



UNIVERSITY OF
FLORIDA

E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 12, 2009

An unusual late season cold front affected South Florida earlier this week dropping overnight temperatures into the low 40's and even the high 30's in some normally cooler areas on Tuesday morning. Windy weather continued for much of the past two weeks. High winds whipped vegetable plants causing widespread damage including fruit scarring and leaf tearing and desiccation. While high winds coupled with dry conditions in most areas have increased evapotranspiration rates and need for irrigation. Last week day time highs reached the high 80's and low 90's and will return to those high beginning this weekend.

All areas reported little or no rain for the period. Clewiston and Belle Glade received 0.01 and 0.29 inches respectively while all other locations were dry. Many growers are experiencing salt issues as the drought continues and water tables drop.

FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
Balm					
3/30 – 4/12/09	39.38	89.33	0.00	73	0.13
Belle Glade					
3/30 – 4/12/09	42.07	91.69	0.29	72	0.14
Clewiston					
3/30 – 4/12/09	43.05	92.44	0.01	71	0.15
Ft Lauderdale					
3/30 – 4/12/09	50.02	90.68	0.00	69	0.15
Fort Pierce					
3/30 – 4/12/09	38.1	90.52	0.33	73	0.15
Homestead					
3/30 – 4/12/09	42.04	89.78	0.00	75	0.15
Immokalee					
3/30 – 4/12/09	41.41	93.27	0.00	74	0.15

Wishing You All a Happy and Blessed Easter

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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

Crops coming to market include beans, blueberries, cabbage, cantaloupe, celery, cucumber, eggplant, endive, lettuce, peppers, squash, strawberries, sweet corn, and tomatoes. Volumes are increasing seasonally. Early watermelons should begin trickling on to the market this coming week.

The short-term forecast from the National Weather Service in Miami indicates a cold front will move southward into north Florida this weekend with the associated shortwave moving off the eastern seaboard. Models allow for the possibility of a few showers developing mainly interior/east coast.

Ridging builds across the area Sunday – Monday leading to mostly dry conditions although a few showers could develop mainly interior each day due to sea breeze convergence. Another short wave passes well north of the area by mid week with an associated weakening cold frontal boundary making its way into central Florida by mid week. Moisture/instability looks to increase slightly allowing for a slight chance of showers and maybe even a few thunderstorms. However widespread/beneficial rainfall is not in the forecast for the foreseeable future.

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

Insects

Thrips

Growers and scouts in Palm Beach County report that thrips are swarming over everything area wide from Fort Pierce to Delray/Boca and indicate that pressure ranges from horrible to moderate depending on the location. Thrips including western flower thrips are hitting a wide range of crops including pepper-where scouts report up to 100 larva per fruit in some areas, tomato - which is displaying fruit scarring and dimpling, squash, cucumber and eggplant as well as cilantro and herbs where foliage damage is an issue. Growers report that control has been difficult although some reports indicate that growers using soft pesticides have seen an increase in pirate bugs and other beneficials working on thrips populations.

Reports indicate that along the high thrips numbers on the east Coast, TSPW virus is becoming more common and widespread and in many areas is more common than TYLCV on young tomato and pepper.

In Southwest Florida, thrips are increasing; reaching 5-10 per bloom in areas but most of them are still flower thrips although some growers have reported a few hotspots where thrips have been causing concern.

Around Plant City, scouts indicate that the big news is all the thrips pressure. Growers and scouts are seeing numbers higher than they can ever remember, and they are on everything...tomato, pepper, beans, melons, etc. Some fruit scarring has been reported.

Around Manatee County, thrips pressure has been high on a variety of crops. Growers knock them down and they come right back.

Around the Glades, thrips are active in snap beans and other crops.

Whiteflies

Reports from the Manatee Ruskin area reports indicate that whiteflies are mostly amazingly low and for this late in the season. Some whiteflies have been reported in squash but growers remain more concerned with thrips.

Around Immokalee, whitefly numbers are increasing but remain lower than seasonal norms. Highest numbers have been reported in eggplant and cucurbits and older tomato fields as growers back off on spraying. As whitefly numbers increase watermelon growers need to be particularly aggressive to prevent possible issues with vine decline.

Respondents around Palm Beach report that whiteflies are around and are present in low to moderate numbers with some hotspots being reported.

Respondents in Homestead indicate that whitefly populations are high in tomatoes and squash.

Aphids

Around SW Florida, growers and scouts are reporting aphids are exerting some late season pressure in cucurbits, pepper and other crops.

Growers and scouts from around Palm Beach indicate that a few aphids are present eggplant, pepper, squash and cucumbers. Colony formation is occurring in some locations.

In the Manatee-Ruskin area, low to very low but consistent aphid populations are present on a wide variety of crops. Some colony formation has been noted in peppers.

In the Glades, a variety of aphids remain widely present in crops.

Leafminers

Reports from the Hillsborough/Manatee area indicate leafminers remain a big issue in tomato and other crops. Scouts report that appear to be declining in some areas.

Growers and scouts around Southwest Florida leafminer indicate that leafminer pressure remains mostly low and continues to decline in most places.

Reports from Homestead indicate that leaf miner remains a problem in different crops including tomato, squash, beans, and basil.

Respondents around Palm Beach and the East Coast indicate that leafminer pressure is declining.

Worms

Reports from east coast production areas indicate that melonworms have been causing problems in cucumber otherwise worm pressure is mostly low with a few beet and southern armyworms. A few pinworms are beginning to show up in tomato and eggplant.

Around Southwest Florida, growers and scouts report that worms are starting to come back, mostly southern armyworms but also some beets, fruitworms, loopers and even a few hornworms. Melonworms and pickleworms have been causing some problems in squash and other cucurbits. Tomato pinworms are very low.

Growers around Manatee County are seeing a few looper eggs, hornworm eggs along with beet and southern armyworm but report that pressure is light overall.

Fall armyworm counts are increasing in corn and other crops in the Glades but no where near the numbers seen last fall. Diamondback moths are making active in the various brassica crops. Silk fly pressure in the surviving sweet corn fields following the frosts has been relatively light to date.

Spider mites

Growers in scouts across south Florida report that spider mites are widespread and are increasing in a number of crops reaching moderate levels in some places. A few russet mites are also being reported on tomato around Immokalee.

Respondents in Palm Beach note that spider mite pressure is horrible. Spidermites seem to be everywhere and are causing problems cucurbits, eggplant, and tomato.

Around Plant City reports indicate that spider mites are moving into tomatoes and melons faster than usual.

Broad mites

Reports from East Coast growers indicate that broad mites are starting to show up in pepper again.

Around Immokalee, broadmites remain active in some pepper and eggplant.

Scouts in Manatee County also report finding broad mites in peppers recently.

Pepper weevils

Around Southwest Florida, scouts report pepper weevils are starting to show up in a number of areas but remain mostly low, although some old pepper fields are building up higher populations.

Respondents in the Palm Beach area report that pepper weevil numbers are major problem in a number of areas especially in older plantings and note they are now showing up in younger plantings as well and may well be a crop limiting factor in some cases.

Stinkbug

Stinkbugs are present and causing scattered problems in some locations around South Florida.

Diseases

Powdery Mildew

Respondents in Palm Beach report that powdery mildew is widespread and causing problems in a number of crops including dill, eggplant, cucumber, and tomato. Growers report that Quintec is working well.

Growers and scouts around Immokalee that powdery mildew is present on many crops and has reached significant (some say horrible) levels in squash, cantaloupe and watermelons. They are also reporting low levels of powdery mildew on tomato and peppers.

Around Homestead, respondents indicate that powdery mildew severe on squash and other cucurbits.

Low levels of powdery mildew have been reported on melons around Manatee County.

Powdery mildew of watermelon is a fairly recent phenomenon in Florida possibly because of the combination of dry spring seasons with the conversion of much of the watermelon acreage to drip irrigation which maintains dry foliage.

Powdery mildew of watermelon appears as yellow blotches on the oldest leaves first. Later these mosaic-like blotches become bronzed and turn dark brown or purple and may be mistaken for wind burn. The white masses of sporulation that are commonly seen with other powdery mildews are not seen commonly with the powdery mildew of watermelon. With magnification, it may be possible to observe a limited amount of the powdery mildew fungus in the yellowed areas.

Control of powdery mildew of watermelon can be achieved with chlorothalonil, the high rates of mancozeb, the strobilurin fungicides such as Amistar, Cabrio, Flint and others, and sterol inhibitors like Nova. New materials like Curzate, Pristine and Quintec have also shown good efficacy.

Clarification: Quintec rotational plant back restriction - for registered crops there is no rotational restriction. For crops listed in crop groups of, brassica cole leafy vegetables (crop group 5), cucurbit vegetables (crop group 9), fruiting vegetables (crop group 8), okra & leafy greens (crop group 4A), root and tuber vegetables (crop group 1), and sunflowers, the rotational interval is 30 days. The crops listed in the rotational restriction pretty much cover all the vegetables in FL. All other crops are 12 months.

Procure 480SC fungicide (FRAC Group 3) can also be used on cucurbit crops for powdery mildew control at the 8 fl oz/A rate, but should be rotated with products like Quintec, Pristine, etc. to prevent resistance build-up. Procure 480SC has the active ingredient, triflumizole, a DMI fungicide, which should not be rotated with Nova/Rally in subsequent applications.

Resistance management involving the rotation of fungicides of differing modes of action is especially important in combating powdery mildew as this disease has historically proven quite adept at developing resistance to fungicides with a specific mode of action such as benomyl, triadimefon and the strobilurins. Growers should be sure to follow labeled instructions regarding the number of applications per season and rotate between different fungicide classes.

Sulfur, potassium bicarbonate and copper products may provide some control for organic producers. Micronized sulfur can be quite effective but may burn foliage under the high temperatures experienced in the late spring in south Florida.

The biological fungicide AQ-10 can also be effective against powdery mildew. The bio-fungicide AQ10 parasitizes powdery mildew and can, when applied properly, provide good control at several stages during the season. Research shows that AQ10 can be used as long as disease incidence does not exceed a threshold of 3% on leaves and clusters. At higher levels of pressure, AQ10 must be applied in rotation with sulfur or other products to assure acceptable control. Good spray coverage is critical to success.

Powdery mildew of pepper is caused by *Leveillula taurica*, which is a very different powdery mildew fungus from that causing powdery mildew on cucurbits. The fungus which affects cucurbits *Podosphaera xanthii* (*Sphaerotheca fulginea*) or, occasionally, *Erysiphe cichoracearum*, grows on both surfaces of a leaf and forms haustoria within some epidermal cells to absorb nutrients and produces spores on both surfaces.

In contrast, *Leveillula taurica* grows only within a leaf until it produces spores, a growth habit which is similar to *Alternaria* and most other foliar plant pathogenic fungi. Additionally, *Leveillula taurica* only produces spores on the underside of leaves. *Leveillula taurica* is a species complex that infects over 1000 plant species in 74 families, including tomato and eggplant as well as pepper.

Detecting powdery mildew on pepper can be difficult. The white powdery growth characteristic of powdery mildew diseases occurs only on the underside of leaves and it will turn brown rather than remaining white. Diffuse yellow spotting often develops on the upper surface. Affected leaves tend to drop off the plant, as occurs with bacterial leaf spot.

Late Blight

Around Immokalee growers and scouts report that late blight has slowed but there are still active lesions around with the cool humid windy conditions of the past few weeks. Reports indicate that recent genotyping studies concludes that the race present around Immokalee is actually different from the race that was present in the area last year which was initially thought to be the case based on PCR and electrophoresis bands.

Around Palm Beach, growers and scouts report that late blight pressure is waning but is still causing some issues.

Reports from Homestead indicate some late blight is still present on tomato in places.

Bacterial leaf spot

Respondents around south Florida report that bacterial spot activity is mostly very low although some increase especially on peppers has been noted in several locations.

Dr Ken Pernezny reports that isolations from the bacterial spot lesions in the UF/IFAS Immokalee Pepper Variety trial indicate that all recovered strains were bacterial spot race 4. This is in keeping with what we've been finding over the last couple of years

Fusarium Crown Rot

Around SW Florida, fusarium crown rot is causing havoc in some older tomato fields planted to susceptible varieties.

Reports from Palm Beach indicate some fusarium crown rot is showing up in dramatic fashion on older plantings that have been in the ground for some time. Interested parties should cut lower stems and look for the telltale vascular browning. This discoloration does not extend very far up into the shoot as one would see with the true Fusarium wilt.

In Manatee County growers and scouts report that fusarium crown rot is causing some problems in field with a history of the disease.

Downy Mildew

Around Palm Beach County, downy mildew is severe on cucumbers and is reaching high levels in many squash fields.

Growers and scouts around Southwest Florida report that downy mildew is still active in cucumbers and hitting them hard in a number of places. It is also present at lower levels in some squash.

Respondents from Homestead report that downy mildew is around on squash, but is not too bad due to the dry weather.

Across South Florida, downy mildew is widely present on basil.

Since its appearance in South Florida downy mildew has emerged as an important disease on basil and growers should be on a very strict, preventative spray program if they want to control it. The phosphites are effective when applied early, and these should be alternated in a program with azoxystrobin (Amistar or Quadris) to provide the desired control. Spray intervals should be no more than 7-days, with 2 times per week preferable. Once plants are infected, it is very difficult to control. Research is being conducted on additional chemistries with IR-4 and soil applications for early disease control are also being researched.

Downy mildew of cruciferous crops

Downy mildew has been prevalent on cabbage, broccoli, and related cruciferous crops around the Glades and elsewhere this spring. All fungicides discussed in the note describing the lettuce downy mildew outbreak are equally effective against this species of downy mildew.

TYLCV

On the East Coast, tomato yellow leaf curl virus is present in a number of scattered locations but is mostly low. Respondents indicate that TSPW is actually more prevalent in a number of areas.

Reports from Homestead indicate that TYLCV is present on tomatoes but incidence remains low.

Around Southwest Florida TYLCV incidence remains low but scouts are seeing some increases, mostly in the 2-5% range with some hotspots going much higher.

Botrytis

Respondents around South Florida continue to report problems with botrytis kicking off flowers, bud in peppers and small fruit. Gray mold is a fairly common problem in tomato and can also attack beans, eggplants, pepper, and potato as well as many ornamentals.

Sclerotinia

Reports from around south Florida indicate that sclerotinia seems to have slowed in most places on tomato and pepper with not much new infection being reported.

Topsin M has given good results on sclerotinia. EPA has extended the expiration date of the Section 18 use of Topsin M WSB on fruiting vegetables in Florida from December 31, 2008 to April 24, 2009. Label must be in applicators possession at the time of application. Call if you need a copy of the Section 18 label.

Target Spot

Target spot is mostly low around South Florida but is causing a few problems in places.

Early Blight

A few reports of Alternaria on tomato are starting to come in from several locations around South Florida. Incidence is increasing in a number of east Coast locations which received recent heavy rains and some reports of black mold on fruit have been received.

Gummy Stem Blight

Around Southwest Florida, gummy stem is increasing in watermelon but remains mostly low although a few more reports are coming in.

Dr Gary Vallad also reports a few gummy stem samples coming in on watermelons from around the Manatee area.

In Florida, gummy stem blight is a serious disease that occurs annually on watermelons. Infection and symptoms may occur on all plant parts and at any stage of development from seedlings to maturity.

Symptoms appear as light to dark brown circular spots on leaves or as brown to black, lesions on stems. Wilting, followed by death of young plants may occur. Stem lesions enlarge and slowly girdle the main stem resulting in a red-brown-black canker that cracks and may exude a red to amber gummy substance. Vine wilting is usually a late symptom. Use of a hand lens will reveal small, clear white (when young) to black (when old), pycnidia embedded in older diseased tissue.

Because other plant disorders can cause exudation of a gummy substance, “gummy-ness” should not be relied upon for diagnosis of gummy stem blight. Anthracnose and inadequate liming can both cause stem lesions and gumming.

Gummy stem blight typically progresses from the central stem of the plant to growing tips. Leaf spots are variable in shape, red-brown in color and initial infections are generally seen on leaf margins and veinal areas.

The fungus (*Didymella bryoniae*) produces two spore stages, a sexually produced spore (ascospore) and an asexually produced spore (pycnidiospore). The ascospore is windborne and serves as a primary source of inoculum. The pycnidiospore functions in secondary spread of the disease. Pycnidiospores are released in a gummy substance that makes them adaptable for spread by splashing water.

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

Temperatures and moisture conditions are often ideal for development during watermelon season in Florida. Gummy stem blight is most severe in wet years since moisture is necessary for spore germination. After a spore germinates on a susceptible host, the fungus penetrates the plant tissue and symptoms can appear in 3- 5 days – **Thanks to Dr Tony Keinath for this correction** – he notes that by 12 days growers could be seeing secondary symptoms (i.e., the second disease cycle or if later in the season, the next disease cycle).

Gummy stem blight can be successfully managed using a combination of control strategies. Control of primary sources of inoculum is important. Growers should purchase clean seed and avoid transplants that have gummy stem blight or other diseases.

Multiple applications of fungicides are necessary to control gummy stem blight. It is important to begin a fungicide program prior to the first sign of gummy stem blight. In south Florida, the spray program should be initiated soon after emergence or transplanting. In other areas of the state, fungicide spray programs can be initiated when the vines begin to “run.” When vines are small, band applications of fungicide over the crown area are effective and help reduce application costs.

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

Phytophthora

Some problems have been noted with *Phytophthora capsici* around SW Florida primarily on cucurbits and peppers where growers are over irrigating.

Wet Rot

Growers and scouts around Southwest Florida are reporting scattered problems with wet rot on squash.

Mosaic

Mosaic virus is present on squash around South Florida.

News You Can Use

Severe Drought Conditions Continue over Interior and Western Sections of South Florida

A cold front which stalled out over south Florida a few weeks ago led to showers and a few thunderstorms which affected the east coast metro areas of south Florida. Rainfall amounts of between 1 to 3 inches were observed over most of the east coast metro areas, except over northern Broward and southern Palm Beach metro areas where as much as 4 to 8 inches of rainfall occurred. As a result drought conditions eased over eastern metro areas.

The rest of south Florida saw lesser amounts, ranging from a tenth of an inch in the Naples and Marco Island areas to about a half inch over interior areas.

Here are some yearly rainfall totals...normals...and departures from normal across south Florida for the 15 month period covering from January 1, 2008 to March 26, 2009...and the dry season of 2008-09.

Airports	15 month totals	15 month departures total	dry season 2008-09	dry season 2008-09 dep.
Miami international:	62.31	-2.23	3.29	-8.38
Fort Lauderdale Inter:	54.42	-17.71	3.86	-11.30
Palm Beach International:	60.84	-10.47	4.28	-13.79
Naples municipal airport:	48.81	-9.05	1.47	-8.01

Secondary observation sites

Immokalee	48.13	-6.45	2.19	-7.74
Devils garden	66.37	-4.51	2.42	-8.36
Clewiston	52.61	+1.17	2.26	-8.38
Belle Glade	58.81	-8.75	2.24	-9.10
Moore Haven lock	67.18	+12.87	2.81	-8.50

The relative lack of rainfall from last week's weather system over interior and western south Florida means that the area of severe drought status has been expanded westward by the national drought monitor to include all of the interior and west coast metro areas.

However, the beneficial rainfall over eastern metro areas has resulted in the metro areas of Broward, northern metro Miami Dade and southern metro Palm Beach counties being improved to a moderate drought status.

The wells across the interior and west coast metro areas of south Florida were running at 10 to 30 percent below the normal level for this time of year. The wells across the east coast metro areas of south Florida have risen to near normal levels as a result of the rains from last week.

The underground reservoirs along the east and west coast metro areas were still running a little bit below normal for this time of year. The level of Lake Okeechobee was 12.25 feet which is about 2 feet below normal for this time of the year. Fisheating creek was around 0.4 feet this was 8 percent of the normal level for this time of year.

Despite the rains of last week, the fire danger remains in the severe range for most of south Florida, except for Glades and Hendry counties where they are in the extreme range. There is also a burn ban in effect for Glades, Hendry and Palm Beach counties due to the severe to extreme fire danger.

Florida Organic Growers-IFAS April Workshops to Provide Tools for Growers to Transition to Organic

GAINESVILLE, Fla. – Florida Organic Growers (FOG) will team up with the University of Florida IFAS to present two Organic Transition workshops in April: Wednesday, April 22 at the IFAS Extension facility in Homestead and Thursday, April 23 at the UF/IFAS Southwest Florida Research & Education Center in Immokalee. Commercial growers who are interested in transitioning to organic production will learn about organic farming practices, regulations, and organic farm plan development. The program includes an update on financial incentives available to transitioning producers included in the 2008 Farm Bill.

The workshops are part of FOG's Organic Transition & Pesticide Reduction initiative that offers farmers free technical assistance to transition to organic production by pairing growers with an experienced organic production crop advisor. The advisor, FOG staff, and allied professionals offer support, technical know-how and assurance growers may need or desire to successfully make the transition.

Growers who transition to organic production gain access to the organic foods marketplace, which, in the U.S., has grown from \$1 billion in sales in 1990 to an estimated \$23 billion in 2008.

“The organic marketplace continues to expand and Florida growers may want to seriously consider the market opportunities,” FOG Executive Director Marty Mesh said.

In addition to assisting transitional growers, FOG's program is open to Florida fruit, vegetable, and row-crop producers who are motivated to reduce their use of pesticides. Growers who participate with the goal of reducing pesticide use and abandoning high-risk pesticides can work with a Crop Advisor to learn and adopt sustainable farming practices and sound Integrated Pest Management.

To register for the April 22 workshop in Homestead, please contact Teresa Olczyk at 305-248-3311 or twol@ufl.edu.

To register for the April 23 workshop in Immokalee, please contact Gene McAvoy at 863-674-4092 or gmcavoy@ufl.edu.

Registration is \$15 and includes lunch, refreshments, and a resource binder.

Growers who would like to work with a Crop Advisor through the Organic Transition & Pesticide Reduction program should contact Matt Vargas at (352) 377-6345 or matt@foginfo.org. More information, including the application to participate in the program, can be found at www.foginfo.org/epa

I-9 Form Changes

Changes to the I-9 form (employment eligibility verification) rule will now take effect April 3. These changes represent another attempt by the Department of Homeland Security to intensify the regulations which apply to employers and prospective employees. Information about the changes as well as a copy of the Employer's Handbook are available online at: <http://www.uscis.gov/>.

Reimbursements for Organic Certification Costs

Florida Certified Organic Growers and Consumers, Inc. (FOG) is accepting applications from certified organic growers and handlers in Florida for reimbursement of up to 75 percent of certification costs, or a maximum of \$750. Reimbursement for certification costs paid between Oct. 1, 2008, and Sept. 30, 2009, will be issued on a first-come, first-served basis until funds are depleted. The deadline for submitting applications is Oct. 15, 2009.

To qualify for the organic certification cost share reimbursement, an operator must have certified organic farm or production facilities in Florida, must hold an organic certificate issued by a USDA accredited certification agency issued between Oct. 1, 2008, and Sept. 30, 2009, and must not have previously received cost share reimbursement for the same period.

For additional information, including the cost share program application, visit www.foginfo.org, call 352.377.6345 or email fog@foginfo.org <<mailto:matt@foginfo.org>>.

Horticulture BMP's for Water Conservation and Treatment Workshop

Are you interested in water conservation, managing diseases and algae in water, or using recycled or reclaimed water in your nursery or field crops? The University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) and The Water Education Alliance for Horticulture will host a program focusing on onsite recycling and treatment of irrigation water on April 29 at the UF/IFAS Gulf Coast Research and Education Center in Wimauma from 10 AM to 4 PM.

The goal is to encourage and enable growers to recycle irrigation water and/or adopt BMPs for water conservation, which will reduce water demand. Greenhouse, nursery, foliage, strawberry and vegetable growers will learn about diagnosing and treating diseases, algae, and salt problems in recycled and recycled/reclaimed water. This regional workshop will feature presentations from industry and university experts from throughout the U.S. Best Management Practices (BMPs) to conserve irrigation water will also be discussed.

There is an optional tour of the Riverview Flower Farm earlier that morning, from 10- 11:30 a.m., at 5363 Bonita Drive, Wimauma, which will highlight new research and practical aspects of water conservation.

To register for the free tour and workshop, visit

<http://hillsborough.extension.ufl.edu/Ag/AgCalendar.html#April> The registration deadline is April 22. There is a \$15 per person for late registrations. Pesticide CEUs have been applied for the morning and afternoon sessions.

Pesticide Potpourri

- Folicur 3.6 F has been labeled for use in Florida on the cucurbit crop group including watermelons and all other cucurbits for powdery mildew control and gummy stem blight suppression (watermelon, squash, pumpkin only). Rate is 4 -6 oz per acre for powdery mildew and 8 oz for gummy stem. Do not apply more than 24 oz per season. REI is 12 hours; PHI is 7 days for cucurbits. Note: Folicur is also labeled for use on corn, green beans and leafy brassica greens. Rate, total application per season, REI and PHI varies by crop so be sure to read the label.

- NuFarm has received a label for Kaiso 24 WG a unique formulation of Lambda-Cyhalothrin which is formulated as a Wettable Granule that functions as an emulsifiable concentrate when mixed with water. This has several advantages including easy clean-up and limited worker exposure while providing broad spectrum control on a range of crops.
- FFVA has announced that methyl bromide will be in extremely short supply by the fall fumigation period. Growers should be working hard on finding alternatives in the next months. (Florida Grower, February, 2009).
- Telone supplies are also tight and according to Dow Rep Jerry Nance growers wishing to use Telone this fall would be wise to start communicating with him to ensure there is product available to meet there needs.
- The manufacturer of the fungicide maneb (United Phosphorous) has voluntarily canceled the registration of the material and existing stocks may be gone before the end of this crop year. While there have been registration materials submitted mancozeb use in some of the crops in which maneb was used, these will probably not be acted on until mid-Summer. Consequently, mancozeb for a certain crop may not be available for 2009.
- However, the EPA has recently approved several new vegetable crop use sites including pepper for chlorothalonil (Bravo® 720), which may cover the loss of maneb to some extent.

Opportunity

POSITION ANNOUNCEMENT: FIELD DEVELOPMENT REPRESENTATIVE - EASTERN USA

Certis USA, a leading manufacturer and marketer of biological and botanical products for pest management, is seeking a highly motivated and articulate professional to serve as lead technical representative in the Eastern USA (Florida/Southeast, Mid-Atlantic and Great Lakes areas). Position reports to the Director of Technical Development, within the Sales & Marketing Group.

Major Responsibilities:

- * Working with the Product Development team, conduct field research and provide analyses to support marketing strategies for new products and market expansion of existing products.
- * Technical support of the field sales team, including management of grower demonstration trials, work with key influencers, presentations to customers, and development of technical bulletins and other marketing aids.

Requirements:

MS or PhD in Plant Pathology, Entomology, Agronomy, or related discipline.

2-5 years practical experience in commercial product development, research/extension, or technical sales & marketing related to agricultural or horticultural pest management.

Demonstrated field research skills in experimental design, statistical analysis, application technology, etc.

Willingness to travel within the assigned geography (may exceed 50% of time depending on season and location).

Excellent verbal and written communications skills, including proficiency with PowerPoint, Excel, Word, and other presentation/communication tools.

Ability to work in teams in a fast-paced, rapidly changing market environment. The ideal candidate will have leadership skills necessary for future advancement into managerial positions for the company's long term strategic growth.

Location at company headquarters in Columbia, Maryland is preferred, but others may be considered for outstanding candidates already located within key market areas in the assigned geography.

Please send your résumé to probinson@certisusa.com or mail to Human Resources, Certis USA, L.L.C., 9175 Guilford Road, Suite 175, Columbia, Maryland 21046 EOE

Farm Land for Lease

Farm Land for lease in LaBelle area – contact Greg Jones at 863-675-0545

Agriculture land available for a long term lease of 8-10 years. This 320 acre property is located in Martin County on Hwy 609 and 3 miles north of Hwy 710 (The Beeline Hwy). It is within the Troop Indiantown Water District (TIWD) which provides for irrigation water and free-flowing drainage. This land is free of wetlands and cleared for farming. Contact Miguel Perales: 561-718-4635.

Quality agricultural land for lease or possible joint venture production of vegetable crops, bio-fuels etc. is available in Martin County. Easy access to SR 710 and SR 76, under drip and/or overhead irrigation, Call Mitch Hutchcraft at 239-405-1694

Up Coming Meetings

Hillsborough County

April 29, 2009

Horticulture BMP's for Water Conservation and Treatment

UF/IFAS GCREC
Wimauma, Florida

To register for the free tour and workshop, visit

<http://hillsborough.extension.ufl.edu/Ag/AgOrnProd/AgCalendar.html#April>

The registration deadline is April 22. There is a \$15 per person for late registrations.

May 1, 2009

Developing a Food Safety Program for Vegetable and Berry Growers and Packers

UF/IFAS GCREC

Registration required- \$20, contact Lacey Marsden at 813-744-5519 ext 128 or [lacee@ufl.edu](mailto:lancee@ufl.edu)

Miami Dade County

April 22, 2009

Organic Transition & Pesticide Reduction Workshop

Miami-Dade County Extension

Homestead, FL

Cost is \$15 - contact 305-248-3311 for more information or to register.

Southwest Florida

April 14, 2009

Congressman Putnam Meet and Greet 7:30 AM
Candidate for Commissioner of Agriculture

Captain Hendry House
512 Fraser Street
LaBelle, Florida 33935

For a Mapquest map to the Captain Hendry House, use this link:

<http://www.mapquest.com/maps?city=Labelle&state=FL&address=512+Fraser+Street>

April 23, 2009

Organic Transition & Pesticide Reduction Workshop

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

Cost is \$15 - contact 863-674-4092 for more information or to register.

April 30, 2009

CORE/Private Pesticide License Training 8 AM – Core
1 PM - Private

Hendry County Extension Office
LaBelle, Florida

Contact 863-674-4092

April 30, 2009

Methyl Bromide Alternatives Update

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

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

Other Meetings

June 7-9, 2009

Florida State Horticultural Society Meeting

Jacksonville, Florida

For more information contact Mary Lamberts at 305-248-3311 x234, email to lamberts@ufl.edu or go to <http://www.fshs.org/meetings.htm>

Websites

UF/IFAS Hendry County Extension Website – have a question or find out more about our programs, want to look at a past issue of the hotline, enroll or child in 4-H or contact me or one of our agents, go to <http://hendry.ifas.ufl.edu/index.shtml>

Watermelon Diseases – UF/IFAS site has color photos of many common watermelon diseases, go to <http://watermelons.ifas.ufl.edu/diseases/diseases.htm>

Quotable Quotes

Everything has got a moral if you can only find it. - Lewis Carroll

Sometimes I've believed as many as six impossible things before breakfast. - Lewis Carroll, Alice in Wonderland

It's a poor sort of memory that only works backward. - Lewis Carroll

If you don't know where you are going, any road will take you there. Lewis Carroll

Contrariwise, if it was so, it might be; and if it were so, it would be; but as it isn't, it ain't. That's logic. - Lewis Carroll

One of the secrets of life is that all that is really worth the doing is what we do for others. - Lewis Carroll

'The time has come,' the walrus said, 'to talk of many things: of shoes and ships - and sealing wax - of cabbages and kings.' - Lewis Carroll

On the Lighter Side

Horses Ass

Does the statement, "We've always done it like that" ring any bells

The US standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That's an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and English expatriates built the US Railroads.

Why did the English build them like that?

Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used. Why did "they" use that gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

Okay! Why did the wagons have that particular odd wheel spacing? Well, if they tried to use any other spacing, the wagon wheels would break on some of the old, long distance roads in England, because that's the spacing of the wheel ruts.

So who built those old rutted roads?

Imperial Rome built the first long distance roads in Europe (and England) for their legions. The roads have been used ever since.

And the ruts in the roads?

Roman war chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels. Since the chariots were made for Imperial Rome, they were all alike in the matter of wheel spacing.

The United States standard railroad gauge of 4 feet, 8.5 inches is derived from the original specifications for an Imperial Roman war chariot. And bureaucracies live forever.

So the next time you are handed a specification and wonder what horse's ass came up with it, you maybe exactly right, because the Imperial Roman army chariots were made just wide enough to accommodate the back ends of two war horses.

!

Now, the twist to the story

When you see a Space Shuttle sitting on its launch pad, there are two big booster rockets attached to the sides of the main fuel tank. These are solid rocket boosters, or SRBs.

The SRBs are made by Thiokol at their factory at Utah. The engineers who designed the SRBs would have preferred to make them a bit fatter, but the SRBs had to be shipped by train from the factory to the launch site.

The railroad line from the factory happens to run through a tunnel in the mountains. The SRBs had to fit through that tunnel.

The tunnel is slightly wider than the railroad track, and the railroad track, as you now know, is about as wide as two horses' behinds.

So, a major Space Shuttle design feature of what is arguably the world's most advanced transportation system was determined over two thousand years ago by the width of a horse's ass.

Everything I Need to Know, I Learned from the Easter Bunny . . .

Don't put all your eggs in one basket.

Walk softly and carry a big carrot.

Everyone needs a friend who is all ears.

There's no such thing as too much candy.

All work and no play can make you a basket case.

A cute little tail attracts a lot of attention.

Everyone is entitled to a bad hare day.

Let happy thoughts multiply like rabbits.

Some body parts should be floppy.

Keep your paws off other people's jellybeans.

Good things come in small-sugarcoated packages.

The grass is greener in someone else's basket.

An Easter bonnet can cover the wildest hare.

To show your true colors, you have to come out of your shell.

The best things in life are still sweet and gooey.

All the best for a Happy and Blessed Easter Holiday

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 Becthel/Yoder Brothers, 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, 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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Special Thanks to the **generous support** of our **sponsors**; who make this publication possible.

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