



UNIVERSITY OF
FLORIDA

E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 7, 2008

Most areas of south Florida received 1 - 2 inches of rain or more over the weekend in addition to receive regular showers over the past few weeks and the entire region is experiencing unseasonably wet conditions this spring. Showers have been a weekly occurrence in most places leading one grower to quip that if this continues, "How will we know when the rainy season arrives?" Most areas are reporting an inch or more of rain over the past few weeks. Growers in Devil's Garden report they have had in excess of 15 inches since February. In addition to the showers high winds and heavy night dews has helped keep disease active.

Despite a cool start to the period, temperatures have been warming with most places beginning to see temperatures reach regularly into the mid to upper 80's, and a few locations have reported a couple of days in the 90's.

FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
Balm					
3/14 – 4/7/08	39.06	87.91	4.92	70	0.13
Belle Glade					
3/14 – 4/7/08	46.17	86.83	3.53	76	0.13
Clewiston					
3/14 – 4/7/08	43.58	89.82	3.35	74	0.13
Ft Lauderdale					
3/14 – 4/7/08	53.64	91.60	3.27	74	0.13
Fort Pierce					
3/14 – 4/7/08	43.73	84.96	4.32	77	0.12
Homestead					
3/14 – 4/7/08	47.37	91.31	4.64	74	0.12
Immokalee					
3/14 – 4/7/08	39.13	89.53	4.11	76	0.13

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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

Vegetables coming to market include snap beans, cabbage, celery, eggplant, endive, escarole, lettuce, pepper, radishes, squash, strawberries, sweet corn, tomatoes, and various specialty items. Watermelon harvest has started around Immokalee with light volumes coming to market.

The short-term forecast from the National Weather Service in Miami calls for a drying trend this week with the possibility of a late season cold front toward weekend. At this time it is uncertain if it will have enough push to make it all the way to south Florida. For additional information, visit the National Weather Service in Miami website at <http://www.srh.noaa.gov/mfl/newpage/index.html>

Insects

Whiteflies

Around Southwest Florida whiteflies are continuing to escalate in spite of frequent insecticide sprays. The combination of warmer temperatures and with fields being destroyed around the area has spurred an increase the movement of adults and nymphs are building quickly in the younger crops around the area. Whiteflies have been up and down in watermelons and reports indicate that more watermelons fields are being treated than ever before in response to findings that vine decline and other cucurbit viruses are whitefly vectored.

Respondents in Manatee County indicate that although whiteflies are present at mostly low to moderate levels they have begun to spike in some later plantings with counts of up to 15 per plant being reported.

In Palm Beach County reports indicate that whitefly pressure is relentless. Some silverleaf has been noted in squash.

Reports from Homestead indicate that whiteflies populations are building up fast, with counts of 5 -8 per leaf in some places.

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

Pepper Weevils

Growers and scouts on the East Coast report that pepper weevils are high especially in older pepper and are causing problems in a number of locations.

Respondents around Southwest Florida report that pepper weevils continue to increase and populations have reached moderate to high levels in a number of locations. Pressure is highest in specialty pepper.

Reports from the Manatee County area indicate that weevil pressure has been steady for the past few weeks.

Weevils are also causing problems around Homestead where reports indicate they are a constant problem.

Thrips

Reports from East Coast indicate that growers are battling western flower thrips in a variety of crops; including cilantro, eggplant, tomato, pepper, squash, cucumbers and cowpeas. Some Florida flower thrips (*F. bispinosa*) and *Thrips palmi* are also present but western flower thrips is the main concern.

Some East Coast locations are reporting problems with control where western flower thrips is present. Unnamed sources indicate that resistance to Spintor/Radiant has been reported.

In some older pepper pressure is extremely high with literally dozens of thrips present on fruits and in every flower. Some scouts report that thrips damage appears to be aggravating problem with bacterial spot as new infections are coming in on thrips damaged areas around the stem and calyx.

Around Southwest Florida thrips have increased in many area fields coinciding with the end of the citrus bloom period. While most thrips still appear to be flower thrips (*F. bispinosa*) but a few western flower thrips (*F. occidentalis*).

Around Homestead, respondents report western flower thrips as well as *Thrips palmi* are causing problems in pepper.

Western flower thrips have also been reported in strawberries around Plant City.

Managing Western Flower Thrips

Thrips are tiny insects with fringed wings. There are over 5,000 described species with about 87 species of thrips that are pests of commercial crops due to their feeding on leaves, fruits, and flowers causing discoloration, deformity, and reduced marketability.

The western flower thrips (*Frankliniella occidentalis*) was spread over many parts of the world during the 1980's and 1990's due to the global trade in ornamental plants. Originally from the southwestern US, it is now largely cosmopolitan, and it is the key vector of *Tomato spotted wilt virus*. The insect and the virus have become the key pest problems of tomato, pepper, and other crops in northern Florida, but they were not, until 2006, serious pests in central and southern Florida. In northern Florida, the eastern flower thrips (*Frankliniella tritici*) is more common than the western flower thrips. In central and southern Florida, the Florida flower thrips (*Frankliniella bispinosa*) is the more common. All of the above-mentioned species of thrips have a broad host range that includes many crops, weeds and other plants in and around crop fields.

The pest status of individual species of flower thrips differs in tomato and pepper. The adults of the western flower thrips inhabit the flowers where they feed on pollen and flower tissues. The females lay eggs individually on the small developing fruit in the flower, and the larva hatches in about six days. A small dimple sometimes surrounded by a halo remains on the developing fruit of pepper and tomato. Direct feeding by the western flower thrips larvae also can cause cosmetic fruit damage referred to as 'flecking'. Both types of damage can result in cull-out and lowering of grade of the harvested fruit, with tolerance based on price and demand in the marketplace.

The eastern flower thrips is virtually a non-pest. It does not damage fruit and it is an incapable vector of *Tomato spotted wilt virus*. The Florida flower thrips is not damaging to fruit. Although it is a capable vector of *Tomato spotted wilt virus*, epidemics are rare in central and southern Florida where it is the predominate species. In fact, they compete with the western flower thrips, and in high numbers they out-compete the populations of western flower thrips. The eastern flower thrips and the Florida flower thrips are suppressed by insecticides in many chemical classes with different modes of action. The adults of these species are much more active than the adults of western flower thrips. They are capable of rapidly re-colonizing insecticide treated crops and sometimes there is an apparent lack of control for these species under field conditions.

There is an unusual virus-vector relationship between the thrips and the *Tomato spotted wilt virus*. The virus is acquired only by the larvae, and the adults can transmit to host plants. Primary spread is due to infections caused by incoming viruliferous adults to a crop (such as tomato and pepper) from outside sources that are usually host weed species. Adults persistently transmit, and their control with insecticides does not

prevent transmission due to the short time of feeding for infection to occur. Secondary spread is caused by viruliferous adults that acquired the virus as larvae feeding on an already infected plant in the tomato or pepper field. For secondary spread, thrips need to colonize and reproduce on that season's crop. Most viral infections in northern Florida usually are the result of primary spread, although some secondary viral infections occur late in the season.

The invading populations of western flower thrips were largely resistant to most organophosphate, carbamate, pyrethroid, and organochlorine insecticides. Further, insecticidal control of the viruliferous adults proved ineffective in preventing spread of *Tomato spotted wilt virus*. Even though ineffective, growers in most parts of the world responded by spraying insecticides on a calendar schedule. This sometimes resulted in an economic and environmental disaster with growers suffering uncontrollable damage due to high thrips populations and epidemics of tomato spotted wilt. Application of broad-spectrum insecticides may suppress western flower thrips initially, but their numbers can increase rapidly a few days after application in numbers that are many-fold greater than untreated pepper. This was the situation in northern Florida and southern Georgia beginning the 1980's. Eventually, integrated pest management programs were developed and once adopted these proved to be effective, economic, and sustainable.

Natural infestations of a predatory bug, the minute pirate bug (*Orius insidiosus*) are very effective predators of thrips in pepper. Their effectiveness is predictable based on the number of the predator relative to the number of thrips prey. Suppression occurs when there is one predator for approximately 180 thrips. Control occurs when there is one minute pirate bug per 50 thrips. A conservation biological control program was implemented in northern Florida and this program has been adapted to local conditions throughout the world. This integrated pest management program employs reduced-risk insecticides, natural infestations of minute pirate bugs, and cultural control tactics including ultraviolet-reflective mulch. SpinTor (Dow AgroSciences, Indianapolis, Indiana) is the most effective insecticide able to suppress populations of western flower thrips, and it is a reduced-risk insecticide that does not suppress populations of minute pirate bugs at labeled rates. In pepper and other fruiting vegetables, this product is being replaced by another spinosyn insecticide, Radiant, with the same mode of action.

Minute pirate bugs do not prefer tomato and numbers remain too low in tomato fields to suppress thrips. Other management tactics are highly beneficial. Ultraviolet-reflective mulch (aluminum layered) is very effective in reducing the colonization of all thrips species onto tomato plants and in reducing the incidence of primary infections of *Tomato spotted wilt virus*. This is the most effective tactic in northern Florida tomatoes. Development of the larvae is about 5 days, and weekly applications of insecticides are sufficient to prevent successful larval development and subsequent secondary spread of *Tomato spotted wilt virus* on tomato.

Monitor (Valent USA Corp., Walnut Creek, California) and Radiant are in different chemical classes with different modes of action. Few other insecticides are efficacious against the western flower thrips.

The predominate thrips in central and southern Florida is the Florida flower thrips. The western flower thrips has been established in very low population levels for over two decades. Recently, populations have increased in a number of crops grown during the winter and spring. Large, damaging populations have occurred in peppers and tomatoes throughout Palm Beach County. Damaging populations have been noted in more isolated occurrences in other locations throughout central and southern Florida. There appear to be several factors responsible for this increase including the unusually dry conditions which favor the western flower thrips over the native species. Calendar sprays of broad-spectrum insecticides in attempts to control pests have caused outbreaks of the western flower thrips. Populations resurge when natural enemies and competing thrips are killed. Also, some insecticides especially pyrethroids have beneficial effects on the development and reproduction of western flower thrips. Growers need to be aware that the western flower thrips is resistant to most broad-spectrum insecticides and their use can only serve to induce outbreaks. Bioassays of western thrips in central and southern Florida reveal a mix of resistant and susceptible populations to Radiant. There are

increased incidences of *Tomato spotted wilt virus* in central and southern Florida, although epidemics have remained localized.

Producers in central and southern Florida will need to begin considering western flower thrips as a key pest. At this time, tomato spotted wilt is not a serious pest.

Specific recommendations for the management of western flower thrips in fruiting vegetables include the following:

- Plant and maintain refugia such as sunflowers. Some weeds such as Spanish needle (*Bidens* species) also are good refugia. These refugia are a source for minute pirate bugs to invade peppers and other suitable crop hosts and a sink for thrips leaving tomato or pepper to be eaten by predators. There are other benefits of refugia as well.
- Identify the thrips in crops as the western flower thrips is a damaging pest and the Florida flower thrips is not damaging. Also, the Florida flower thrips competes with the western flower thrips.
- Scout and use established economic threshold for western flower thrips as appropriate for individual crops. Thresholds should include the impact of the minute pirate bug and the predator's ratio relative to the number of thrips.
- Use reduced-risk insecticides to conserve populations of minute pirate bugs in pepper, eggplant, and strawberries. Minute pirate bugs will not invade tomato in sufficient numbers to suppress thrips.
- Use ultraviolet-reflective mulches when possible (aluminum layered mulches reflect the most)
- Do not use insecticides known to induce western flower thrips.
- Rotate insecticides with different modes of action as a resistance management strategy. Do not rotate Radiant with SpinTor, because they are in the same class of chemistry. Multiple plantings of susceptible crops from fall to spring on the same farm creates many problems. Western flower thrips can move from one planting to another. In some locations especially southeastern Florida, populations of western flower thrips are treated with Radiant on one planting and then move to the adjacent planting and get sprayed again. This results in the same thrips population getting sprayed multiple times. Multiple applications can result in the thrips population developing tolerance to the spinosyn chemistry and thus poor performance. Adjacent fields should be planted and destroyed at the same time, so that they can be managed together. Therefore, there should be communication between growers in an area-wide knowledge-based approach.
- Do not make more than two consecutive applications of Group 5 insecticides (Radiant and SpinTor). If additional treatments are required after two consecutive applications, rotate to another class of effective insecticide for at least one application. Do not apply more than 34 oz or 6 applications of Radiant per calendar year.

In some cases, additional management efforts are needed to manage western flower thrips and other difficult pests in space and time. Management of the pepper weevil (*Anthonomus eugenii*) is proving a challenge to pepper growers trying at the same time to manage western flower thrips. Growers need to emphasize sanitation and other cultural tactics over broad-spectrum insecticides that kill minute pirate bugs or induce western flower thrips in other ways.

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

Contributed by Dr. Joe Funderburk, Entomologist UF/IFAS NFREC, Quincy, FL and Mr. Tony Weiss, Dow AgroSciences, Brandon, Florida

Leafminer

Respondents in Manatee County report that a number of fields are being treated for leafminer.

Reports from Palm Beach County indicate that leafminer pressure is low to moderate and many growers have stopped targeting them in a number of places.

Around Immokalee, leafminers are mostly low.

Worms

In Palm Beach County, respondents indicate that worm pressure is mostly low with a few loopers, southern and beet armyworms and a few fall armyworms being found in pepper

Around the Glades, reports indicate that fall armyworm problems have increased significantly in sweet corn over the past few weeks.

Respondents in Manatee County report that worm activity is low with a mixed bag of a different types being found here and there.

Around Southwest Florida, worm pressure has been mostly low with growers finding some loopers, southern and beet armyworms as well as fruitworms in tomato, pepper, eggplants and on some watermelon rinds. Scouts report that pickle worms are high in squash. Tomato pinworms are around, mostly at low levels.

Spider Mites

Respondents from Palm Beach note some scattered problems with spider mites on basil, cilantro, eggplant and melons in places.

Growers and scouts around Southwest Florida report that spider mites are patchy in occurrence around the area with some fields reaching moderate levels.

Around Homestead spider mites are causing some problems in squash.

Broad Mites

East Coast respondents indicate that broad mites are bad in some basil and continue to cause some problems in pepper with some hotspots noted.

Around Southwest Florida while broad mites have flared in a few locations while remaining very low in others.

Aphids

Growers and scouts around Immokalee report that aphids are present in scattered locations on pepper and melons and have flared up in a few locations.

On the East Coast, reports indicate aphids are mostly low but are building up in some watermelons.

A few aphids are also present in the Manatee Ruskin area.

Growers in the Glades report that aphids are still causing problems in leafy vegetables.

Silkfly

Dr Gregg Neussly Entomologist UF/IFAS EREC reports that silk flies have been fairly low in numbers around Belle Glade, they are on the rise. He notes that species distribution of the three species of silk flies has been fairly random, and indicates growers are now seeing more of each species and the distributions are starting to overlap more.

Diseases

Watermelon Vine Decline

Water melon vine decline has been reported from several locations around southwest Florida where it is hitting melons approaching maturity. Squash vein yellowing virus (SqVYV) is a whitefly transmitted virus that has been identified as the cause of watermelon vine decline.

Late Blight

Respondents on the East Coast report no new late blight and note that activity has been relatively low in areas where it had been found previously.

Respondents in the Manatee County area report that late blight is still a problem on tomatoes.

Dr Pam Roberts, Pathologist at SWFREC is interested in obtaining samples in an effort to characterize races occurring in Florida. She can be contacted at 239-658-3400.

Bacterial Spot

Around Southwest Florida, bacterial spot is widespread on pepper. Severity is moderate to high in many places. Bacteria is also causing problem in tomato.

Respondents in Homestead report that bacterial spot continues to cause problems in tomato.

Growers and scouts on the East Coast report that bacterial spot is high especially in pepper and less in tomato. Scouts report that there seems to be some correlation with high thrips and bacteria leaf spot severity.

Reports from Manatee County indicate that bacterial spot is present at low levels in a number of tomato fields.

Dr Ken Pernezny reports that isolates from our UF/IFAS bacterial spot resistant bell pepper trials in Delray yielded mostly Race 4 and 6.

Bacterial leaf spot of lettuce

Bacterial leaf spot, caused by *Xanthomonas campestris* subsp. *vitians*, is present on lettuce in the Glades. Copper fungicides will provide some but not total control of this disease. Lettuce growers, if they are using

phosphonic compounds for downy mildew control, should be mindful that phytotoxicity problems may arise if unbuffered phosphonics are used with copper already in place.

TYLCV

On the East Coast, reports indicate that TYLCV is bad in places reaching 100% in some scattered older plantings but remains low to moderate in many others.

Around Southwest Florida, tomato yellow leaf curl virus continues to increase in many fields with many older fields reaching a 50% infection rate. Scouts report some organic tomato at 100% and note that TYLCV resistant varieties are performing well.

Respondents in Homestead indicate that tomato yellow leaf curl virus is widely present and indicate that infection ranges from 30 – 100% depending on the field.

Around Manatee County, reports indicate that tomato yellow leaf curl virus is present at mostly low – moderate levels. Respondents indicate that infection rates appear to be lower than in past years at this stage of growth.

Downy Mildew

Cucurbit producers around Southwest Florida report that downy mildew continues to be a major problem in squash and especially in cucumbers.

Growers and scouts on the East Coast indicate that downy mildew is still causing problems on cucumber and not that growers need to stay on top of it to get control.

Around Homestead, respondents note that downy mildew is increasing in squash.

Respondents around Belle Glade are reporting lots of downy mildew on both leaf and head lettuce in the Glades.

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.

Powdery Mildew

On the East Coast, powdery mildew is causing problems squash. Powdery mildew is also present on pepper in scattered locations.

Powdery mildew is wide spread in squash and cucumbers in Homestead. In many fields, incidence is surpasses that of downy mildew. Some problems have also been noted with powdery mildew on tomato.

Around Immokalee, a few tomato fields have powdery mildew present older foliage on with a few upper branches showing infections. Powdery mildew is also an increasing problem in pepper in a number of locations.

Gummy Stem Blight

Gummy stem is widely present on watermelons at low levels around Southwest Florida.

Respondents in Palm Beach County report that gummy stem is present on cucumbers and squash in several locations.

Leaf mold

Growers and scouts around Southwest Florida report that leaf mold has been showing up in many locations at low to moderate levels and is causing some defoliation in a few fields and has resulted in many yellowed leaves in many other fields. Some scouts indicate that leaf mold has impacted production more than late blight at this point in time.

Corn Leaf Blight

Dr Rick Raid, Plant Pathologist UF/IFAS EREC reports that sweet corn diseases have really been taking off around Belle Glade. Northern corn leaf blight has kicked into high gear and southern corn leaf blight are also present. While strobilurin and triazole fungicides may aid greatly in keeping these diseases in check, growers should not wait until disease levels have built up before using them. They should be tank-mixed or alternated with an EBDC fungicide, such as mancozeb, to optimize efficacy and to slow development of fungicide resistant strains.

Rust

Dr Raid indicates that common rust is also present and treatment is as above.

Rhizoctonia

With the abnormally wet warm conditions, Rhizoctonia has been a problem on snap beans in all areas.

Bean red node

Bean red node has been spotted on snap and specialty beans grown in south Florida. Caused by Tobacco Streak Virus, controls for this disease are mostly cultural. Good ditchbank weed management and growing beans in large tracts to minimize border to field area ratio are the most effective means of controlling this disease. Typically, this requires advanced planning. Once beans are in the ground, there is little that can be done, so keep this in mind for next season

Target Spot

Growers and scouts around Immokalee report that target spot continues to work on interior foliage threatening tomatoes but has not flared greatly following recent rains.

Target spot is widely present around Palm Beach and respondents are reporting target spot damage on tomato fruit.

Alternaria

Growers and scouts across the area report that Alternaria is widely present and increasing in a number of locations.

Mosaic

Reports from Homestead indicate that mosaic is widespread in squash.

Mosaic is widely present on squash around Southwest Florida. In at least one location, nearly 100% infection has been reported on young seedlings prompting growers to destroy the crop and replant.

Reports indicate that mosaic is increasing in watermelon around SW Florida.

Fusarium crown rot

Reports from SW Florida note some increase in Fusarium crown rot following the recent rains.

Some fusarium wilt is also being reported on tomatoes around Homestead.

Cucurbit Leaf Crumple Virus

Cucurbit Leaf Crumple Virus has been diagnosed on squash in Hendry County. Beans have also been implicated as a host.

News You Can Use

Revus Top Fungicide Receives Federal Registration

Greensboro, N.C., March 24, 2008 – Syngenta Crop Protection announced today the federal registration of Revus Top™ fungicide, a powerful premix of two active ingredients, mandipropamid and difenoconazole, for use on tomatoes and potatoes against destructive oomycete pathogens. State registrations or specific crop and/or pest uses may still be pending in certain states. Check with your state regulatory agency to determine registration status.

Revus Top, a 1-to-1 combination of mandipropamid, a carboxylic acid amide (CAA) fungicide, and difenoconazole, a triazole fungicide (sterol inhibitor), provides protection against early blight and late blight, as well as a broad-spectrum of other tough diseases including black mold, black dot, Septoria leaf spot, anthracnose and other damaging diseases. Conveniently pre-mixed for ease of use, Revus Top provides economical disease control. In addition, Revus Top exhibits excellent crop safety, good tankmix compatibility¹, and works effectively in Integrated Pest Management (IPM) programs.

“Revus Top combines two powerful active ingredients into one protective fungicide, providing control of two of the most damaging diseases, late blight and early blight, in potatoes and tomatoes,” said David Laird, fungicide brand manager, Syngenta. “Even under adverse weather conditions, Revus Top offers a new tool for excellent control of these diseases.”

Applied by ground, air or chemigation, Revus Top is rainfast as soon as spray droplets have dried. Through unique LOK + FLO™ action, Revus Top locks tightly to the waxy cuticle of treated leaves, quickly becoming rainfast and establishing a protective barrier to prevent fungi from taking hold. A steady supply of Revus Top enters the leaf, moving through the plant tissue via translaminar movement, protecting both leaf surfaces and providing long-lasting, preventive protection.

“Mandipropamid is a member of Fungicide Resistance Action Group 40, and difenoconazole is a Group 3 fungicide,” said Laird. “Alternating active ingredients is vital for managing fungicides now and in the future, and Revus Top is an excellent rotation partner with other fungicides, including Bravo Weather Stik®, Omega®, Quadris® and Ridomil Gold® Bravo®. With a powerful foundation from Revus Top protecting against a broad spectrum of diseases, growers can build a highly effective, sustainable defense against pathogens all season long.”

Revus received a Florida Label on April 4, 2008

Opportunity

Plant Breeding Research Assistant I, Immokalee, Florida

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 primary responsibilities for this position include, but are not limited to:

- Assisting the Harris Moran sweet pepper breeding program in field trial design, planting, evaluation, seed harvest, data collection, disease screening, and sampling for molecular marker analysis
- Will supervise greenhouse plantings, including managing plant culture and crossing blocks and crews in the field and greenhouse
- Responsible for data entry and maintenance of breeding program database

Additionally, this person will be expected to interact with other employees including plant pathologists, molecular biologists, product managers, product development representatives, and sales representatives

Qualifications:

Position requires a minimum BS in plant science, horticulture, or related discipline

2-3 years seed industry experience

This position requires a non-smoker based on job responsibilities related to greenhouses and the potential for Tobacco Mosaic Virus (TMV) contamination

Skills required:

- Requires excellent written and oral communication skills
- Working knowledge of Microsoft Word, Excel, and Access
- Ability to travel domestically and internationally.

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

Up Coming Meetings

Palm Beach County

April 8, 2008

UF/IFAS Everglades REC Field Day

April 9, 2008 **General Standards/Core Test Review** (4 CEUs) 8:00 AM – 12:00 PM
Ag Row Crops Test Review (2 CEUs) 1:00 – 3:00 PM

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

Call 561-996-1655 for more information.

Southwest Florida

April 14 **West Coast Bell Pepper Variety Trial**

Thomas Produce Farm #12
CR 835
Clewiston, Florida

Contact Gene McAvoy at 863-674-4092 for details

May 1, 2008 **Spring Vegetable Field Day** 10:00 pm – 1:30 pm.

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

Contact Gene McAvoy at 863-674-4092 for details

Other Meetings

April 9, 2008 **Certified Crop Advisor Seminar** 7:30 AM to 6:30 PM

UF/IFAS CREC and other locations

Registration fee - \$100

Go to www.crec.ifas.ufl.edu/cca for information

Websites

Diagnosing Postharvest Diseases of Cantaloupe – This NCSU website should be useful to anyone who works with cantaloupe pre- and post-harvest http://www.ncsu.edu/project/cucurbitkeys/opening_page.htm

Quotable Quotes

The world is a dangerous place, not because of those who do evil, but because of those who look on and do nothing. - Albert Einstein

It is not the critic who counts, not the man who points out how the strong man stumbled, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly, who errs and comes short again and again, who knows the great enthusiasms, the great devotions, and spends himself in a worthy cause, who at best knows achievement

and who at the worst if he fails at least fails while daring greatly so that his place shall never be with those cold and timid souls who know neither victory nor defeat. - Theodore Roosevelt

If a man walks in the woods for love of them half of each day, he is in danger of being regarded as a loafer. But if he spends his days as a speculator, shearing off those woods and making the earth bald before her time, he is deemed an industrious and enterprising citizen. - Henry David Thoreau

Grown-ups never understand anything by themselves, and it is tiresome for children to be always and forever explaining things to them. - Antoine de Saint-Exupery

On the Lighter Side

Oldies Trivia Quiz

To all my OLD friends! This will bring back memories.

1. What builds strong bodies 12 ways?

- A. Flintstones vitamins
- B. The buttmaster
- C. Spaghetti
- D. Wonder Bread
- E. Orange Juice
- F. Milk
- G. Cod Liver Oil

2. Before he was Muhammed Ali, he was...

- A. Sugar Ray Robinson
- B. Roy Orbison
- C. Gene Autry
- D. Rudolph Valentino
- E. Fabian
- F. Mickey Mantle
- G. Cassius Clay

3. Pogo, the comic strip character said, 'We have met the enemy and...

- A. It's you
- B. He is us
- C. It's the Grinch
- D. He wasn't home
- E. He's really mean
- F. We quit
- G. He surrendered

4. Good night, David.

- A. Good night, Chet
- B. Sleep well
- C. Good Night, Irene
- D. Good Night, Gracie
- E. See you later, alligator
- F. Until tomorrow
- G. Good night, Steve

5. You'll wonder where the yellow went,

- A. When you use Tide
- B. When you lose your crayons
- C. When you clean your tub
- D. If you paint the room blue
- E. If you buy a soft water tank
- F. When you use Lady Clairol
- G. When you brush your teeth with Pepsodent

6. Before he was the Skipper's Little Buddy, Bob Denver was Dobie's friend,

- A. Stuart Whitman
- B. Randolph Scott
- C. Steve Reeves
- D. Maynard
- G. Krebbs
- E. Corky B. Dork
- F. Dave the Whale
- G. Zippy Zoo

7. Liar, liar...

- A. You're a liar
- B. Your nose is growing
- C. Pants on fire
- D. Join the choir
- E. Jump up higher
- F. On the wire
- G. I'm telling Mom

8. Meanwhile, back in Metropolis, Superman fights a never ending battle for truth, justice and...

- A. Wheaties
- B. Lois Lane
- C. TV ratings
- D. World peace
- E. Red tights
- F. The American way
- G. News headlines

9. Hey, kids, what time is it?

- A. It's time for Yogi Bear
- B. It's time to do your homework
- C. It's Howdy Doody Time
- D. It's Time for Romper Room
- E. It's bedtime
- F. The Mighty Mouse Hour
- G. Scoopy Doo Time

10. Lions and tigers and bears...

- A. Yikes
- B. Oh no
- C. Gee whiz
- D. I'm scared
- E. Oh My

F. Help Help

H. Let's run

11. Bob Dylan advised us never to trust anyone

A. Over 40

B. Wearing a uniform

C. Carrying a briefcase

D. Over 30

E. You don't know

F. Who says, 'Trust me'

G. Who eats tofu

12. NFL quarterback who appeared in a television commercial wearing women's stockings.

A. Troy Aikman

B. Kenny Stabler

C. Joe Namath

D. Roger Stauback

E. Joe Montana

F. Steve Young

G. John Elway

13. Brylcream...

A. Smear it on

B. You'll smell great

C. Tame that cowlick

D. Greaseball heaven

E. It's a dream

F. We're your team

G. A little dab'll do ya

14. I found my thrill...

A. In Blueberry muffins

B. With my man, Bill

C. Down at the mill

D. Over the windowsill

E. With thyme and dill

F. Too late to enjoy

G. On Blueberry Hill

15. Before Robin Williams, Peter Pan was played by

A. Clark Gable

B. Mary Martin

C. Doris Day

D. Errol Flynn

E. Sally Fields

F. Jim Carey

G. Jay Leno

16. Name the Beatles

A. John, Steve, George , Ringo

B. John, Paul, George , Roscoe

C. John, Paul, Stacey, Ringo

- D. Jay, Paul, George , Ringo
- E. Lewis, Peter, George , Ringo
- F. Jason, Betty, Skipper, Hazel
- G. John, Paul, George , Ringo

17. I wonder, wonder, wonder, who

- A. Who ate the leftovers?
- B. Who did the laundry?
- C. Was it you?
- D. Who wrote the book of love?
- E. Who I am?
- F. Passed the test?
- G. Knocked on the door?

18. I'm strong to the finish

- A. Cause I eats my broccoli
- B. Cause I eats me spinach
- C. Cause I lift weights
- D. Cause I'm the hero
- E. And don't you forget it
- F. Cause Olive Oyl loves me
- G. To outlast Bruto

19. When it's least expected, you're elected, you're the star today...

- A. Smile, you're on Candid Camera
- B. Smile, you're on Star Search
- C. Smile, you won the lottery
- D. Smile, we're watching you
- E. Smile, the world sees you
- F. Smile, you're a hit
- G. Smile, you're on TV

20. What do M & M's do?

- A. Make your tummy happy
- B. Melt in your mouth, not in your pocket
- C. Make you fat
- D. Melt your heart
- E. Make you popular
- F. Melt in your mouth, not in your hand
- G. Come in colors

Here are the answers.

- 1 d - Wonder Bread
- 2 g - Cassius Clay
- 3 b - He Is Us
- 4 a - Good night, Chet
- 5 g - When you brush your teeth with Pepsodent
- 6 d - Maynard G. Krebs
- 7 c - Pants on Fire
- 8 f - The American Way
- 9 c - It's Howdy Doody Time
- 10 e - Oh My

11 d - Over 30
12 c - Joe Namath
13 g - A little dab'll do ya
14 g - On Blueberry Hill
15 b - Mary Martin
16 g - John, Paul, George , Ringo
17 d - Who wrote the book of Love
18 b - Cause I eats me spinach
19 a - Smile, you're on Candid Camera
20 f - Melt In Your Mouth Not In Your Hand

Note: The hotline is now available by subscribing to the South Florida Vegetables LISTSERV. Get the latest pest and disease updates and news in a timely fashion -the e-version is automatically sent to you as soon as it is published.

If you want to switch over just drop me an email and help save a tree.

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