

Hendry County Extension PO Box 68 LaBelle, Florida 33975-0068 Phone (863) 674-4092

SOUTH FLORIDA

VEGETABLE PEST AND DISEASE

#### HOTLINE

# April 3, 2011

**The past week bought unsettled weather with high winds and widespread rain to south Florida with most areas reporting any where from just over an inch on the lower east coast to over 5 inches around Balm.** Most inland areas reported 2-3 inches of precipitation.

**Daytime highs have been in the mostly mid to upper 80’s with a number of days reaching into the low 90’s in many interior locations, nighttime lows have ranged between the 50’s, and 60’s.**

**Hot windy weather the past few weeks has dropped water levels in ditches and battered plants and scarred fruit.** Severe weather in Central Florida this past week dropped significant rain and was accompanied by high winds which tore up some plantings.

###### FAWN Weather Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Air Temp °F** | | **Rainfall** | **Ave Relative Humidity** | **ET (Inches/Day)** |
|  | **Min** | **Max** | **(Inches)** | **(Percent)** | **(Average)** |
| Balm |  |  |  |  |  |
| 3/14 – 4/1/11 | 45.95 | 88.66 | 5.33 | 76 | 0.12 |
| **Belle Glade** |  |  |  |  |  |
| 3/14 – 4/1/11 | 49.96 | 91.67 | 2.39 | 78 | 0.14 |
| **Clewiston** |  |  |  |  |  |
| 3/14 – 4/1/11 | 49.82 | 92.25 | 2.71 | 77 | 0.14 |
| **Ft Lauderdale** |  |  |  |  |  |
| 3/14 – 4/1/11 | 54.18 | 91.31 | 2.31 | 73 | 0.15 |
| **Fort Pierce** |  |  |  |  |  |
| 3/14 – 4/1/11 | 48.34 | 92.03 | 2.17 | 76 | 0.13 |
| **Homestead** |  |  |  |  |  |
| 3/14 – 4/1/11 | 48.56 | 89.37 | 1.27 | 78 | 0.15 |
| **Immokalee** |  |  |  |  |  |
| 3/14 – 4/1/11 | 45.12 | 93 | 1.76 | 76 | 0.14 |

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**On Monday March 28, South Florida experienced its second Big Rain Day of the year.** A Big Rain Day (BRD) is any day in which south Florida (as an aggregated whole) averages one inch or more of rain. One inch of rain isn’t all that unusual for any single gauge, but as a regional average it’s a pretty rare event. O n average over the past 20 years, South Florida averages around six BRDs per year.  
  
**June and September typically have the highest monthly occurrence of BRDs, but forty percent of them fall during the dry season (Nov-Apr).** Fay totaled 5.7 inches over a single day but it’s Mitch with 5.3 inches in November 1998 that wins the one day prize.

**BRDs appear to have a good chance of occurring any time of year, both during the wet season and the dry season.** Despite getting 3/4ths of our rain during the summer wet season, those showers are often localized in nature. In comparison, a winter cold front can spread water across all the basins in one fell swoop.

**Vegetable volumes and quality are increasing weekly.** Snap beans, broccoli, cabbage, celery, sweet corn, eggplant, endive, escarole, lettuce bell peppers, radishes, squash, tomatoes, and strawberries and specialty vegetables are moving to market. Prices have been strong on most items. Cantaloupe has started around Immokalee.

**The short-term forecast from the National Weather Service in Miami indicates that surface high pressure will gradually move from the Florida peninsula into the western Atlantic today and tonight, resulting in mainly dry and pleasant weather.** Temperatures will again be above seasonal norms with afternoon max readings mainly in the mid and upper 80s inland. The pressure gradient will tighten with breezy conditions expected late this morning and afternoon as another area of high pressure forms off the northeast states.

**A cold front will reach the southeast states by late Monday afternoon or evening with low level flow becoming south to southeasterly across the local area bringing increased moisture and winds will once again increase Monday afternoon and evening as the pressure gradient tightens in advance of the front.**

**Chance of precipitation on Tuesday will range from 40 percent more northern parts of South Florida to 20 percent in more southerly counties.** A few lingering showers and thunderstorms are possible Tuesday evening. The remainder of the week should be dry with highs near 90.

**For additional information, visit the National Weather Service in Miami website at**  [http://www.srh.noaa.gov/mfl/newpage/index.html](http://www.srh.noaa.gov.mia)

## Insects

**Thrips**

**Reports from Homestead indicate that melon thrips are in increasing in beans, squash, cucumber, eggplants and pepper. Growers should c**heck flowers in pepper and older leaves in other vegetable crops for adults and larvae. It helps to turn the under-surface of the leaf at 45o angle towards light to observe glittering feeding damage.

**Flower thrips are present in mainly low numbers but growers should be concerned with flower thrips due to the significant threat of virus transmission.** Check both leaves and flowers using hand held lens (10X) to find thrips. Bring infested leaves and flowers to your extension agent or local REC to confirm the species.

**Dr Dak Seal, Entomologist at UF/IFAS TREC advises growers to use insecticides in rotation and use a non-ionic surfactant with insecticide.** Materials including Radiant, Lannate, Vydate, Agrimek, Provado, Trilogy, and Requiem should provide control. If the minute pirate bug population is high, growers should consider not spraying or leave some area in the field without spray to facilitate their population increase and avoid the use of harsh chemicals.

**Dr Gregg Nuessly, Entomologist at EREC reports thrips are causing damage to leafy vegetables and leafy Brassica vegetables in the EAA and in the east coast areas.**  Thrips counts spiked a couple of weeks ago in the east coast peppers, with western flower thrips populations increasing greatly from previous weeks’ counts.  These are likely coming out of declining weeds on canal banks and roadways, and even more from citrus orchards finishing their flowering cycles.

**He reminds growers to keep on eye out for thrips on tender leaves, blooms, fruit and pods.**  While spinetoram remains a very effective insecticide for controlling thrips, other insecticides 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 best 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.

**David Sui, Vegetable Extension Agent in Palm Beach reports that adult western flower thrips in the bell pepper fields in Boca and Delray have increased substantially, beyond UF/IFAS economic threshold, which is 6 adult WFT per flower, and 2 larvae per young fruit.** Scouts report that thrips are also present in tomato and eggplant and are especially heavy in cucurbits.

**Around Southwest Florida, thrips are increasing, dramatically in some locations but populations remains mostly Florida flower thrips (*Frankliniella bispinosa*)**. Some growers are spraying for thrips and scattered incidence of GRSV has been noted in tomato.

**Reports from the Manatee/Ruskin area indicate that thrips are increasing and are the big issue on a variety of crops around Central Florida.**

**UF/IFAS recommendations encourage growers to use multiple approaches in a comprehensive thrips IPM program, such as planting Columbian sunflowers along the ditch banks for Orius refugia and windbreaks, and releasing biocontrol agents like predacious mites.** These strategies complement other insecticide programs. Most important of all, do NOT exceed the time and quantity limits of the label. DO rotate the mode-of-action group if using insecticides.

**Thrips Management Recommendations for Pepper and Eggplant from http://edis.ifas.ufl.edu/IN401**

1. In scouting program, distinguish between adult and larval thrips and identify adult thrips to species
2. Economic thresholds: about 6 western flower thrips per flower and about 2 thrips larvae per fruit
3. Do not treat for Florida flower thrips and eastern flower thrips as they outcompete western flower thrips
4. When peppers are flowering, use insecticides for thrips and other pests that conserve minute pirate bugs
5. Never use insecticides that induce western flower thrips
6. Use ultraviolet-reflective mulch
7. Sunflower and other refugia provide a source for minute pirate bugs
8. Vertically integrate management of thrips and other pests including pepper weevil and lepidoptera
9. Follow BMP’s for fertility and water management

**Insecticides That Conserve Minute Pirate Bugs from http://edis.ifas.ufl.edu/IN401**

* + Spinosyns Thrips And Other
  + Pyridadyl Thrips And Other Pests
  + Requiem Thrips, Aphids, Whiteflies
  + Flonicamid Thrips, Aphids, Plant Bugs
  + Spirotetramat Thrips, Aphids, Whiteflies
  + Cyazypyr Thrips, Aphids, Whiteflies, And Other Pests
  + M-Pede Thrips, Aphids, Whiteflies, Spidermites
  + Methoxyfenoxide Lepidoptera
  + Indoxacarb Lepidoptera
  + Bt’s Lepidoptera, Coleoptera
  + Ecotrol Thrips And Other Pests
  + Azadirachtin Various Taxa
  + Cyromazine Dipteran Leafminers
  + Fenbutatin Mites
  + Pymetrazine Whiteflies, Aphids

**Dr. Gregg Nuessly, entomologist at UF/IFAS-Belle Glade, also advised that Assail is another soft product that conserves Orius.**

**In addition to soft chemicals, if your pepper field is nearing final harvest, Mustang and Lannate are also options for knock-out.** However, these knock-out chemicals are not recommended options if the pepper is not approaching termination as using Lannate and Mustang will likely take out other natural enemies that help control worms and leafminer flies.

**Whiteflies**

**Around SW Florida, whiteflies are also increasing across the area but pressure still varies widely between locations.** Scouts report that nymphs are building up in some older tomato fields, adults are also increasing in squash and other cucurbits in places.

**Growers and scout report movement of whitefly and thrips from tomato fields that were severely damaged by the freezes and abandoned and not properly cleaned up.** Both pests are building in resprouts and moving to adjacent fields often carrying virus.

**In addition, in response to strong market prices many of the older fields around that were slated for destruction are now being brought back into production.** Growers are wise to consider the risk of leaving old crops set around unsprayed.

**Growers and scouts in Homestead whiteflies are increasing in all crops including squash, beans, eggplant and tomato**. Dak Seal advises growers that on tomato if they shake 10 plants at a distance of 6-8 steps from each other, they should be prepared to spray if they see 3-5 whitefly adults especially given the importance of whitefly transmitted virus. Recommended insecticides include: the neonicotinoids, diamides, Movento, Durivo and Oberon in rotation.

**Reports from Manatee/ Ruskin area indicate that whiteflies remain mostly low however in Manatee; however, significant TYLCV is showing up in tomato despite very low numbers indicating that the whiteflies are viruliferous.**

**Some growers have reported some phytotoxicity following the use of Requiem on watermelons for thrips and/or whiteflies.** Note that according to the label for cucurbits: Use of REQUIEM in tank mixes with some products including, but not limited to, those containing strobilurins or chlorothalonil may result in phytotoxicity. Do not apply products containing chlorothalonil within 4 days after application of REQUIEM. Do not apply REQUIEM for 30 days following an application of chlorothalonil.

**Aphids**

**Respondents in the Homestead area report that aphids are increasing a wide variety of crops including beans, eggplant, peppers, squash, and tomatoes.**

**Growers and scouts in the Glades report that aphid numbers are declining in leafy greens but are increasing in green beans.**

**Around Palm Beach County, aphids are active and flights have been noted in peppers, tomatoes, Chinese vegetables, and others crops with pressure varying from low to medium depending on the crop and location.**

**Around Southwest Florida, winged aphids are still moving around and occasionally becoming established in some locations.** In squash, virus transmission is a concern and some fields have reached up to 30% mosaic virus.

**In the Manatee/Ruskin area, respondents report that aphid numbers are on the rise.**

**Leafminers**

**Reports from the Glades indicate that Dipterous leafminers have spiked in crops including lettuce and some leafy Brassicas (e.g., Chinese mustard greens) during the last couple of weeks.**  Dr Gregg Nuessly notes that care should be used in selecting insecticides for controlling these flies due to long term stable resistance to insecticides.

**Respondents indicate that leaf miners are increasing around Palm Beach County, especially in eggplant, peppers and tomato.**

**Leafminers are mostly low around the Manatee Ruskin area but growers and scouts have reported stippling on tomatoes and melons.** Numbers have reached threshold levels in a number of areas and growers are treating as necessary.

**Around Homestead, leafminers are moving from non-vegetable hosts (nursery) to vegetable hosts but remain mostly low.** Dak Seal reports that naturally occurring wasp parasitoids of leafminers are abundant in all fields and reminds growers that non-judicial use of insecticides may disrupt naturally occurring beneficial insects.

**Around Southwest Florida, leafminers pressure is variable and numbers have reached thresholds in some fields and growers are treating some tomato and watermelon fields**.  Higher numbers have been reported on tomato in Devil’s Garden. Growers report good results with Coragen, Radiant, Agrimek, and Trigard. Be sure to follow label instructions.

**Spider mites**

**Around Southwest Florida, spider mites are still widely present in number of locations on a variety of crops including eggplant, tomato and cucurbits including watermelon although recent rains seems to have slowed them down temporarily.**

**Respondents from the Manatee/Ruskin area report that mites are increasing in melons.**

**Reports from Palm Beach County indicate that spider mites are present in a variety of crops especially eggplant and grape tomatoes.**

**Growers and scouts around Homestead report that two-spotted mites are distributed in an aggregated pattern in vegetable fields and that numbers have been increasing in recent days.**

**Worms**

**Around Southwest Florida, growers and scouts are reporting a gradual increase in worms with beet armyworms, southern armyworms, loopers, fruitworms and melonworms all present.**  Some diamondback moths are present in crucifers.

**Growers and scouts in the Glades report increased egg-laying by both beet and fall armyworm in corn in recent days.**

**In Palm Beach and the Glades, reports indicate that diamondback moths and striped cabbage worms remain active on Chinese vegetables and other leafy brassicas.** Reports indicate that pressure has been increasing.

**Dr Dak Seal reports that around Homestead, a variety of worm pests, including fall armyworm, beet armyworm and diamondback moth are around and with rising temperatures can increasing rapidly in the absence of proper management.** Growers should check under surface of the host leaves for young larvae and feeding holes.

**Growers should rotate insecticides and should not use any insecticide more than one time.** Good results have been obtained with the following materials: Dipel, Xentari, Radiant, Synapse, Avaunt, Coragen, Voliam Flexi, Voliam Xpress, Rimon, and Proclaim.

***Bacillus thuringiensis* based insecticides (Dipel, Xentari and others) are also excellent in controlling worms at early stage and growers should use Bt’s in their rotation.**

**Corn Silk Fly**

**Reports from Homestead and the Glades indicate that silk flies are increasing in number.** When scouting, look for adults on the east side of the corn field in the morning between 8 -10 AM. At tasseling, check top part of corn plants after 5 pm for adults. Recommended insecticides include: Sevin, Penncap, Thiodan, and pyrethroids in rotation.

**Milkweed assassin bugs and minute pirate bugs are potential predators of corn silk fly.** Growers should keep these naturally occurring beneficials in mind when spraying insecticides.

**Pepper Weevil**

**Growers and scouts in South Florida report that pepper weevils are getting nasty in several locations, especially in older pepper fields and in specialty peppers.** Good results have been reported with Cryolite in combination with Pounce at low volume; rotate with Vydate, Actara, and Belay.

**Reports indicate that pepper weevils are also causing problems in Palm Beach County in pepper and eggplant.**

**Stinkbug**

**Around Southwest Florida, growers continue to report some issues with stinkbugs in several crops including tomato, pepper, cucumber, watermelons and potatoes.** Organic growers in particular are having difficulty in obtaining control and are experiencing significant damage.

**Yellow margin leaf beetle**

**Yellow margin leaf beetle, *Microtheca ochroloma* has been found in Chinese cabbage in the Glades.** Both adults and immatures are present and infested plants have a "shotgun blasted look".

**Diseases**

**Bacterial speck**

**Around Immokalee bacterial speck continue to increase on tomatoes with many fields in the moderate to high range.**

**Foliage symptoms of bacterial speck are much more difficult to distinguish from other diseases.** The leaf spots are small, black lesions surrounded by prominent chlorotic (yellow) haloes. These haloes are quite large, averaging twice the size of the necrotic tissue they surround. Bacterial speck lesions are very superficial and do not crack or become scaly like spot.

**Tentative field diagnosis of bacterial speck is best accomplished by inspection of fruit symptoms**. Speck lesions on green fruit are small, sunken, black spots surrounded by darker green haloes. On ripe fruit, spots are dark brown to black, superficial flecks.

**Lesions in the stems may be dark brown to black and shaped like elongated ovals.**

**Bacterial speck is favored by cool, moist environmental conditions.** The virulent bacteria are spread mechanically and by wind-driven rain. A period of stormy weather; followed by overcast days with cool temperatures increases risk of outbreaks.

**At present few products are registered specifically for bacterial speck.** Pesticides applied for bacterial spot control, should also provide some bacterial speck control. Resistance to copper exists, and therefore copper/manzate may be only partially effective in reducing the impact of susceptible strains. In the current outbreak, there has been little or no visible control on plants treated with copper.

**Dr Jeff Jones advises that Actiguard (Syngenta) may help reduce or prevent infections in uninfected fields.** Recommended rate is 1/3 oz per acre and should be applied weekly. In fields where infections are widespread and severe, it may provide little or no benefit.

**Oxidate may provide some assistance in drying up bacterial speck lesions when used in a rotation.** REI and PHI once sprays dry.

**Omnilytics produces a strain of AgriPhage specifically formulated for speck.**

**Regalia is also labeled for tomatoes and peppers for both Xanthomonas (bacterial spot) and Pseudomonas (bacterial speck) control.** Regalia has a 0 day PHI and a 4 hour REI, is NOP compliant and OMRI approved.

**Growers should also practice good sanitation as movement of people, equipment and harvest aids between infected fields and none infected fields could potentially move infections from field to field.**

**Bacterial leaf spot**

**Growers and scouts around South Florida report that recent rain has kept bacterial leaf spot active on tomato in a number of places where it continues to increase and move higher into the canopy.**

**Bacterial spot on pepper remains low in most fields with many fields still free of symptoms.**

**Respondents in the Homestead area report that bacterial spot remains a problem in tomato and pepper.**

**Around Homestead, Dr Shouan Zhang reports that bacterial diseases remain a major problem in beans.**

**Around SW Florida, bacterial leaf spot caused by Pseudomionas sp. is present on watermelons where it causes a dark greasy angular leafspot especially when observed early in the morning when foliage is still wet.** Lesions become tan and translucent when dry. If incidence and severity warrant control, low rates of copper (1 -1 ½ lb/acre) should provide control, **note** higher rates may cause phytotoxicity. Growers might confuse this for downy mildew or gummy stem blight but chemicals usefully in controlling those diseases will have little effect on this.

**Around the Glades, no bacterial leaf spot has been reported in lettuce yet, but if it is present, it will most likely show over the next week, following the recent rains.**  Copper and maneb remain the standard but are only marginal for control if conditions are very favorable.

**TYLCV**

**Growers and scouts around Southwest Florida report that TYLCV remains low in most places but is running wild in some hotspots with up to 50% infection and a few isolated fields where it has reached 90-100 percent infection rate.**

**Scouts report major problems with viruliferous whiteflies moving out of abandoned fields.** In some cases these are fields that had been badly damaged by the freezes and are now showing some resprouts and whiteflies are moving from these to nearby fields. Growers are reminded to practice sanitation and clean up abandoned fields.

**Around Manatee County, respondent report that** TYLCV a real issue in a number of areas with crops showing anywhere from a 2 to 14% infection rate at first tie.  In hotspots around the Lake Manatee area -some blocks are at 30-40 % infection at first tie.

**Around Dade County, TYLCV incidence is increasing in tomato as whiteflies become more active.**

**Late Blight**

**No additional finds of late blight have been received since the initial report a few weeks ago.**

**Common rust and northern corn leaf blight**

**Dr Rick Raid reports that common rust and northern corn leaf blight are now kicking in to full gear, and with the extended leaf wetness periods observed with recent rains, he predicts disease pressures will be very high over the next few weeks.**  On varieties that are even moderately susceptible to either disease, a solid fungicide management program is recommended.

**Dr Raid advises that a strobilurin is definitely the compound of choice for if rust is the predominant disease and either a triazole or strobilurin are effective against northern corn leaf blight.**  Pre-mixtures of the two classes are excellent choices against both.  It is wise to spray somewhat preventatively if you know a variety is particularly susceptible to disease, keeping disease and inoculum pressures low.  The aforementioned fungicide classes should be alternated with each other, or with a broad spectrum protectant such as mancozeb or chlorothalonil.

**Downy Mildew on Lettuce**

**Growers and scouts in the Glades report that lettuce downy mildew remains in the area, but has largely been controlled by good management.**  Rick Raid advises that growers and scouts must remain vigilant however.

**Alternaria**

**Growers and scouts should be on the lookout for an increase in Alternaria on beans following recent rains, and a bit of prevention may help growers having loads rejected at the packing house.**

**The most serious symptoms of this disease occur on bean pods, since damage to the marketable portion of the plant can render the produce unfit for sale.** Lesions on pods usually appear as very small, dark-brown to black flecks. When examined with a hand lens, these flecks are somewhat raised and cone-like. When only a few flecks occur on a pod, the damage may be insufficient to result in rejection at the packinghouse. Large numbers of unsightly flecks, however, can result in rejection of the entire lot, especially at lower market prices.

**Leaf symptoms first appear as small, water-soaked flecks that rapidly develop into circular to irregular spots with pale-brown centers and reddish-brown borders.** Faint, concentric rings may occasionally be visible in older lesions. As the disease progresses, leaf lesions may merge together leading to large, blighted areas and premature leaf drop.

**For scouts and others with access to a microscope, the multi-celled, pigmented spores that have both transverse and longitudinal septa (cell walls) and a short "tail" or "beak" are diagnostic of the disease.**

**Beans that are nutritionally deficient in nitrogen and/or potassium are most susceptible as are those planted at high densities with can result in more frequent disease incidence and greater disease severity.**

**Management of Alternaria leaf and pod spot consists of maintaining adequate crop nutrition and avoidance of close between-row and within-row plant spacing.** Fungicides also play a major role in the integrated management of this disease.

**It is particularly important that effective fungicides be applied when pods are small (pin pod stage) in order to avoid infections that will be evident later as pods mature.** Strobulurin fungicides have given good results but should be applied according to the label and rotated with materials with other modes of action to avoid potentials problems with resistance.

**Botrytis**

**Growers and scouts report that botrytis remains a problem in some older tomatoes and flared up in some places following recent rains.**

**Switch is now also registered and is an excellent botrytis material; it is the standard in strawberries. Syngenta also recently registered Inspire Super for tomatoes.** This is a combination of the fungicides Difenoconazole & Cyprodinil (one of the a.i.’s in Switch). It now has a specific label claim for *B. cinerea* in tomatoes.

**Phytophthora**

**Growers and scouts in Palm Beach County continue to report problems with phytophthora in pepper as well as squash, herbs and parsley**.

**Around Southwest Florida, phytophthora is also causing some problems in pepper and cucurbits.**

**Groundnut ringspot virus**

**Groundnut ringspot virus continues to be identified from locations around South Florida but overall incidence is low and occurrence remains sporadic with few new infections being identified.** Around Palm Beach County, GRSV which was present on tomatoes earlier in the season has now have been found on peppers in nearby fields, occurrence remains low. A few new infections have also been reported around SW Florida and up in Manatee County but incidence remains low.

**Powdery Mildew**

**Powdery mildew is being reported in squash around South Florida**. Pressure is high in some older plantings.

**Around SW Florida, powdery mildew has been increasing in pepper and in a few locations there has been some defoliation due to powdery mildew.**  Recent heavy fog has most likely played a major role in providing conducive conditions for the development of this disease.

**Growers and scout around Immokalee, report finding some powdery mildew in watermelons on the older leaves and moving down row middles.**

**Around SW Florida, powdery mildew has also been reported on cucumber, and cantaloupe in several locations.** Scouts report that these have been fast moving infections that are responding positively to the windy conditions.

**In Palm Beach County, growers are reporting problems with powdery mildew on cucumber but note they are getting good results with Rally for control.**

**Downy Mildew**

**Basil growers in all areas continue battle downy mildew.**

**Around SW Florida, downy mildew is present in cucumbers, squash, and cantaloupe.**

**Downy mildew has been reported on cucumbers in Homestead.**

**In Palm Beach County, growers and scouts are reporting some problems with downy mildew in squash.**

**Target Spot**

**Growers and scouts around Immokalee and in Manatee County report that target spot is remains active on inner foliage of tomatoes.** Incidence and severity is low to moderate depending on the location.Some fruit infections have been noted.

**Alternaria**

**Respondents from around Immokalee report early blight continues to affect tomato and potato with much of it starting on old cold injured leaves and mostly remaining low on the vines.**

**Around Palm Beach County, reports indicate that early blight is increasing in tomato.**

**Disclaimer:** Pesticide applicators must follow all current label directions for the specific pesticide being used. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and University of Florida IFAS Cooperative Extension Service assume no liability resulting from the use of these recommendations.

###### News You Can Use

**Capital Report**

Budget proposals, water management districts taxes, Medicare reform, gun rights, and school food and nutrition were on the front burner this week, as the 2011 Florida legislative session continued on its record pace with legislators tackling major public policy issues. Both the Senate and the House Appropriations Committees have voted to approve their respective budget bills, and they are now ready to be calendared for a floor vote as early as next week, very, very early for a budget vote. Once the bills are adopted, conference committees will be appointed to resolve the significant differences between the two chambers. The House is proposing a budget of $66.5 billion and the Senate is recommending a $69.8 billion budget, a difference of $3.3 billion.  
  
**Budget**

The House proposes larger cuts to education, the single biggest area of state spending.  There is a $220 million difference between the two budget proposals for higher education.  The House proposes a 5% reduction for UF/IFAS funding while the Senate proposes a 1.2% reduction - assuming they pass proposed changes to state benefits.

**WMD’s**

Criticized for their taxing authority and financial autonomy, water management districts could find their budgets determined by the Legislature and their spending approved by the governor under bills advancing through the House and Senate. PCB SCWP 11-01 and SB 7154 would require lawmakers to annually set the tax rate that water management districts could levy. Senate Budget Committee Chairman J.D. Alexander (R-Lake Wales) pointed out to his committee that Southwest Florida Water Management District is so overflowing with money that it probably could run for two years without collecting a dollar more in taxes. “When I see $850 million, half of which is not reserved for anything, and we’ve essentially allowed them to collect taxes on people when they really didn’t need the money, I don’t understand that,” Alexander said.  The proposal would fold the five water management districts’ budgets into the state budget and would force them to enact property tax cuts next year.

**Immigration**

Although immigration started out as a notable hot-button issue making the press regularly in the beginning of session, it has bowed out of the spotlight of late. Until today, its last visible action was when Sen. Anitere Flores, R-Miami, chair of the Senate Judiciary Committee, amended the Committee’s bill on unauthorized immigrants (now SB 2040) to make e-verify optional rather than mandatory and passed it out of her committee on March 14.

It was included in the Senate Judiciary Committee’s agenda for its next meeting on Monday, April 4.

On the House side, House Judiciary Committee Chair William Snyder, R-Stuart, passed a committee bill (now HB 7089) relating to the enforcement of immigration laws out of his committee on March 10. E-verify remains mandatory in that bill.

Despite the lack of public visibility, the immigration issue remains very much in play behind the scenes. FFBF President John Hoblick continues to work with other agricultural industry leaders as well as general business organizations such as the Florida Chamber of Commerce, Associated Industries of Florida, and others to make sure that agriculture is fairly represented in the ongoing negotiations.

FFBF’s position continues to be that immigration is a federal issue and should be dealt with on the federal level.

**Numeric Nutrient Criteria**

HB 239 by Rep. Trudi Williams, R-Ft. Myers, and SB 1090 by Sen. Charlie Dean, R Inverness, prohibit the implementation of certain federal numeric nutrient water quality criteria rules by the Florida Department of Environmental Protection, water management districts and local governmental entities.

This legislation was filed in response to the U.S. Environmental Protection Agency’s action establishing specific limits for phosphorus and nitrogen in Florida’s flowing waters and lakes.

On March 15, HB 239 cleared its first hurdle when it passed out of the House Agriculture and Natural Resources Subcommittee. This bill has not moved since that time, and Governor Scott is currently reviewing HB 239. FFBF believes Florida needs to present a unified stand against EPA’s numeric nutrient criteria rule.

**Wetlands–Ag Exemption**

SB 1174 by Sen. Gary Siplin, D-Orlando, and HB 421 by Rep. Leonard Bembry, D-Madison, clarify aspects of the agricultural exemption from wetland regulation contained in Chapter 373, Florida Statutes. This legislation authorizes the Florida Department of Agriculture and Consumer Services (FDACS) to determine whether an activity is a bona fide agricultural best management practice.

SB 1174 passed out of the Senate Environmental Preservation and Conservation Committee on Wednesday, March 30. It will now go to the Senate Budget Committee. HB 421 is in the House Agriculture and Natural Resources Appropriations Subcommittee.

**Fertilizer**

HB 457 by Rep. Clay Ingram, R-Pensacola, and SB 606 by Sen. Greg Evers, R-Milton, grant FDACS the exclusive authority to regulate fertilizer, including its sale, composition, formulation, packaging, use, application and distribution.

It also authorizes counties and municipalities to adopt and enforce the Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes or an equivalent requirement as a mechanism for protecting local surface and groundwater quality.

It should be noted that this legislation does not limit the authority of the Florida Department of Environmental Protection or water management districts to require practices needed to comply with water quality standards or to implement federal programs.

This legislation has run into strong opposition from both local governments and the environmental community. Negotiations continue as stakeholders strive to find a workable compromise. HB 457 is in the House State Affairs Committee. SB 606 is in Senate Community Affairs.

**Spring Weather Outlook from NWS**

Rainfall across South Florida is expected to remain below normal for the spring of 2011 as the La Ninã we are currently in continues. The Climate Prediction Center indicates that while below normal rainfall is expected temperatures from the period of March through May are expected to be near normal. The average high for the typical spring day is in the low to mid 80s while rainfall normally averages around 10 inches for the entire 3 month period. Spring is also a time of year that can be windy providing the ideal set up for rip currents along the beaches and the rapid spread of wildfires across the mainland.

The median date of the end of the South Florida dry season is May 20th. However, since 1956, the rainy season has started as early as April 16th and as late as June 3rd. As winter moves into spring, surface temperatures and humidity levels steadily increase, eventually enough so to trigger the onset of the rainy season as formidable sea breezes develop providing convergence in a steamy, unstable airmass, which results in thunderstorm development.

The rainy season is characterized by the development of afternoon thunderstorms on a daily basis. The onset of the rainy season typically is sudden and sometimes fierce. In fact, often the strongest thunderstorms occur at the beginning of the rainy season, due to colder air aloft present as compared to later in the season, which leads to higher instability.

A severe weather climatology survey was conducted for the NWS Miami County Warning Area which categorized on a daily, monthly, and annual basis the severe weather reports received between 1950-2004. Severe weather is defined by the National Weather Service as winds of 58 mph or greater, hail to 1 inch or greater (changed from ¾ inch last year), or a tornado. Results indicate that severe weather sharply increases in May, peaking in June and declining to low levels by September as mid level temperatures warm throughout the rainy season. Recall that the median date of the rainy season is May 20th. So it’s impressive that May ranks second in total severe events given that the first half of the month often remains relatively inactive.

**Tips on Leading**

* Always Do What is Right
* Be Honest
* Lead with Character – Studies show that in times of crisis, people gravitate towards the person with the highest character.
* Don’t Associate Long Hours with Hard Work – Your Family is a Priority
* Loyalty, Loyalty, Loyalty – Push back with Respect
* Be Professional – Actions, Dress, Attitudes and Conversations
* Be Positive – We have all been given a great opportunity
* Be Disciplined – Time, Words, Actions and Thinking
* Treat People Like You Want to Be Treated
* Think Big and Be Creative
* Provide Accurate Information – Say you don’t know and then get the answer
* Focus, Focus, Focus - Goals and Priorities
* Your Schedule should Track your Priorities
* Work in Teams to Accomplish the Goal – No Ego’s/Share information
* Teach and Mentor Those Around You – Add value to their lives.
* Squint with your Ears – Listening is a critical skill for Leaders
* Ask Yourself “How can I add Value/Am I adding Value” – Don’t Be an Obstacle or Impediment
* Play to Your Position
* Ask the Right Questions
* A “Stop Doing” List is as important as a “To Do” List
* Every Meeting Should include an Agenda with a Start and End Time
* Do Listening Checks – At the end of a meeting, repeat the “take homes” and the “to do’s”.
* Be Accountable to Those Around You
* Establish Clear Expectations for those Around You
* Have Fun

**Follow SW Florida Vegetable Grower on Facebook**

SW Florida Vegetable Grower is now on Facebook providing up-to-date news for vegetable growers and industry reps on the go!

This is the place to find what you need to know about growing vegetables in SW Florida. Bringing you the most up-to-date news; about varieties, pest control tactics, tips and breaking news, to help make you a more successful grower.

Relevant, timely information and discussion topics that help the fruit and vegetable industry understand how to succeed in this dynamic and ever-changing business.

Follow us on Facebook at <http://www.facebook.com/pages/SW-Florida-Vegetable-Grower/149291468443385>

Facebook is a social networking website with more than 500 million active users in July 2010, which is about one person for every fourteen in the world. In the US, almost over 100 million people use Facebook. For the younger crowd (whether in age or spirit), its use is nearly universal. Your kids are on it, many of your friends too. Check it out and get with the times!

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

**Up Coming Meetings**

**Manatee County**

**April 5, 2011 CORE and Private Applicator Training** CORE – 9 – 11 AM

Private – 1 – 3 PM

Manatee County Extension Service

1303 17th St. West

Palmetto, Fl 34221

For More information call Jennifer at (941) 722-4524 or e-mail: [jeglass@ufl.edu](mailto:jeglass@ufl.edu)

**Palm Beach County**

**April 7, 2011 Everglades Research and Education Center Field Day**

UF/IFAS EREC

3200 East Palm Beach Road

Belle Glade, FL 33430

• Disease Management Efforts on Sweet Corn and Other EAA Vegetables

• Fertilizer Management and Soil pH Amendments for Lettuce

• Sweet Corn Breeding

• Influence of Phosphorous on critical period of weed control in lettuce

• Improvements in Sugarcane Nutrition

• Performance of new lettuce cultivars on organic soils

RSVP requested for the lunch and tour:

RSVP website: <http://erecfieldday2011.eventbrite.com>

Phone: 561-993-1500

Email: klkr@ufl.edu

**Southwest Florida**

**April 5, 2011 Bacterial Spot Resistant Pepper Field Day 9:00 AM – 11 AM**

Pacific Tomato Growers

CR 858 (Oil Well Rd)

Immokalee, Florida

**Other Meetings**

**April 7 -9, 2001 2nd Annual International Watermelon Conference**

Eden Roc Renaissance Resort & Spa

4525 Collins Ave

Miami Beach, FL

For more information, or to register, visit <http://www.internationalwatermelon.com.>

**April 13, 2011 CCA Nutrient Management and Pest Management**  
**Educational Seminar and CEU Session**

On-site host: UF/IFAS Citrus Research and Education Center in Lake Alfred, and by videoconference at:

* Gulf Coast REC in Wimauma
* Southwest Florida REC in Immokalee
* Indian River REC in Ft. Pierce
* University of Florida main campus in Gainesville
* Lake County Extension Center in Tavares

Speakers will deliver their presentation from the site in their respective area.

Regular registration is $100

Nutrient Management (5 CEUs)

Pest Management (5 CEUs)

Register online at http://bit.ly/hnZwrQ

**April 14 -15, 2011 Applying HACCP to Produce**

UF/IFAS Southwest Florida Research & Education Center

2686 SR 29 N

Immokalee, Fl 34142

UF/IFAS and Environ Health Associates, Inc. Presents an Accredited HACCP Course

Applying HACCP Principles™ to Produce - this is a one and 1/2 day intensive course

• Learn the Elements of HACCP

• Apply them in Your Operations

• Reduce Risk and Improve Efficiency

• Earn Recognition of HACCP Competency

Persons taking this course include produce facility managers, production supervisors, quality assurance staff, trainers, food safety and HACCP consultants, regulators and auditors responsible for food safety inspection.

Please download the PDF registration form at <http://www.haccpprinciples.com/assets/files/HACCP_Registration_030211.pdf> and FAX completed form to 1.888.227.1022

For more info go to <http://www.haccpprinciples.com/assets/files/HACCP%20Flyer_030211.pdf>

**You must pre-register as payment will not be accepted at the door**

**Opportunities**

**Bees for Pollination**

600 - 700 beehives available for March pollination - Immokalee/SW Florida area. Contact Esli - 239-265-2734 begin\_of\_the\_skype\_highlighting   end\_of\_the\_skype\_highlighting

**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

**Help Wanted:**

**Field Research Position**

Job Responsibilities: Work with the US team of research and development scientists in agricultural production, seed testing and environmental sciences to:

* Plan, design, and execute bioefficacy (Pest Control and Crop Variety-GMO testing) and GLP (Good Laboratory Practices) Studies, such as Plant and soil residue, soil dissipation, foliar, crop rotation, residue build-up, import tolerance.
* Select sites for conducting trials and apply all necessary agronomic practices. Take soil samples, plant samples, spray various pesticides, regulators and fertilizers for pest/weed control and crop growth.
* Establish crops, manage irrigation and applications of plant food and crop protection pesticides on a timely basis as requested by protocol.
* Take assessment of agronomic parameters related to growth and health of crops, collect needed plant samples, harvest plots and keep plots clean of pests.
* Enter data into computer programs, generate reports and prepare plant and soil samples for shipment and laboratory testing.
* Be physically able and willing to work in field conditions of FL/South East US.

Requirements and Skill

* Minimum of M.S. in Agricultural sciences (preference in Pest Management, Agronomy, Plant Sciences, Weed Science, Entomology, Plant Pathology, Pesticide residue, soil science and Seeds). Preference will be given to those with experience in testing agrochemical and seeds products in Agricultural or Environmental Sciences.
* Have a good knowledge of the computer and data entering.
* Have a good writing reports skill.
* Fluent in English writing, reading and speaking.
* Be flexible and willing to work with the team

Compensation: Will be based on qualification and experience of applicant.

Location: Florida

To Apply: Email resume to Kate Eiford at kate@mrlynden.com

**Websites**

**Food Safety News** – good source of information and breaking news on food safety issues <http://www.foodsafetynews.com/>

**FDA Produce and Plant Products Guidance for Industry** - Guidance documents contain nonbinding recommendations - <http://1.usa.gov/AQpDn>

**UF/IFAS County Reports** – Click on any county in the state to see the impact of agriculture on the county’s economy as well as a summary of Extension activities - <http://ifas.ufl.edu/reports.html>

**Quotable Quotes**

Don’t just make a living, make a mark.

“When tillage begins, other arts follow. The farmers, therefore, are the founders of human civilization." --Daniel Webster

On account of being a democracy and run by the people, we are the only nation in the world that has to keep a government for four years, no matter what it does. – Will Rogers

If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest. - Benjamin Franklin

Three may keep a secret, if two of them are dead. - Benjamin Franklin

A democracy is nothing more than mob rule, where fifty-one percent of the people may take away the rights of the other forty-nine. - Thomas Jefferson

**On the Lighter Side**

**Grandma's Boyfriend**  
  
A 5-year-old boy went to visit his grandmother one day. Playing with his toys in her bedroom while grandma was dusting, he looked up and said, 'Grandma, how come you don't have a boyfriend now that Grandpa went to heaven?'   
  
Grandma replied, 'Honey, my TV is my boyfriend. I can sit in my bedroom and watch it all day long.   
  
The religious programs make me feel good and the comedies make me laugh. I'm happy with my TV as my boyfriend.'  
  
Grandma turned on the TV, and the reception was terrible. She started adjusting the knobs, trying to get the picture in focus. Frustrated, she started hitting the backside of the TV hoping to fix the problem.  
  
The little boy heard the door bell ring, so he hurried to open the door and there stood Grandma's minister. The minister said, 'Hello son is your Grandma home?'  
  
The little boy replied, 'Yup, she's in the bedroom bangin' her boyfriend.'  
  
The minister fainted.

**Hillbilly Vasectomy**

After their 11th child, a hillbilly couple decided that was enough, as they could not afford a larger bed.

So, the husband went to his veterinarian and told him that he and his cousin didn't want to have any more children.

The doctor told him that there was a procedure called a vasectomy that could fix the problem but that it was expensive. 'A less costly alternative,' said the doctor, 'is to go home, get a cherry bomb, light it, put it in a beer can, then hold the can up to your ear and count to 10.'

The hillbilly said to the doctor, 'I may not be the smartest tool in the shed, but I don't see how putting a cherry bomb in a beer can next to my ear is going to help me.'

'Trust me,' said the doctor.

So the man went home, lit a cherry bomb and put it in a beer can. He held the can up to his ear and began to count, “1 2, 3, 4, 5...” At which point he paused, placed the beer can between his legs and continued counting on his other hand.

This procedure also works in parts of Alabama, Arkansas, Georgia, Indiana, Kentucky, Louisiana, Mississippi, Missouri, Tennessee and West Virginia.

**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 Bechtel/Syngenta Flowers, Bruce Corbitt/West Coast Tomato Growers, Fred Heald/Farmers Supply, Sarah Hornsby/AgCropCon, Cecil Howell/H & R Farms, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, Barry Kostyk/SWFREC, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Mark Mossler/UF/IFAS Pesticide Information Office, Gene McAvoy/Hendry County Extension, Alice McGhee/Thomas Produce, Dr.Gregg Nuessly/EREC Chuck Obern/C&B Farm, Dr. Monica Ozores-Hampton/SWFREC, 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.

Gene McAvoy

County Extension Director / Extension Agent IV

Regional Specialized Agent - Vegetables/Ornamental Horticulture

Hendry County Extension Office 863-674-4092 phone

PO Box 68 **863-673-5939 mobile - Nextel 159\*114449\***

LaBelle, Florida 33975 863-674-4637 fax

Web: [http://hendry.ifas.ufl.edu/](%20http://hendry.ifas.ufl.edu/) [GMcAvoy@ifas.ufl.edu](mailto:GMcAvoy@ifas.ufl.edu)

**Special Thanks** to the **generous support** of our **sponsors**; who make this publication possible.

### Shawn Barley

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(863) 441-9255 cell

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9905 Clint Moore Road

Boca Raton, Florida 33496

Carol Howard

***Mobley Plant World***

1351 W Cowboy Way

LaBelle, Florida 33935

Phone 863-675 -2020

Fred Heald

***Farmers Supply Inc***

710 Broward Street

Immokalee, FL 34142

Phone 239-657-8254 Fax 239-657-2005

Mark Myers

***Agriliance/ProSource One***

Immokalee, Florida

Phone 239-657-8374 Mobile 239-253-6631

E-mail: [memyers@agriliance.com](mailto:memyers@agriliance.com)

Gargiulo

Growers Shippers Importers Exporters

David Pensabene: Production Manager

Naples Operations

Phone 239-353-0300 Fax 239-353-3407

Ed Early

Dupont Agricultural Products

5100 South Cleveland Avenue

Fort Myers, Florida 33907

Phone 239-332-1467 Mobile 239-994-8594

Dr. Nancy Roe

***Farming Systems Research***

5609 Lakeview Mews Drive

Boynton Beach, Florida 33437

Phone 561-638-2755

Stacey Howell  
***Bayer CropScience***

3481 3rd Ave NW

Naples, Fl 34120

Phone (239) 353-6491 Cell (239) 272-8575

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**Management**

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Cody Hoffman

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Jason Osborne

***Marrone Bio Innovations***

239-707-7168 cell

josborne@marronebio.com

Scott Houk

***Dow AgroSciences LLC***

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Sarah Hornsby, CCA

***Agricultural Crop Consulting, Inc***

Scouting: Manatee, Hillsborough, Collier

Office/Fax 941-776-1122

Cell 941-713-6116

Email: [AgCropCon@aol.com](mailto:AgCropCon@aol.com)

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Luis Hansen 305.793.9206

Sim NiFong

863.441.1057

# BioSafe Systems LLC

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Mike Roberts

Central Florida Regional Sales Manager (863) 956-1544 office (863) 207-7779 cell mroberts@agraquest.com

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Garry Gibson

***BASF Corporation***

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Vero Beach, Florida 32966

Office 772-778-4646 AGNET 21726

w.garry.gibson@basf.com

Jack Kilgore

239-707-7677

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[*info@naturalindustries.com*](mailto:info@naturalindustries.com)

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[sagator@aol.com](mailto:sagator@aol.com)

Chuck Obern

***C & B Farm***

CR 835

Clewiston, FL 33440

Office 863-983-8269 Fax 863-983-8030

Cell 239-250-0551

Richard Roles

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[richard@rmiint.com](mailto:RICHARD@RMIINT.COM)  [www.rmiint.com](http://www.rmiint.com)

Cell 561-644-3511

Jay Hallaron

***Chemtura Corporation***

321-231-2277 cell 407-256-4667 cell

[jay\_hallaron@cromptoncorp.com](mailto:jay_hallaron@cromptoncorp.com)

***Grower's Management, Inc***

P.O. Box 130

Belle Glade, FL 33430

Phone: 561-996-6469

[www.growersmanagement.com](file:///E:\www.growersmanagement.com)

Dr. Henry Yonce

***KAC Agricultural Research***

Scouting, Consulting

Research

386-736-0098 work 386-527-1124 cell

[HDYONCE@msn.com](mailto:HDYONCE@msn.com)

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