



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

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# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

October 4, 2007

Although a subtle hint of cooler weather to come has been felt a couple mornings over the past two weeks the taste of things to come is short-lived with temperatures still rising into the 90's most afternoons. A number of areas reported a few nights with temperatures finally dipping into the upper 60's for the first time this season.

The past two weeks have also bought some of the wettest weather this season to many parts of South Florida. The UF/IFAS FAWN weather station in Fort Lauderdale reported a whopping 14.7 inches for the period, followed by Homestead with 8.8 and Fort Pierce with 6.8 inches. FAWN sites in Immokalee and Balm each reported 2.83 inches of precipitation but respondents in both areas report much higher local accumulations, with some growers in Manatee reporting over 9 inches over night earlier this week. As always is the case in Florida rain fall has been extremely variable and conditions can change over night.

Fall planting and associated cultural operations – staking and tying remains in high gear in most areas. In some places, field operations were slowed by wet conditions. Scattered reports of plant damage by high winds and heavy rain associated with thunderstorm activity have also been received. Growers continue ship okra from Dade County, and some early cucumbers and specialty crops are starting to come on the market.

## FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Hours Below Certain Temperature (hours)								
	Min	Max		40°F	45°F	50°F	55°F	60°F	65°F	70°F	75°F	
<b>Balm</b>												
9/17- 10/4/2007	67.7	91.3	2.83	0.0	0.0	0.0	0.0	0.0	0.0	11.0	83.5	
<b>Ft Lauderdale</b>												
9/17- 10/4/2007	71.9	91.2	14.72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	
<b>Fort Pierce</b>												
9/17- 10/4/2007	70.2	89.7	6.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1	
<b>Homestead</b>												
9/17- 10/4/2007	70.5	90.5	8.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.6	
<b>Immokalee</b>												
9/17- 10/4/2007	68.8	92.8	2.83	0.0	0.0	0.0	0.0	0.0	0.0	2.9	77.4	

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Around Hillsborough County strawberry planting started this week. In general, reports indicate that for the fall crop, plantings look relatively good in most places.

**The short-term forecast from the National Weather Service in Miami** calls for more of the same with a 50% chance of thunderstorms for the next few days. Slight drier conditions may move in early next week. For additional information, visit the National Weather Service in Miami website at <http://www.srh.noaa.gov/mfl/newpage/index.html>

## **Insects**

### **Whiteflies**

**Reports from around Manatee County indicate that whitefly numbers have declined from the high numbers reported a few weeks ago since heavy rains have returned.** Scouts report that whitefly numbers fluctuate from day to day depending on last insecticide treatments and local weather, and note that they are beginning to find some immatures in some of the oldest tomato plantings last week in Manatee Co.

**Dr Dave Schuster reports that there is some indication that at least some of the whiteflies adults are coming from fallow fields being disked in preparation for the spring crop.** He notes that there appears to be at least two immigrations of whiteflies, one apparently more viruliferous than the other and both from different directions.

**Growers and scouts around southwest Florida indicate that whiteflies numbers are up and down with the rain.** In general, numbers have dropped compared to levels seen earlier in the season but remain above normal. Whiteflies are also above normal in eggplant, squash and watermelons. Counts of up to 5 whiteflies per leaf have been reported on cucurbits.

**Respondents in Homestead indicate that whitefly pressure is high in okra.**

**Growers and scouts around Palm Beach County report mostly low but note that in several instances transplants are arriving with whitefly nymphs and eggs.**

For current management recommendations – see **Management of Whiteflies, Whitefly-Vectored Plant Virus, and Insecticide Resistance for Vegetable Production in Southern Florida** - <http://edis.ifas.ufl.edu/IN695>

### **Worms**

**Respondents from the Manatee/Ruskin area indicate that worms are generally not a big problem although some growers are seeing some worms on older squash and cukes that are being harvested.**

**Around Immokalee, beet armyworm numbers have been on the increase with many eggs being found in the past few days.** Armyworm numbers have been very high in peppers since the end of the full moon and some growers have had a hard time getting control.

**Southern armyworms, fruitworms and loopers are also present.** Scouts indicate that tomato hornworm eggs are very common some days but note that they rarely see the actual worms possible because they are more susceptible to insecticide applications. Melonworms are present in squash and other cucurbits but not in high numbers.

**Reports from across South Florida indicate worm pressure in sweet corn is extremely high.**

**On the East Coast, worms have been manageable but some growers expect increased problems due to frequent rains interfering with spray applications.**

### **Spider Mites**

**Despite wet conditions, spider mites are causing problems on eggplants, cucurbits, and some early corn in some locations around Palm Beach County.**

**Scouts in Manatee report that finding some two spot mites in melon plantings that have remained somewhat rain free over the past two weeks.**

### **Broad Mites**

**Broadmites are rocking and rolling in pepper and eggplant in a number of locations with the populations building to damaging levels very fast.**

### **Leafminer**

**Respondents around Southwest Florida report that leafminers numbers remain very low and note that there are some parasites around.**

**Around Manatee County reports indicate that leafminer is not a problem except for a few scattered fields.**

### **Stinkbug**

**Growers in Homestead are reporting some problems with stinkbug on okra affecting fruit quality.**

## **Diseases**

### **TYLCV**

**Around Southwest Florida, tomato yellow leaf curl virus is around and there are several fields that are approaching 1% infection with few early plantings in the 2-5% range.**

**Around Manatee County, tomato yellow leaf curl virus is present in a number of locations with incidence ranging from 1 - 8% or so. Incidence mostly varies by planting date, with oldest plantings having highest numbers.**

**A few scattered reports of mostly single plants showing TYLCV symptoms are also trickling in from around Palm Beach County.**

### **Bacterial Spot**

**Around Southwest Florida, growers and scouts report that recent rains have helped flare up bacterial spot in several locations, especially on tomatoes.**

**Around Manatee County, some tomato fields are remarkably clean and in others bacteria is moderate to severe with lesions halfway up the bush. This largely coincides with rainfall patterns and amounts.**

**Phyllis Gilreath notes that she has noticed some obvious differences in tomato plants depending on disease control programs, adding that some growers over apply copper. It is important to remember that**

copper is a protectant and will not cure bacteria. The idea is to keep the new growth covered and too much copper just makes the plant hard and slows growth. It is not necessary to apply so much copper that the plastic is either blue or brown.

**Bacterial spot is one of the most serious diseases of tomato and pepper in Florida because it can spread rapidly during warm periods with wind driven rains, and because fruit symptoms reduce marketability.**

**Bacterial spot is caused by the bacterium, *Xanthomonas campestris* pv *vesicatoria*.** Entry into the plant occurs through stomata or wounds made by wind driven soil, insects, or cultural operations. Bacterial spot can be seed transmitted, but most inocula comes from volunteer plants or infected plant debris in the soil. Temperatures of 75-87°F are ideal for bacterial spot but infections can occur at higher or lower temperatures.

**Symptoms of bacterial spot appear as small, water-soaked, greasy spots on infected leaflets.** On tomatoes, distinct spots with or without yellowing occur. Individual leaf spots may coalesce with each other, resulting in the browning of entire leaflets. Fruit spots often begin as dark specks with or without a white halo. As spots enlarge, they become raised and scab-like.

**In pepper, symptoms are similar to those in tomato, except that spots may be lighter in color and fruit lesions may appear blistered.** In mature plants, leaflet infection is most concentrated on older leaves and defoliation may occur in severe infections.

**Positive diagnosis requires lab tests as other diseases may cause symptoms that appear similar to those of bacterial spot.**

**An integrated approach is needed to manage this disease.** Sanitation is important. Pepper and tomato volunteers and solanaceous weeds should be destroyed between crops. Transplant houses should be located away from tomato or pepper fields. Purchase only certified disease-free transplants.

**Since water movement spreads the bacteria from diseased to healthy plants, workers and farm equipment should be kept out of fields when fields are wet because the disease will spread readily under wet conditions.**

**Researchers have identified no fewer than ten different races of *Xanthomonas campestris*.** Since no variety incorporates resistance to all known races, it is important that growers use varieties that have resistance to races that occur in their area. No resistant tomato varieties are available commercially.

**Commercial pepper varieties resistant to races 1, 2 and 3 have been on the market for several years and over the past year or so a number of newer varieties which incorporate additional resistance to races 4 and 5 have come on the market.** Seminis has introduced several varieties of sweet pepper that are resistant to Races 1 through 5 including PS 5776 and PS 8302. Harris Moran has introduced Patriot and Revolution which include Race 1, 2, 3 and 5 resistance. Harris Moran 2641 has resistance to races 1 through 4. All of these have performed well in trials demonstrating dramatically reduced infection rates.

**It is important to apply sprays before and during rainy periods.** If conditions are favorable, frequent spraying may not be sufficient to maintain bacterial spot below damaging levels.

**The traditional recommendation for bacterial spot control consists of copper and maneb or mancozeb.** Attention to application techniques is as important as choice of material in achieving adequate control. The effectiveness of copper is limited, because of the widespread occurrence of copper tolerance among strains of *X. campestris* pv. *vesicatoria*.

**There is some evidence that the use of organosilicate adjuvants and applications of magnesium might increase the incidence and severity of bacterial spot infections.**

**In the past few years several new products have come on the market that have given good results in research trials when used in rotation or together with traditional controls such as copper.** These include Tanos (Dupont) as well as the SAR elicitor Actigard (Syngenta), and Serenade (AgraQuest).

**Over the past few years, some growers and researchers have experienced success with the bacteriophage (bacterial virus) AgriPhage (Omnilytics) for the control of bacterial spot.** Success with AgriPhage requires a high level of management and sampling to detect and

**A number of growers have also reported good results using Oxidate (Biosafe Systems) as a sanitizing agent following cultural operations or weather events favoring the development and spread of the disease.**

**Growers around Homestead are reporting some problems with bacteria on beans following recent heavy rains.**

### **Pythium**

**Growers and scouts in all areas continue to report some problems with pythium on a variety of crops, particularly beans and pepper.** In some areas affected by heavy rains aerial pythium has melting down scattered plants in the wetter areas.

### **Phytophthora**

**Some phytophthora has also been reported, particularly where growers failed to apply Ridomil pre-plant or in wet spots where the disease is traditionally a problem.**

### **Southern Blight**

**Growers and scouts in SW Florida and in Manatee area report finding a few mostly single plants with southern blight which is about normal for this time of year.**

**Southern blight is caused by a soil-born fungus, *Sclerotium rolfsii*.** Whitish fungal growth develops around the base of herbaceous plants (and a few woody plants) at the ground line. Small seed-like structures (sclerotia) are found with fungal growth. They are white at first and later turn dark brown to black. Plants wilt and die suddenly after the fungus girdles the stem.

**Southern blight is especially destructive on crops such as tomato, beans, peas and peanuts.** Many other plants including annual ornamentals are also susceptible. The fungus develops rapidly during hot weather when temperatures are over 85° F. It grows on living and non-living organic matter and becomes most severe when dead leaves or other types of organic matter are present around the base of the plant. This permits the fungus to build up momentum by utilizing energy from the decaying organic matter and rapidly kill the host plant. The fungus develops rapidly when summer rains occur after a drought. A good rule of thumb is that the first moisture event (either rainfall or irrigation) following the first sustained 3-5 day period when temperatures exceed 95 ° F will signal the first severe outbreak of the disease. This stimulates germination of the sclerotia (seed-like structures) and furnishes needed moisture for fungal growth. If the fungus finds ample organic matter and host plants, a large supply of sclerotia are produced for next year. These structures have a hard thick covering that resists weathering.

**Southern blight can be controlled with cultural and chemical techniques.** Residue management options differ depending on what the previous crop was in a field. If the previous crop was a non susceptible crop in the grass family it may be advantageous to simply mulch the residue into the surface or plant in the stubble. However, if the previous crop was a susceptible one such as peanut, cantaloupe, or black eye pea, residue should be buried deep enough to prevent its being brought back up in land preparation and cultivation.

**The fungus requires oxygen for development and deep burial reduces its activity.** Keeping fallen leaves or other organic matter from the base of the plant is helpful. Using foliage fungicides to prevent foliage diseases will help keep leaves on the plant and off the ground. Fungicides may also be applied to the soil on certain crops. This will inhibit development of the fungus. Improving drainage by planting on raised bed helps reduce damage on some crops.

### **Gummy Stem Blight**

**Growers and scouts in Immokalee report that gummy stem blight is around at low levels on squash and other cucurbits but recently increased.**

**Around Manatee County some gummy stem is showing up in watermelons being harvested.**

### **Downy/Powdery Mildew**

**Growers on both coasts are reporting some scatter problems with downy mildew and powdery mildew on cucurbits.**

### **Cucurbit Leaf Crumple Virus**

**Cucurbit Leaf Crumple Virus has been detected in early plantings around Manatee County planted when whitefly numbers were highest.**

**In November 2006, cucurbit leaf crumple virus (CuLCrV), a virus new to Florida, was found in squash (*Cucurbita pepo* L.) fields in north central and northeast Florida.** Leaves of yellow straightneck squash and zucchini were thickened and distorted, as well as curled and crumpled. The symptoms on infected yellow straightneck squash were slightly different from those on zucchini. The leaves of yellow straightneck squash plants were rounded on the edges while leaves of zucchini plants were not. Zucchini fruit did not show obvious symptoms, but the fruit from infected yellow straightneck squash were streaked with green, making them unmarketable. Feeding by whitefly nymphs causes silvering of leaves of squash and blanching of yellow-fruited squash and yellow blotchiness of green-fruited squashes. Leaf silvering is distinct from cucurbit leaf crumple disease and should be not be confused with it.

**Cucurbit leaf crumple virus is a begomovirus reported from the western United States (Arizona, Texas and California) and northern Mexico.** (Cucurbit leaf crumple virus has been known in some locations as Cucurbit leaf curl virus). Cucurbit leaf crumple virus is able to infect most cucurbits including cucumber, muskmelon, squash, pumpkin, and watermelon, and has been reported to infect bean. Honeydew, Crenshaw, and casaba melons appear to be immune. As with other begomoviruses, this virus is transmitted in a persistent manner by various biotypes of the whitefly, *Bemisia tabaci*, including the silverleaf whitefly (*B. tabaci* biotype B = *B. argentifolii*). The adult whitefly must feed for a minimum of 30 minutes on the infected plant and can only transmit the virus after a delay of 6-8 hours. Once the whitefly is able to transmit the virus, it can continue to do so for days. The virus cannot be transmitted mechanically and is unlikely to be transmitted through seed.

**Whitefly populations were exceptionally high in fall 2006 in north central and northeast Florida, possibly because of the drought conditions during the summer.** Heavy summer rains can reduce populations under normal conditions, but whiteflies may also have become concentrated on irrigated crop plants when weed hosts

wilted. These high populations may be responsible for the high incidences of Cucurbit leaf crumple virus-infected plants in both locations.

**Management of this new virus will not be much different than management of other begomoviruses in vegetable crops such as Tomato yellow leaf curl virus in tomato.** Virus- and whitefly-free transplants should be used, and transplants produced in states where this virus is known to be a problem (Texas, Arizona, California) should not be planted in Florida. Where whiteflies are a problem, a soil-applied neonicotinoid insecticide such as imidacloprid (Admire<sup>®</sup>), thiamethoxam (Platinum<sup>®</sup>), or dinotefuran (Venom<sup>®</sup>) should be used at planting. If a foliar application of dinotefuran is used instead of a soil application, it is best to apply it in the first 30 days of the crop, before flowering. In addition to protecting bees, it also will help limit the exposure of the whitefly population to neonicotinoids during the latter part of the crop cycle. The crop should be monitored regularly for the presence of adult whiteflies. An application of pymetrozine (Fulfill<sup>®</sup>) will reduce the number of adults and nymphs and can help slow virus spread into and within the crop. Other materials that can be used to reduce adult populations include endosulfan or a combination of bifenthrin and endosulfan. A new product, spiromesifen (Oberon<sup>®</sup>), is effective against immature stages of the whitefly as is buprofezin (Courier<sup>®</sup>), an insect growth regulator. Although spiromesifen and buprofezin affect only reproduction and survival of immatures, they can help reduce secondary spread within and between fields by slowing the increase of the whitefly population. Because of concerns about insecticide resistance in whiteflies, it is critically important to observe the restrictions on the number of applications, to rotate insecticide applications among chemicals in different classes, and never follow a soil application of any neonicotinoid with a foliar application of another neonicotinoid. Further information on management of both begomoviruses and resistance to neonicotinoids can be found on the Whitefly MoA poster at the IRAC (Insecticide Resistance Action Committee) Website - <http://www.irc-online.org>

**In addition to starting with virus- and whitefly-free transplants, other effective cultural controls include avoiding planting next to older, whitefly-infested crops (virus and whitefly hosts such as beans and other cucurbits, but also whitefly hosts such as cabbage, collards, peanuts, tomato, cotton, and soybeans).** Use UV-reflective mulches, which repel migrating whiteflies in the first few weeks of the crop (until canopy closure), thus delaying the introduction of virus. These mulches also repel aphids and will give additional benefits by reducing early spread of aphid-transmitted viruses. Remove weeds from fields, as they can be hosts for whiteflies, and can interfere with thorough coverage with insecticides applied for whitefly control.

**The distribution of cucurbit leaf crumple virus in Florida is not yet known.** Samples of plants suspected to be infected with this virus can be submitted to County Extension Offices for testing by one of the UF/IFAS Plant Disease Clinics.

**For additional information on this virus, please see <http://edis.ifas.ufl.edu/IN716>** Looking at the photos you may agree that this virus may be a fairly widespread around the state albeit at low levels. – GM

### **Damping Off**

**A number of reports of damping-off have been received from scattered locations around the state.**

**Damping-off is a disease that can affect almost all vegetable plants at the early stages of growth.** Losses can be severe and are often manifested in reduced stands in seed flats or rapid wilting and death of young seedlings or production of low-quality plants that perform poorly in the field. Damping-off is a general term used to describe the death of seedlings due to a variety of soil borne fungal pathogens such as Pythium, Rhizoctonia, Phytophthora, Sclerotinia, Botrytis and Fusarium.

**Damping-off is promoted by high soil moisture and can occur either before or after seedling emergence.** Damping-off can occur over a range of temperatures since the various fungi that can cause disease are active at

different soil temperatures. *Pythium* is most active in wet, warm soils, while *Rhizoctonia solani* is more active in cool moist soils.

**Although damping-off can be caused by a number of soil fungi, Pythium and Rhizoctonia are most often involved.** Pythium is especially destructive in commercial vegetable plantings

**Typical symptoms of damping-off are root decay and rotting stems at or near the soil line.** Wilting, yellowing, a reduced and discolored root system, and water soaking of tissue are commonly observed. Fungal growth may often be seen on affected plants. Germinating seed can be attacked before emergence resulting in poor stands. Rhizoctonia, Fusarium, and Sclerotinia, generally cause post emergence damping-off by killing the seedling at the soil line. Seedlings infected by Rhizoctonia typically display a reddish brown discoloration. Pythium attacks below the soil line, causing water soaking and collapse of stems and dark rotted roots.

**Damping-off may be confused with plant injury caused by excessive fertilization, high soluble salts, drowning, desiccation, and death of seedlings from heat, cold, or chemical injury.** This type injury often damages the leaves and upper stem before the roots are affected.

**The best control for damping-off is prevention, since once damping-off is established in seedling flat or field, it is difficult to control.** An integrated approach should be employed to reduce the occurrence of damping-off. Practices that encourage rapid germination, such as proper soil preparation and good drainage, as well as attention to planting depth and soil temperature to assure rapid seedling emergence and growth, will reduce the risk of damping off. Proper plant nutrition is also important to get plants off to a healthy start.

**Crop rotation is often of little value since damping-off fungi are widespread and can survive for a long time.** Incorporation of cover crops into the soil immediately before planting can increase inoculum loads and the risk of damping-off.

**The use of high quality, fungicide-treated seed will reduce the risk of disease as will soil fumigation and the use of in-row soil treatment with fungicides such as Ridomil Gold or Ultra Flourish (*Pythium*, *Phytophthora* spp.) or Terrachlor (*Rhizoctinia*), to reduce the level of damping off fungi in the field.** Seed treatment with commercially available beneficial fungi such as Rootshield (*Trichoderma harzianum*) or Soilgard (*Gliocladium virens*) has shown promise in some cases and may be of particular interest to organic producers.

## News You Can Use

### Inspectors to Target Soil Fumigation Operations for Compliance

**WPS Inspectors will be targeting vegetable soil fumigation operations this fall to ensure that users of methyl bromide are in compliance with pertinent rules and regulations.**

### Some things to remember when applying methyl bromide:

- Methyl bromide must be applied by or under the direct supervision of a licensed restricted use pesticide applicator who must be on site.
- Commercial or public license holders must have the soil and greenhouse fumigation category on their license.
- In addition to a properly licensed restricted use pesticide applicator, two persons specifically trained in the use of fumigants must also be on site.
- All workers involved with the fumigation operation including shovel ditch workers must be trained as handlers.



- A least 5 gallons of potable water marked “Not for drinking – for decontamination use only” must be located on the application equipment
- A least 5 more gallons of water for decontamination must be on site but not on the application equipment.
- Self contained breathing apparatus (SCBA) must be on site but shall not be located on the application equipment.
- Teflon hoses reinforced with stainless steel wire braid shall be used between the canister and flow divider, elsewhere manufacturer approved tubing must be used.
- If the ambient air concentration of methyl bromide exceeds 5 ppm or chloropicrin exceeds 0.1 ppm respiratory protection must be used – self contained breathing apparatus or supplied air.
- Methyl bromide must be injected to a minimum depth of 6 inches.
- Soil must be sealed.
- Operator must be located to avoid exposure.

### **Plastic Burning Rules in Florida**

Burning of polyethylene plastic mulch has been an approved and widely practiced disposal method in Florida vegetable production under Chapter 62-256 FAC where local ordinances and environmental conditions permitted.

Growers are advised to take note that in a recent case in North Florida a grower was cited and fined for burning black plastic drip tape along with the mulch. Although the drip tape was also black polyethylene, **it was ruled that burning polyethylene drip tape related to an agricultural operation is in violation of the law according to FAC 62-256.**

FFVA and Farm Bureau are currently seeking to include burning of drip tape along with polyethylene plastic mulch as an approved disposal method under Chapter 62-256 FAC. Until this occurs, burning polyethylene drip tape related to an agricultural operation is in violation of the law and growers could be cited.

### **Judge Delays Ruling on Effort To Crack Down On Illegal Labor**

The U.S. government's plan to crack down on undocumented immigrant workers by targeting their employers was put on hold at least 10 more days Monday after the federal judge hearing a lawsuit to block it said he needed more time to issue a ruling.

U.S. District Judge Charles Breyer heard arguments in a legal challenge to a proposal by the Social Security Administration and the Department of Homeland Security to joint send letters warning businesses they'll face penalties if they keep workers whose Social Security numbers don't match their names.

The so-called “No Match” letters were supposed to start going out in September, but Breyer extended a temporary hold preventing the new rule from taking effect so he could consider the points made in court Monday.

The restraining order was necessary in the meantime because “it's clear ... there could be irreparable harm to plaintiffs” if the government went ahead with its plan as it stands, Breyer said.

The new rule would require businesses to sort out any Social Security mismatches within 90 days of being notified by the government or to fire the employee involved. If not, employers could face fines and possible prosecution for knowingly hiring illegal immigrants.

The government has 140,000 such letters ready to go as soon as the judge grants his permission, said Deputy Assistant Attorney General Tom Dupree.

Lawyers for the suit's plaintiffs, which include the AFL-CIO, the American Civil Liberties Union, the U.S. Chamber of Commerce and numerous other business and labor groups, claim the rule would put a heavy burden on employers.

It also could cause many authorized immigrants and U.S. citizens to lose their jobs over innocent paperwork snafus, they said. Employers who were trying to comply with the government's mandate could in turn be exposed to discrimination lawsuits brought by employees who got wrongfully terminated.

Juliana Barbassa  
AP - October 1, 2007

### **Sunshine State implications**

Opponents of "no match" enforcement said that the federal government's actions will broadly affect some of Florida's biggest industries.

"This is not just an issue that affects agriculture, but it goes to the heart of the three-legged stool in Florida - agriculture, hospitality and construction," said Lochridge, the Florida Fruit and Vegetable Association spokeswoman.

"That's what the Florida economy depends on."

The Florida Department of Agriculture estimates that farming is a \$97 billion economic machine, employing 390,184 workers and paying \$2.85 billion in taxes.

But Pat Reilly, a spokeswoman for the Department of Homeland Security, said immigration enforcement should not be an economic debate. "I've heard that argument - everyone has heard that argument about how devastating this will be economically," Reilly said. "But we have also seen unemployment rise. I believe you can find legal workers. What we're doing is taking away the employers' ability to say, 'Oh, I didn't know.'" Work site enforcement has more than tripled in the last year.

Penalties for working in the United States illegally and for employing undocumented workers have resulted in hundreds of criminal arrests.

Devona Walker  
Sarasota Herald Tribune

### **Department of Labor Inspectors on the Prowl**

Department of Labor investigators continue to search for and find unregistered housing. Please remember that ANY association you have with where migrant or seasonal agricultural workers live requires that you have those premises inspected and registered prior to their occupancy. The Migrant & Seasonal Agricultural Worker (MSPA) Act states... "A farm labor contractor, agricultural employer, agricultural association or any other person is in 'control' of a housing facility or real property, regardless of the location of such facility, if said person is in charge of or has the power or authority to oversee, manage, superintend or administer the housing facility or real property either personally or through an authorized agent or employee, irrespective of whether compensation is paid for engaging in any of the aforesaid capacities." The enforcement officials interpret "control" very liberally - so be fore-warned! (See 29 CFR 500, sections .130 -.135)

Wes Wurth: Chapps

## **NEW TPR FRUITING VEGETABLE COBRA HERBICIDE LABEL AVAILABLE**

The Florida Department of Agriculture and Consumer Services announced Sept. 28 the approval of a new Third Party Registrations, Inc. Special Local Need label for the use of COBRA Herbicide (lactofen). COBRA is used to manage weeds in row middles of all plastic mulch-grown fruiting vegetable and okra crops.

The label is valid immediately and available to any commercial fruiting vegetable (tomato, pepper, eggplant, etc.) and okra farm in good standing and a member of FFVA.

As a result of potential crop damage or non-performance issues, COBRA must be used under very specific conditions; therefore, access to the label is managed through a waiver and limitations of warranty and liability process. This process requires that a registration agreement and a waiver and limitation of warranty and liability document be processed by TPR before receipt of the label. Once this paperwork is completed and the \$2-per-acre label administrative fee is received, participants will be provided with the label and allowed access to the product.

The approved label allows for application pre- or post-transplant with hooded or shielded spray equipment.

COBRA manages numerous broadleaf weeds (dozens of different species are listed on the label such as nightshade, lambsquarters, pigweeds, ragweeds, Eclipta, purslane, etc.) in both pre-emergent and post-emergent manners.

Growers who indicated interest in this label through the COBRA/Fruiting Vegetable Grower Interest Questionnaire, which was sent out in the spring, will be sent the paperwork necessary for signup. Other growers who may be interested in access to this or any other TPR, Inc. label are encouraged to contact the Environmental & Pest Management Division for assistance in the enrollment process.

### **Prowl (pendimethalin) Supplemental Labeling for Use on Tomato and Pepper – Clarification**

Joe Mitchell BASF writes Prowl H2O is strictly a row middle application to be applied between the plastic beds. BASF's recommendation is basically 3 pints/Acre on our soils since a grower is only going to apply one time most likely before transplanting. He notes that the label mentions incorporation, (which is from the Prowl 3.3 EC label) but says Prowl H2O just needs a wet / dry cycle to break the micro capsules and really does not require incorporation. Even our morning dews will likely be enough to cause the capsules to break. He adds that it is unlikely that any tomato grower that would incorporate between the plastic beds anyway.

### **Soil Fumigant Pesticides - Extension of Comment Period**

As part of EPA's ongoing evaluation of soil fumigant pesticides, and in response to further requests from stakeholders, the Agency is extending the public comment period on risk reduction options until November 3, 2007. On May 2, 2007, EPA issued revised human health risk assessments and requested public comment on risk-reduction options for the soil fumigants: methyl bromide, metam sodium, dazomet, and chloropicrin. Another soil fumigant, 1,3-dichloropropene (Telone) is included for comparison purposes, but its reassessment is complete and few if any regulatory changes are anticipated.

Reregistration for 1,3-dichloropropene (1,3-D or Telone) was completed in 1998, but it is included in the review for comparative purposes. The Agency is interested in first-hand comments on possible human health risk mitigation options from stakeholders who are most affected by soil fumigant use, including growers, professional fumigant applicators, farm workers, neighbors and community members, local officials, and others.

Some of the risk mitigation options that have been tossed out are scary – 1500 foot buffer zones, etc.

If you have not yet made your voice heard you still have time. More information on soil fumigant risk mitigation options, and how to submit comments is available on EPA's Web site at [http://www.epa.gov/oppsrrd1/reregistration/soil\\_fumigants/risk\\_mitigation.htm](http://www.epa.gov/oppsrrd1/reregistration/soil_fumigants/risk_mitigation.htm)

### **OPERATION CLEANSWEEP – Statewide Pesticide Pickup Available**

Operation Cleansweep is a mobile pesticide collection program that provides a safe way to dispose of cancelled, suspended, and unusable pesticides at no cost to farms, groves, nurseries, greenhouses, golf courses, pest controls services and forestry operations. Pesticide dealers can participate for a fee. Deadline for requesting pickup is December 15, 2007.

For more information contact the Florida Department of Agriculture and Consumer Services toll free at 877-851-5285 or email [Cleansweep@doacs.state.fl.us](mailto:Cleansweep@doacs.state.fl.us). To visit the CLEANSWEEP website go to [www.dep.state.fl.us/waste/categories/cleansweep-pesticides/](http://www.dep.state.fl.us/waste/categories/cleansweep-pesticides/)

### **Palm Beach to Keep Extension Service Programs**

Palm Beach County commissioners voted unanimously Sept. 20 to keep the county's extension service programs. During a budget meeting, commissioners told about 150 supporters of the programs that the commissioners had no intention of slashing the \$3 million in county funds earmarked for the programs.

### **Lake Okeechobee Water Levels Remain Well Below Previous Historic Lows for This Time of Year**

September rainfall offered only marginal gains for water levels in Lake Okeechobee, a primary backup water supply to five million South Floridians and the source of water for irrigation across more than 500,000 acres of farmland in the Everglades Agricultural Area. Rainfall for the entire month was slightly above average across the region.

As a result of the rainfall, coastal groundwater and surface water levels across nearly all of the South Florida Water Management District (SFWMD) have improved over the past 30 days. However, water levels in most inland water bodies and monitoring wells remain at or near historic lows, as District-wide rainfall remains below average for 2007, and rainfall patterns continue to favor southeastern residential areas.

Lake Okeechobee, the largest water body in South Florida's water management system and a leading indicator of regional water supply conditions, reached an all-time record low of 8.82 feet above sea level on July 3, 2007. **The lake level registered 9.96 feet above sea level on Oct 3, up only 0.45 feet since September 1.** This is 0.82 feet below its previous historic low for this date of 10.78 feet above sea level, recorded on October 3, 1956. A year ago today, the lake's water level was 13.35 feet above sea level, 3.39 feet higher than this morning's reading.

Lake Okeechobee water levels have been setting new record daily lows for 122 consecutive days, and according to water managers, the growing disparity between current lake level readings and previous historic lows continues to suggest that South Florida may experience back-to-back water shortage years for the first time since the early 1980s.

September 2007 followed the driest August since 1987 and fourth driest on record since 1932, yielding District-wide rainfall of 7.38 inches, or about five percent above the historical average for the month. At only 36.18 inches, or 83 percent of the historical average through Monday, October 1, year-to-date average rainfall remains below normal for the 16-county region. In the absence of dramatic rain events in basins north of Lake Okeechobee over the next thirty days; we will almost certainly face a more severe regional water shortage in the spring of 2008.



## Southwest Florida

**October 8 - 9, 2007**

### **Spanish Pesticide License Training - CORE and Private**

UF/IFAS Hendry County Extension Office  
PO Box 68  
LaBelle, Florida

Contact Gene McAvoy at 863-674-4092 for details

**October 9, 2007**

### **Vegetable Growers Meeting – Whitefly Update and Introducing ImproCrop – A Novel Line of Crop Enhancement Products**

UF/IFAS SW Florida Research and Education Center  
SR 29 N  
Immokalee, Florida

Contact Gene McAvoy at 863-674-4092 for details

## Other Meetings

**October 24-26, 2007**

### **22<sup>nd</sup> Annual Tomato Disease Workshop** Williamsburg, Virginia

For more information, go to <http://www.cpe.vt.edu/tdw/>

**December 6 -7, 2007**

### **Florida Ag Expo**

Gulf Coast Research and Education Center  
14625 CR 672  
Wimauma, Florida

The Florida Ag Expo will offer in-depth education sessions will cover a wide array of timely topics important to growers and their operations. The Expo will also feature extensive indoor and outdoor exhibit areas for "hands-on, in-person" previews of the latest products, equipment and services.

## Websites

**ZIPSkinny.com** – this is an interesting site that provides census data for any particular zip code and allows you to compare that locale with census data for other areas by zip code. Enter your zip code and see how it compares with neighboring zips - <http://zipskinny.com/>

## Quotable Quotes

Many people despise wealth, but few know how to give it away. - Francois de La Rochefoucauld

A diplomat is a man who always remembers a woman's birthday but never remembers her age. - Robert Frost

Common looking people are the best in the world: that is the reason the Lord makes so many of them. - Abraham Lincoln

The heights by great men reached and kept were not attained by sudden flight. But they, while their companions slept, were toiling upward in the night. - Henry Wadsworth Longfellow

In the middle of every difficulty lies opportunity. - Albert Einstein

## **On the Lighter Side**

Who knew!

1. To remove a bandage painlessly, saturate the bandage with vodka. The solvent dissolves adhesive.
2. To clean the caulking around bathtubs and showers, fill a trigger-spray bottle with vodka, spray the caulking, let set five minutes and wash clean. The alcohol in the vodka kills mold and mildew.
3. To clean your eyeglasses, simply wipe the lenses with a soft, clean cloth dampened with vodka. The alcohol in the vodka cleans the glass and kills germs.
4. Prolong the life of razors by filling a cup with vodka and letting your safety razor blade soak in the alcohol after shaving. The vodka disinfects the blade and prevents rusting.
5. Spray vodka on vomit stains, scrub with a brush, and then blot dry.
6. Using a cotton ball, apply vodka to your face as an astringent to cleanse the skin and tighten pores.
7. Add a jigger of vodka to a 12-ounce bottle of shampoo. The alcohol cleanses the scalp, removes toxins from hair, and stimulates the growth of healthy hair.
8. Fill a sixteen-ounce trigger-spray bottle and spray bees or wasps to kill them.
9. Pour one-half cup vodka and one-half cup water in a Ziploc freezer bag and freeze for a slushy, refreshable ice pack for aches, pain or black eyes.
10. Fill a clean, used mayonnaise jar with freshly packed lavender flowers, fill the jar with vodka, seal the lid tightly and set in the sun for three days. Strain liquid through a coffee filter, then apply the tincture to aches and pains.
11. To relieve a fever, use a washcloth to rub vodka on your chest and back as a liniment.
12. To cure foot odor, wash your feet with vodka.
13. Vodka will disinfect and alleviate a jellyfish sting.
14. Pour vodka over an area affected with poison ivy to remove the urushiol oil from your skin.
15. Swish a shot of vodka over an aching tooth. Allow your gums to absorb some of the alcohol to numb the pain.

.... silly me. I've only been drinking the stuff!!!

## Wild Turkey

A game warden was driving down the road when he came upon a young boy carrying a wild turkey under his arm.

He stopped and asked the boy, "Where did you get that turkey?"

The boy replied, 'What turkey?'

The game warden said, "That turkey you're carrying under your arm."

The boy look down and said, "Well, lookee here, a turkey done roasted under my arm!"

The game warden said, "Now look, you know turkey season is closed, so what ever you do to that turkey, I'm going to do to you. If you break his leg, I'm gonna break your leg. If you break his wing, I'll break your arm. Whatever you do to him, I'll do to you. So, what are you gonna do with him?"

The little boy said, "I guess I'll just kiss his butt and let him go!"

**Note: The hotline is available by email. Get the latest pest and disease updates and news in a timely fashion -the e-version is automatically sent to you as soon as it is published. If you want to switch over just drop me an email and help save a tree.**

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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.

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