



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

Institute of Food and Agricultural Sciences

Hendry County Extension

PO Box 68 LaBelle, Florida 33975-0068

Phone (863) 674-4092

# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

August 30, 2007

**Summer rains have bought relief to some areas, but most of the South Florida vegetable production area remains gripped in drought.** The first real relief to the drought-stricken Southeast was the arrival of tropical storm Barry on June 2. Barry came ashore in the Big Bend of Florida bringing welcome widespread rainfall to most of Florida and especially east Coast locations. Since then, the onset of the convective rainy season, characterized by frequent afternoon thundershowers, has continued to bring beneficial rainfall to some areas with the lower east coast receiving highest totals. While the recent rainfall has certainly been welcome, much more is needed to ease the impacts of long-term deficits. In spite of the rain, Lake Okeechobee remains near historic lows and has been slow to respond

**Mostly hot temperatures have prevailed over the past few weeks although overcast skies and scattered showers have bought some sporadic relief to localized areas.** Daytime temperatures have been reaching the mid 90's with nighttime temps in the mid 70's. In most areas, pan evaporation has been ranging between 0.15 – 0.19 inches per day.

### 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>											
6/1 – 8/30/2007	59.9	96.3	16.69	0.0	0.0	0.0	0.0	0.1	18.9	40.2	71.8
<b>Ft Lauderdale</b>											
6/1 – 8/30/2007	59.5	94.9	31.00	0.0	0.0	0.0	0.0	1.9	18.4	38.4	16.0
<b>Fort Pierce</b>											
6/1 – 8/30/2007	59.4	94.6	18.04	0.0	0.0	0.0	0.0	0.5	0.5	24.5	18.2
<b>Homestead</b>											
6/1 – 8/30/2007	59.5	95.7	19.65	0.0	0.0	0.0	0.0	0.2	0.3	23.3	34.6
<b>Immokalee</b>											
6/1 – 8/30/2007	57.6	97.1	19.30	0.0	0.0	0.0	0.0	3.4	15.0	2.7	119.9

**Welcome back and wishing you a successful and prosperous season!**

The Institute of Food and Agricultural Sciences is an Equal Employment Opportunity – Affirmative Action Employer authorized to provide research, educational, information, and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin.  
COOPERATIVE EXTENSION WORK IN AGRICULTURE, FAMILY AND CONSUMER SCIENCES, SEA GRANT AND 4-H YOUTH, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLORIDA, U.S. DEPARTMENT OF AGRICULTURE, AND BOARDS OF COUNTY COMMISSIONERS COOPERATING

**Fall vegetable crop planting continues actively in the southern Peninsula areas.** Growers report some plant stress especially on newly set transplants depending on local conditions. Growers continue to market light shipments of okra in Dade County.

**Dry conditions over an extended period of time have resulted in large rainfall deficits across most of South Florida.** The Lake Okeechobee area including Glades and Hendry Counties remain in a moderate drought status, while western Collier County has been upgraded to a severe drought status. The rest of South Florida remains out of a drought status. See discussion below under **News You Use**.

**The short-term forecast from the National Weather Service in Miami** for Saturday through early next week, have models moving the surface low from off the NE Florida coast into the west central Atlantic, leaving a weak surface trough in place somewhere over central or south Florida. This frontal boundary could generate scattered showers and thunderstorms during the afternoon hours with forecasters calling for a 40% chance of scattered showers and thunderstorms each day. For additional information, visit the National Weather Service in Miami website at <http://www.srh.noaa.gov/mfl/newpage/index.html>

## **Insects**

### **Whiteflies**

**Respondents in Manatee County report high whitefly numbers from a number of places especially for this time of year.** Counts of up to 30 adults per plant were reported in some early plantings, numbers have reportedly declined to an average of 4-5 per plant in recent days. Dr Dave Schuster Entomologist at UF/IFAS GREC notes that scouts have made some interesting observations about this years' whiteflies. They note that the adults appear to be on the average smaller than normal. Even with a hand lens, they don't appear to be white (gray is more like it) and they tend to be found deep inside the plant canopy next to a vein on an underside of a leaf.

**Growers and scouts around Southwest Florida are also reporting that whiteflies are abnormally high for this early in the season.** Scouts report that whitefly numbers are variable being "horrible" on white plastic and lower on reflective mulches.

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

**East Coast growers report that whitefly are present in young planting and given the incidence of TTYLCV last season, some growers have indicated that their new threshold is "one" - per farm.**

**Growers are reminded to monitor cull piles and fields for volunteers and presence of whiteflies and/or virus.**

## **UF/IFAS Recommendations for Management of Whiteflies, Begomovirus, and Insecticide Resistance for Florida Vegetable Production**

### **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.

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

Reduce overall whitefly populations, both biotype B and biotype Q (if present), by strictly adhering to cultural practices.

### **1. Use proper pre-planting practices.**

a. Plant whitefly and virus-free transplants.

- 1) Do not grow vegetable transplants and vegetatively propagated ornamental plants (i.e. hibiscus, poinsettia, etc.) at the same location, especially if bringing in plant materials from other areas of the US or outside the US.
- 2) Isolate vegetable transplants and ornamental plants if both are produced in the same location.
- 3) Do not work with or manipulate vegetable transplants and ornamental plants at the same time.
- 4) Practice worker isolation between vegetable transplants and ornamental crops.
- 5) Avoid yellow clothing or utensils as these attract whitefly adults.
- 6) Cover all vents and other openings with whitefly resistant screening. Use double doors with positive pressure. Cover roofs with UV absorbing films.

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

c. Do not plant new crops near or adjacent to old, infested crops.

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

e. Use TYLCV resistant tomato cultivars (here 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 are able to 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 are historically most susceptible to whitefly infestation and TYLCV infection.

### **2. Use proper post-planting practices.**

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.

d. Dispose of cull tomatoes as far from production fields as possible. If dumped in pastures for cattle feeding, the fruit should be spread instead of dumped in a large pile to encourage consumption by cattle. The fields should then be monitored for germination of tomato seedlings and, if present, they should be controlled by mowing or with herbicides.

e. Avoid u-pick or pin-hooking operations unless effective whitefly control measures are continued.

f. Destroy old crops within 5 days after harvest, destroy whitefly infested abandoned crops, and control volunteer plants with a desiccant herbicide and oil.

### **C. Insecticidal Control Practices.**

1. Use a proper whitefly insecticide program. Follow the label!

a. On transplants in the production facility, do not use a neonicotinoid insecticide if biotype Q is present. If biotype B is present, apply a neonicotinoid one time 7-10 days before shipping. Use products in other chemical classes, including Fulfill, soap, etc. before this time.

b. 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.

c. 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 including insecticides effective against biotype Q. Consult the Cooperative Extension Service for the latest recommendations.

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

e. Do not apply insecticides on weeds on field perimeters because this can kill natural enemies, thus interfering with biological control, and because this can select for biotype Q, if present, which is more resistant to many insecticides than biotype B.

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 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. If foliar applications of a neonicotinoid insecticide are used instead of or in addition to soil drenches at transplanting, foliar applications should be restricted to the first six 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 six weeks and do not use any neonicotinoid class insecticides for the remaining cropping period

## Worms

**Growers and scouts in all areas report variable early season worm pressure citing the usual suspects including southern armyworm, beet armyworm, tomato fruit worm, hornworms and loopers on tomato and pepper and melon worms on cucurbits. Pressure is reported to be fairly high in places and about average or lower in others. New hatches may be expected following this week's full moon.**

## Mites

**Some broad mites have been noted in pepper in a number of scattered locations around South Florida.**

**Spider mites have been reported causing some problems in eggplants around SW Florida.**

## Crickets

**There have been a few scattered reports of crickets – mole crickets and common field crickets causing problems in new plantings. Crickets are a periodic problem in vegetables. Field crickets are often attracted to moisture under plastic mulch and under dry conditions have been known to chew through drip tubes causing leaks in search of moisture.**

## **Diseases**

### TYLCV

**Around Southwest Florida, tomato yellow leaf curl has already reared its ugly head in a few scattered locations. Scouts report some over summering virus around cull piles and in volunteers. TYLCV has also been detected in some early planting. Incidence is low at present.**

**TYLCV has also been reported at a few locations in West Central Florida and in some cases appears to be coming out of the transplant house. Incidence is low.**

### Bacterial Spot

**Respondents in Manatee County report finding some bacterial leaf spot on early planted bell peppers, mostly on poor transplants or plants that have been stressed due by high temps. Over the past few years growers have reported good success with a base management program for incorporating Serenade and copper.**

### Pythium

**Growers and scouts in all areas report some problems with pythium on a variety of crops, particularly pepper. Scouts have noted that some pythium is present on plantings where growers irrigated and over compensated for dry field conditions. Others reports point to poor quality transplants and stressful conditions as well as following mole cricket damage.**

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.

*Pythium myriotylum* and *P. aphanidermatum* are generally most abundant in Florida because they are adapted to high soil temperature. The optimum temperatures for their growth and infection of plants range between 86 and 98 °F.

The host range for *Pythium* spp. is extremely wide. Vegetable crops commonly infected include beans cucurbits, peppers, southern peas, strawberries, and tomatoes. A number of broadleaf and grassy weeds may host *Pythium* spp. and serve as important sources of inocula.

*Pythium* is one of the “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.

*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 distinct from the orange to red to dark, sunken lesions caused by *Rhizoctinia solani*.

Infection with *Pythium* spp. also causes wilting of numerous crop species. Plants affected by *Pythium* root and stem rots commonly exhibit yellowing of the lower leaves.

In small plants planted thickly, such as greenhouse transplants, *Pythium* can infect and colonize the plants with the result that the entire plant is destroyed. Look for water-soaked tissue in this situation. It is also common to see white mycelial growth in such situations.

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.

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. 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.

A number of chemical treatments are available for the control of damping off. Seed treatments containing mfenoxam (Apron) work best. Mfenoxam should be used in combination with a broad-spectrum fungicide to avoid the development of resistance.

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. Their success rate has been variable.

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.

With the anticipated loss of methyl bromide as a soil fumigant, it is likely that crops that are now commonly grown with methyl bromide/chloropicrin fumigation, such as tomatoes, peppers, strawberries, will incur greater incidence of disease problems from *Pythium* spp. unless a suitable substitute is employed.

### **Phytophthora**

**Some phytophthora has also been reported, particularly where growers failed to apply Ridomil pre-plant.**

### **News You Can Use**

#### **USDA WAIVES DISASTER PAYMENT PENALTY**

In the past several weeks, many producers who collected disaster assistance for the 2004 hurricanes received letters from FSA that required them to pay back what they received plus interest. In most cases, these letters were sent because producers failed to meet the requirement to buy crop insurance for the following year.

Last week USDA announced that the repayment of the disaster assistance would be waived, provided that producers can prove they purchased crop insurance for 2008 or 2009.

Because of this ruling, over 2,000 producers who would have had to repay a total of \$24 million can now take steps to avoid refunding the payments.

Florida's Congressional delegation, including Senators Martinez and Nelson, as well as Congressmen Boyd, Buchanan, Feeney, Mahoney and Putnam were instrumental in brokering a successful outcome to this issue. Other Florida agricultural associations also played a key role.

Producers who received a notice should contact their county FSA office.

#### **CONTACT:**

Kevin Morgan, [Kevin.Morgan@ffbf.org](mailto:Kevin.Morgan@ffbf.org), 352-374-1544

Dana Brooks, [Dana.Brooks@ffbf.org](mailto:Dana.Brooks@ffbf.org), 352-384-2633.

#### **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)

## No Quick End to Drought in Sight

National Weather Service has calculated some yearly rainfall totals, norms and departures from normal across South Florida so far for 2007 and for the 20 month period of January 1, 2006 to August 23, 2007.

Airports	2007 yearly totals	2007 yearly departures	: 20 month totals	: 20 month departures
Miami International	: 44.11	8.19	108.25	13.42
Palm Beach international	: 31.79	1.92	92.13	-5.31
Naples municipal airport	: 19.90	-14.57	70.08	-15.86

### Secondary observation sites

Immokalee	: 23.49	-7.10	67.27	-18.83
Devils Garden	: 24.66	-7.84	70.47	-17.77
Clewiston	: 32.63	-9.91	63.14	-22.84
Belle Glade	: 31.89	-8.42	68.18	-17.33
Flamingo Ranger Station	: 27.29	-5.91	67.31	-13.71
Miami Beach	: 44.32	15.87	99.74	23.07

The Lake Okeechobee area including Glades and Hendry Counties remain in a moderate drought status, while western Collier County has been upgraded to a severe drought status. The rest of South Florida remains out of a drought status.

Lake Okeechobee measured at 9.56 feet NGVD on Tuesday, which is 0.10 feet higher than it was on that day last week and 0.51 feet higher than it was a month ago.

### Hydrologic Impacts

Wells across interior and western sections of south Florida are still running at below 10 percent of normal levels except for the east coast where they are running at 10 to 30 percent above normal due to the greater amounts of rainfall that occurred during the first half of August. Underground reservoirs are at adequate levels over the eastern areas of south Florida, while the western areas of south Florida are below normal levels. Lake Okeechobee has remained around 9.5 feet through August, about 4 feet below normal for this time of the year.

Despite the recent rains in August, the South Florida Water Management District has kept most of the east coast under phase two water restrictions and the Lake Okeechobee area in phase three water restrictions due to the low level of Lake Okeechobee. This limits most residential and commercial water usage to twice a week, except once a week for the Lake Okeechobee area.

Despite the recent rains which are typical of the South Florida's rainy season, an immediate end to the drought is not expected due to the large rainfall deficits across the interior and west coast areas of South Florida.

### Area Water Restrictions

**Upper and Lower East Coast Service Areas, which comprise the residential areas of St. Lucie, Martin, eastern Palm Beach, Broward, Miami-Dade and Monroe counties - Modified Phase II Mandatory Water Use Restrictions**



Restrictions for land greater than five acres and other guidelines are available on the latest SFWMD -Just the FACTs sheet - [http://www.sfwmd.gov/newsr/ws\\_just\\_the\\_facts\\_7\\_11\\_07.pdf](http://www.sfwmd.gov/newsr/ws_just_the_facts_7_11_07.pdf). The Phase II restrictions in this region apply to users who get their water from public utilities, private wells, canals, ponds and lakes.

### **Lake Worth, Lantana, Hallandale and Dania Beach Water Utilities - Modified Phase III Mandatory Water Use Restrictions**

Restrictions for land greater than five acres and other guidelines are available on the latest SFWMD Just the FACTs sheet - [http://www.sfwmd.gov/newsr/ws\\_just\\_the\\_facts\\_7\\_11\\_07.pdf](http://www.sfwmd.gov/newsr/ws_just_the_facts_7_11_07.pdf)

### **Lake Okeechobee Service Area - Phase III Mandatory Water Use Restrictions**

Phase III water use restrictions predominantly impact agricultural, industrial and commercial water users in parts of Hendry, Glades, Okeechobee, Lee, Martin, St. Lucie and western Palm Beach counties. Agricultural water users in these areas are required to reduce surface water consumption by 45 percent. Groundwater sources (wells) are not restricted by this order.

### **Lake Istokpoga Area/Upper Indian Prairie Basin (portions of Highlands and Glades counties) - Phase III Mandatory Water Use Restrictions**

Effective May 11, permitted agricultural and other area users who withdraw water directly from surface water sources connected to Lake Istokpoga will transition to Phase III water restrictions in incremental stages as the water level of Lake Istokpoga continues to drop below specified thresholds. Users were notified of the specific tiers representing 35 and 45 percent cutbacks and are encouraged to voluntarily exercise additional water conservation measures as practicable.

### **Lee, Collier, Hendry, and Glades Counties; portion of Charlotte County - Phase II Mandatory Water Use Restrictions**

Phase II restrictions remain in place in Lee, Collier, Hendry and Glades counties, and are intended to produce a 30 percent water use reduction by agricultural, industrial, commercial, golf course, landscaping and residential water users. The Phase II restrictions in this region apply to users who get their water from public utilities, private wells, canals, ponds and lakes.

**The use of 100 percent reclaimed water, an alternative water source, is not subject to restrictions.**

### **Pesticide Label Changes/Additions**

Ron Palumbo, FMC reports that Capture LFR (Liquid Fertilizer Ready) Insecticide, a soil applied insecticide is labeled to control below ground pests. Capture LFR offers an important insect management tool to the grower as the availability of soil applied insecticide choices dwindles. Capture LFR offers unique properties such as compatibility with most all liquid fertilizers without constant tank agitation. The long residual activity of Capture LFR insures long lasting protection. Capture LFR can be applied by several methods including use in the transplant water through the 2 EE label. Capture LFR is labeled for many important Florida crops such as tomato, peppers, cucurbits, snap beans, brassicas, potatoes, sweet potatoes, okra, eggplant and other crops.

## Up Coming Meetings

### Manatee County

September 11, 2007

Private Pesticide Applicator Training and Testing. 9 AM.  
Manatee County Extension Service, Palmetto.

2 CORE CEUs offered for those who have a current license.

Testing for all categories by appointment. Please call Linda Means at 722-4524 to schedule an exam.)

### Palm Beach County

September 17, 2007

<b>General Standards/Core Training and Test Review</b>	8:00 AM – 10:00 AM
<b>Aquatic Weed Control Test Review (2 CEUs)</b>	1:00 – 3:00 PM

Clayton Hutchinson Ag Center  
559 N Military Trail  
West Palm Beach, Florida

September 19, 2007

Contact 561-233-1700 – select option, 1 then option 3

<b>General Standards/Core Test Review</b>	8:00 AM – 10:00 AM
<b>Private Applicator Test Review (2 CEUs)</b>	1:00 – 3:00 PM

Belle Glade Extension Office  
2975 State Road 15  
Belle Glade, Florida

Call 561-996-1655 for more information.

### Southwest Florida

September 7, 2006

<b>WPS Handler Training</b>	9:00 AM - Spanish
	1:00 PM - English

Hendry County Extension Office  
1085 Pratt Boulevard  
LaBelle, Florida

Contact Gene McAvoy at 863-674-4092 for details

**September 10 -11, 2007**      **Restricted Pesticide Applicator Classes**      **Sept. 10 – Core, Private**  
**Sept. 11 – Row, Tree Aquatic**

Hendry County Extension Office  
1085 Pratt Boulevard  
LaBelle, Florida

Contact Gene McAvoy at 863-674-4092 for details

**September 19, 2007**      Vegetable Growers Meeting – Tomato/Watermelon BMP Project Update and  
Introducing Zeba

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

Contact Gene McAvoy at 863-674-4092 for details

#### Other Meetings

September 4-9, 2007      The Florida Tomato Committee and  
The Florida Tomato Exchange 2007 Joint Tomato Conference

The Ritz-Carlton Hotel  
280 Vanderbilt Beach Road  
Naples, Florida 34108

For more info – go to <http://www.floridatomatoes.org/conference.html>

September 16-18, 2007      FFVA Annual Convention  
Boca Raton, Florida

For information call 321-214-5200.



Horticultural Sciences Department

**THIRD ANNUAL**

**Tomato Packinghouse Managers Workshop**

*“Sanitation and Food Safety Update for the Tomato BMP Program”*

**Tuesday, September 4, 2007 1:30 p.m. – 5:00 p.m.**

**Ritz-Carlton Hotel, Naples**

**REGISTRATION FORM—Please print clearly**

Attendee Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_

E-mail: \_\_\_\_\_

Preferred Method of Contact (check one):

Phone  FAX  E-mail

Send completed registration form and payment of \$50 (check or money order only - payable to Florida Tomato Exchange) to:

Florida Tomato Exchange  
Attn: Tomato Packinghouse Managers  
Workshop, 800 Trafalgar Court, Suite 300  
Maitland, FL 32751

*Deadline for advance registration is Friday, August 31, 2007. Registration is available on-site for \$60 (check, money order or exact cash only) the day of the meeting. On-site registration begins at 1:00 p.m.*

**2007 Tomato Institute Program**

Wednesday, September 5, 2007

Ritz Carlton, Naples, FL

*Moderator: Alicia Whidden, Hillsborough County Extension Service, Seffner*

9:00 am **Welcome** – Joan Dusky, Associate Dean & Professor, UF/IFAS Extension, Gainesville

9:10 am **State of the Industry** – Reggie Brown, Florida Tomato Committee, Maitland

9:20 am **CUE and Fumigant Assessment Update** – Mike Aerts, FFVA, Maitland

9:40 am **Critical Issues for the Tomato Industry: Preventing a Rapid Postharvest Breakdown of Fruit** – Jerry Bartz, UF/IFAS Plant Pathology Department, Gainesville

9:50 am **Food Safety Update and TGAP Program** – Martha Roberts, UF/IFAS, Tallahassee

10:20 am **Results of Latest BMP Trials** – Monica Ozores-Hampton, UF/IFAS, SWFREC, Immokalee

10:50 am **Recent Developments and Release Outlook from the University of Florida Tomato Breeding Program** – Jay Scott, UF/IFAS, GCREC, Balm

11:10 am **Western Flower Thrips: on the Move?** – Joe Funderburk, UF/IFAS, NFREC, Quincy

11:30 am Lunch

*Moderator: Phyllis Gilreath, Manatee County Extension Service, Palmetto*

1:00 pm **Got Gas? Keep it Under Wraps** – Jim Gilreath, PhytoServices, Myakka City

1:20 pm **Whitefly Resistance Update** – Dave Schuster, UF/IFAS, GCREC, Balm

1:40 pm **Small Viruses That Cause Big Problems in Tomatoes** – Jane Polston, UF/IFAS, Plant Pathology Department, Gainesville

2:00 pm **Industry New Product Updates** – TBA

3:00 pm Adjourn

RUP and CCA CEUs have been approved in the following categories: RUP: 4 total (4 Private, 3 Ag Row, 3 Demo/ Research, 0.5 Soil Fumigation) CCA: Morning session: 2.0 PM. Afternoon session: 1.0 CM, 0.5 PM, 0.5 NM.

## Websites

**Kopperts Biological Systems** – need biological control organisms, pollinators, or information on pesticide compatibility with bio control agents? Go to <http://www.koppert.nl/e005.shtml>

**CropLife Foundation** is a charitable and research organization created in 2001 to promote and advance sustainable agriculture and the environmentally sound use of crop protection products and bioengineered agriculture. By promoting sound science-based discovery, the organization will help global agriculture economically produce safe, high quality, abundant food, fiber, and other crops, ensuring food security and alleviating poverty, suffering, and hardship. This site provides good information especially if you are looking

for facts and figures to present to the public, media etc about the benefits of pesticides. Go to <http://www.croplifefoundation.org/>

**Google Earth** – This site is cool and useful. Fly to your house or ever house you have ever lived in, find your farm. Just type in an address, press Search, and you'll zoom right in Google Earth combines the power of Google Search with satellite imagery, maps, terrain and 3D buildings to put the world's geographic information at your fingertips. It is free – just go to <http://earth.google.com/>

## Quotable Quotes

There is always free cheese in a mousetrap. - Anon

A slip of the foot you may soon recover, but a slip of the tongue you may never get over. – Ben Franklin

He that is good for making excuses is seldom good for anything else. – Ben Franklin

You always pass failure on the way to success. – Mickey Rooney

If you really do put a small value upon yourself, rest assured that the world will not raise your price. - Anon

All that is gold does not glitter; not all those that wander are lost. – J. R. Tolkien

## On the Lighter Side

### ABC for Seniors

**A's** for arthritis,

**B's** the bad back

**C's** the chest pains, perhaps cardiac?

**D** is for dental decay and decline

**E** is for eyesight; can't read that top line!

**F** is for fissures and fluid retention

**G** is for gas which I'd rather not mention.

**H** is high blood pressure, I'd rather was low.

**I's** for incisions with scars you can show.

**J** is for joints out of socket, won't mend

**K** is for knees that crack when they bend.

**L's** for libido; what happened to sex?

**M** is for memory (I forget what comes next).

**N** is neuralgia in nerves way down low.

**O** is for osteo; the bones that don't grow!

**P** is prescriptions, I have quite a few;

Just give me a pill and I'll be good as new!

**Q** is for queasy; is it fatal or flu?

**R** is for reflux, one meal turns to two.

**S** is for sleepless nights counting my fears,

**T's** for Tinnitus, there's bells in my ears!

**U** is for urinary, big troubles with flow

**V** is for vertigo, that's "dizzy," you know.

**W's** for worry, NOW what's going 'round?

**X** is for X ray and what might be found.

**Y** is another year I'm left here behind  
**Z** is for zest I still have-- in my mind.

I've survived all the symptoms my body's deployed and I'm keeping twenty-six doctors fully employed!!!

## **Water and Wine**

Ben Franklin said: "In wine there is wisdom, in beer there is freedom, in water there is bacteria."

In a number of carefully controlled trials, scientists have discovered that if we drink one liter of water each day, at the end of the year we would have absorbed more than 1 kilo of *Escherichia coli*, (E. coli) – the bacteria found in feces. In other words, we are consuming 1 kilo of poop.

However, you do NOT run that risk when drinking wine & beer (or tequila, rum, whiskey etc.) because alcohol has to go through a purification process of boiling, filtering and/or fermenting.

Remember: Water = Poop, Wine = Health

Therefore, it's better to drink wine and talk stupid, than to drink water and be full of shit.

**Contributors** include: Joel Allingham/AgriCare, Inc, Bruce Corbitt/West Coast Tomato Growers, Dr. Phyllis Gilreath/Manatee County Extension, Michael Hare/Drip Tape Solutions, Fred Heald/Farmers Supply, Sarah Hornsby/AgCropCon, Cecil Howell/Taylor & Fulton, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Bob Mathews, Glades Crop Care, Mark Mossler/UF/IFAS Pesticide Information Office, Gene McAvoy/Hendry County Extension, Alice McGhee/Thomas Produce, Jimmy Morales/Pro Source One, Dr. Gregg Nuessly/EREC Chuck Obern/C&B Farm, Teresa Olczyk/ Miami-Dade County Extension, Dr. Aaron Palmateer/TREC, Dr. Ken Pernezny/EREC, Dr. Rick Raid/ EREC, Dr Pam Roberts/SWFREC, Dr. Nancy Roe/Farming Systems Research, Wes Roan/6 L's, Dr. Dak Seal/ TREC, Kevin Seitzinger/Gargiulo, Jay Shivler/C&B Farm, Ken Shuler/Stephen's Produce, Ed Skvarch/St Lucie County Extension, John Stanford/Thomas Produce, Mike Stanford/MED Farms, Dr. Phil Stansly/SWFREC, , Mark Verbeck/GulfCoast Ag, and Alicia Whidden/Hillsborough County Extension.

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 III  
Regional Specialized Agent - Vegetables/Ornamental Horticulture

Hendry County Extension Office  
PO Box 68  
LaBelle, Florida 33975  
Web: <http://hchort.ifas.ufl.edu/>

863-674-4092 phone  
2863-673-5939 mobile - Nextel 159\*114449\*  
863-674-4097 fax  
[GMcAvoy@ifas.ufl.edu](mailto:GMcAvoy@ifas.ufl.edu)

Special Thanks to the **generous support** of our **sponsors**; who make this publication possible.

***Thomas Produce Company***

Of South Florida  
Grower and Shippers of Quality Vegetables  
9905 Clint Moore Road  
Boca Raton, Florida 33496

Robert Murray

***Wedgworth's Inc***

**Big W Brand Fertilizer**  
Phone 561-996-2076 Cell 239-707-2272

Wes Mathis

***Triangle Chemical Company***

2821 Old State Road 8  
Venus, Florida 33960  
Toll Free 866-893-7848 Cell 863-673-2892

Fred Heald

***Farmers Supply Inc***

710 Broward Street  
Immokalee, FL 34142  
Phone 239-657-8254 Fax 239-657-2005

***Gargiulo***

Growers Shippers Importers Exporters  
David Pensabene: Production Manager  
Naples Operations  
Phone 239-353-0300 Fax 239-353-3407

Damon Shelor

***ProSource One***

Immokalee, Florida  
Office 239-657-8374 Cell 239-707-6142  
E-mail: [dshelor@ProSourceOne.com](mailto:dshelor@ProSourceOne.com)

Dr. Nancy Roe

***Farming Systems Research***

5609 Lakeview Mews Drive  
Boynton Beach, Florida 33437  
Phone 561-638-2755

Ed Early

***Dupont Agricultural Products***

5100 South Cleveland Avenue  
Fort Myers, Florida 33907  
Phone 239-332-1467 Mobile 239-994-8594

***Glades Crop Care, Inc.***

**Leaders in Crop Health  
Management**

Charlie Mellinger, Ph.D.  
Phone 561-746-3740 Fax 561-746-3775

Rachel Walters

***Bayer CropScience***

32871 Washington Loop Road  
Punta Gorda, FL 33982  
Phone 941-575-5149 Cell 239-707-1198

Glen Kaufman

***Paramount Seeds, Inc.***

PO Box 1866  
Palm City, Florida 34991  
Phone 772-221-0653 Fax 772-221-0102

Walter Preston

***Manatee Fruit Company***

PO Box 128  
Palmetto, Florida 34220-0128  
Phone 941-722-3279 Fax 941-729-5151

Special Thanks to the **generous support** of our **sponsors**; who make this publication possible.

Jim Cartwright  
**Syngenta Crop Protection**  
PO Box 960639  
Miami, FL 33296  
Office 305-3800492 Cell 305-439-5968

**OmniLytics - AgriPhage**  
Safe Natural Effective  
Vegetable Bacteria Control  
Brett Jackman 801-541-4244  
Aaron Johnson 801-746-3461

**PRODUCTION SOILS LLC**  
A Superior Alternative To Compost  
  
Sam Hipp 954-296-9203

Scott Allison  
**DIAMOND R FERTILIZER**  
1155 Commerce Drive  
LaBelle, Florida 33935  
Phone 863-675-3700 Cell 239-851-0613

John Frieden  
Abacus (Abemectin)  
**Rotam USA LLC**  
Valdosta, Georgia 31602  
Office 229-253-1646 [johnfr@rotam.com](mailto:johnfr@rotam.com)

Chip Giles  
**Dow AgroSciences LLC**  
  
Phone 239-707-0197  
AgNet 158\*17\*15098

Bobby Hopkins  
**SIPCAM AGRO USA**  
Phone 1-800-295-0733 or 770-587-1032  
Cell 678-576-4549  
[www.sipcamagrousa.com](http://www.sipcamagrousa.com)  
[Lrhopkins3@aol.com](mailto:Lrhopkins3@aol.com)

Steve Mike Dave  
**Jamerson Farms**  
  
Growers, Packers and Shippers of  
Florida's Finest Vegetables  
Phone 239-229-5734 Fax 239-368-0969

Sarah Hornsby, CCA  
**Agricultural Crop Consulting, Inc**  
Scouting: Manatee, Hillsborough, Collier  
Office/Fax 941-776-1122  
Cell 941-713-6116  
Email: [AgCropCon@aol.com](mailto:AgCropCon@aol.com)

Donald Allen  
**AGLIME SALES INC**  
1375 Thornburg Road  
Babson Park, Florida 33827-9549  
Office 863-638-1481 Fax 863-638-2312  
Mobil 863-287-2925

**OxiDate®** BioSafe Systems LLC  
**TerraClean®** Luis Hansen 305.793.9206  
**StorOx®** Sim NiFong  
[info@biosafesystems.com](mailto:info@biosafesystems.com) 863.441.1057

**AgraQuest Inc**  
  
Steve Melchert  
Eastern Divisional Manager  
239-633-2403 cell



Special Thanks to the **generous support** of our **sponsors**; who make this publication possible.

Garry Gibson  
**BASF Corporation**  
1502 53rd Avenue  
Vero Beach, Florida 32966  
Office 772-778-4646 AGNET 21726  
w.garry.gibson@basf.com

**PREV AM**  
Vegetable Pest/Disease Control  
Darrell Thorpe 352-483-6569  
Jerry Dukes 941-524-1312  
Len Duane 863-221-4725  
UAP – AGRILIANCE - TRIANGLE/CPS

Dan Brunetti  
**KeyPlex Products**  
Morse Enterprises Limited Inc  
151 SE 15<sup>th</sup> Road  
Miami, Florida 33129  
800-433-7017 305-577-0692 fax

Jack E Kilgore II  
**Chemical Dynamics**  
“Our business is to help you grow”  
7150 E Brentwood Road  
Fort Myers, Florida 33919  
Cell 239-707-7677 Nextel: 158\*17\*24422

Chuck Obern  
**C & B Farm**  
CR 835  
Clewiston, FL 33415  
Office 863-983-8269 Fax 863-983-8030  
Cell 239-250-0551

Bart Hoopingarner  
**UPI- formerly Cerexagri**  
3605 162 Ave E  
Parrish, FL 34219  
Cell 941-737-7444 Fax 941-776-1844  
[bart.hoopingarner@uniphos.com](mailto:bart.hoopingarner@uniphos.com)

Jay Hallaron  
**Chemtura Corporation**  
321-231-2277 cell 407-256-4667 cell  
[jay\\_hallaron@cromptoncorp.com](mailto:jay_hallaron@cromptoncorp.com)

Matt Arnold  
**United Agri Products**  
116 Jerome Drive  
Immokalee, Florida  
239-657-3168 office 239-464-5763 cell

Dr. Henry Yonce  
**KAC Agricultural Research**  
Scouting, Consulting  
Research  
386-736-0098 work 386-527-1124 cell  
[HDYONCE@msn.com](mailto:HDYONCE@msn.com)

Richard Roles  
**Roles Marketing International**  
Distributors of Agrigro and Super Cal  
10% Calcium  
[richard@rmiint.com](mailto:richard@rmiint.com) [www.rmiint.com](http://www.rmiint.com)  
Cell 561-644-3511

**PUT YOUR NAME HERE**

**PUT YOUR NAME HERE**

**NOTE:** The acknowledgement of sponsorship in no way constitutes or reflects an official endorsement of these businesses or their products or services by either the University of Florida, IFAS, the Florida Cooperative Extension Service, or the Hendry County Extension Office. Sponsors have no control over the content of this publication