



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

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# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

**September 26, 2014**

**It has been a long hot summer.** Daytime temperatures have been running in the low to mid 90's with most nights in the 70's. Immokalee recorded at least one day where temps topped 100 degrees. Hot conditions have interfered with fruit set in some early tomato plantings.

**It was relatively dry until August and most places have seen between 8 and 14 inches since then with much of it coming in the later part of August and early September.** Near daily rains over the past two weeks has disrupted land prep and planting schedules in a number of places and has kept growers running their throw-out pumps.

### FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
<b>Balm</b>					
8/1 – 9/25/14	66.87	97.43	11.24	84	0.15
<b>Belle Glade</b>					
8/1 – 9/25/14	68.25	97.25	11.1	89	0.16
<b>Clewiston</b>					
8/1 – 9/25/14	69.49	96.31	8.97	85	0.15
<b>Ft Lauderdale</b>					
8/1 – 9/25/14	-----	93.15	13.53	80	0.15
<b>Homestead</b>					
8/1 – 9/25/14	69.03	94.96	8.57	85	0.15
<b>Immokalee</b>					
8/1 – 9/25/14	68.49	100.08	14.97	86	0.16
<b>Okeechobee</b>					
8/1 – 9/25/14	68.4	97.72	8.87	87	0.14

**“Remember, when in doubt - scout.”**

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**Although South Florida has been spared any tropical weather this season, some rains have been intense and have battered crops especially in the Manatee/Ruskin area where plantings are more advanced.**

**Insect and disease pressure has been relatively light to date but this might change with recent daily rains.**

**Strawberry planting is set to start in Hillsborough County next week.**

**The National Weather Service reports that high pressure over the western Atlantic will build westward along with a slow decrease in atmospheric moisture reducing the chance of showers and thunderstorms over the weekend, especially across the east coast metro areas as easterly wind flow drives convection away from the East Coast.** The focus of convection during the day Friday and Saturday will be across the interior and the Gulf Coast. However, East Coast locations stand a chance of nighttime showers and thunderstorms as the onshore winds could drive rains onshore.

**Early next week, the ridge will shift back to the east and south allowing for a return to deep westerly flow.** This will shift the showers and storms back to the interior and east coast bringing the threat for locally heavy rains over the east coast metro areas.

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

## **Insects**

### **Whiteflies**

**Growers and scouts in the Immokalee area report heavy whitefly pressure with high adult numbers in almost all crops including eggplants, melons, peppers, squash, and tomatoes, with adults showing up in fields within a few days of planting in many locations.** Fortunately, they do not seem to be viruliferous and little TYLCV has been reported. Scouting reports reveal no egg deposition and/ or nymphal activity yet.

**Around Manatee County whitefly numbers have been variable and virus has been mostly low to non-existent, although in the past week, some isolated reports of TYLCV showing up around Bradenton have been received.**

**On the East Coast, whiteflies have been variable from low to pretty high with highest counts of several per leaf common in isolated cases.** TYLCV is rare and appears to be coming from the greenhouse.

### **Management of Whiteflies, Whitefly-Vectored Plant Virus, and Insecticide Resistance for Vegetable Production in Southern Florida**

#### **Recommendations:**

##### **A. Crop Hygiene**

Field hygiene should be a high priority and should be included as an integral part of the overall strategy for managing whitefly populations, TYLCV incidence, and insecticide resistance. These practices will help reduce the onset of the initial infestation of whitefly, regardless of biotype, and lower the initial infestation level during the cropping period.

1. Establish a minimum 2 month crop free period during the summer, preferably from mid-June to mid-August.

2. Disrupt the virus-whitefly cycle in winter by creating a break in time and/or space between fall and spring crops, especially tomato.

### **B. Cultural Control Practices.**

Reduce overall whitefly populations, regardless of biotype, and avoid introducing whiteflies and TYLCV into crops by strictly adhering to correct cultural practices.

1. Use proper pre-planting practices.

a. Plant whitefly and virus-free transplants.

b. Delay planting new fall crops as long as possible.

c. Use determinant varieties of grape tomatoes to avoid extended crop season.

d. Use TYLCV resistant tomato cultivars where possible and appropriate, especially during historically critical periods of virus pressure. Whitefly control must continue even with use of TYLCV resistant cultivars because these cultivars can carry the virus.

f. Use TYLCV resistant pepper cultivars when growing pepper and tomato in close proximity.

g. Use ultraviolet light reflective (aluminum) mulch on plantings that growers find are historically most commonly infested with whiteflies and infected with TYLCV.

### **Insecticidal Control Practices for Whiteflies.**

a. Apply an effective insecticide to kill whitefly adults prior to cultural manipulations such as pruning, tying, etc.

b. Rogue tomato plants with symptoms of TYLCV at least until second tie. Plants should be treated for whitefly adults prior to roguing and, if nymphs are present, should be removed from the field, preferably in plastic bags, and disposed of as far from production fields as possible.

c. Manage weeds within crops to minimize interference with spraying and to eliminate alternative whitefly and virus host plants.

### **Insecticidal Control Practices for Whiteflies.**

1. Delay resistance to neonicotinoid and other insecticides by using a proper whitefly insecticide program. Follow the label!

Neonicotinoid based systemic insecticides by Bayer (Admire, Provado – imidicloprid) and more recently second and third generation nicotinoids (Platinum, Actara – Syngenta, Venom, dinotefuran - Valent) have been the basis for whitefly management. Applied at planting these materials have demonstrated excellent long-term residual control of whiteflies and whitefly vectored geminiviruses.

In recent years there have been wide spread reports of diminished efficacy. Growers are advised to practice good resistance management and avoid multiple applications of these materials in order to preserve these materials.

New systemic insecticides like cyazapyr (Dupont – Verimark) have given good results in controlling whiteflies when applied in this fashion; Verimark can be applied to the root zone at planting or transplant or with drip chemigation soon after planting or transplant. This product provides growers with a new alternative to neonics for early season whitefly management and controls a wider range of pests including leafminers, thrips and leps.

a. Use neonicotinoids in the field only during the first six weeks of the crop, thus leaving a neonicotinoid-free period at the end of the crop.

b. As control of whitefly nymphs diminishes following soil drenches of the neonicotinoid insecticide or after more than six weeks following transplanting, use rotations of insecticides of other chemical classes.

c. Use selective rather than broad-spectrum control products where possible to conserve natural enemies and enhance biological control.

2. Soil applications of neonicotinoid insecticides for whitefly control.

a. For best control, use a neonicotinoid as a soil drench at transplanting, preferably in the transplant water.

b. Soil applications of neonicotinoids through the drip irrigation system are inefficient and not recommended.

c. Do not use split applications of soil drenches of neonicotinoid insecticides (i.e. do not apply at transplanting and then again later).

3. Foliar applications of neonicotinoid insecticides for whitefly control.

a. Foliar applications, if used instead of or in addition to soil drenches at transplanting, should be restricted to the first 6 weeks after transplanting. Do not exceed the maximum active ingredient per season according to the label.

b. Follow scouting recommendations when using a foliar neonicotinoid insecticide program. Rotate to non-neonicotinoid insecticide classes after the first 6 weeks and do not use any neonicotinoid class insecticides for the remaining cropping period.

After the residual effects of soil-applied neonicotinoids abate, growers may turn to a variety of materials to suppress whitefly populations. These include insecticidal soaps and oils, IGR's such as Knack. In recent trials, pymetrozine – (Fulfill- Syngenta) has been demonstrated to be effective in preventing viral transmission by whiteflies. Movento (spirotetramat – Bayer) and Oberon (spiromesifen – Bayer) have given excellent control of whiteflies in University trials.

Organic growers can use biocontrols like Mycotrol- *Beauveria bassiana* , insecticidal soaps, oils and Neem based materials (note: use of Neem products is provisionally allowed but regulated – check OMRI for status) for whitefly management.

Consult UF/IFAS recommendations for currently labeled insecticides for whitefly control in Florida vegetables.

## Worms

**Around Palm Beach County, respondents indicate that worm pressure is pretty high in some corn in Loxahatchee, but remains mostly low in tomato and pepper and moderate in eggplant.** In corn, scouts report finding mostly beet armyworms along with an occasional fall armyworm and some loopers.

**Around Southwest Florida, worm pressure has been below normal for early fall.** Armyworms, fruitworms and hornworms are around at low numbers. One exception has been melonworms which are present in high numbers in some cucurbits.

**Respondents in the Manatee/ Hillsborough area report that worms have been horrible with a mixed bag of beet armyworm, loopers, hornworms, fruitworms, and a few pinworms causing problems in a variety of crops.**

### **Leafminer**

**Growers and scouts in the Manatee/Ruskin area and around SW Florida report finds low levels of leafminer stippling and a few mines and adults around.** In all cases, they remain well below treatable thresholds and parasites appear to be keeping them in check.

### **Cucumber beetles**

**Reports indicate that six-spotted cucumber beetle adult numbers have also been pretty high on corn and on some early planted leaf crops in the Glades.** They are also being found on beans in the EAA.

### **Broad Mites**

**Low levels of broadmite have been reported on pepper in SW Florida and on the East Coast.**

**Malformed terminal buds and stunted growth is often a telltale sign that broad mites are present.** Broad mites are extremely tiny and are difficult 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 including AgriMek and Oberon are labeled for control of this pest. For organic growers, sulfur, insecticidal oils or soaps may be effective.** Due to short life cycles, frequent repeated sprays may be necessary to obtain control.

### **Spidermites**

**A few spider mites have been reported on eggplants in Palm Beach County.**

### **Thrips**

**Chilli thrips have been tearing up blueberries in Polk lately and Hillsborough Counties.** Fortunately, there are no reports of damage on other crops.

### **Diseases**

**Growers and scouts report that disease has been relatively low given recent heavy rains.**

### **Bacterial Spot**

**Bacterial spot has been fairly low around Immokalee considering the weather but growers and scouts report some pretty significant flare ups in tomatoes this week.**

**Respondents in Manatee County report that bacterial spot is flaring up in the tomatoes, but is not too bad considering all the rain some areas have received.**

**Bacterial spot remains low in Palm Beach County and seems to be coming in on transplants.**

**Dr Gary Vallad, Plant Pathologist at the Gulf Coast Research and Education reports that many forms of copper, which historically has been used to fight bacterial spot in tomatoes, appear to have become ineffective and at times may actually be detrimental.**

**After conducting four trials over two seasons at CGREC, he says would not recommend using most forms of copper to control the disease in tomatoes.**

**“My advice would be no (copper) for bacterial spot,” he says. “For other diseases, particularly with speck, we haven’t sorted that out yet because they have resistance issues with speck as well.**

**He says he based his recommendation against using copper for bacterial spot control on two factors. Copper really only suppressed the disease years ago and never really did provide what could be considered effective control. That was before the numerous strains found in the state became resistant to copper.**

**During 2011-12, Vallad and colleagues collected 175 samples of bacterial spot in Florida and south Georgia and assayed them for resistance. Of those, 133 came from fields and 43 from greenhouses.**

**All but one was resistant to copper, and populations had also shifted during the past several seasons to the more aggressive T4 strain from the milder T3 strain.**

**The concern is the T4 strain may cause aggressive spotting on the fruit, depending on weather conditions.**

**The results also mirror those obtained in 2006-07, when 377 samples were collected by a group led by Diana Horvath. All of those samples showed resistance to copper.**

**Vallad’s trials were conducted in 2012-13 at GCREC and involved 20 different treatments and four replicates apiece. One of the treatments was an untreated check.**

**What the trial revealed was when Actigard, an SAR—or systemic activated response—material was used alone or in combination with non-copper products, it produced the best results.**

**And when copper was added to any of the treatments, more fruit ended up with lesions than even the untreated check.**

**“Anything that had copper did worse than anything that had Actigard,” he said. “Whenever you had copper, you had significantly reduced yields compared to when you left copper out.”**

**Two antibiotics, both of which are not registered for use on field-grown tomatoes, provided good control of the bacterial disease. But Vallad says they may never be approved because of concerns about antibiotic resistance in humans.**

**Streptomycin is labeled for use in greenhouse production. But resistance already is a concern as 86 percent of bacterial spot samples collected from transplant houses were tolerant to the antibiotic compared with only 14 percent of samples collected from the field.**

**As part of the trial, Vallad calculated costs for each treatment. The cost of a program that used eight sprays of copper-mancozeb was comparable with one using weekly Actigard treatments, \$113 per acre versus \$114 per acre, respectively.**

See more at: <http://www.thegrower.com/news/274752851.html?view=all#sthash.qq66ecsy.dpuf>

## **Pythium**

**Excess moisture and heat have contributed to some pythium problems in several locations around South Florida.** Respondents report that pythium, both aerial and soil infections have been somewhat of an issue in places.

**The combination of abundant soil moisture and elevated temperatures conspire to make the fall planting season a prime time for vegetable growers in Florida to encounter problems with Pythium spp. on a variety of vegetables.** Pythium typically attacks roots causing damping off, seedling blights, root rots and wilting of affected crops. In some instances, Pythium may affect the above ground portions of crops.

**A number of chemical treatments are available for the control of damping off.** Fungicidal drenches such as Previcur Flex (Propamocarb) and Ridomil Gold (mefenoxam) are effective for the suppression of seedling blights and root rots if applied before infection occurs. Resistance to Ridomil has been widely reported.

**Several biological control agents, including actinomycetes and other bacteria and fungi, are available to organic and conventional growers for suppression of Pythium and other soil borne pathogens.**

**Some soils are naturally suppressive to diseases caused by Pythium or may become suppressive by increasing organic matter or manipulating soil pH.** Incorporation of cover crops prior to planting may support competing organisms in the field, but in some cases may result in increased populations of the pathogen. Sunn hemp has been implicated in this regard.

## **Southern Blight**

**Southern blight is causing some issues around South Florida.** Incidence and occurrence is mostly spotty.

**Southern blight is caused by a soil-born fungus, Sclerotium rolfsii and can be a widespread problem in Florida's fall season.** Typical symptoms include a whitish fungal growth develops around the base of plants at the ground line followed by wilting and sudden plant death as the fungus girdles the stem. Small seed-like structures (sclerotia) may be found within fungal mass. They are white at first and later turn dark brown to black.

**The disease usually appears in "hot spots" in fields in early fall and continues until cooler, dryer weather prevails.**

**Soil fumigation fumigant combinations containing chloropicrin and or metam can help reduce the incidence of southern blight.** As growers transition to other less efficacious fumigants some scientists fear the disease may become more prevalent over time.

**Recent trials show that Fontelis - DuPont (penthiopyrad) applied at plant, pre-plant incorporated, as a transplant drench or through the drip has provided good control of southern blight.**

## **Gummy stem blight**

**Gummy stem blight is around at low levels in fall watermelons.**

**Temperatures and moisture conditions are often ideal for development during watermelon season in Florida.** Gummy stem blight is most severe in wet years since moisture is necessary for spore germination. Pycnidiospores are released in a gummy substance that makes them adaptable for spread by splashing water.

**Growers often comment on this disease occurring “overnight.”** What they are actually seeing are the results of secondary spread, which is more difficult to control than primary spread simply because of increased spore numbers with increased diseased tissue.

**Multiple applications of fungicides are necessary to control gummy stem blight.** It is important to begin a fungicide program prior to the first sign of gummy stem blight. In south Florida, the spray program should be initiated soon after emergence. In other areas of the state, fungicide spray programs can be initiated when the vines begin to “run.” When vines are small, band applications of fungicide over the crown area are effective and help reduce application costs. Fungicides like mancozeb or Bravo in rotation will provide good protection before disease is established in the field

**In recent years, strains resistant to the strobilurin fungicides have been detected throughout the Southeast, so it is important that growers practice resistance management and avoid repeated applications of these and all fungicides.** Materials such as Folicur (Tebuconazole), Pristine (BASF) a mixture of boscalid and pyraclostrobin, and Topsin (thiophanate methyl) have shown good efficacy against resistant strains of the disease.

**Newer materials such as Fontelis (penthiopyrad) and Luna Experience (fluopyram) have shown excellent control in trials.**

### **Downy Mildew**

**A little downy mildew is present in some cucurbits around South Florida.**

**On cucurbits, downy mildew lesions start out as yellow angular leaf spots typically located away from leaf margins that will later turn brown to black in color.** Often leaf curling and water soaking are associated with downy mildew. A white to grayish fungal growth will appear in the undersides of these lesions when the leaves are wet from heavy dews, rainfall and high humidity (> 90%).

**Protectant fungicides (chlorothalonil and mancozeb) provide excellent control early in the season, but their effectiveness is limited once the disease becomes established.**

**Downy mildew has been reported to have resistance to Ridomil Gold and FRAC group 11 (e.g., Cabrio, Quadris) fungicides.**

**Revus, Ranman, Presidio and Previcur Flex are the recommended fungicides for downy mildew control once it is present.** These fungicides should be mixed with a protectant fungicide to provide optimal control of downy mildew.

### **Basil Downy Mildew**

**Downy mildew pressure in basil has been relentless and growers have to work hard to keep it in check.**

**In basil, symptoms of downy mildew initially appear as yellowing and cupping of the leaves and are typically concentrated around the mid-vein.** Growers may not realize their basil is infected with downy mildew since the yellowing of the foliage is similar to a nutritional deficiency. The discolored area may cover most of the leaf surface.

**On the underside of leaves, a gray, fuzzy growth may be apparent by visual inspection.** Under high humidity, the chlorotic areas on the leaf turn to dark brown quickly. Sporangia, the reproductive structures of the pathogen, are easily detected under magnification and are diagnostic for this disease.



**The dark sporulation of the lower leaf surface renders the product unacceptable for market and may result in severe losses.** The disease symptoms can intensify in transit on harvested product and again result in unsalable product on arrival.

**Disease development is favored by high humidity and leaf wetness.** In field spread is through spores. This disease can become very severe if crops are not protected with a rigid fungicide program.

**Although few fungicides are specifically labeled for this disease, some broadly labeled fungicides which are labeled under the herb crop grouping on current labels, such as Ranman, Quadris and Amistar (Azoxystrobin) and the phosphonic acids have shown efficacy in managing the disease.**

**Recently Revus received a label for use against pythium but it also provides excellent control of downy mildew when used early as a soil drench.** These fungicides are most effective when applications are started before or just after initial symptoms are found.

### **Bacterial Blight**

**Respondents in Homestead report some problems with bacterial blight on some young beans.**

**Common bacterial blight is by far, the most frequently encountered bacterial disease of snap bean in Florida.** Two other bacterial diseases of bean are well known in many bean production areas. These are halo blight and brown spot, caused by *Pseudomonas syringae* pv. *phaseolicola* and *P. s. pv. syringae*, respectively, which tend to cause problems in cool weather. Outbreaks of these two diseases are unusual in Florida.

**Symptoms on leaves first appear as small, water-soaked spots which are usually more evident on the underside of the leaves.** These lesions become larger and develop into dry, brown spots with distinct, rather narrow, yellow halos. As infection proceeds, the spots may coalesce, and the yellowing of leaves becomes more general.

**Growers should avoid movement through and work in fields when plants are wet.** This simple cultural practice can greatly reduce disease development and spread.

**Applications of copper may provide some control once disease appears.**

### **Little Leaf**

**Respondents in the Manatee/Ruskin area report some little leaf showing up in wet fields.**

**Tomato little leaf is a non-parasitic disease of tomatoes that causes virus-like symptoms in tomato.** A similar disorder affects other crops and has been referred to as frenching in tobacco. Symptoms of this condition are characterized by unusual growth consisting of interveinal chlorosis in young leaves. Subsequent growth becomes severely distorted with leaflets along the mid-rib failing to expand properly resulting in a "little leaf" appearance. Leaflets are twisted and distorted. In addition, failure of blooms to set fruit and fruit distortion consisting of radial cracks extending from the calyx to the blossom scar is often seen. Overall the appearance is reminiscent of viral or phenoxy herbicide symptoms.

**The problem typically occurs on wet soils and is apparently caused by the release of amino acid analogs by soil microorganisms under wet conditions.**

**Control consists largely of managing soil moisture to avoid water logging.** Maintaining soil pH below 6.3 or less can also reduce development of the problem however changing soil pH should be approached carefully

to avoid problems that might accompany reduced lime utilization in tomato. Affected plants generally resume normal growth once soil moisture levels become more favorable.

## **News You Can Use**

### **USDA Natural Resources Conservation Service Farm Bill Program Funding Deadline**

The primary program we administer that offers assistance to growers is the Environmental Quality Incentives Program (EQIP). Through the EQIP program incentive payments are being offered for vegetable crop growers with resource concerns. A few examples are provided here. If you have irrigated a minimum of two of the last five years, you irrigate for a minimum of 9 out of 12 months, and you are willing to install soil moisture monitoring devices and keep records then you could earn up to \$8 per acre per year. Installing a micro-irrigation system that uses a well water source can earn up to \$1,863 per acre. Applying precision nutrient management will earn cost share of \$32/ acre. (Based on 2014 cost-share rates, subject to 2015 revisions)

The Conservation Stewardship Program (CSP) is a program that encourages agricultural producers to maintain existing best management conservation activities and adopt additional enhancements on their operations. If you are accepted into the nationally competitive program you may receive base payments of up to \$15 per acre for 5 years, subject to 2015 revisions.

For more information visit: [www.fl.nrcs.usda.gov/programs](http://www.fl.nrcs.usda.gov/programs) <http://www.nrcs.usda.gov/programs/> or call your local USDA-NRCS office.

Deadline: To be considered for 2015 funding, an application must be on file in the NRCS office by close of business on November 21, 2014.

### **FDA's 2014 Food Safety Challenge: Salmonella in Fresh Produce**

By David G. White  
Food Safety News  
September 23, 2014

Even with one of the safest food supplies in the world, 1 in 6 Americans is sickened by foodborne illness each year, resulting in thousands of deaths and billions of dollars in health care costs.

That's why my colleagues and I are excited to announce the 2014 FDA Food Safety Challenge, the FDA's first open innovation competition under the America COMPETES Reauthorization Act of 2010, which grants all federal agencies broad authority to conduct prize competitions to spur innovation, solve tough problems, and advance their core missions.

We're going after a problem with wide-ranging effects on the safety of the American public — foodborne pathogen detection — and we're targeting Salmonella, which is responsible for more deaths and hospitalizations than any other foodborne pathogen.

Backed by a \$500,000 prize purse, the challenge calls on America's innovators to submit concepts that achieve breakthrough improvements in detecting Salmonella in fresh produce. We are looking for ideas that will advance FDA's pathogen detection efforts and further strengthen the safety of the American food supply.

From the open submission pool, up to five of the most promising concepts will be selected to progress as finalists. Subject matter experts from FDA will help these finalists hone their concepts, providing entrants with extensive coaching and support. Finalists will then present their concepts to a panel of judges from FDA, the

U.S. Centers for Disease Control and Prevention and the U.S. Department of Agriculture at a Demo Day event, and the winner or winners will be selected.

Exciting work in diverse fields, including materials science, nanotechnology, spectroscopy and genomics, offers promising application in the future of pathogen detection. While existing methods continue to improve, new approaches could eliminate steps in the testing process and dramatically speed the time to result.

We know of myriad research teams across the country working on advanced techniques. Through this open innovation competition, we'll look for these researchers and other innovators to contribute solutions that can be deployed in new ways to food safety, enabling us to move this important work out of the lab more efficiently than typical commercialization approaches.

Mandated to regulate the safety of the American food supply, FDA has a responsibility to apply best-in-class testing approaches to protect against foodborne illnesses. Through the challenge, we aim to bring in the best solutions from food safety experts and concepts from adjacent fields that offer promise in the future of rapid pathogen detection.

Open innovation holds much promise for furthering FDA's efforts to ensure the safety of America's food. By gaining fresh perspectives on the challenges of food safety, FDA can explore solutions that may have otherwise escaped our notice. And by engaging a diverse community of innovators, we can create a broader dialogue to advance regulatory science across the federal research enterprise.

(David G. White, Ph.D., is chief science officer and research director at FDA's Office of Foods and Veterinary Medicine.)

[http://www.foodsafetynews.com/2014/09/fda-2014-food-safety-challenge-draft-contributed-post-sept-23/#.VCK\\_5E1OXbi](http://www.foodsafetynews.com/2014/09/fda-2014-food-safety-challenge-draft-contributed-post-sept-23/#.VCK_5E1OXbi)

### **Tips to Avoid Heat Related Illness**

It is hot out there - remember to take care of yourself and your workers in hot weather and avoid heat related illness.

Early fall in South Florida can be overwhelmingly hot, especially when performing strenuous work like laying plastic, planting, staking and tying. Heat stress, heat exhaustion, and heat stroke are illnesses that can overcome you when your body is unable to cool itself.

Heat stress hits quickly, and it may be deadly.

The most serious forms of heat related illness include heat cramps, heat exhaustion and heat stroke.

As many as 600 people die of heat-related causes a year across the United States.

Never leave children or pets in a parked car. The temperature inside cars can rise to 135°F in less than ten minutes, which can kill children or pets. If you see a child or pet left unattended in a parked car, you should call 911.

Slow down. Strenuous activities should be reduced, eliminated, or rescheduled to the coolest time of the day. At-risk Individuals should stay in the coolest available place, not necessarily indoors.

Clothing is important. Dress for summer. Use common sense and wear light colors, a loose weave, long sleeves and a hat. Lightweight, light-colored clothing reflects heat and sunlight and helps your body maintain normal temperatures.

Put less fuel on your inner fires. Foods that increase metabolic heat production--such as proteins--also increase water loss.

Drink plenty of water and other nonalcoholic fluids. Your body needs water to keep cool.

Drink plenty of fluids even if you don't feel thirsty.

People who may be at most risk:

(1) have epilepsy or heart, kidney, or liver disease;

(2) are on fluid-restrictive diets; or

(3) have a problem with fluid retention, should consult a physician before increasing their consumption of fluids.

Do not drink alcoholic beverages. Alcohol dehydrates you.

Do not take salt tablets unless specified by a physician. People on salt-restrictive diets should consult a physician before increasing their salt intake.

Spend more time in air-conditioned places. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, spending some time each day in an air-conditioned environment (during hot weather) can offer some protection.

Don't get too much sun. Sunburn makes it harder for you to cool off.

## **REMEMBER TO DRINK BEFORE YOU FEEL THIRSTY!**

### **Factors Leading to Heat Stress:**

- High temperature and humidity
- Direct sun or heat
- Limited air movement
- Physical exertion
- Poor physical condition
- Some medicines
- Inadequate tolerance for hot workplaces

### **Symptoms of Heat-related Illnesses**

**Heat Cramps** - Rest in a cool place, drink sports drink, and stretch the cramped muscle.

**Heat Exhaustion** - Hot and sweaty.

Headaches, dizziness, lightheadedness, or fainting

Weakness and moist skin

Mood changes such as irritability or confusion

Upset stomach or vomiting

Move the victim to a cool place, give the person sports drinks, lay them down and elevate their legs, remove excess clothing, sponge with cool water and fan the person. If there's no improvement within half an hour, call 911.

**Heat Stroke** - Clammy and dry.

Dry, hot skin with no sweating

Mental confusion or loss of consciousness

Seizures or fits

This is The Big One! This one can, and does, kill. CALL 911 IMMEDIATELY even if the victim seems to be improving; move the victim to a cool place, remove excess clothing, keep the head and shoulders slightly elevated, fan the victim and spray with water, place ice packs under the arms, by the groin and sides of the neck where the big veins are. Ice will help cool the blood.

### **Preventing Heat Stress**

- Know the signs and symptoms of heat-related illnesses, and monitor yourself and your coworkers.
- Block out direct sun or other heat sources.
- Use cooling fans and air-conditioning; rest regularly.
- Drink lots of water--about one cup every fifteen minutes.
- Wear lightweight, light-colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks, and heavy meals.

### **How to Treat Victims of Heat-related Illness**

Call 911 (or local emergency number) at once.

Move the affected person to a cool, shaded area.

Loosen or remove heavy clothing on victim.

Provide cool drinking water to victim.

Fan and mist the person with water.

### **OPERATION CLEANSWEEP 2014**

#### **Statewide Pesticide Pick-up**

Operation Cleansweep is a mobile pesticide collection program that provides a safe way to dispose of cancelled, suspended, and unusable pesticides at NO COST for the first 500 lbs. for: Farms/Groves, Nurseries, Pest Control Services, Greenhouses, Forestry, Golf Courses

Pesticide manufacturers/distributors can participate at the contracted rate.

For more information Contact:

Shannon Turner

Florida Department of Agriculture and Consumer Services

Toll-Free Number: (877) 851-5285

Email: [Cleansweep@freshfromflorida.com](mailto:Cleansweep@freshfromflorida.com)

CLEANSWEEP WEBSITE: <http://www.dep.state.fl.us/waste/categories/cleansweep-pesticides/>

## **Pesticide Pot-pouri**

- Registrants of the insecticide methomyl and the Environmental Protection Agency have agreed to mitigation measures that are designed to reduce dietary risk from drinking water exposure. Registrants include Chemtura Corp., DuPont, Glades Formulation Co., Rotam Ltd. and Sinon Corp. The measures will cancel the use of methomyl on barley, oats, and rye and restrict its use on wheat to Idaho, Oregon and Washington.

In celery, head lettuce and peppers, the number of applications will be reduced by 20 percent and the seasonal maximum rate will be reduced by 12 percent to 20 percent. The number of applications for leaf lettuce, field corn, popcorn and seed corn will be reduced 25 percent to 50 percent.

Although Florida and California are the greatest areas of concern for drinking water, the registrants have agreed to implement the measures nationwide. Methomyl, a carbamate, is a restricted-use broad-spectrum insecticide. Among its brand names are Lannate, Lanox, Methavin and Nudrin. (USAgNet.com, 8/19/14).

- The US Environmental Protection Agency has approved a Section 18 Exemption for the use of Transform WG Insecticide for control of White Sugarcane Aphid (WSA) in forage sorghum grown in Florida. This exemption is valid until 12/31/14 and allows rescue treatments for late planted sorghum.

The recommended application rate is 1 to 1.5 oz. per acre, with a maximum seasonal application rate of 3.0 oz./acre. Research in Mississippi indicates multiple applications may be required for complete control.

## **Up Coming Meetings**

**September 30, 2014                      WPS Train-The-Trainer: Manatee County Extension Service, 10am-12pm.**

Need to become a WPS Certified Trainer?

The Worker Protection Standard (WPS) is a federal program designed to protect agricultural farm workers in the production of agricultural plants. A person is qualified to teach WPS to farm workers if he/she holds a restricted use pesticide license or if he/she has completed the WPS Train-the-Trainer course. Once a person has completed the course he/she is certified for life. Please bring a cash or a check made out to "Manatee County Friends of Extension" or register online through Eventbrite. Registration and details available here: <http://commercialveg.eventbrite.com>

CEUs available: 2 in the following categories: Aerial, Ag. Row, Ag. Tree, O&T, Private, Forest Pest Control, and Soil and Greenhouse Fumigation.

**October 1, 2014                      CORE/PRIVATE Pesticide License Exam Prep Classes**

**CORE Class – 7:30 – Noon**  
**Private Class – 1 – 4:00 PM**

UF/IFAS Hendry County Extension Office  
1085 Pratt Boulevard  
LaBelle, Florida 33935

Classes are \$10 each. For more information or to register, contact Debra at 863-674-4092 or [dcabrera@ufl.edu](mailto:dcabrera@ufl.edu)

**October 30 & 31, 2014**

**HACCP for Florida Fresh Fruit and Vegetable Packinghouses**

**Everglades Research and Education Center  
3200 East Palm Beach Road  
Belle Glade, FL 33430**

## ABOUT THE PROGRAM

Food Safety is critical to the fresh produce industry. In addition to being a major public health issue, food safety issues have had an adverse economic impact on growers, packers, processors and shippers of fresh produce.

In addition to a discussion of current and proposed legislation, the latest research on produce safety and Good Manufacturing Practice (GMPs), the workshop will cover the elements of putting together a comprehensive food safety program.

The hands on course will teach participants how to develop and document a food safety management program based on the principles of Hazard Analysis and Critical Control Point (HACCP) for their specific operations.

Breakout sessions are structured to teach participants how to identify and prevent food safety hazards, monitor hazard reduction procedures, develop control measures and methods to document and verify the results of their efforts.

The workshop, accredited by the International HACCP Alliance, is targeted to produce packers, to assist in the development and customization of food safety programs for their facilities, using a HACCP-based approach.

## PACKINGHOUSE HACCP PROGRAM AGENDA

Thursday October 30th

8:00 Registration  
8:30 Welcome  
Introduction to Food Safety  
and the HACCP System  
Hazards  
Prerequisites to HACCP – GAPs, GMPs, SOPs, SSOPs  
Hazard Analysis (Principle 1)  
Identification of Critical Control Points (Principle 2)  
Establishment of Critical Limits (Principle 3)  
Critical Control Point Monitoring (Principle 4)  
5:00 Adjourn

Friday October 31st

8:00 Coffee  
8:30 Review  
Corrective Actions (Principle 5)  
Verification (Principle 6)  
Recordkeeping (Principle 7)  
Regulations – Food Safety Modernization Act  
HACCP Review  
HACCP Exam  
5:00 Adjourn

The fee for the course is \$400 for industry participants; additional participants from one facility/farm who do not require course materials may register for a fee of \$100. A reduced fee of \$250 is available for government/academic employees that make prior arrangements.

Register online - <https://www.eventbrite.com/e/haccp-for-florida-fresh-fruit-and-vegetable-packinghouses-tickets-12332582085>

**November 4-6th, 2014**      **29th Annual Tomato Disease Workshop**

**Waterfront Hotel  
Windsor, ON**

For more information, go to <https://sites.google.com/site/tomatodiseaseworkshop2014/>

**November 17-20, 2014**      **22nd International Pepper Conference**

**Viña del Mar  
Chile**

For more details, go to <http://www.pepper2014.cl/en/>

## **Websites**

**The New American Reality** - You've probably read the headlines: "New census milestone: U.S. Hispanic population tops 50 million." The U.S. Census numbers have confirmed that the Hispanic population has reached an important milestone, the 50 million mark. We are waking up to a new reality, a new face of America which will drive American politics and shape our society in the future. Check out this video at:

<https://www.youtube.com/watch?v=pQnhuj11zgI&app=desktop>

**FDACs Office of Ag Water Policy - BMP Manuals** – you will also find link to enroll in a BMP program. Go to <http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy/Enroll-in-BMPs/BMP-Rules-Manuals-and-Other-Documents>

**National Sustainable Agriculture Information Service - ATTRA** - is developed and managed by the National Center for Appropriate Technology (NCAT) – lots of information and resources for sustainable farming <https://attra.ncat.org/>

## **Quotable Quotes**

To get something you've never had, you must be willing to do something you've never done. - Thomas Jefferson

A society grows great when old men plant trees whose shade they know they'll never sit in. – Greek Proverb

The real things haven't changed. It is still best to be honest and truthful; to make the most of what we have; to be happy with simple pleasures; and have courage when things go wrong. - Laura Ingalls Wilder

Sometimes you just have to look back and smile about how far you've come. - Anon

Everyone is entitled to their own opinion, but they are not entitled to their own facts. - Daniel Patrick Moynihan

I'll tell you, son, the minority got us out-numbered! – Congressman Frog



Food for thought is no substitute for the real thing. - Pogo

Having lost sight of our objectives, we redoubled our efforts. - Pogo

## **On the Lighter Side**

### **SOUTHERN LIFE**

#### **Georgia**

The owner of a golf course in Georgia was confused about paying an invoice, so he decided to ask his secretary for some mathematical help. He called her into his office and said, "Y'all graduated from the University of Georgia and I need some help. If I wuz to give yew \$20,000, minus 14%, how much would you take off?" The secretary thought a moment, and then replied, "Everthang but my earrings."

#### **Louisiana**

A senior citizen in Louisiana was overheard saying, "When the end of the world comes, I hope to be in Louisiana." When asked why, he replied, "I'd rather be in Louisiana 'cause everythang happens in Louisiana 20 years later than in the rest of the world."

#### **Mississippi**

The young man from Mississippi came running into the store and said to his buddy, "Bubba, somebody just stole your pickup truck from the parking lot!" Bubba replied, "Did y'all see who it was?" The young man answered, "I couldn't tell, but I got the license number."

#### **North Carolina**

A man in North Carolina had a flat tire, pulled off on the side of the road, and proceeded to put a bouquet of flowers in front of the car and one behind it. Then he got back in the car to wait. A passerby studied the scene as he drove by, and was so curious he turned around and went back. He asked the fellow what the problem was. The man replied, "I got a flat tahr." The passerby asked, "But what's with the flowers?" The man responded, "When you break down they tell you to put flares in the front and flares in the back. I never did understand it neither."

#### **Tennessee**

A Tennessee State trooper pulled over a pickup on I-65. The trooper asked, "Got any ID?" The driver replied, "Bout whut?"

#### **Texas**

The Sheriff pulled up next to a guy unloading garbage out of his pick-up into the ditch. The Sheriff asked, "Why are you dumping garbage in the ditch? Don't you see that sign right over your head?" "Yep," he replied. "That's why I'm dumpin' it here, 'cause it says: 'Fine For Dumping Garbage.'"

You kin say whut want 'about the South, but I bet y'all never heard o' nobody retirin' an' movin' North.



**Welcome back and wishing you all the best for a profitable 2014 -2015 Season**

**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.**

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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*

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