



UNIVERSITY OF
FLORIDA

E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

October 2, 2009

Sure feels good – after a long hot humid summer! Cooler drier air filtering in across the area behind the front that is current pushing offshore dipped temperatures into the mid 60’s in most areas with some cooler locations dropping into the upper 50’s. Lower temps combined with lower humidity are a sign that fall is in the air.

Before yesterday’s cooler weather, daytime highs have been reaching the mid 90’as with nighttime lows dipping to the low to mid 70’s. Some sun scalding of transplants has been reported from scattered locations.

The past few weeks have been a little drier that the early part of September allowing growers to catch up on land prep, planting and other cultural activities. Depending on the location, it was dry enough that some growers report that they had to water plants in and irrigate immediately.

FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
Balm					
9/17 – 10/2/09	58.21	94.53	0.13	81	0.14
Belle Glade					
9/17 – 10/2/09	65.71	94.26	2.59	87	0.13
Clewiston					
9/17 – 10/2/09	63.95	93.24	1.24	82	0.13
Ft Lauderdale					
9/17 – 10/2/09	72.21	91.42	1.62	80	0.14
Fort Pierce					
9/17 – 10/2/09	63.93	93.38	0.73	83	0.17
Homestead					
9/17 – 10/2/09	67.32	92.41	2.93	85	0.14
Immokalee					
9/17 – 10/2/09	62.44	97.57	1.76	83	0.15

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Over all crops look good. A few specialty items including basil are beginning to come to market.

The short-term forecast from the National Weather Service in Miami indicates the for the upcoming weekend, the mid/upper level flow will turn northwesterly as a shortwave moves north of the area on Saturday keeping the area dry with a slight chance of showers.

By mid/late week, the low level flow will become southwesterly bringing some higher moisture and a slightly better chance of thunderstorms.

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

Insects

Whiteflies

Around the Manatee County area respondents indicate whitefly have dropped off after the early high numbers earlier in the month. Nymphs are now beginning to appear in the oldest planting planted in late July.

Growers and scouts in Palm Beach indicate whitefly numbers remain mostly low but pressure remains constant at low levels with adults moving around. Some higher numbers have been reported in cucurbits in places.

Reports from SW Florida indicate that whitefly numbers are dropping but are still high for this time of year. Some hotspots are still reporting as many as 10 adults per leaf on melons.

Worms

Growers and scouts around Immokalee are finding an array of worms including fruitworms, southern, beet, and fall armyworms, hornworms, loopers, and melonworms. Pressure is mostly low and with the availability of effective worm control materials there have been few issues with control.

Reports from the Manatee Ruskin area report steady worm pressure including beet armyworms, southern armyworms, loopers, fruitworms, and hornworms, but no control issues.

On the East Coast, respondents are reporting mostly beet armyworms along with a few southern armyworms and melonworms showing up in cucurbits. Heavy hornworm activity has been noted in a few areas.

Broad mites

Reports from Immokalee note that broadmites are out in force and report that a number of fields (pepper and eggplant) have experienced a flare up in populations over the past 10 days or so.

Growers and scouts on the East Coast indicate that a few broad mites are beginning to show up in older pepper and eggplant reaching bloom stage.

Broadmites are showing up in pepper in the Manatee Ruskin area.

Leafminers

Leafminer pressure in the Manatee Ruskin area remains light.

A few leafminers are also beginning to show up around Immokalee.

Aphids

Respondents in Manatee County and Immokalee report that a few aphids are beginning to show up here and there.

In Palm Beach County, there are some isolated reports of heavy aphid pressure in cucurbits along with some virus issues.

Diseases

Bacterial leaf spot

Respondents in Southwest Florida report that bacterial spot is bad and is still widespread in pepper and tomatoes but overall spread has slowed down. Many fields have already suffered some defoliation and some bloom infections. In most cases, peppers have not been hit as hard as tomatoes. Problems with bacterial spot infection coming in on transplants continue to be noted.

In Manatee/Ruskin area, bacterial spot is also the big story and bacteria is also common in tomatoes that received excess rainfall the last couple weeks.

Scouts in Palm Beach County report that bacterial leafspot is common on tomato in many areas and in many cases appears to have arrived on transplants coming from the greenhouse. Bacterial spot is showing up in an increasing number of peppers plantings as well.

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 euvesicatoria*. 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 and others have 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 includes 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. euvesicatoria*.

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 changes in the bacterial populations present.

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.

TYLCV

Respondents in Manatee/Ruskin area note that TYLCV incidence is increasing slowly in most areas and indicate that incidence has reached 70-80% in a few older blocks.

Around Immokalee, TYLCV is around at very low levels in scattered fields. There are some areas that have symptoms on about 1% of plants but many farms are still TYLCV free.

Growers and scouts around Palm Beach report that TYLCV incidence is very low and that they are finding only a few scattered plants here and there.

Pythium

Losses from pythium continue to be reported in all areas especially in those areas hardest hit by rains over the past few weeks but most respondents indicate the situation is improving with drier weather over the past week.

Around Immokalee depending on how much rain has been received, many pepper fields have lost plant and have been reset more than once. Pythium and rhizoctonia is also common on beans.

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

Southern Blight

Growers and scouts around Manatee County report seeing a jump in Southern Blight behind all the rain and note that some farms in Manatee County have had about 20 inches in the last couple of weeks.

Low levels of southern blight on pepper and tomato is being reported from scattered locations around Palm Beach and Martin Counties. Growers are also reporting some issues with Southern Blight affecting stand establishment in beans.

Southern blight is caused by a soil-born fungus, Sclerotium rolfsii. Whitish fungal growth develops around the base of herbaceous plants (and some 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.

Disease outbreaks are most severe during periods of wet, warm weather when temperatures range from 80 to 95 degrees.

Plants which have been attacked by southern blight first tend to turn yellow. This stage of the disease is quickly followed by wilting and death of the affected plant after the fungus girdles the stem.

There are several pests which may cause plant yellowing and wilt, however it's easy to determine if southern blight is responsible. A diagnostic symptom of the disease is the presence of white fungus growth on the lower stem and nearby plant debris. This growth is most easily observed several days after a rain. Numerous smooth, round, light tan to dark brown seed-like structures called sclerotia are usually formed in the mat of fungus growth. The sclerotia generally aren't too difficult to locate and are about the same size as mustard seed.

Southern blight can be controlled with cultural and chemical techniques. Residue management is important 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.

Fumigants can reduce problems with southern blight and fungicides such as Terrachlor may also be applied to the soil on certain crops to inhibit development of the fungus. Planting on raised bed also helps reduce damage on some crops.

Tomato Spotted Wilt Virus

Scouts report finding a few TSPWV infected pepper plants in some east coast locations. It is suspected that this came on plants from Georgia. Some TSPWV infected tomato plants have also been noted which is the first time this has been reported.

Phytophthora

A few problems with Phytophthora have been reported around Immokalee and in Palm Beach.

Mosaic

Growers are reporting some problems with mosaic on early planted squash in Palm Beach County.

Botrytis

Growers report some issues with botrytis on tomato around Manatee County.

Target Spot

Target spot is begging to show up on tomato in the Manatee/Ruskin area.

News You Can Use

Wet September Over Collier County - When Will the Cool Season Begin?

For the second consecutive month, much of Collier County and interior sections of southwest Florida received above normal rainfall (Figure 1). This rain was largely beneficial due to the year-long rainfall deficit experienced over coastal Collier County, especially in the Naples area. Notable September rainfall amounts in these areas include Marco Island with 14.43 inches of rain (second consecutive month of over 10 inches of rain), Naples Regional Airport with 11.36 inches and Devils Garden in central Hendry County with 12.66 inches.

Over eastern sections of south Florida, rainfall ended up near to slightly below normal at most locations. Rainfall amounts over the eastern metro areas were mainly in the 6 to 8 inch range. As usual, there were pockets of lower and higher amounts, sometimes in close proximity to each other. Fort Lauderdale/Hollywood International Airport received only 3.91 inches of rain, while a few miles to the northeast at Fort Lauderdale Beach, a total of 11.22 inches fell (including 4.42 in one day on the 28th). In Palm Beach County, Juno Beach received only 4.08 inches of rain, while 13 miles south at Palm Beach International Airport a total of 7.48 inches was recorded.

One explanation for the much higher rain amounts in southwest Florida was a shift in the overall pattern during the month of September. The first part of the month was dominated by low pressure over the southeast United States, which provided for a general west to east flow over Florida, with wet conditions over southeast Florida as a result. The second part of September saw a switch to high pressure over the Gulf of Mexico and central Florida which produced a change in the atmospheric flow to an east to west direction. The predominant east to west flow during the second half of September, combined with typically high moisture values, led to the daily pattern of showers and thunderstorms focusing over western sections of the southern peninsula.

Below are September rainfall totals and departure from normal in inches for select south Florida locations:

Figure 1

Location	September 2009 Rainfall	September Departure From Normal
Miami Int'l	6.83	-1.55
Fort Lauderdale Int'l	3.91	-4.35
Palm Beach Int'l	7.48	-0.62
Naples Regional	11.36	3.25
Miami Beach	6.03	-0.28
Moore Haven	7.00	0.58
The Redland (South Dade)	9.89	1.50
Oasis Ranger Station	4.12	-3.98

Now that October is here, many South Floridians look forward to the much anticipated end of the long, warm and humid rainy season and the onset of the mild and less humid dry season. The median date for the beginning of the dry season is October 17th for most of south Florida, and perhaps up to a week earlier for the interior northern sections of south Florida mainly west of Lake Okeechobee. The beginning of the South Florida dry

season is usually marked by several consecutive days of dew points below 70 degrees which typically occur as a result of weak frontal passages and a gradual shift from deep tropical moisture and near-daily showers and thunderstorms to drier air masses of continental origin overspreading the area. The lower dew points also coincide with minimum temperatures dropping below 70 degrees for the first time since April or early May.

A more significant drop in temperatures typically does not occur until late October or early November, which is when the first significant cold front normally sweeps through south Florida. This offset between the beginning of the dry season and the beginning of the “cool” season occurs in most years, although in some years the beginning of the dry season is marked by a strong cold front. This was the case back in 2005 when a strong cold front swept through south Florida on the heels of Hurricane Wilma on October 25th.

One way to define the beginning of the “cool” season is the average date when the first daily minimum temperature drops to below 60 degrees over the southeast Florida metro areas, and 55 degrees or below for the southwest Gulf coast and areas around Lake Okeechobee. Below is

Below is a table with the average first date of the cool season when these minimum temperature values are reached:

Location	Average First Date Low Temp < 60F (<= 55F for Naples, Moore Haven and LaBelle)
Miami	November 8
Fort Lauderdale	November 4
West Palm Beach	November 3
Miami Beach	November 18
The Redland (South Dade)	October 30
Naples	November 3
Moore Haven	November 2
LaBelle	October 30

The October outlook from the Climate Prediction Center is for equal chances of above, below or near normal temperatures. Local analysis suggests that there may be a slightly enhanced likelihood of below normal temperatures in October, but confidence is quite low. The precipitation outlook for October is for a slightly enhanced likelihood (50-55 percent) of above normal precipitation. As with the temperature outlook, confidence in the precipitation outlook for October is low.

Looking ahead to the upcoming dry/cool season, one of the primary features to look for is the evolution of the current El Niño pattern (for more information on El Niño, see the latest El Niño Advisory). Preliminary information based on latest projections from the Climate Prediction Center of a moderate El Niño peaking during the winter, in conjunction with local analyses, indicates a significantly increased likelihood of above normal precipitation and cooler than normal temperatures across south Florida for the upcoming November-April dry/cool season period. Along with the likelihood of wetter than normal conditions is an increased likelihood of severe weather, including tornadoes.

A complete dry season outlook will be provided by the National Weather Service Miami-South Florida Forecast Office during the last week of October.

For the latest weather conditions, forecasts, warnings, advisories and statements, please visit the National Weather Service Miami-South Florida Forecast Office’s web site at <http://www.srh.noaa.gov/mfl/>
NWS – Oct1, 2009

Bronson Seeks to Intervene in Lawsuit Involving State Water Bodies; Asks Water Management Districts to do the Same

TALLAHASSEE -- Florida Agriculture and Consumer Services Commissioner Charles H. Bronson today announced that he is seeking to intervene in a Federal Court lawsuit involving EPA's attempt to impose arbitrary nutrient standards for state water bodies and is asking four of the state's five Water Management Districts to join in the challenge.

The legal proceeding in which the Commissioner is attempting to become involved concerns a proposed settlement of a lawsuit filed by a Florida environmental group against EPA in which the federal agency would impose what Bronson regards as "arbitrary and unreasonable" numeric nutrient standards on numerous lakes, streams and marine waters throughout Florida. The proposed settlement, known as a consent order, is subject to a judge's approval.

A number of organizations, including the South Florida Water Management District, are challenging the consent order, and Bronson filed a motion late yesterday with the federal court for the Northern District of Florida to join the challenge. At the same time, he has written letters to each of the state's other four Water Management Districts asking them to do the same.

Bronson said that the EPA's proposed consent order effectively preempts efforts by the Florida Department of Environmental Protection to develop nutrient standards that are science based and would cost the state billions of dollars to comply with.

"These new standards would impose regulations far in excess of anything being considered in any other state, drastically increasing costs for all consumers," Bronson said. "It is important that the court understands the magnitude of this issue and the importance of careful scientifically based standards for controlling nutrients in our state."

Note – if you haven't been following this – you need to and you need to get involved as this could lead to requirements for individuals growers having to obtain permits for offsite movement of nutrients. See below from last week. GM

Will the Environmental Protection Agency Clamp Down on Runoff?

Environmental legal groups, US Department of Justice and EPA attorneys have cooked up a deal to control runoff from your farm or ranch. Are you ready to be required to obtain a Clean Water Act permit for your farming operation?

You may not know about Clean Water Act permits, otherwise known as NPDES permits. All industry and publicly owned treatment works must have these permits, which are written by your friendly regional EPA office and subject to public notice and comment. Then EPA may decide after receiving this comment to issue the permit or make changes in limiting the amount of pollutants that may be discharged to a water of the United States.

In an action where law is being created through a Consent Order signed by a U.S. District Court Judge, a new approach under the Clean Water Act will likely require farmers in Florida in the future to have legal limits set on the runoff coming from their farms which goes into Florida waterways.

In fact the environmental groups filing the law suit believe the consent order model developed between themselves, EPA and Department of Justice lawyers will serve as a model for other states.

It appears, for the first time, that EPA will start developing and setting a numeric number to control runoff from farming and ranching operations. This would mean there will be limits on the runoff that might contain waste or fertilizer from your farm or ranch based on nutrient quality standards (read as limits for phosphorous and nitrogen runoff).

This Consent Order appears to ignore the language of the agricultural storm water runoff exemption that we in agriculture have enjoyed since 1973. The environmental community believes that rain causes runoff with contaminants to run into the waterways of the US. They believe that Agricultural runoff from our farms is harming and possibly poisoning ecosystems.

The law suit, with the deal cut in the Consent Order, will be the first time where EPA will be issuing standards of numeric limits to limit runoff from Florida's farms. The environmental groups believe that with numeric limits developed in water quality standards it will be much easier for EPA or environmental groups to force the regulation of agricultural runoff from farms and ranches.

The environmental groups are crediting the new administration for quick action in attempting to regulate nutrient runoff and compare this action to the foot dragging of the Bush administration.

A number of agricultural groups in Florida sought to intervene. They have a court order seeking a hearing on the Consent Decree.

Individuals involved in tillage and animal agriculture better hope industry's lawyers point out there is an agricultural storm water exemption that Congress has made very clear when courts have in the past tried to regulate runoff from our fields and ranches.

American Agriculturist, September 14, 2009

Weed Control in Tomato

Although weed control has always been an important component of tomato production, its importance has increased with the introduction of the sweet potato whitefly and development of the associated irregular ripening problem. Increased incidence of several viral disorders of tomatoes also reinforces the need for good weed control. Common weeds, such as the difficult-to-control nightshade, and volunteer tomatoes (considered a weed in this context) are hosts to many tomato pests, including sweet potato whitefly, bacterial spot, and viruses. Control of these pests is often tied, at least in part, to control of weed hosts. Most growers concentrate on weed control in row middles; however, peripheral areas of the farm may be neglected. Weed hosts and pests may flourish in these areas and serve as reservoirs for re-infestation of tomatoes by various pests. Thus, it is important for growers to think in terms of weed management on the entire farm, not just the actual crop area.

Total farm weed management is more complex than row middle weed control because several different sites and possible herbicide label restrictions are involved. Often weed species in row middles differ from those on the rest of the farm, and this might dictate different approaches. Sites other than row middles include roadways, fallow fields, equipment parking areas, well and pump areas, fence rows and associated perimeter areas, and ditches.

Disking is probably the least expensive weed control procedure for fallow fields. Where weed growth is mostly grasses, clean cultivation is not as important as in fields infested with nightshade and other disease and insect hosts. In the latter situation, weed growth should be kept to a minimum throughout the year. If cover crops are planted, they should be plants which do not serve as hosts for tomato diseases and insects. Some perimeter areas are easily disked, but berms and field ditches are not and some form of chemical weed control may have to be used on these areas. We are not advocating bare ground on the farm as this can lead to other serious problems, such as soil erosion and sand blasting of plants; however, where undesirable plants exist, some control should

be practiced, if practical, and replacement of undesirable species with less troublesome ones, such as bahiagrass, might be worthwhile.

Certainly fence rows and areas around buildings and pumps should be kept weed-free, if for no other reason than safety. Herbicides can be applied in these situations, provided care is exercised to keep them from drifting onto the tomato crop.

Field ditches and canals present special considerations because many herbicides are not labeled for use on aquatic sites. Where herbicidal spray may contact water and be in close proximity to tomato plants, for all practical purposes, growers probably would be wise to use Diquat only. On canals where drift onto the crop is not a problem and woodier weeds, Rodeo, a systemic herbicide, could be used. Other herbicide possibilities exist, as listed in <http://edis.ifas.ufl.edu/WG040>. Growers are cautioned against using Arsenal on tomato farms because tomatoes are very sensitive to this herbicide. Particular caution should be exercised if Arsenal is used on seepage irrigated farms because it has been observed to move in some situations.

Use of rye as a windbreak has become a common practice in the spring; however, in some cases, adverse effects have resulted. If undesirable insects such as thrips build up on the rye, contact herbicide can be applied to kill it and eliminate it as a host, yet the remaining stubble could continue serving as a windbreak.

The greatest row middle weed problem confronting the tomato industry today is nightshade. Nightshade has developed varying levels of resistance to some post-emergent herbicides in different areas of the state. Best control with post-emergence (directed) contact herbicides is obtained when the nightshade is 4 to 6 inches tall, rapidly growing and not stressed. Two applications in about 50 gallons per acre using a good surfactant is usually necessary.

With post-directed contact herbicides, several studies have shown that gallonage above 60 gallons per acre will actually dilute the herbicides and therefore reduce efficacy. Good leaf coverage can be obtained with volumes of 50 gallons or less per acre. A good surfactant can do more to improve the wetting capability of a spray than can increasing the water volume. Many adjuvants are available commercially. Some adjuvants contain more active ingredient than others and herbicide labels may specify a minimum active ingredient rate for the adjuvant in the spray mix. Before selecting an adjuvant, refer to the herbicide label to determine the adjuvant specifications.

Postharvest Vine Desiccation

Additionally important is good field sanitation with regard to crop residue. Rapid and thorough destruction of tomato vines at the end of the season always has been promoted; however, this practice takes on new importance with the sweet potato whitefly. Good canopy penetration of pesticidal sprays is difficult with conventional hydraulic sprayers once the tomato plant develops a vigorous bush due to foliar interception of spray droplets. The sweet potato whitefly population on commercial farms was observed to begin a dramatic, rapid increase about the time of first harvest in the spring of 1989. This increase appears to continue until tomato vines are killed. It is believed this increase is due, in part, to coverage and penetration. Thus, it would be wise for growers to continue spraying for whiteflies until the crop is destroyed and to destroy the crop as soon as possible with the fastest means available. Gramoxone Inteon is labeled for postharvest desiccation of tomato vines. Follow the label directions.

The importance of rapid vine destruction can not be overstressed. Merely turning off the irrigation and allowing the crop to die will not do; application of a desiccant (with an oil or other insecticide – GM) followed by burning is the prudent course.

See <http://edis.ifas.ufl.edu/WG040> for full article and herbicide recommendations. – thanks to Dr Bill Stall: Weed Scientist UF/IFAS

Regulatory Action for Pea Leaf Miner (*Liriomyza huidobrensis*)

Effective November 1, 2009, the USDA Animal and Plant Health Inspection Service (APHIS) will take action on commodities imported into the United States if pea leaf miner is detected, regardless of the state of destination.

On December 19, 2008, APHIS solicited to determine an option for the continued regulation of *Liriomyza huidobrensis*, commonly known as pea leaf miner. Leaf mining flies of the insect family, Agromyzidae, which includes pea leaf miner, arrive in commerce almost exclusively as larvae or pupae. APHIS has always taken action at ports of entry when Agromyzidae were found on commodities because these immature insects cannot be identified to the species level using morphological characters alone. However, only in a few cases where surveys on specific crops in specific countries determined that pea leaf miner was virtually the only species of Agromyzidae on those crops could we appropriately assume that the intercepted, immature flies were pea leaf miner. Pea leaf miner was also thought to be present in certain states within the United States, so APHIS regulated pea leaf miner by taking action only on imported shipments destined to Florida because that state employed an effective exclusion program to prevent introduction of the pest through interstate trade. However, research indicates that the pest previously believed to be pea leaf miner in the United States is actually *L. langei*.

APHIS will take action on imported commodities regardless of the state of destination into the United States if pea leaf miner is detected. We will also continue taking action on imported commodities if immature larvae or pupae of the family Agromyzidae are detected. APHIS action will consist of treatment, destruction, or re-exportation of infested shipments.

Under IPPC standards, *Liriomyza huidobrensis* is considered to be Absent: pest records invalid in the United States. Contact: Joseph Cavey, National Identification Services, Registration, Identification, Permits, and Plant Safeguarding, Plant Protection and Quarantine, (301)-734-8547

Two New Begomoviruses Found Infecting Solanaceous Crops in Cuba

In 2007, two new begomoviruses viruses were found to be affecting Solanaceous crops in eastern Cuba. Both are newly determined viruses with proposed names, and little information is known regarding the full host range or distribution of either. In general, begomoviruses are transmitted by the whitefly, *Bemisia tabaci*, which is present worldwide and can be transported through movement of nursery stock, cut flowers, or wind. At this point, it is unclear what impacts these viruses may have on their host crops.

Tomato yellow leaf distortion virus (ToYLDV) was determined to be infecting tomato (*Solanum lycopersicum*). Symptoms of ToYLDV include yellow mottle and leaf distortion.

Tobacco yellow crinkle virus (TbYCV) was determined to be infecting tobacco (*Nicotiana tabacum*) and sweet pepper (*Capsicum annuum*). Symptoms of TbYCV on tobacco include foliar yellowing and crinkling. Symptoms of TbYCV on sweet pepper plants were foliar yellow mottle.

Spinosyn Use Ban Extended

Tony W. Weiss of Dow AgroSciences advises that the prohibition on the use of spinosyns has been extended in SE FL. The attached labels define the prohibition of use in Broward and certain areas of Palm Beach County, until July 1, 2010.

Growers in other areas of the state that are still able to use spinosyn products would be well advised to practice an aggressive resistance management program utilizing all IPM techniques including preservation of beneficial insects to avoid falling into a similar situation.

Western flower thrips can not be controlled by the used of insecticides alone. A knowledge-based integrated approach to manage this pest is required.

Label Search Help Available

Mark Mossler with the UF/IFAS Pesticide Information Office has extended an offer to assist growers with pesticide label searches on CDMS. You can contact Mark at 352-392-4721 or at plantdoc@ufl.edu

Up Coming Meetings

Hillsborough County

October 13, 2009 Pesticide License Testing 9AM

Hillsborough County Extension Office
Seffner, Florida

For more information call Mary Beth Henry at 813-744- 5519 ext. 103.

Palm Beach County

October 27, 2009 Food Safety Train the Trainer Class 8:30 AM – 3:30 PM

559 Military Trail
West Palm Beach, Florida

Contact David Sui at 561-233-1700

Southwest Florida

October 6, 2009 SW Florida Agricultural Water 9:30 AM – 3:00 PM
Management Conference

Dallas Townsend Agricultural Center
1085 Pratt Boulevard
LaBelle, Florida

Places are limited - you must RSVP to Bernadette Rashford at Gulf Citrus Growers at 863-675-2180 before October 2, 2009 to participate.

October 8, 2009 Vegetable Growers Meeting - Row Middle 6:00 PM – 8:00 PM
Weed Control and Fumigant RED Up-Date

UF/IFAS Southwest Florida Research & Education Center
SR 29N
Immokalee, Florida

Contact 863-674-4092 for more information or to register.

October 20, 2009

WPS Train the Trainer Class

Hendry County Extension Office
1085 Pratt Boulevard
LaBelle, Florida

Contact 863-674-4092. Registration fee is \$10

November 10, 2009

Agricultural Production and EcoSystem Services

8 AM - Noon

UF/IFAS Southwest Florida Research & Education Center
SR 29N
Immokalee, Florida

Cap and Trade, Carbon Markets and Water Quality Credits are some of the topics to be discussed. Speakers from the University of Florida/IFAS, Florida Farm Bureau, and Southern DataStream will be summarizing evolving federal and local legislation concerning carbon emissions and water quality standards, as well as potential opportunities for agricultural producers to participate in emerging markets for carbon and water quality credit markets.

Please call Fritz Roka at 239.658-3400 for more information.

Other Meetings

October 14, 2009

Certified Crop Advisor Training

7:30 AM - 5:30 PM

UF/IFAS Southwest Florida Research & Education Center
SR 29N
Immokalee, Florida

Note via videoconference; program originates from the UF/IFAS Citrus Research and Education Center, Lake Alfred).

5 CEUs each for soil and water management and crop management. For registration information and program, visit http://www.crec.ifas.ufl.edu/crec_websites/cca/

October 28, 2009

Florida Ag Expo

7:30 AM – 4 PM

UF/IFAS Gulf Coast Research and Education Center
Balm, Florida

For agenda and registration information, go to www.floridaagexpo.com

Opportunities

Vice President of Farming Operations

A well established Grower Shipper in Central Florida is looking for a VP of Farming Operations. The ideal candidate will have 5-10 years of agricultural commercial experience (leafy green or produce experience is a plus) and 5-10 years of research experience.

Client has farming operations in 6 east coast states and specializes in two (2) commodities.

The candidate must have a minimum of a M.S. in Horticulture, Agronomy, or a related field, with an emphasis on technology. The candidate will be responsible for the company's total farming operations and have 4 head growers reporting to him/her. The candidate must have experience resolving critical growing issues by generating growing ideas and incorporating technologies. The candidate must have the experience and the ability to hire and lead a group of professionals.

Client is offering a very attractive compensation package based on experience plus full benefits! Client is open to relocation for this position. Please contact Stacey Rouse at JBN & Associates at 480-222-5519 or www.stacey@jbnassociates.com.

Farm Land for Lease

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

Websites

US FDA Guidance, Compliance and Regulatory Information – links to lots of information of produce food safety including guidance documents on tomatoes, melons and leafy greens. Go to <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/default.htm>

Knott's Handbook for Vegetable Growers 5th Edition – all 630 pages of the classic reference for vegetable growers can now be found on-line at <http://www.scribd.com/doc/7904829/Handbook-for-Vegetable-Growers-5th-Ed>

Quotable Quotes

I have found the best way to give advice to your children is to find out what they want and then advise them to do it. - Harry S Truman

The perfect bureaucrat everywhere is the man who manages to make no decisions and escape all responsibility. - Brooks Atkinson

Hell hath no fury like a bureaucrat scorned. - Milton Friedman

Suburbia is where the developer bulldozes out the trees, then names the streets after them. - Bill Vaughan

Plans are only good intentions unless they immediately degenerate into hard work. - Peter Drucker

The optimist proclaims that we live in the best of all possible worlds; and the pessimist fears this is true. - James Branch Cabell

On the Lighter Side

Casualty Rate - Logic 101

An interesting letter in the Australian Shooter Magazine this week, which I quote:

"If you consider that there has been an average of 160,000 troops in the Iraq theater of operations during the past 22 months, and a total of 2112 deaths, that gives a firearm death rate of 60 per 100,000

soldiers.

The firearm death rate in Washington, D.C. is 80.6 per 100,000 for the same period.

That means you are about 25 per cent more likely to be shot and killed in the US capital, which has some of the strictest gun control laws in the US, than you are in Iraq."

Conclusion: The US should pull out of Washington

Fun with Puns:

King Ozymandias of Assyria was running low on cash after years of war with the Hittites. His last great possession was the Star of the Euphrates, the most valuable diamond in the ancient world. Desperate, he went to Croesus, the pawnbroker, to ask for a loan. Croesus said, "I'll give you 100,000 dinars for it." "But I paid a million dinars for it," the King protested. "Don't you know who I am? I am the king!" Croesus replied, "When you wish to pawn a Star, makes no difference who you are."

A man rushed into a busy doctor's office and shouted "Doctor! I think I'm shrinking!!" The doctor calmly responded, "Now, settle down. You'll just have to be a little patient."

A thief broke into the local police station and stole all the toilets and urinals, leaving no clues. A police spokesperson was quoted as saying, "We have absolutely nothing to go on."

How It Works in Washington.....

Three contractors were bidding to fix the White House fence, one from Chicago, another from Kentucky and the third from Florida. They were with a White House official examining the fence.

The Florida contractor took out a tape measure, did some measuring, then worked on some figures with a pencil. "Well," he said, "I figure the job will run about \$900. That would be \$400 for materials, \$400 for my crew, and \$100 profit for me."

The Kentucky contractor also did some measuring and figuring, then said, "I can do this job for \$700. That would be \$300 for materials, \$300 for my crew and \$100 profit for me."

The Chicago contractor didn't do any measuring or figuring, but leaned over to the White House official and whispered, "\$2,700."

The official was incredulous and said, "You didn't even measure like the other guys! How did you come up with such a high figure?"

"Easy," the Chicagoan explained, "\$1,000 for you, \$1,000 for me, and we hire the guy from Kentucky."

I Am Thankful

I am thankful for my shadow that watches me work because it means I am out in the sunshine.

...for a lawn that needs mowing, windows that need cleaning, and gutters that need fixing because it means I have a home.

...for all the complaining I hear about the government because it means we have freedom of speech.

...for the parking spot I find at the far end of the parking lot because it means I am capable of walking and I have been blessed with transportation.

...for the lady behind me in church who sings off key because it means I can hear.

...for the pile of laundry and ironing because it means I have clothes to wear.

...for weariness and aching muscles at the end of the day because it means I am capable of working hard.

...for the alarm that goes off in the early morning hours because it means I am alive.

...and finally, for too much e-mail because it means I have friends who are thinking of me.

Send this to someone you care about. I just did.

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.

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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