



UNIVERSITY OF
FLORIDA

E X T E N S I O N

Institute of Food and Agricultural Sciences

Hendry County Extension

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

December 7, 2009

A cold front just before Thanksgiving holiday last week and another stalled front this week brought several consecutive days of intermittent rain and overcast skies to South Florida.

Rainfall accompanying both fronts was variable with Homestead reporting over 4 inches, Balm with over 3 inches and Clewiston, Fort Lauderdale, Fort Pierce and Immokalee reporting around 2 inches each. Some isolated showers dropped even more with some areas south of LaBelle reporting 3 - 5 inches over night just before Thanksgiving.

Last weeks front brought the coldest temperatures with lows in the low 40's and even some upper 30's in some inland locations. Daytime highs were in the 70's and 80's.

FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
Balm					
11/16 – 12/7/09	40.33	82.96	3.65	83	0.08
Belle Glade					
11/16 – 12/7/09	39.7	86.32	1.36	84	0.08
Clewiston					
11/16 – 12/7/09	41.5	86.16	2.7	84	0.08
Ft Lauderdale					
11/16 – 12/7/09	47.12	87.93	2.45	78	0.08
Fort Pierce					
11/16 – 12/7/09	36.42	85.68	2.14	84	0.08
Homestead					
11/16 – 12/7/09	41.85	86.86	4.80	84	0.08
Immokalee					
11/16 – 12/7/09	37.95	88.56	1.95	81	0.08

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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

Cloudy rainy weather has caused some issues with gray wall and rain checking and cracking on tomatoes. Cucumbers, cantaloupes, eggplant, herbs, lettuce, peppers, squash, sweet corn, tomatoes, watermelons, and specialty items moved to market. Volumes on most items remains light.

The short-term forecast from the National Weather Service in Miami calls for foggy mornings and partly cloudy skies for the next few days. Temperatures will be near seasonal norms with nighttime lows in the 60's and day time highs in the 80's. Weak high pressure will build over South Florida through Wednesday. A cold front that was forecasted to move into south Florida Thursday, now looks like it will only pass through the Lake Okeechobee region Thursday night and move north again Friday. The best chances of rain then will be Thursday afternoon and evening with 30 percent chance of showers and possibly thunderstorms over the northern sections.

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

Insects

Leafminers

Respondents on the East Coast report leafminer pressure is increasing and mining injury has become more frequent on beans, eggplants and tomatoes. Pressure has been persistent and growers report finding mines on plants only in the ground for a few days.

Growers and scouts around Immokalee report that leafminers have really picked up over the past few weeks with a number of tomato fields receiving treatments. As on the East Coast, scouts report mines on young plantings after about 4 days in ground. Some growers are just tolerating mining damage for the first few weeks until they can get out Coragen. Some are spraying Trigard and other products on young plants in attempt to reduce early damage

Leafminers are causing some problems on squash around Homestead.

Around Manatee County leafminers are present in scattered locations in commercial fields.

Whiteflies

Around SW Florida whitefly numbers continue to vary from location to location, and nymphs are starting to build in several older crops. Adults have also been increasing in older fields but so far growers haven't reported huge numbers moving into younger crops although there have been some reports of adults blowing in on new plantings. They are around and the few growers who have done nothing to control them have problems.

Reports from Palm Beach indicate whitefly pressure is increasing in some places with nymphs showing up in older tomatoes. Numbers are higher in cucurbits.

In the Manatee Ruskin area, whitefly numbers are remaining mostly steady at low to moderate levels with some slight increase noted in places. In a few locations, scouts report finding large numbers of banded wing whiteflies.

With the high incidence of virus present in the Manatee County area, growers could be facing a tough situation this spring unless cold weather intervenes. As fields are harvested, good sanitation and crop destruction can play a major role in reducing potential problems in subsequent crops. With all crops that suffer

from whiteflies and whitefly vectored viruses, the following management recommendations should be considered.

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, **both biotype B and biotype Q (if present)**, and lower the initial infestation level during the cropping period.

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

2. Use a correct crop destruction technique, which includes destruction of existing whitefly populations in addition to the physical destruction of the crop.

- a. Promptly and efficiently destroy all vegetable crops **within 5 days of final harvest** to maximally decrease whitefly numbers and sources of plant begomoviruses like TYLCV.
- b. Use a contact desiccant (“burn down”) herbicide in conjunction with a heavy application of oil (not less than 3 % emulsion) and a non-ionic adjuvant to destroy crop plants and to quickly kill whiteflies.
- c. Time burn down sprays to avoid crop destruction during windy periods, especially when prevailing winds are blowing whiteflies toward adjacent plantings.
- d. Destroy crops block by block as harvest is completed rather than waiting and destroying the entire field at one time.

B. Other 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 (see additional information below for list) 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 are able to carry the virus.
- f. Use TYLCV resistant pepper cultivars (see additional information below for list) 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.

D. Do unto your neighbor, as you would have them do unto you.

1. Look out for your neighbor's welfare.

This may be a strange or unwelcome concept in the highly competitive vegetable industry but it is in your best interest to do just that. Growers need to remember that should the whiteflies develop full-blown resistance to insecticides, especially the neonicotinoids, it's not just the other guy that will be hurt—everybody will feel the pain!

2. Know what is going on in the neighbor's fields.

Growers should try to keep abreast of operations in upwind fields, especially harvesting and crop destruction, which both disturb the foliage and cause whitefly adults to fly. Now that peppers have been added to the list of TYLCV hosts, tomato growers will need to keep in touch with events in that crop as well.

For additional information:

IRAC (Insecticide Resistance Action Committee) Website – <http://www.irc-online.org>.

Worms

Around Southwest Florida, worms are still around and numbers are up and down. In some places, reports indicate that worm numbers really spiked around new moon. Some growers have reported issues with fall armyworm in pepper with worms boring into fruit. Melonworms continue to show up in cucurbits.

On the East Coast, respondents report little decline in worm activity, but beet and southern armyworm and loopers in peppers, tomatoes, and fall armyworm in newly planted sweet corns. Cabbage loopers are widely present on brassicas in the Glades.

Growers and scouts in the Manatee Ruskin area report that worms are still active with lots of southern armyworm along with a small assortment of other varieties.

Around Hillsborough County, strawberry producers are working to clean up early fruitworm and armyworm activity.

Growers in Devils Garden and the Glades indicate that fall armyworm pressure has begun to drop off in sweet corn in recent days but note that worms are still common.

Broad mites

Broad mites are continuing to cause problems in pepper around Manatee County.

Respondents on the East Coast locations report that broad mites are persistent and just about everywhere on eggplant, pepper and basil often showing up on young planting after a week or two.

Around Immokalee, broad mites continue to be up and down in pepper and eggplant and growers have had to work to maintain control.

Aphids

Respondents around Southwest Florida report that aphids are moving around and colonies are forming in some fields. Growers in Devil's Garden and the Glades continue to report problems with aphids in greens and crucifers, especially bok choy and mustard greens.

Around Palm Beach County, respondents report that more aphids are showing up in squash, pepper and some specialty items and some colony formation has been noted.

Scouts in Manatee County, report that aphids are beginning to increase in some areas.

Spider mites

Around Immokalee, spider mites numbers remain low.

Respondents in Palm Beach indicate that spider mites remain problematic in eggplants and strawberries with highest pressure on field margins and near weedy ditch banks.

Mites are present in strawberries in Manatee and Hillsborough Counties where harvest activity is moving them around.

Thrips

A few more thrips are showing up around the area on pepper and other crops the area. These have been Florida flower thrips and are causing no problems.

Reports from Manatee County indicate that thrips are causing some problems on strawberries.

David Sui, Vegetable Extension Agent in Palm Beach County, reports that sampling around the Boynton Beach area showed predominantly native Florida flower thrips at 5-6 adults per flower but notes that he is beginning to find 1-2 adult western flower thrips per flower in some samples. While this is still far below the 10 western flower thrips adult per flower economic threshold, growers are well advised to monitor the situation and be on the lookout for western flowers thrips in case of a potential spike.

Pepper Weevils

Pepper weevils are widely present in Palm Beach County and other locations. Reports indicate they are bad in some places and low in others.

In Southwest Florida, a few pepper weevils are present in some older pepper that has been picked 4-5 times and also in some specialty peppers.

Around Manatee County, respondents indicate that low numbers of weevils are also present.

Diseases

Bacterial leaf spot

Bacterial spot is widely present on tomatoes around Homestead.

Respondents in Southwest Florida report that new bacterial spot lesions are showing up following last weeks rains. Bacterial spot incidence is higher in tomato than in pepper.

In the Manatee/Ruskin area, there is no shortage of bacterial spot and perhaps even some bacterial speck. Bacterial spot is remaining active in a number of places with rain and warmer than usual temps. The disease pressure varies greatly by location and amount of rain received.

Scouts in Palm Beach County report that the bacterial spot problems have increased rapidly on tomato and some pepper following recent rains.

Target Spot

Growers and scouts around Immokalee report that wet weather over the past few weeks fired up target spot in a number of fields.

Around the Manatee Ruskin area, target spot is widespread and especially where growers are holding on to crops they should burn down due to price.

Reports from Palm Beach County indicate that target spot is widely present on tomato and is also causing problems in cucumber.

On tomato, foliar lesions begin as small, pinpoint, water-soaked spots on the upper surface. Gradually these increase in size (up to 2 cm diameter), becoming circular, with concentric rings, and pale brown with conspicuous yellow halos. The lesions will coalesce leading to blighting of foliage. The subsequent premature defoliation affects fruit quality and yield.

The lesions on stems and petioles are brown and oblong. These increase in size and may girdle petioles and stems leading to collapse of the leaflets. On young fruit, the lesions are small, light-brown freckles with darker margins, and centers that are slightly sunken and somewhat dry. Fruit lesions enlarge and coalesce resulting in large areas of sunken, necrotic tissue. On ripe fruit, large circular lesions develop with brown centers that crack.

In the early stages of disease development, symptoms of target spot may be confused with those of bacterial spot and early blight.

On cucumbers, the disease starts as small, yellow leaf flecks that gradually enlarge to about 1 cm (0.4 in) across and become angular. Individual mature lesions are very light tan with a thin, brown margin. Lesions may coalesce, with the development of large circular areas of dead tissue, which dry and tear out. Small, elongate target spot lesions may occasionally occur on cucumber petioles and stems.

Target spot, especially in the early stages, is difficult to distinguish from angular leafspot and downy mildew, two common foliar diseases of cucumber. In late stages, the disease can be confused easily with anthracnose of cucumber.

TYLCV

Respondents in Manatee/Ruskin area report that new TYLCV infections have slowed down in some places but is still rampant in Wimauma. Some fields have reached 100% virus infection. To complicate matters spraying is being reduced due to harvesting and reduced whitefly control and holding fields longer than normal due to favorable prices is aiding the development TYLCV in harvested fields. There is a real concern that with the widespread incidence of virus this fall, the spring season won't be pretty. See **Recommendations for Management of Whiteflies, Begomovirus, and Insecticide Resistance for Florida Vegetable Production** above.

Around Immokalee, TYLCV is increasing in many places, overall infections are not real high but there are several older fields now showing over 10% symptoms and some are significantly higher, over 50%. In other places you could go a long way with out finding a single infected plant

Growers and scouts around Palm Beach report that TYLCV incidence remains low with only a few exceptions especially on plants that are at the edges by ditch banks with trees and brush growing on them.

Downy Mildew

Downy mildew is widespread and almost universally present in cucumbers around South Florida with few exceptions where aggressive control program are in place. It is also increasing in squash and has hits some fields hard around Manatee County.

Downy mildew is also causing problems on basil in a number of locations. Basil and lettuce downy mildews continue to be present and management should continue through the end of the season. Dr Rick Raid, Plant Pathologist at UF/IFAS EREC reports that phosphonics can provide good economic control but cannot be solely relied upon for total control. Rotate or tank mix with some of the other registered fungicides. Some growers report good results with Regalia.

Sclerotinia

Reports from Palm Beach County indicate that scouts are beginning to find Sclerotinia on pepper.

Powdery mildew

Around Immokalee low levels of powdery mildew is increasing in squash.

Some growers in Palm Beach County indicate that their biggest disease problem on squash and other cucurbits this fall is powdery mildew. One grower notes that many of the newer fungicides target water molds but not powdery.

Powdery mildew is also beginning to show up on peppers around Palm Beach County.

Late Blight

No reports of late blight yet but it is that time of year and conditions have been favorable so growers should be extra observant for symptoms of the disease and rotate protective fungicides such as Bravo into their spray program. Looking over back issues of the hotline – we have seen late blight in 12 of the past 13 years. The earliest appearance has been around Thanksgiving and it typically appears by mid-late December.

Gray Wall

Growers note some problems with gray wall in tomatoes mostly like assisted by the cloudy weather over the last few weeks. Incidence is mostly low but is bad in some fields.

Symptoms are first observed as flattened, blotchy, brownish- gray areas that develop on green fruit. As the fruit mature, these blotchy areas remain gray or turn yellow while the rest of the fruit turns red resulting in uneven ripening. Internally, there may be some browning of the vascular tissue. While the disorder is not well understood, certain conditions seem to favor its' development.

These conditions include: plants that are growing rapidly, high nitrogen, low potassium, high soil moisture, high humidity, temperature fluctuations, low light intensity, low temperatures and soil compaction, most of which we had during the past 2-4 weeks.

News You Can Use

US: FDA Announces Intent for Enforceable Produce Safety Standards

With Congress on the brink of passing food safety reform legislation, the Food and Drug Administration has signaled it is beginning work on enforceable standards for fresh produce safety at the farm and packinghouse.

In the just-published fall 2009 federal regulatory agenda, the FDA said it aims to issue a notice of proposed rulemaking about the regulation by October of 2010.

In the announcement in the regulatory agenda, the FDA said the proposed rule will be based on "prevention-oriented public health principles" and use what the FDA has learned in the past decade since issuing its 1998 good agricultural practices guide.

"The proposed rule also will reflect comments received on the agency's 1998 update of its GAPs guide and its July 2009 draft commodity-specific guidances for tomatoes, leafy greens and melons," the FDA said.

However, while the proposed rule will be based on recommendations included in the GAPs guide, the FDA said the agency does not intend to make the entire guidance mandatory.

"FDA's proposed rule would, however, set out clear standards for implementation of modern preventive controls," the announcement said.

In addition, the agency said the proposed rule would stress the need for environmental assessments to identify hazards and possible pathways of contamination.

The FDA said the requirements of the proposed rule would be "scale appropriate" and in keeping with the relative risks and complexity of individual operations.

Guidance will also be issued after the proposed rule is finalized to help the industry comply with the regulation's requirements, the FDA said.

In its statement, the agency said the regulation will affect more than 300,000 domestic and foreign producers and packers of fresh produce.

Anticipated costs include one-time investments in new tools and equipment and recurring costs of monitoring, training and recordkeeping.

FDA said they anticipate a reduction in foodborne illness and deaths associated with fresh produce. The agency said it did not have dollar estimates of the costs and benefits of the proposed regulation yet.

The agency said it determined that enforceable standards (as opposed to voluntary recommendations) were necessary to "ensure best practices are commonly adopted." - The Packer – 12/7/09

Florida to Feds: Move carefully on water standards

All 25 members of Congress from Florida urged federal officials on Thursday to move carefully when imposing new water rules so they don't damage the state's economy.

It's hard these days to get members of both parties to agree on anything. The unanimous response shows the high stakes of curbing water pollution.

"While we all value the health of our waterways, this regulatory change will also have economic impacts on the state, and thus it is important that the standards are based on the best available science," Florida's two senators and 23 House members wrote to the EPA administrator.

Florida will be the first state subject to new federal water mandates.

The cost of upgrading Florida's water systems to meet the requirements would range from \$24.4 billion to \$50.7 billion, according to the FWEA Utility Council, a group of government and private utilities in Florida.

The Florida members of Congress urged EPA to work closely with state environmental officials before finalizing the rules. Sun Sentinel online – Dec 3, 2009

Navigating the Canadian Marketplace - Town Hall Meetings - January 19-22

Doing business in Canada? Interested in the opportunity?

Agricultural products are Florida's leading export sector to Canada. Join us at one of these timely Town Hall Meetings to learn more about this valuable export market opportunity. Highlights will include:

- Payments and quality claims
- Inspections and border issues
- Maximum residue levels
- Food safety
- Labeling
- and more...

Mark your calendar ... there's a free meeting at a place convenient for you.

- Tuesday, Jan. 19 Dade County CES, Homestead 5:30 – 7:30 p.m.
- Wednesday, Jan. 20 UF Indian River REC, Fort Pierce 11:30 a.m. – 1:30 p.m.
- Wednesday, Jan. 20 Palm Beach County CES, West Palm 5:30 – 7:30 p.m.
- Thursday, Jan. 21 Southwest Florida REC, Immokalee 11:30 a.m. – 1:30 p.m.
- Thursday, Jan. 21 Gulf Coast REC, Balm 5:30 – 7:30 p.m.
- Friday, Jan. 22 Hilton Garden Inn, Valdosta, Ga. 11:30 a.m. – 1:30 p.m.

Sessions will include buffet lunch or dinner.

RSVP by calling 321-214-5200 or contact Mike Aerts, FFVA Director of Membership and Marketing, at Mike.Aerts@FFVA.com

Snake Hunters Welcome in South Florida

LABELLE, FL. -- The Florida Fish and Wildlife Conservation Commission (FWC) reminds hunters that they may continue to take Burmese pythons and all other reptiles of concern within four South Florida wildlife management areas (WMAs).

An FWC executive order, which went into effect Aug. 29, gives all properly licensed and permitted hunters authority to harvest pythons and other reptiles of concern (Indian python, reticulated python, northern and southern African rock python, amethystine or scrub python, green anaconda and Nile monitor lizard) on Everglades and Francis S. Taylor, Holey Land, Rotenberger and Big Cypress WMAs during specified hunting seasons.

Besides Big Cypress WMA, small-game seasons are going on in the other three management areas, continuing through March 7. On Big Cypress, general gun season is in, immediately followed by the area's small-game season, which goes through Feb. 1. In all four WMAs, only a Florida hunting license and management area permit are required to hunt reptiles of concern from now through the end of the small-game seasons.

With the exception of the small-game season in the Deep Lake Unit of Big Cypress (where only bows and muzzleloaders are allowed), hunters may use shotguns, rimfire rifles and handguns to take pythons. Nets and snares also may be used, but no matter the method of take, all reptiles of concern must be euthanized on site.

Reptiles of concern may not be taken out of the wildlife management areas alive and must be reported to the FWC within 36 hours by calling, toll-free, 866-392-4286, or going to MyFWC.com and selecting 'Burmese pythons' in the Quick Clicks menu. However, any reptile of concern taken from Big Cypress must be checked in at one of the area's six check stations.

Hunters may do what they wish with the reptile's skin and meat. However, according to the National Park Service, mercury testing on two dozen captured Burmese pythons in Everglades National Park revealed extraordinarily high levels of mercury in the meat - well above levels considered safe to eat in freshwater fish and alligators.

Officials estimate there are thousands of Burmese pythons in the wild in South Florida. The FWC's goal is to contain the spread of these pythons in the wild and prevent establishment of other reptiles of concern. Data collected by hunters on these state-managed lands will assist in preventing their northern movement.

Farm-To-School Program Seeks Interested Farms

The School District of Collier County provides nutritious meals for thousands of students every school day. A key element in offering a well balanced, nutritious meal is having the freshest produce available. As a way to

accomplish this, the district's Department of Nutrition Services is interested in developing a farm-to-school program. Through this program, local farms would provide district schools with fresh seasonal produce.

Working through a bid from Sarasota County Schools, the Collier district would be able to add new farms willing to provide produce to our schools. The district would purchase the product directly from the farm, and bring it into schools through its produce distributor, Fresh Point.

Director of Nutrition Services Dawn Houser is excited about the advantages such a program would bring everyone. "We hope to build a relationship with local farms that will prove mutually beneficial to farmers, and allow us to serve our students the freshest locally grown produce currently available throughout the school year."

If you're interested in becoming a part of this program, please contact Sarasota County Schools Nutrition Services Director Beverly Girard, at (941) 4862199.

To learn more about the School District of Collier County's initiative, please contact Dawn Houser at (239) 377-0280.

South Florida Vegetable Pest and Disease Hotline – if you get the hotline second hand from another source you may be missing the Quotable Quotes and The Lighter Side – to subscribe direct – email gmcavoy@ufl.edu

Pesticide Update and Label Changes

Cabrio Sec 2(ee) Recommendation - BASF announces receipt of a Section 2(ee) recommendation for the use of Cabrio in a tank mix with a fixed copper and a mancozeb fungicide to suppress bacterial speck and bacterial spot in peppers and tomatoes. Directions for use call for 8 -16 ozs of Cabrio in a tank mix prior to disease development.

Up Coming Meetings

Manatee County

December 9, 2009

CORE/Private Restricted Pesticide Use License Training
Core from 8 -10 AM and Private from 10 AM -12 PM.

Manatee County Extension Service
1303 17th Street West
Palmetto, FL 34221

CEUs are available for all classes.

Contact Jennifer at 941-722-4524 for more information or to register.

Palm Beach County

December 17, 2009

Vegetable Growers Meeting **12:00 Noon – 2:00 PM**
focusing on Whiteflies and TYLCV

UF/IFAS Palm Beach County Extension
559 North Military Trail
West Palm Beach, FL 33415

Please RSVP to dsui@ufl.edu or by calling Maria Kelly 561-233-1725

Thursday, Jan. 21 - Gulf Coast REC, Balm, 5:30 – 7:30 p.m.

Friday, Jan. 22 - Hilton Garden Inn, Valdosta, Ga., 11:30 a.m. – 1:30 p.m.

Sessions will include buffet lunch or dinner.

RSVP by calling 321-214-5200 or contact Mike Aerts, FFVA director of membership and marketing, at Mike.Aerts@FFVA.com

December 18, 2009	Lower West Water Supply Plan Workshop Estero Recreational Center Room 103A	9:30-12:00
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2010 Water Supply Update- Public Water Supply Component

- Overview of water supply planning
- Goals and objectives of plan update and the process
- Review of 2006 plan and implementation status
- Population and water demand projections
- Issue identification for plan- homework for sequent meeting

Please if you need further information, call:

Terry Bengtsson
Lead Hydrogeologist
West Coast Water Supply Coordinator
SFWMD - Fort Myers Service Center
239-338-2929-7740
239-989-3075

Opportunities

Commercial Development Representatives - Valent USA is seeking a two Commercial Development Reps (West Coast & East Coast) to work on biorational products.

Valent USA is seeking two hands-on leaders to spearhead a greater emphasis on biorational products. This individual will serve as a critical liaison between university extension agriculture experts, Valent's agriculture product distributors, and Valent customers in the field and distributors' locations. This includes coordinating internal staff and resources with external partners and customers. This person will be essential in providing guidance to sales representatives. As an individual contributor, it is critical that this person be a self-starter.

The following responsibilities will fall under his/her control:

- Initiate, direct and execute scientific research and/or development strategies for biorational products through research staff or individual studies.
- Investigate the feasibility of applying a wide variety of scientific principles and concepts to potential opportunities, products or problems.
- Plan and execute field research for biorational products.
- Manage the technical development of the sales group and interface with various departments.

The CDR must possess an in-depth understanding of the biological pesticides and develop a proficiency to explain the biorational product line and train Sales colleagues in their use. Since he/she will regularly interact with the Field Market Developers (FMDs), it is of utmost importance to foster an effective working relationship

with them. A key ingredient for success in this role is the ability to work with others and demonstrate strong personal skills with people throughout the agriculture industry.

The selected individual will travel up to 40%. The West coast position will be based in the candidate's home office, ideally in Central California, the Fresno area and/or Washington State. The East Coast position will be located in the State of Florida, Georgia, Michigan, New York or Pennsylvania. There may be a significant amount of car travel as well.

The ideal candidate will have:

- A B.S. degree in an agricultural or biological science such as plant physiology or agricultural science. An advanced degree such as an M.S., Ph.D. or MBA in business agriculture, entomology, plant physiology, agriculture sciences, plant science, horticulture or a biological science a plus.
- A minimum of five years relevant industry experience, preferably with ten or more years experience in field development.
- Extensive knowledge of agricultural practices and work experience with Plant Growth Regulators (PGRs) is preferred, and Bt (*Bacillus thuringiensis*) experience is ideal.
- A record of successful product development and commercialization.

In addition to a salary, this position is eligible for a significant annual cash bonus, which is tied to sales and job performance goals.

Contact Joanne Yawitz, President, Bay View Resource Group, on a proprietary and confidential basis.

Telephone: 415-441-351 E-mail: jyawitzbvr@gmail.com
Website: www.bayviewresourcegroup.com

Food safety Manager

Well established produce company in Miami, FL is searching for a Food Safety/QC Manager. Would like someone who has a degree in Agriculture Science, Food Science or a related field. A couple of years of experience in a Food Safety/QC capacity in produce is ideal, but they are willing to train the right person. Any experience with vegetable crops is a big plus! This is a new position overseeing the company's external and internal Food Safety/QC process. The candidate MUST be bilingual (English/Spanish). There will be some travel involved with this position. Salary range is \$45-65k doe.

Interested candidates may contact Stacey Rouse at JBN & Associates at 480-222-5519 or e-mail www.stacey@jbnassociates.com.

Research Associate in Phytopathology

Join the winning team at Harris Moran Seed Company, a global leader in vegetable seed; as part of the world's largest independently owned seed company, we offer exciting careers full of challenge, diversity, and growth. The Assistant Plant Pathologist will design, implement and manage, in a team environment, the plant pathology program based in Immokalee, FL. The Florida research station houses a fresh market tomato and a sweet pepper breeding programs, and it is used by other programs including corn, melon, watermelon, squash and bean for trials in hot and humid environment.

Main responsibilities:

- Implement plant pathology tests for diseases that are considered industry standard.
- Put in place new tests with the support of the Business Unit research pathology team.

- Manage the daily activities of the pathology laboratory, growth chamber and greenhouses.
- Establish and maintain a pathogen collection.

Other responsibilities:

- Support breeding, sale and product development in identifying diseases in field samples in coordination with other Business Unit laboratories.
- Supervise the phytosanitary conditions of plants grown at the Immokalee FL station field and greenhouses.

Qualifications:

- M.S. in Plant Pathology or closely related field with 2+ years of relevant experience or B.S. with relevant experience of at least 10 years
- Experience with plant pathology, microbiology and molecular biology is required
- Spanish language skills desirable

Skills required:

- Able to work independently.
- Detail oriented.
- Strong oral and written communication skills.
- Familiarity with MS Word/Excel/Access.
- Willing to take initiative and able to work independently.
- Must be able to multitask, with strong problem solving abilities.
- Some travel required.

Harris Moran is an "at will" employer.
Equal Opportunity Employer.
Drug Free Workplace.

Please send application and resume to:
Harris Moran
PO Box 4938
Modesto CA 95352
USA
or by e-mail to: hr@harrismoran.com

Farm Land for Lease

Farm Land for lease in LaBelle area – contact Clyde Lavender at 863-673-2338

Websites

USDA AMS Market News - Fruit and Vegetable Market News Portal. Users can retrieve both current and historical price and movement information 24 hours a day. The Portal offers customized views and downloads of data from the present to 1998, for terminal and shipping point prices, movement reports and specialty crop information. – check it out at

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateA&page=FVMarketNews>

Florida's Lost Tourist Attractions - Once upon a time, before the giant mouse ate Orlando and Interstate Highways were built to cattle chute the tourists directly into International Drive, there was another Florida – these website catalogs the dimming memories of Florida roadside attractions – go to <http://lostparks.com/>

Quotable Quotes

Live as if you were to die tomorrow. Learn as if you were to live forever. - Mahatma Gandhi

Facts do not cease to exist because they are ignored. - Aldous Huxley

... when you have eliminated the impossible, whatever remains, however improbable, must be the truth. - Sir Arthur Conan Doyle

The road to success is always under construction. – Anonymous

If everything seems under control, you're just not going fast enough. - Mario Andretti

On the Lighter Side

Angels Explained By Children

I only know the names of two angels, Hark and Harold. - Gregory, age 5

Angels work for God and watch over kids when God has to go do something else. -Mitchell, age 7

My guardian angel helps me with math, but he's not much good for science. - Henry, age 8

Angels talk all the way while they're flying you up to heaven. The main subject is where you went wrong before you got dead. – Daniel, age 9

Angels have a lot to do and they keep very busy. If you lose a tooth, an angel comes in through your window and leaves money under your pillow. Then when it gets cold, angels go south for the winter. - -Sara, age 6

Angels live in cloud houses made by God and his son, who's a very good carpenter. -Jared, age 8

My angel is my grandma who died last year. She got a big head start on helping me while she was still down here on earth. – Ashley, age 9

Some of the angels are in charge of helping heal sick animals and pets. And if they don't make the animals get better, they help the child get over it. – Vicki, age 8

The Code of the West – Cowboy Ethics

Live Each Day with Courage

Take Pride in Your Work

Always Finish What You Start

Do What Has to be Done

Be Tough, But Fair

When You Make a Promise, Keep It

Ride for the Brand

Talk Less and Say More

Remember That Some Things Aren't for Sale
Know Where to Draw the Line

Not a bad code for non-cowboys either- GM.

Roy Rogers Prayer

Lord, I reckon I'm not much just by myself;
I fail to do a lot of things I ought to do.
But Lord, when trails are steep and passes high,
Help me ride it straight the whole way through.

And when in the falling dusk I get that final call,
I do not care how many flowers they send,
Above all else, the happiest trail would be,
For YOU to say to me, "Let's ride, My Friend."

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 with in minutes of my completing it and help conserve dwindling resources at the same time. Thanks to those that have already made the switch.

Contributors include: Joel Allingham/AgriCare, Inc, Jeff Bethel/Syngenta Flowers, 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/H & R Farms, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, Barry Kostyk/SWFREC, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Mark Mossler/UF/IFAS Pesticide Information Office, Gene McAvoy/Hendry County Extension, Alice McGhee/Thomas Produce, Dr. Gregg Nuessly/EREC Chuck Obern/C&B Farm, Dr. Aaron Palmateer/TREC, Dr. Ken Pernezny/EREC, Dr. Rick Raid/ EREC, Dr Ron Rice/Palm Beach County Extension, Dr Pam Roberts/SWFREC, Dr. Nancy Roe/Farming Systems Research, Wes Roan/6 L's, Dr. Dak Seal/ TREC, Kevin Seitzinger/Gargiulo, Ken Shuler/Stephen's Produce, Crystal Snodgrass/Manatee County Extension, John Stanford/Thomas Produce, Mike Stanford/MED Farms, Dr. Phil Stansly/SWFREC, Dr David Sui/Palm Beach County Extension, Dr Gary Vallad/GCREC , Mark Verbeck/GulfCoast Ag, Alicia Whidden/Hillsborough County Extension, Dr Henry Yonce/KAC Ag Research and Dr. Shouan Zhang/TREC.

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