



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

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# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

February 26, 2012

**A couple of cold fronts moved into south Florida during the first half of February bring some rainfall to South Florida and light frost to a few places.** Most of the rainfall occurred over the east coast metro areas with rainfall between 2 to 4 inches. A few isolated areas along the east coast metro areas received 5 to 7 inches of rain. Otherwise February was mostly warm and dry with temperatures averaging few degrees above normal and the remainder of south Florida seeing between a quarter to an inch of rain.

**Despite the rain, producers have been irrigating fields constantly due to dry conditions.** Towards the end of the month, dry and windy conditions persisted and battered young vegetable plants. Many mornings saw foggy conditions and heavy dews which have kept diseases active in many places.

**Temperatures for the past few weeks have been above average with nighttime temps in the 40's, 50's and 60's and daytime highs reaching into the low to mid 80's most days.**

## FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
<b>Balm</b>					
1/29 – 2/26/12	30.52	85.23	0.56	76	0.09
<b>Belle Glade</b>					
1/29 – 2/26/12	42.97	91.47	0.50	82	0.10
<b>Clewiston</b>					
1/29 – 2/26/12	36.62	89.65	0.60	81	0.10
<b>Ft Lauderdale</b>					
1/29 – 2/26/12	46.53	88.93	1.63	80	0.09
<b>Fort Pierce</b>					
1/29 – 2/26/12	38.66	88.86	1.38	81	0.09
<b>Homestead</b>					
1/29 – 2/26/12	45.66	88.00	2.72	84	0.10
<b>Immokalee</b>					
1/29 – 2/26/12	36.13	89.64	0.46	80	0.10

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**Harvesting of winter vegetables is on-going across the southern peninsula.** AMS market movement included beans, cabbage, celery, eggplant, endive, escarole, lettuce, peppers, radishes, squash, strawberries, specialty items, sweet corn and tomatoes.

**The National Weather Service forecast indicates that the cold front which moved through South Florida on Saturday stalled south of the area in the Florida straits.** The stalled front combined with a high pressure to the north will result in brisk easterly winds can be expected across south Florida today. As the high pressure system moves offshore, a strong easterly low level wind flow will persist today into Monday carrying moisture and a chance of rain will be possible today and Monday.

**For the extended period, Wednesday through Saturday, winds will become easterly as the high pressure builds over the Atlantic accompanied by drier and more stable air over the area and lower chance of rains with only possible nocturnal minimal showers in east coast locations.** Temperatures will be in the 80's in the day and 60's at night.

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

## **Insects**

### **Whiteflies**

**Growers and scouts around SW Florida reports indicate that whiteflies moving around and are on the increase in a variety of crops.** Populations vary from location to location and from day to day with some farms reporting fairly high pressure and others fairly low. Some growers have reported that during peak movement clouds of whiteflies can be seen streaming past a dark background like a vehicle parked in a field. Growers have been spraying for whiteflies in tomatoes, watermelons, squash, peppers, and potatoes.

**In the Homestead area, whiteflies pressure is increasing in a variety of crops and reports indicate that the incidence of TYLCV and Bean Golden Mosaic Virus is also on the increase.**

**On the East Coast, respondents report that they are battling to keep whitefly adults off young tomatoes in locations where there are old crops or other hosts nearby. Whiteflies are reportedly moving into other crops in high numbers in areas of Palm Beach County.**

**Reports indicate that white fly numbers have declined somewhat in the Manatee/Ruskin area and numbers vary from low to moderate depending on the location.**

### **Management of Whiteflies, Whitefly-Vectored Plant Virus, and Insecticide Resistance for Vegetable Production in Southern Florida**

#### **Recommendations:**

##### **A. Crop Hygiene**

Field hygiene should be a high priority and should be included as an integral part of the overall strategy for managing whitefly populations, TYLCV incidence, and insecticide resistance. These practices will help reduce the onset of the initial infestation of whitefly, regardless of biotype, and lower the initial infestation level during the cropping period.

1. Establish a minimum 2 month crop free period during the summer, preferably from mid-June to mid-August.

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

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

Reduce overall whitefly populations, regardless of biotype, and avoid introducing whiteflies and TYLCV into crops by strictly adhering to correct cultural practices.

1. Use proper pre-planting practices.
  - a. Plant whitefly and virus-free transplants.
  - b. Delay planting new fall crops as long as possible.
  - c. Do not plant new crops near or adjacent to old, infested crops.
  - d. Use determinant varieties of grape tomatoes to avoid extended crop season.
  - e. Use TYLCV resistant tomato cultivars where possible and appropriate, especially during historically critical periods of virus pressure. Whitefly control must continue even with use of TYLCV resistant cultivars because these cultivars can carry the virus.
  - f. Use TYLCV resistant pepper cultivars when growing pepper and tomato in close proximity.
  - g. Use ultraviolet light reflective (aluminum) mulch on plantings that growers find are historically most commonly infested with whiteflies and infected with TYLCV.

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

- a. Apply an effective insecticide to kill whitefly adults prior to cultural manipulations such as pruning, tying, etc.
- b. Rogue tomato plants with symptoms of TYLCV at least until second tie. Plants should be treated for whitefly adults prior to roguing and, if nymphs are present, should be removed from the field, preferably in plastic bags, and disposed of as far from production fields as possible.
- c. Manage weeds within crops to minimize interference with spraying and to eliminate alternative whitefly and virus host plants.

- d. Dispose of cull tomatoes as far from production fields as possible. If deposited in pastures, fruit should be spread instead of dumped in a large pile to encourage consumption by cattle. The fields should then be monitored for germination of tomato seedlings, which should be controlled by mowing or with herbicides if present.
- e. Avoid u-pick or pin-hooking operations unless effective whitefly control measures are continued.
- f. Destroy old crops within 5 days after harvest, destroy whitefly infested abandoned crops, and control volunteer plants with a desiccant herbicide and oil.
- g. Plant non-host cover crops such as Sudex to discourage weeds and volunteer crop plants from growing and being infested by whiteflies.

### **Insecticidal Control Practices for Whiteflies.**

- 1. Delay resistance to neonicotinoid and other insecticides by using a proper whitefly insecticide program. Follow the label!
  - a. On transplants in the production facility, do not use a neonicotinoid insecticide if biotype Q is present. If biotype B is present, apply a neonicotinoid one time 7-10 days before shipping. Use products in other chemical classes, including Fulfill, soap, etc. before this time.
  - b. Use neonicotinoids in the field only during the first six weeks of the crop, thus leaving a neonicotinoid-free period at the end of the crop.
  - c. As control of whitefly nymphs diminishes following soil drenches of the neonicotinoid insecticide or after more than six weeks following transplanting, use rotations of insecticides of other chemical classes.
  - d. Use selective rather than broad-spectrum control products where possible to conserve natural enemies and enhance biological control.
  - e. Do not apply insecticides on weeds on field perimeters. These could kill whitefly natural enemies and, thus, interfere with biological control, as well as select for biotype Q, if present, which is more resistant to many insecticides than biotype B.

### **2. Soil applications of neonicotinoid insecticides for whitefly control.**

- a. For best control, use a neonicotinoid as a soil drench at transplanting, preferably in the transplant water.
- b. Soil applications of neonicotinoids through the drip irrigation system are inefficient and not recommended.
- c. Do not use split applications of soil drenches of neonicotinoid insecticides (i.e. do not apply at transplanting and then again later).

### **3. Foliar applications of neonicotinoid insecticides for whitefly control.**

- a. Foliar applications, if used instead of or in addition to soil drenches at transplanting, should be restricted to the first 6 weeks after transplanting. Do not exceed the maximum active ingredient per season according to the label.

b. Follow scouting recommendations when using a foliar neonicotinoid insecticide program. Rotate to non-neonicotinoid insecticide classes after the first 6 weeks and do not use any neonicotinoid class insecticides for the remaining cropping period.

**For more information, see Management of Whiteflies, Whitefly-Vectored Plant Virus, and Insecticide Resistance for Vegetable Production in Southern Florida at <http://edis.ifas.ufl.edu/in695>**

**Under Florida law, abandoned tomato fields that have not been destroyed within five days after final harvest are subject to an immediate final order (IFO) per rule in FS Chapter 5B-59.003, Tomato Plant Destruction.**

**You can report abandoned tomato fields by sending an email to the Division of Plant Industry describing the physical location of the property.** Their first route of destruction would be to make contact with the growers and request compliance, if this does not occur an IFO is issued in which the grower has 10 days to correct the problem. If the commercial tomato producer refuses or neglects to comply with the terms of the notice within 10 days after receiving it, the director or her or his authorized representative may, under authority of the department, proceed to destroy the tomato plants. The expense of the destruction shall be assessed, collected, and enforced against the commercial tomato producer by the department.

See the rule here <https://www.flrules.org/gateway/RuleNo.asp?ID=5B-59.003>

Please contact Tyson Emery if you have any further questions or to report abandoned fields.

Tyson Emery  
Chief- Bureau of Plant and Apiary Inspection  
Division of Plant Industry  
Florida Department of Agriculture and Consumer Services  
Email: tyson.emery@freshfromflorida.com  
Phone: 352.372.3505 ext. 154

### **Leafminers**

**In Palm Beach County, leafminer pressure remains high in some areas on tomato and eggplants.** Around Belle Glade, growers continue to battle leafminers in celery and leafy greens.

**Respondents in SW Florida report that leafminers remain active although numbers are variable depending on location.** Growers and scouts report that numbers have reached threshold levels in several tomatoes and watermelon fields this spring.

**Around Homestead, leafminers numbers range from low to medium in variety of crops including tomatoes, beans and other crops.** Dr Dak Seal, Entomologist at UF/IFAS TREC reports that both soil and foliar applications of Coragen provided significant control of leafminers.

### **Pepper Weevils**

**Respondents in the Manatee/Ruskin area are reporting a lot of early weevil activity in pepper.**

**Around Southwest Florida, pepper weevils remain active and continue to infest new buds and small fruit.** Most pepper fields now have some level of weevil infestation now and in some fields, weevil feeding has destroyed a high proportion of new bloom/buds.

**Reports from Homestead note that weevils are widespread and population numbers are high in many fields with the majority of fruits infested with pepper weevils in some fields.**

**Growers and scouts in Palm Beach report that weevil pressure ranges from high to extremely high in most pepper fields.**

**The major form of damage is destruction of blossom buds and immature pods.** Both adult and larval feeding causes bud drop. Adult feeding punctures appear as dark specks on the fruit, and are not very damaging. Sometimes the fruit is deformed.

**Larval feeding within the mature pod is another important form of damage, causing the interior to become brown, moldy and hence unmarketable.** The stem of pods infested by larvae turn yellow, and the pod turns yellow or red prematurely. Fruit drop is common, and is perhaps the most obvious sign of infestation.

**Scouting efforts should concentrate on a search for adults in leaf whorls, flowers and fruit during morning hours.** Commercially available pheromone traps may also aid in early detection. Fruit and flower buds should be examined for damage and fallen fruit and buds examined for presence of larvae.

**Infested fruits can be recognized before they fall by the yellow calyx and the presence of oviposition punctures that look like small dimples.** Hot peppers like Jalapeno and Serrano's are often the first peppers to be affected. Fruit and flower buds should be examined for damage and fallen fruit and buds examined for presence of larvae. If possible, all damaged and fallen fruit should be removed and destroyed.

**Chemical control is difficult because all stages but the adult are protected within the fruit, so that only the adult weevil is vulnerable to insecticides.** Frequent sprays may be necessary starting in the initial stages of infestation in order to avoid unacceptable levels of damage.

**Spraying needs to commence at the first sign of weevils or with flowering in fields with a history of problems.** Vydate has been the standard control and has given pretty good results when sprayed weekly in trials at the Southwest Florida Research and Education Center. A total of 24 pts can be applied for the season.

**Some growers have indicated disappointing results in obtaining satisfactory control with Vydate in the field.** Some growers have terminated older plantings where weevils had become unmanageable. Other products that have performed well in trials include Capture (bifenthrin), Kryocide (cryolite) and Actara (thiomethoxam).

## **Thrips**

**Thrips activity is beginning to pick up in a number of locations.** Populations will most likely spike as the citrus bloom comes to an end over the next few weeks.

**Around Homestead, melon thrips numbers are high on bean, cucumber, eggplants.** Dr Dak Seal, Entomologist at UF/IFAS TREC reports that Spintor at 8.0 oz/acre in combination with Hero (10 oz) and Trilogy provided best result in TREC field studies.

**In the Manatee/Ruskin area, thrips activity is also picking up in many places.** In some locations, chili thrips are present and causing problems.

**Scouts indicate that thrips are high in areas of pepper and eggplant in Palm Beach area.** Dr. David Sui, vegetable Extension agent in Palm Beach reports that western flower thrips are present at low levels (0 - 0.4 adult per flower) in peppers in the Ag Reserve area. He notes, however, that the percentage of WFT is high in the population. Growers are advised to monitor WFT population level against UF/IFAS economic threshold, which is 6 adult WFT per flower, and 2 larvae per young fruit. .

**In the EAA, thrips numbers are picking up and causing damage to several crops, including snap beans.** Dr. Gregg Nuessly notes that this is a little early for thrips damage in the EAA compared to other seasons. He reminds growers to keep an eye out for thrips on tender leaves, blooms, fruit and pods. While spinetoram remains a very effective insecticide for controlling thrips, other insecticides like Requiem and Movento also work well and growers should be rotating among insecticides with different modes of action (MOA) to reduce the chances for development of resistance to the most effective compounds.

**Bean growers should also a close eye on thrips populations, because in addition to causing feeding scars and egg-laying blemishes on pods, they transmit bean red node.** Symptoms appear at the branches of flowers stalks and vegetative growth, but also on pods.

### Worms

**Around SW Florida worm populations remain fairly low but are being to increase and scouts report finding new eggs and hatches of southern and beet armyworms, loopers, melonworms and pickleworms.** Spraying targeted at whitefly suppression is keeping numbers down in many fields.

**Respondents in the Glades are starting to see a slow but steady increase of both fall and beet armyworm in sweet corn. Lep pests are also on the increase in lettuce.**

**Around Palm Beach County, reports indicate that worm pressure is mostly low except in tomatoes that are not being sprayed regularly.** Melonworm and pickleworm are still causing problems in squash in some areas.

**Grower and scouts in Homestead report that beet armyworm numbers remain low in pepper and tomato but not that melonworm and pickleworm are increasing in cucurbits.** Fall armyworm pressure remains high in corn and diamondback moth populations are medium to high in cabbage. Growers are using a program of Bt's, Coragen, Avaunt, Synapse and Radiant to control this and other lepidopteran pests.

### Yellowmargined leaf beetle

**Reports from growers and scouts working in the Glades area indicate that yellowmargined leaf beetle showed up about two weeks ago in the EAA.**

**The adult beetle is about 5 mm long and predominately dark brown, bronze or black.** The margins of the elytra or hardened forewings characteristic of beetles are marked with a margin of yellow or brown, a characteristic which gave this species its common name. Each elytra also has four rows of deep punctures.

**The normal hosts for this species are all in the plant family Cruciferae.** Vegetable crops that are damaged include broccoli, cabbage, cauliflower, collards, mustard, radish, turnip, and watercress.

**The yellowmargined leaf beetle is not a major problem for conventional growers, as it usually is controlled by foliar insecticides used against other insect pests.** It can be a bigger problem for organic growers who cannot use these chemical insecticides. Consult UF/IFAS recommendations for currently labeled insecticides for yellowmargined leaf beetle control in Florida crucifers.

### Aphids

**In the Belle Glade area, aphids remain a constant battle in lettuce and leafy greens.** Aphid numbers are still very high and steady in the EAA. Scouts report that they are common in Chinese cabbage, lettuce, cabbage, and spinach where you don't have to look very hard to find them.

**Growers and scouts in SW Florida report that aphids are increasing in a variety of crops.**

**Around Palm Beach County, aphids are active in a variety of crops including oriental brassicas, as well as cucumbers, peppers and squash.**

**Respondents in Homestead report that green peach aphid numbers remain mostly low.**

### **Corn silk Fly**

**Growers and scouts report that silk flies remain active in Homestead and the Glades in areas close to the Lake.**

### **Spidermites**

**Low levels of two-spotted mites and red spider mites are present on eggplant and some older squash in the Immokalee area.**

**Growers and scouts in the Glades report that mites were building and causing low damage in beans, corn, and celery until recent rains.**

### **Stinkbugs**

**Scattered problems with stinkbugs and leaf-footed bugs continue to be reported on a number of crops and locations across South Florida.**

## **Diseases**

**Foggy weather and heavy dews have helped keep diseases active.**

### **Late Blight**

**Late blight is now widely present at mostly low around Immokalee in a number of potato and tomato fields.** Reports indicate that infections are increasing and that in a few isolated cases the disease has taken off and reached higher levels.

**In the Manatee Ruskin area mostly low levels of late blight are present on tomato and scouts report finding new infections on young tomatoes in several places.**

**Growers would be well advised to scout susceptible crops carefully as the weather of the past few days (foggy mornings with cool nights and warm days) have been conducive to disease development.**

**The disease thrives under cool wet conditions.** Temperatures between 50 and 80 F combined with moist conditions such as rain, fog, heavy dews, or relative humidity above 90 percent are conducive for disease development. Night temperatures in the mid-fifties with daytime temperatures from the mid-fifties to mid-seventies are ideal for this disease.

**Since the disease can spread so rapidly, growers should scout their fields thoroughly each day, especially when cool and wet conditions conducive to disease development prevails.**

**Late blight symptoms on leaves appear as irregularly shaped brown to purplish lesions with indefinite border lesions that can span veins.** The lesions may be seen any time of day, on any stage of plant growth and



on leaves of any age. Velvety, white fungal growth may appear on the lower surface of affected leaflets early in the morning before leaves dry and/or in the lower canopy.

**On stems, purplish lesions may be found anywhere on the stem.** Cottony, white growth of fungus on stems with lesions can often be seen early in the morning and/or in the lower canopy. Stems with lesions are brittle and break easily. Lesions are confined to epidermis and cortex. Leaf rolling and wilting is often associated with stem lesions and purpling of leaflets may occur in some varieties.

**Begin a spray program with fungicides if late blight is in your area or weather conditions are suitable for late blight development.** At harvest, kill infected foliage to minimize tuber infection.

**Tomato growers should purchase disease-free transplants.** Observe your fields thoroughly each day, especially when cool and wet weather prevails.

**Currently, fungicides are the most effective means of controlling late blight and will remain the primary tool until cultivars with resistance to this disease become available.** Fungicides slow the rate at which the disease develops in the field by creating a protective barrier on the foliage.

**Just applying a chemical, however, does not necessarily equate with effective disease control.** Relative effectiveness of a product, coverage, and timing must be factored into the equation for maximum benefit.

**Numerous fungicide products are registered for late blight control.** Protectants, as the name implies, protect foliage from infection by spores. Protectant chemicals must be well distributed over the leaf surface and must be applied before spores land on leaves. They are ineffective against established infections.

**Systemic products become distributed locally within plant tissues and protect foliage from infection by spores.** They may kill some established infections and may suppress production of new spores. Even a short break in spray schedules, despite what is said regarding some of the newer fungicides, can result in a dramatic increase in blight when conditions are conducive to disease development.

**Consult current UF/IFAS recommendations for labeled fungicides for the control of late blight.**

### **Tomato Yellow Leaf Curl Virus**

**Around Immokalee, TYLCV is widely present in most tomato fields and continues to spread.** Growers are battling whiteflies in an attempt to holding it down but are still seeing new infections.

**Many fields now range from about 25% to 50% infections to some extreme cases where incidence is nearly 100% at first tie.** Despite the high rate of infection in some fields, a number of growers indicate that whiteflies have been relatively low.

**In the Manatee/Ruskin area, TYLCV is starting to increase in tomatoes.** This is in spite of some relatively low adult numbers around Manatee. In some instances, virus appears to have arrived on transplants.

**TYLCV incidence is on the increase in Homestead where an increasing number of infections are showing up in tomato.**

**In Palm Beach respondents indicate that TYLCV remains mostly low with a few plants showing up here and there.**

## Lettuce Downy Mildew

Growers in the EAA are continuing to battle lettuce downy mildew which showed up about 3 weeks ago.

Dr. Rick Raid, Pathologist at UF/IFAS EREC advises everyone growing lettuce to be on a PREVENTATIVE program. The phosphites are good tools but should be used in a program with maneb and other compounds that are more efficacious against downy mildew.

The list of fungicides currently labeled for lettuce downy mildew control includes maneb, fosetyl-Al, metalaxyl, and several copper compounds along with several newer compounds such as Presidio, Previcur Flex, Forum, Curzate, Reason, Revus, and Tanos, that have been added to growers control options. Consult current UF/IFAS recommendations for labeled fungicides for the control of lettuce downy mildew.

Resistance in *B. lactucae* to the fungicide metalaxyl was reported in Florida during 1989, and therefore its efficacy may be somewhat reduced. Due to downy mildew demonstrated ability to develop resistance, growers are advised to rotate chemistries to avoid problems - FRAC numbers on labels will help avoid using similar active ingredients repeatedly.

## Downy mildew

Reports indicate that downy mildew is present on cantaloupes in Plant City area.

## Basil Downy Mildew

Basil downy mildew has been very severe around South Florida given the warm, moist conditions of the last couple of weeks. Dr. Richard Raid, Plant Pathologist at UF/IFAS EREC recommends a preventative program using a good phosphite fungicide, alternated or tank-mixed with azoxystrobin.

Under favorable conditions for disease development, sprays must be at least weekly, perhaps even more frequently. Since there is abundant inoculum all over south Florida, growers should not wait until the disease shows up.

## Groundnut Ringspot Virus

A few GRSV infected tomato plants continue to be reported from fields around Homestead, Palm Beach and SW Florida.

Groundnut Ringspot Virus in Florida was recently published and can be found on-line at <http://edis.ifas.ufl.edu/pp282>

## Powdery Mildew

Around southwest Florida, powdery mildew is widely present in squash with incidence and severity dependent on location and crop age. Powdery mildew is also present at low levels in some mature pepper and tomatoes and so far is very low being found in a only few watermelon fields.

Powdery mildew is primarily associated with greenhouse-grown tomatoes in Florida. The disease occurs occasionally on tomatoes grown in commercial fields although in recent years, infections on field grown plants seem to becoming more common.

**Symptoms of the disease occur only on the foliage.** Symptoms initially appear as light green to yellow blotches or spots that range from 1/8 - 1/2 inches in diameter on the upper surface of the leaf.

**These spots eventually turn brown as the leaf tissue dies.** Eventually, the entire leaf will turn brown and shrivel, but remains attached to the stem. The white, powdery growth of fungal mycelium is typically present on the lower surfaces of affected leaves.

**In Palm Beach County, powdery mildew is severe on squashes, melons, tomatoes, and watercress in some locations.** Growers and scouts also report finding some powdery mildew in pepper.

**Respondents in Homestead report that powdery mildew is severe in squash and causing some problems in beans.**

**In the Glades, low levels of powdery mildew are present on beans.**

**Powdery mildew remains active on strawberries in Hillsborough County.**

### **Bacterial Spot**

**Around Immokalee, bacterial spot activity has increased on tomato in some areas.**

**In Homestead respondents indicate that bacterial leaf spot is mostly low in tomato.**

**Around Palm Beach, bacterial spot is present in some pepper and tomato at mostly low levels.**

### **Target Spot**

**Around Immokalee, reports indicate that target spot is still active inside the bush on older tomatoes in many places.**

**Reports from Palm Beach and Homestead indicate that target spot is present in both areas. Incidence and severity is low to moderate.**

### **Early Blight**

**Growers and scouts in Immokalee report finding early blight on tomato coming in behind cold damage in many cases.** Products listed for target spot should provide good control. Due to increasing evidence of resistant strains of *Alternaria* to the strobilurin fungicides, Dr Gary Vallad recommends that growers limit their use in tomatoes and be sure to rotate fungicides and follow good resistance management practices

### **Southern Corn Rust**

**Southern corn rust is present at low levels in the Glades, otherwise corn diseases remain mostly low.**

**Scouts have also reported the occurrence of rust on corn in Homestead.**

### **Fusarium**

**Growers and scouts around south Florida are beginning to report finding some fusarium crown rot dropping a few nearly mature tomato plants along with a few peppers in places.** Incidence is low and occurrence is patchy.

**Fusarium is taking out some watermelons in a couple of fields around Desoto and Hendry Counties.**

### **Phytophthora**

**Respondents in Palm Beach County report that Phytophthora has become worse in the past few weeks with many pepper fields displaying long stretches of wilted plants.** In the Boynton Beach area peppers started about 5 weeks ago with 30-50% of pepper plants wilting or dead, and Delray Beach area started 2 weeks ago with moderate level of wilting and progressively getting worse.

### **Sclerotinia**

**Sclerotinia is causing scattered problems in tomato and pepper around southwest Florida.**

### **Botrytis**

**Growers and scouts are reporting some problems with botrytis on tomatoes around Immokalee.**

**In the Plant City area, reports indicate that strawberry producers are battling some of the worst levels of botrytis seen in many years.**

### **Gummy stem blight**

**Gummy stem blight is present at mostly low levels on watermelons in several locations around south Florida.**

**Growers and scouts are also reporting some problems on cucumbers in Palm Beach County.**

### **Pythium**

**Pythium is causing some stand loss in watermelons where it is coming in on plants which were suffered wind damage and twisted stems early in the season.**

### **Gray Wall**

**Growers and scouts in several locations are reporting problems with gray wall in tomato.**

**Symptoms are first observed as flattened, blotchy, brownish- gray areas that develop on green fruit.** As the fruit mature, these blotchy areas remain gray or turn yellow while the rest of the fruit turns red resulting in uneven ripening. Internally, there may be some browning of the vascular tissue.

**While the disorder is not well understood, certain conditions seem to favor its' development.** These conditions include: plants that are growing rapidly, high nitrogen, low potassium, high soil moisture, high humidity, temperature fluctuations, low light intensity, low temperatures and soil compaction.

## **News You Can Use**

**East Coast Drought Conditions improved while West Coast Drought Conditions have become worse**

A couple of cold fronts moved into South Florida during the first half of February that brought rainfall to South Florida. Most of the rainfall occurred over the east coast metro areas with rainfall between 2 to 4 inches with the

remainder of south Florida seeing between one quarter to around one inch of rain. A few isolated areas along the east coast metro areas received 5 to 7 inches of rain.

This has allowed for moderate drought conditions to improve to abnormally dry conditions over the east coast metro areas.

However, moderate drought conditions remain over the interior of south Florida which has expanded into metro Collier county. Severe drought conditions were also introduced into western Glades County.

Hydrological impacts...

The wells across the east coast metro areas have improved to the highest 10 to 30 percent of normal levels. The wells over the interior areas were running around normal levels. The wells over Glades, Hendry and metro Collier counties were running at the lowest 10 to 30 percent of normal levels. The only exception to this was the wells in western Hendry County where the wells were running at the lowest 10 percent of normal levels. The underground water reservoirs in Palm Beach County were running around 16.3 feet which is 0.4 feet above normal. In Broward County, these reservoirs were running around 11.8 feet which is 0.4 feet above normal. In Miami Dade County...the underground water reservoirs were running around 10 feet which is 0.4 feet above normal.

The level of Lake Okeechobee was around 13.13 feet as of February 16, which was about 1.44 feet below the normal level of 14.57 feet.

### **Bill Gates, a voice of reason for modern agriculture**

Where are the voices of reason, those who would speak out for modern agriculture? Recent news would lead you to believe that the activists are gaining ground and that we must cast aside our use of modern technology for the more compassionate, politically correct farming methods that were common in the days before electricity reached into rural America.

We need voices of reason and spokesmen and women for agriculture whose voices are capable of being heard over the steady drumbeat of those who seek to take agriculture back to the hunter-gatherer days.

One of those voices belongs to Bill Gates. Yes, the Microsoft founder is an advocate for agriculture, championing the use of technology and modern agriculture to alleviate hunger throughout the world. At a speech to the UN rural poverty agency (IFAD) in Rome, this week, Gates called for a “digital revolution” to combat hunger by increasing agricultural productivity through satellites and genetically-engineered seed varieties.

“We have to think hard about how to start taking advantage of the digital revolution that is driving innovation including in farming,” Gates said. “If you care about the poorest, you care about agriculture. We believe that it’s possible for small farmers to double and in some cases even triple their yields in the next 20 years while preserving the land.”

Gates’ foundation has committed \$2 billion for farmers over the years, and in Rome he announced \$200 million in new grants to finance research on a new type of drought-resistant maize, a vaccine to help livestock farmers and a project for training farmers.

“Investments in agriculture are the best weapons against hunger and poverty,” he said.

Gates defended the use of genetically modified organisms (GMOs) in the developing world and large-scale farm land investments by foreign states in the developing world – both seen as highly controversial by many.

“You should go out and talk to people growing rice and (ask) do they mind that it was created in a laboratory when their child has enough to eat?” Gates said. “The change in the way mankind lives over the last several hundred years is based on adoption of innovative practices and we simply haven’t done enough for those in the greatest need to bring these things (into use).”

Now that’s a voice worth championing to all those who would denounce modern agriculture.

### **FFA Creed**

I believe in the future of agriculture with a faith born not of words but of deeds--achievements won by the present and past generations of agriculturists; in the promise of better days through better ways, even as the better things we now enjoy have come to us from the struggles of former years.

I believe that to live and work on a good farm, or to be engaged in other agricultural pursuits, is pleasant as well as challenging; for I know the joys and discomforts of agricultural life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny.

I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and in the ability of progressive agriculturists to serve our own and public interest in producing and marketing the product of our toil.

I believe in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so--for others as well as myself; in less need for charity and more of it when needed; in being happy myself and playing square with those whose happiness depends on me.

I believe that American agriculture can and will hold true to the best traditions of our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task.

Written by E. M. Tiffany

These are inspirational words for all of us in agriculture. - GM

### **EPA Approves New Fumigant Labels**

The EPA approved nearly all soil fumigant product labels incorporating the second phase of mitigation measures required by the 2009 Reregistration Eligibility Decisions (REDs) for the soil fumigants methyl bromide, chloropicrin, metam sodium/metam potassium, and dazomet. New risk reduction measures include buffer zones and related measures that will help protect workers and bystanders from exposure to potentially harmful airborne concentrations of these pesticides.

Measures added to labels in the first phase of implementation included Fumigant Management Plans (FMPs), good agricultural practice requirements, and new worker protection measures among other things. Phase 1 labels were approved in 2010.

Existing stocks of products bearing Phase 1 labels may be sold and distributed by registrants until December 1, 2012.

After that date, only products bearing the newly approved labels may be sold or distributed by registrants. Distributors and retailers who are not registrants may sell and distribute products until their supplies are exhausted. Likewise, growers and applicators may apply products bearing old labels until those supplies have been exhausted. (EPA OPP Update, 1/13/12).

## Up Coming Meetings

### **March 6 and 7, 2012      Greenhouse Tomato Short Course**

Eagle Ridge Conference Center  
1500 Raymond Lake Road  
Raymond, Mississippi

### **November 4-6, 2012      21st International Pepper Conference**

Naples Grande  
Naples, Florida

For more information, go to <http://www.conference.ifas.ufl.edu/pepper2012/>

## Opportunities

### **Farm Land for Lease**

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

Farm Land for lease on Babcock Ranch, Hwy 31, Charlotte County. Rotational fields or permanent locations, phone 941-639-3958

## Websites

**Ag MRC – Agricultural Marketing Resource Center** – linking production with marketing channels – go to [www.agmrc.org](http://www.agmrc.org)

**Olives in Florida??** – presentations from a UF/IFAS CREC workshop on olive culture, cultivar selection, and marketing for Florida conditions. Here is a link to the presentations made at the workshop. - <http://www.crec.ifas.ufl.edu/extension/olives/>

**Open Source Ecology** - The Global Village Construction Set (GVCS) is a modular, DIY, low-cost, high-performance platform that allows for the easy fabrication of the 50 different Industrial Machines. Check it out at [www.opensourceecology.org](http://www.opensourceecology.org)

**SW Florida Vegetable Grower Facebook Page** providing up-to-date news for vegetable growers and industry reps on the go! Become a friend - <http://www.facebook.com/?ref=home#!/pages/SW-Florida-Vegetable-Grower/149291468443385>

## Quotable Quotes

If we knew what it was we were doing, it would not be called research, would it? - Albert Einstein

An injured friend is the bitterest of foes. - Thomas Jefferson

A man who has never gone to school may steal from a freight car; but if he has a university education, he may steal the whole railroad. - Theodore Roosevelt

Don't hit at all if it is honorably possible to avoid hitting; but never hit soft. - Theodore Roosevelt

The government is us; we are the government, you and I. - Theodore Roosevelt

Old age is like everything else. To make a success of it, you've got to start young. - Theodore Roosevelt

A man who carries a cat by the tail learns something he can learn in no other way. - Mark Twain

## **On the Lighter Side**

### **How would it be?**

"How would it be, if just for today, we thought less about contests and rivalries, profits and politics, winners and sinners ...?"

And more about helping and giving, mending and blending, reaching out, and pitching in?

How would it be?

### **Taxes**

Tax his land, tax his bed,  
Tax the table, at which he's fed.

Tax his tractor, tax his mule,  
Teach him taxes are the rule.

Tax his work, tax his pay,  
He works for peanuts anyway!

Tax his cow, tax his goat,  
Tax his pants, tax his coat.

Tax his ties, tax his shirt,  
Tax his work, tax his dirt.

Tax his tobacco, tax his drink,  
Tax him if he tries to think.

Tax his cigars, tax his beers,  
If he cries tax his tears.

Tax his car, tax his gas,  
Find other ways to tax his ass.

Tax all he has then let him know  
That you won't be done till he has no dough.

When he screams and hollers; then tax him some more,  
Tax him till he's good and sore.

Then tax his coffin, tax his grave,  
Tax the sod in which he's laid...



Put these words upon his tomb,  
'Taxes drove me to my doom...'

When he's gone, do not relax,  
It's time to apply the inheritance tax.

## **Heaven or Hell**

While walking down the street one day a Corrupt Senator was tragically hit by a car and died. His soul arrives in heaven and is met by St. Peter at the entrance.

Welcome to heaven," says St. Peter. "Before you settle in, it seems there is a problem. We seldom see a high official around these parts, you see, so we're not sure what to do with you."

"No problem, just let me in," says the Senator.

"Well, I'd like to, but I have orders from the higher ups. What we'll do is have you spend one day in hell and one in heaven. Then you can choose where to spend eternity."

"Really? I've made up my mind. I want to be in heaven," says the Senator.

"I'm sorry, but we have our rules."

And with that, St. Peter escorts him to the elevator and he goes down, down, down to hell.

The doors open and he finds himself in the middle of a green golf course.

In the distance is a clubhouse and standing in front of it are all his friends and other politicians who had worked with him. Everyone is very happy and in evening dress. They run to greet him, shake his hand, and reminisce about the good times they had while getting rich at the expense of the people. They played a friendly game of golf and then dine on lobster, caviar and the finest champagne. Also present is the devil, who really is a very friendly guy who is having a good time dancing and telling jokes. They are all having such a good time that before the Senator realizes it, it is time to go. Everyone gives him a hearty farewell and waves while the elevator rises.

The elevator goes up, up, up and the door reopens in heaven where St. Peter is waiting for him. Now it's time to visit heaven, so, the Senator joins a group of contented souls moving from cloud to cloud, playing the harp and singing. They have a good time and, before he realizes it, the 24 hours have gone by and St. Peter returns.

"Well, then, you've spent a day in hell and another in heaven. Now choose your eternity."

The Senator reflects for a minute, then he answers: "Well, I would never have said it before, I mean heaven has been delightful, but I think I would be better off in hell."

So, St. Peter escorts him to the elevator and he goes down, down, down to hell...

Now the doors of the elevator open and he's in the middle of a barren land covered with waste and garbage. He sees all his friends, dressed in rags, picking up the trash and putting it in black bags as more trash falls to the ground.

The devil comes over to him and puts his arm around his shoulders.

"I don't understand," stammers the Senator. "Yesterday I was here and there was a golf course and clubhouse, and we ate lobster and caviar, drank champagne, and danced and had a great time. Now there's just a wasteland full of garbage and my friends look miserable. What happened?"

The devil smiles at him and says, "Yesterday we were campaigning. Today you voted..."

Vote wisely this November.

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

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