a pencil, and you're a thousand miles from the corn field. - Dwight D. Eisenhower  (I know it is a repeat but it’s a great quote - GM)

That's what I consider true generosity. You give your all, and yet you always feel as if it costs you nothing. - Simone de Beauvoir

A positive attitude may not solve all your problems, but it will annoy enough people to make it worth the effort. - Herm Albright

Democracy is the recurrent suspicion that more than half of the people are right more than half the time. - E. B. White

Democracy is a device that ensures we shall be governed no better than we deserve. - George Bernard Shaw

Democracy is a process by which the people are free to choose the man who will get the blame. - Laurence J. Peter

On the Lighter Side

At the Gym

An older gentleman, not in the best of shape, was working out in the gym when he spotted a beautiful young woman.

He asked the nearby trainer, “What machine should I use in here to impress that cute young thing over there?”

The trainer looked him up and down and said, “I’d try the ATM machine in the lobby.”

An Atheist and a Little Girl on a Plane

An atheist was seated next to a little girl on an airplane and he turned to her and said, “Do you want to talk? Flights go quicker if you strike up a conversation with your fellow passenger.”

The little girl, who had just started to read her book, replied to the total stranger, “What would you want to talk about?”

” Oh, I don’t know,” said the atheist. “How about why there is no God, or no Heaven or Hell, or no life after death?” as he smiled smugly.

“OK,” she said. “Those could be interesting topics but let me ask you a question first. A horse, a cow, and a deer all eat the same stuff – grass. Yet a deer excretes little pellets, while a cow turns out a flat patty, but a horse produces clumps. Why do you suppose that is?”

The atheist, visibly surprised by the little girl’s intelligence, thinks about it and says, “Hmmm, I have no idea.”
To which the little girl replies, “Do you really feel qualified to discuss why there is no God, or no Heaven or Hell, or no life after death, when you don’t know shit?”

And then she went back to reading her book.

Blonde Joke

An old, blind cowboy wanders into an all-girl biker bar by mistake. He finds his way to a bar stool and orders a shot of Jack Daniels. After sitting there for a while, he yells to the bartender, “Hey bartender, you wanna hear a blonde joke?”

The bar immediately falls silent. In a very deep, husky voice, the woman next to him says, “Before you tell that joke, Cowboy, I think it is only fair, given that you are blind, that you should know five things:

1. The bartender is a blonde girl with a baseball bat.
2. The bouncer is a blonde girl.
3. I’m a 6-foot tall, 175-pound blonde woman with a black belt in karate.
4. The woman sitting next to me is a blonde professional weight lifter.
5. The lady to your right is a blonde professional wrestler.

Now, think about it seriously, Cowboy. Do you still wanna tell that blonde joke?” The cowboy thinks for a second, shakes his head and mutters, “No… not if I’m gonna have to explain it five times.”

Note: State and local budgets cuts are threatening to further reduce our funding – if you are receiving currently receiving the hotline by mail and would like to switch over to electronic delivery – just drop me an email. It is much quicker and you will get the hotline within minutes of my completing it and help conserve dwindling resources at the same time. Thanks to those that have already made the switch.

Contributors include: Joel Allingham/AgriCare, Inc, Jeff Bechtel/Syngenta Flowers, Bruce Corbett/West Coast Tomato Growers, Gordon DeCou/Ag Tech Services of Bradenton, Fred Heald/The Andersons, Sarah Hornsby/AgCropCon, Cecil Howell/H & R Farms, Bruce Johnson/General Crop Management, Barry Kostyk/SWFREC, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Chris Miller/Palm Beach County Extension, Mark Mossier/UF/IFAS Pesticide Information Office, Gene McAvoy/Hendry County Extension, Alice McGhee/Thomas Produce, Dr. Gregg Nuessly/EREC Chuck Obern/C&B Farm, Dr. Monica Ozores-Hampton/SWFREC, Dr. Rick Raid/ EREC, Dr Ron Rice/Palm Beach County Extension, Dr Pam Roberts/SWFREC, Dr. Nancy Roe/Farming Systems Research, Wes Roan/6 L’s, Dr. Dak Seal/ TREC, Kevin Seitzinger/Gargiulo, Ken Shuler/Stephen’s Produce, Crystal Snodgrass/Manatee County Extension, Dr. Phil Stansly/SWFREC, Dr Gary Vallad/GCREC , Mark Verbeck/GulfCoast Ag, Alicia Whidden/Hillsborough County Extension, Dr Henry Yonce/KAC Ag Research and Dr. Shouan Zhang/TREC.

The South Florida Pest and Disease Hotline is compiled by Gene McAvoy and is issued on a biweekly basis by the Hendry County Cooperative Extension Office as a service to the vegetable industry.

Gene McAvoy
County Extension Director / Extension Agent IV
Regional Specialized Agent - Vegetables/Ornamental Horticulture

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