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SOUTH FLORIDA

VEGETABLE PEST AND DISEASE

#### HOTLINE

# February 14, 2011

**Warmer weather over the past few weeks has favored crop growth and development including newly planted watermelons.**  Daytime highs have been in the 60’s, 70’s and 80’s with nighttime lows mostly in the 40’s and 50’s. Windy conditions have battered some crops causing some damage.

**Despite a some nice showers over the past few weeks most of South Florida remains in the grip of a severe drought including interior areas of Collier, Broward, northwest Miami Dade counties as well as the areas around Lake Okeechobee and the metro areas of Palm Beach County.** All areas received significant precipitation for the period ranging from just over an inch and a quarter in Belle Glade to more than 4 inches in Fort Lauderdale. Foggy mornings and rainy weather over the past few weeks have increased disease pressure and has also caused post harvest issues on harvested fruit.

###### FAWN Weather Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Air Temp °F** | | **Rainfall** | **Ave Relative Humidity** | **ET (Inches/Day)** |
|  | **Min** | **Max** | **(Inches)** | **(Percent)** | **(Average)** |
| Balm |  |  |  |  |  |
| 1/20 – 2/14/11 | 35.57 | 82.38 | 2.89 | 79 | 0.07 |
| **Belle Glade** |  |  |  |  |  |
| 1/20 – 2/14/11 | 37.04 | 85.42 | 1.29 | 81 | 0.08 |
| **Clewiston** |  |  |  |  |  |
| 1/20 – 2/14/11 | 35.43 | 84.70 | 1.52 | 81 | 0.08 |
| **Ft Lauderdale** |  |  |  |  |  |
| 1/20 – 2/14/11 | 43.14 | 85.32 | 4.30 | 77 | 0.08 |
| **Fort Pierce** |  |  |  |  |  |
| 1/20 – 2/14/11 | 37.07 | 83.37 | 1.76 | 79 | 0.08 |
| **Homestead** |  |  |  |  |  |
| 1/20 – 2/14/11 | -- | 84.36 | 2.59 | 82 | 0.08 |
| **Immokalee** |  |  |  |  |  |
| 1/20 – 2/14/11 | 35.35 | 84.79 | 2.87 | 79 | 0.08 |

Happy Valentine’s Day

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**Volumes remain low in the wake of the freezes earlier in the season.** Light supplies of snap beans, cabbage, celery, sweet corn, endive, escarole, bell peppers, radishes, squash, tomatoes, and strawberries and specialty vegetables are moving to market.

**The short-term forecast from the National Weather Service in Miami indicates** high pressure is forecast to continue building across the gulf coast states and extending across the Florida peninsula...bringing very stable weather conditions and a warming trend. High pressure and stable weather will continue to dominate the region into at least mid-week.

**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

**Aphids**

**Aphids remain a significant challenge on a variety of crops around South Florida, flights of winged aphids are common and some colony formation is occurring.**

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

**Growers and scouts in the Glades and other areas are reporting finding lots of aphids on radishes and leafy greens and brassicas where they are causing some problems.** These are a mixed bag of cabbage aphids and green peach aphids.

**In the Palm Beach area, aphids are present in low to moderate numbers in cucumbers, peppers, tomatoes, and oriental vegetables with some isolated colonies being reported.**

**Around Southwest Florida, aphids are moving around and becoming established in several fields and multiple crops especially in pepper and squash.**

**In Hillsborough County, aphid numbers are on the rise in strawberries.**

**For the most effective control, time applications of insecticides early in infestation so as not to kill beneficials.** Time the application of insecticidal soaps when the maximum numbers of wasps are still in the aphid mummies.

**Insecticide applications specifically for aphids are usually only needed when high populations**

**(> 50/plant) are present on very young seedlings/transplants, or near harvest-as a contaminant/marketability concern.** Early to mid-season treatment decision for aphids should decided upon the abundance of beneficial insects, plant growth stage and weather conditions.

**Softer pesticides including insecticidal soaps such as M-Pede), nicotinoids like Admire, Actara, Platinum, Provado, Assail and others including Belay, Beleaf, Movento and Fulfill will provide good control and help reduce impact on beneficials.**

**Resistance to some insecticides has been reported in some aphid populations.** Rotating pesticide materials may effectively help slow the development of resistance. Several aphid control materials are quite toxic; use the least toxic material that is effective on your aphid populations.

**Fields should be scouted at least twice a week**. Sample upwind field borders and edges next to other crucifers first; this is where aphids tend to appear first. Take field samples in a zigzag pattern. Remember to check all quadrants of the field because aphid populations are often clumped.

**Spider mites**

**Respondents indicate that spider mites are increasing on a variety of crops around Southwest Florida over the past few weeks with big increases noted in some tomato fields as well as mostly low numbers in eggplant and watermelons.**

**In Hillsborough County, mites are on the rise in strawberries especially where growers have not employed bio-control measures.**

**Reports from Palm Beach County indicate that spider mites are present in eggplant.**

**Leafminers**

**Leafminers are low around the Manatee Ruskin area but growers note some stippling on newly planted tomatoes.**

**Leaf miners are active around Palm Beach County, attacking peppers, eggplants, tomatoes, and lettuce.**

**Reports indicate that leafminers are causing some problems in celery in the Glades.**

**Around Southwest Florida, leafminers pressure is mostly low but remains persistent 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.

**Reports from Homestead indicate that leafminer pressure has eased in a variety of crops including in eggplant, pepper and tomato.**

**Worms**

**Growers and scouts in the Glades are reporting report that armyworm numbers are beginning to increase in sweet corn and leafy greens.**

**Respondents in Southwest Florida report that worms remain mostly but scouts report finding a few beet and southern armyworms hatches along with an occasional looper and tomato fruitworm.** A few pinworm moths are being picked up in traps.

**In Palm Beach and St Lucie Counties, reports indicate that diamondback moths are quite active on Chinese vegetables, lettuce, and other leafy greens.**

**Around Homestead, respondents are reporting moderate pressure from fall armyworm in sweet corn and low levels of beet and fall armyworm on pepper. Low numbers of melonworms are present in squash.**

**Dak Seal, Entomologist at the UF/IFAS Tropical Research and Education Center in Homestead reminds growers that *Bacillus thuringiensis* based insecticides (Dipel, Xentari) are excellent in controlling worms at early stage and encourages growers to use Bt in their rotation.**

**Whiteflies**

**Respondents around SW Florida are reporting variable whitefly populations, with most areas low but there are some older plantings with higher numbers and nymphs are present.** Scouts note that even with low whitefly numbers there has been a significant increase in TYLCV around Immokalee indicating that many of the whiteflies moving around are viruliferous.

**Growers and scouts in Homestead are seeing mostly low numbers of whiteflies on squash, beans, eggplant and tomato**

**Reports from Manatee County indicate that whiteflies remain mostly low in new tomato plantings but some increase in numbers has been noted in a few locations.**

**With the recent excitement and prices increases in the marketplace 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.

**Stinkbug**

**Around Palm Beach County, growers are reporting major problems with stink bugs in shadehouses where they are particularly bad on fruiting vegetables, tomatoes, peppers, eggplants, cukes, and squash.** Nearby open field grown crops do not have much of a problem.

**Around Southwest Florida, growers are reporting some issues with stinkbugs, which are increasing in number in the older damaged vines.**

**Broad Mites**

**Growers and scouts across South Florida are reporting low levels of broad mites in a variety of crops including eggplant, pepper and squash**

**Pepper Weevil**

**Growers and scouts in Palm Beach and around Southwest Florida report while pepper weevils numbers are down following the freezes they are not gone and remain present in low numbers in a few locations.**

**Thrips**

**In the Homestead area, melon thrips are present in moderate numbers in squash, eggplant, beans and peppers.** A few chili thrips have been reported in pepper.

**Dak Seal reports that Spinetoram (Radiant) is still working in Miami-Dade in controlling thrips; but cautions growers to avoid using it frequently.** He notes that rotations of Requiem and Trilogy in combination with Spinetoram may help improve the level of control of thrips.

**Growers and scouts around Palm Beach County are reporting mostly low levels of western flower thrips in pepper.** Vegetable Agent David Sui encourages growers to monitor populations as warmer weather approaches.

**Around Plant City strawberry producers were reporting some problems with thrips but these appear to be declining in recent days.**

**Cucumber beetle**

**Growers and scouts indicate that cucumber beetles are still active a few locations around South Florida.**

**Diseases**

**Bacterial leaf spot**

**Reports from Palm Beach County indicate that bacterial spot has jumped on pepper in a number of areas including Boynton Beach following lashing rains a few weeks ago and is severe in some places.** Vegetable Extension Agent David Sui notes that even race 1-5 resistant plants have been affected and lab tests confirm that race 6 bacterial spot is present in these areas.

**Around Southwest Florida, bacterial spot remains active in tomato and pepper.** Bacterial speck is also present in a number of places and is present in mixed infections with bacterial spot in some places.

**Respondents in the Homestead area are reporting an increase in bacterial spot pressure in tomato and pepper.**

**Bacterial speck**

**Bacterial speck has been confirmed in a number of places around Immokalee over the past few weeks, although growers and scouts report warmer weather over the past week have helped slow down the disease.** 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.

**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.

**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.**

**Target Spot**

**Growers and scouts around Immokalee report that target spot is increasing with damage to the fruit in older plants being harvested.**

**Alternaria**

**Respondents from around Immokalee report some new early blight in tomato and potato with much of it starting on old cold injured leaves.**

***Alternaria alternata* has also been associated with some post harvest problems on frost/freeze damaged tomatoes as well reducing pack-outs.**

**Downy Mildew on Lettuce**

**Dr Rick Raid, Pathologist at EREC advises downy mildew is now present in the Belle Glade area as well as in Devils Garden.**

**He 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, fosetylAl, metalaxyl, and several copper compounds along with several newer compounds such as Actinovate, Presidio, Previcur Flex, Reason, Revus, and Tanos, that have been added to growers control options.**

**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 is a serious foliar disease of lettuce which has a direct effect on yield and quality, as it affects the marketable portion of the crop.** In addition to losses in the field, downy mildew's impact is accompanied by significant postharvest losses. In Florida, yield losses of up to 100 percent have been reported for individual fields.

**Lettuce downy mildew is caused by the fungus *Bremia lactucae* which is the class of fungi known as the Oomycetes.**  Downy mildew is capable of infecting any growth stage from seedling to mature plant. Head, leaf, and cos lettuce are all susceptible.

**Symptoms of downy mildew appear initially as chlorotic yellow spots on the upper leaf surface.** Under favorable conditions, a white cottony-like fungal growth indicative of sporulation may be seen on the lower leaf surface.

**During the early stages, leaf spots are often delineated by the veins of the leaf, giving an angular appearance.** Lesions become increasingly chlorotic and eventually turn brown. Although downy mildew is most severe on the older outer leaves, the disease may become systemic over time, infecting heads internally. Lesions may also provide entry for secondary fungi such as Botrytis.

**Downy mildew is spread by spores called conidia or sporangia.** These may be rain-splashed or windblown to uninfected tissue, inciting new infections. Although rain-splash dissemination normally ranges from several inches to several feet, sporangia may be windblown tens to hundreds of miles and still maintain their infectivity.

**Many thousands of sporangia can be formed in each lesion under favorable conditions, allowing downy mildew to spread rapidly over large areas.** Sporulation and infection are favored by relatively cool temperatures and humid conditions. For this reason, epidemics in Florida usually occur during the period of December to March. Five to 7 hours of high humidity or leaf wetness are required for successful infection and sporulation.

**Cultivar resistance when available is the most economically feasible form of downy mildew control.** In the event of a regional outbreak, susceptible cultivars should be protected with fungicides to avoid major losses.

**The list of fungicides currently labeled for lettuce downy mildew control includes maneb, fosetyl Al, metalaxyl, and several copper compounds.** Recently some newer compounds including Presidio, Previcur Flex, Reason, Revus, and Tanos have been added to growers control options. Resistance in *B. lactucae* to the fungicide metalaxyl has been reported in Florida and its efficacy may be reduced.

**Applications must be made prior to infection if adequate control is to be maintained.** If downy mildew is known to be present in the area, growers should launch a fungicide program immediately.

**Several cultural practices, such as the establishment of a lettuce-free period, crop rotation, and the destruction of possible weed hosts, are also recommended control measures.**

**Given the current susceptibility of Florida cultivars, downy mildew is extremely difficult, if not impossible, to maintain at non-economic levels once a major outbreak has occurred.** For this reason, prevention and early detection are of the utmost importance.

**Sclerotina**

**Growers and scouts around Southwest Florida report finding low levels of sclerotinia in pepper, potato and tomato.** Unfortunately, growers do not have many control options at this point.  Only Actinovate, Contans, and Soilgard are specifically labeled for the control of Sclerotinia in pepper. Contans and Soilgard are soil applied and are typically applied preventatively preplant or at planting. Growers may also get some benefit from other fungicides when applied preventively for the control of anthracnose and frogeye leaf spot.

**Angular Leafspot**

**Respondents in Hillsborough County report that strawberry growers are finally gaining the upper hand on angular leafspot.**

**Growers and scouts in Homestead are also reporting pretty heavy angular leaf spot pressure on strawberry.**

**Septoria Leafspot**

**Dr Richard Raid, Pathologist at EREC reports finding some septoria leafspot on parsley in the Glades.**

**Septoria leaf spot (*Septoria petroselini)* is an important disease of parsley and occasionally occurs on other herbs such as coriander.** The fungus can be seed-borne (on parsley and coriander) and may also survive in plant debris and on volunteer plants. Under favorable environmental conditions, the disease can spread rapidly, affecting both yield and quality. Because of its seedborne nature, the disease can potentially develop on crops under any production system, although those that are overhead watered are more at risk. Septoria species cause disease on other crops of the Apiacae family (e.g. celery) but the host range for each species is limited. For instance *Septoria petroselini* example, only infects parsley and *S. apiicola* only infects celery.

**Typical early symptoms on parsley and coriander are brown sunken leaf spots sometimes with yellow haloes, on leaves and cotyledons.** As the leaf spots age, the centers turn tan or light grey and tiny black fungal pycnidia are often visible, which is a useful diagnostic feature for this disease. When infection is severe, leaves may die and drop off, and lesions may develop on petioles.

**The fungus is seed-borne (at least for parsley and coriander).** Pycnidia are sometimes visible on the seed surface but infection may also be more deep-seated within seeds.

**Septoria from parsley can survive on crop debris for at least three years and also on volunteer or overwintered plants.** There is also a risk of cross-infection between neighboring crops (e.g. with sequential planting).

**Crops are most at risk after long periods of leaf wetness, particularly at warm temperatures and high relative humidity.** Disease development is highly dependent on the presence of water for the pycnidia to swell and release spores, for splash dispersal of spores between plants and for leaf infection to occur. Spores are readily spread by overhead irrigation and also by people and machinery. Under optimum conditions (25°C, 100% RH), symptoms can develop on parsley after only 9 days.

**As the fungi can be seed-borne, use of clean seed is important for disease avoidance**. Hot water treatment for control of septoria on seed is useful but the temperature and soak duration are critical (48°C, 30 min) to maintain seed viability.

**The use of strobilurin fungicides like Amistar (azoxystrobin) should assist in controlling this disease**.

**Botrytis**

**Growers and scouts report that botrytis has fired up with recent foggy weather with the disease jumping on freeze damaged foliage, blooms, and small fruit.** Chlorothalonil can be useful in preventing fruit infection if applied in a timely fashion and with coverage intended to give good inner canopy protection. Higher rates are required – 2.-2.75 pts./A of Weatherstik.

**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 are reporting severe problems with phytophthora in pepper on many farms along 441 Corridor with plant death rate 3-10%; in a few places plant loss has reached 80%.**

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

**TYLCV**

**Growers around Southwest Florida continue to report mostly low levels of TYLCV although a number of hotspots have been reported.** Scouts report some 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. Growers are reminded to practice sanitation and clean up abandoned fields.

**Low levels of TYLCV are also being reported around Dade County.**

**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.

**Fusarium**

**Around Southwest Florida, some Fusarium crown rot starting to show in older tomatoes but overall levels are very low.**

**Powdery Mildew**

**Heavy powdery mildew is being reported in some squash around South Florida.**

**Powdery mildew is also present on squash in Homestead.**

**Downy Mildew**

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

**Downy mildew is also present on squash in Homestead and in some fields around Immokalee.**

**Pythium**

**Around Southwest Florida, young watermelons are showing pythium problems in wetter areas but growers and scouts report that plant loss has abated somewhat with warmer drier weather.**

###### News You Can Use

**Vegetable prices surging as Florida nears harvest**

IMMOKALEE, Fla. — Florida grower-shippers are moving past the heavy damages they sustained during the December freezes and are preparing to increase spring vegetable shipments.  
  
The increase in shipments come as prices escalate after word of Mexico’s freeze-damaged crops.

#### Florida squash prices doubled in early February. According to the U.S. Department of Agriculture, ½- and 5/9-bushel cartons of small zucchini on Feb. 7 sold for $20.35-20.85 with mediums at $18.35-18.85, twice as high as the $10.85 for small and $8.85 for mediums on Feb. 1. Half-bushel cartons and crates of small yellow straightneck sold for $20.35-20.85 with mediums at $18.35-18.85, up from $18.35-18.85 for the small and $16.35-16.85 for the mediums the previous week. Three-quarter bushel cartons and crates of small yellow crooknecks were $20.85 with mediums at $15.85, unchanged from the previous week. “Zucchinis are going high,” said Fred Moore, a salesman for Five Bros. Produce Inc., Homestead. “They will probably get to $30-35-40 a case. We are filling the thing out. In Mexico, what zucchinis they have, they’re selling for $43. This whole market situation on zucchinis, yellow straightneck and eggplant, it’s going to be much higher because of what’s taken place in Mexico.” Bell pepper prices have also increased. The USDA reports 1 1/9-bushel cartons of jumbos from central and south Florida jumping from $12.85 on Feb. 1 to $28.85 on Feb. 7 for jumbos and extra larges. Jeremiah Miller, a salesman with J&J Produce Inc., Loxahatchee, said the freezes slowed plantings a day or two but said product in mid-February looks well. He said Immokalee plantings remain on schedule and characterized spring acreage as strong and steady. “The December freezes affected the crops pretty hard,” Miller said. “The crops that survived fared well with average quality, just not exceptional quality. The newer crops coming on look nice.” While one of J&J’s farms saw a total loss, other fields that survived saw big yield losses, Miller said. Immokalee-area green bean production has been increasing by small amounts each week, said Christian “Chris” Tordonato, sales manager of Florida Specialties Inc. Tordonato said he expects bean prices to remain high until volume is expected to return in early March. “We’re at 25% of normal volume,” he said in early February. “With a little more volume, the market remains unsettled and is adjusting. There’s always a period of adjustment as you get back into the field.” In early February, Tordonato quoted the mid-$20s for bushel cartons/crates of round green beans. He said the market had been as high as $40. In early February, the USDA reported moderate demand for central and south Florida beans, compared to “fairly slow” the previous week. The USDA on Feb. 7 reported Florida beans selling for $25.85-28.85, down from $30.85-31.85 on Feb. 1. Emilio Mirzakhani, general manager of Homestead Pole Bean Cooperative Inc., Homestead, said the cold snaps which hit as far south as the Miami-Dade County growing region severely damaged squash and green beans, but in early, February bean and squash production was beginning to return to regular volume. “Overall, from now on, we should do very well on quality and supply,” he said. “Things are looking well. The weather we had tricked all the way to this point. The crop coming out from now on will be a new crop after the freeze for beans, squash and corn.” For corn, the USDA on Feb. 7 reported wirebound crates of 4-4 1/2 dozen from south Florida selling for $18.85-20.85, down slightly from $20.95 for those colors on Feb. 1.

#### [Doug Ohlemeier](http://thepacker.com/Doug-Ohlemeier/StaffDirectory.aspx?oid=273558)

#### The Packer On-line 02/08/2011

### [Five food safety myths — debunked!](http://www.pbs.org/wnet/need-to-know/the-daily-need/five-food-safety-myths-debunked/7132/)

Does the threat of being felled by a carnitas burrito at your local taquería or sidelined by the potato salad at your annual church picnic keep you up at night? Nope? Me neither! But, according to President Obama, the U.S. food system is a “hazard to public health,” and we should all be quivering in our urb-ag-chicWellies. In January, he signed into law the Food Safety Modernization Act, authorizing $1.4 billion dollars to be poured into Food and Drug Administration prevention and enforcement activities. Great, except in the quest to fan public outrage, a few untruths have been (conveniently) perpetuated.

**1. Food safety is worse than it used to be.**

Food safety has actually improved since the mid-1990s when the Centers for Disease Control first began its national monitoring program, with net incidence of the major illnesses falling by [20 percent](http://www.cdc.gov/foodnet/factsandfigures/2009/Table_overall_change.pdf). On a disease-by-disease basis, that means 30 percent less campylobacter, 41 percent less toxin-producing E. coli and 10 percent less salmonella. In fact, the only increase — by 85 percent — has been in vibrio, contracted by eating raw shellfish. (You heard it, people, shuck and slurp and you’re on your own.) And even though the CDC recently tripled the number of major foodborne pathogens it monitors from 9 to 31, it reduced its estimate of annual illnesses from 76 to 48 million.

**2. The biggest danger to your health comes from livestock feeding practices, food industry negligence and the terrorist threat to our food supply.**

More than 90 percent\* of foodborne illnesses occur within a vast, loosely organized network of rogue microbe breeders: restaurants! (about half of all outbreaks) and a motley assortment of workplaces, banquet facilities, caterers, churches, nursing homes, schools and others. Almost 60 percent of these — 5.5 million illnesses — are caused by norovirus, about which the CDC observes, “In many of these cases, sick food handlers were involved in the spread of the virus.” A 2004 [study](http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodborneIllnessandRiskFactorReduction/RetailFoodRiskFactorStudies/ucm093901.htm#appd) by the FDA found that 56 percent of fast food and 72 percent of full-service restaurant personnel did not wash their hands often or well enough. Ten viral particles with your soup, sir? (or fork or menu or credit card?)

**3. OMG! I’ve got salmonella! I’m going to DIE!**

Just calm down, get plenty of rest and keep hydrated. Your risk of death is [extremely small](http://www.cdc.gov/EID/content/17/1/pdfs/09-1101p1.pdf#page=18) — half of one percent for salmonella, one tenth of one percent for campylobacter and half of one percent for even the most virulent variety of E. coli. In fact, the total annual number of deaths from foodborne illnesses is about 3,000, or the number killed by the flu in a very, very good year. (In a bad year, flu can kill up to 50,000 people.) As with influenza, most food-pathogen-related deaths are among the very old, the very young and the immunologically compromised. That guy who [testified](http://www.pritzkerlaw.com/pdf-file/testimonyalmer.pdf) before Congress that his mother died from eating contaminated peanut butter? Shirley Almer may have had a lot of sisu,Finnish for spunk, but she also had lung cancer and a brain tumor and was far more susceptible to infections, including the UTI she was hospitalized for when she contracted salmonella.

**4. From now on, I’m scouring every tomato! Pressure-washing every pepper!**

Go right ahead if it makes you feel in control — and to remove [some pesticides](http://www.ct.gov/caes/cwp/view.asp?a=2815&q=376676) and grit. But unless you’re plunging your produce in boiling water or immersing it in a 10 percent bleach solution, those little salmonella, campylobacter and E. coli bacteria are going to go right on doing the things organisms like to do — ingesting, reproducing, excreting. Speaking of which, most major foodborne illnesses are transmitted through feces — campylobacter: chickens; E. coli: cows; salmonella: the whole barnyard; norovirus: us — and some are perfectly normal residents of animal guts. They only cause mayhem when we insert them—via dirty food or hands—in places they shouldn’t be, e.g. our mouths.

**5. Anyway, now that the Food Safety Modernization Act’s been signed into law, I don’t have to worry about this stuff, right?**

Of course not! Faster recalls, more frequent inspection of food processing facilities, greater importer accountability and high-tech food-chain tracking are going to eradicate all foodborne illnesses…. Except for those 58% that come from norovirus and the other unknown percent — probably substantial — that are caused or exacerbated by risky food service practices such as cross-contamination through utensils, work surfaces and equipment; storage at improper temperatures; commingling of foodstuffs; and, of course, poor hygiene. What with [42% of our food budget](http://www.ers.usda.gov/briefing/cpifoodandexpenditures/data/Expenditures_tables/table8.htm) spent on meals outside the home, you know what would have really made sense? A national safety-training program for food service workers.

\*For some reason ([National Restaurant Association lobbying dollars?](http://soprweb.senate.gov/index.cfm?event=getFilingDetails&filingID=2F6C6A2E-4BA4-4738-ACD4-83A29C24FBAF)), the CDC does not regularly analyze data on the location of outbreaks and cases of foodborne illnesses. The more than 90 percent statistic is based on [the one year](http://www.cdc.gov/outbreaknet/pdf/MMWR2007_Table3Consumption_WEB.pdf) for which totals on number of cases per type of location is available (2007) and my own tabulation of 2008 data downloaded from the [OutbreakNet database](http://wwwn.cdc.gov/foodborneoutbreaks/).

By [Anastacia Marx de Salcedo](http://www.pbs.org/wnet/need-to-know/author/marxdesalcedoa)

Need to Know on PBS.org, February 8, 2011

**Drought Update**

National Weather reports extreme drought conditions developed in [metro](http://forecast.weather.gov/glossary.php?word=METRO) Palm Beach County while severe drought conditions continue for rest of South Florida, except southeast and southwest coastal areas where moderate drought conditions prevail.

High pressure has been mostly in control across South Florida for the first half of February bringing dry weather conditions. The only exception to this was on February 10 and 11 when a cold front brought showers to areas north of Alligator Alley.

Even with the rainfall that occurred on February 10 and 11 over northern portions of South Florida, there is still a long term deficit over the area. Rainfall totals since June are running 5 – 5 inches below normal in many areas of South Florida.

Hydrologic impacts...

Wells across South Florida has remained in the 10 to 30 percent of normal levels for the first half of February...except for northern Palm Beach County where they were still running at the lowest 10 percent of normal levels.

The underground water reservoirs in Palm Beach County were running around 16 feet which is 0.7 feet below normal. The underground water reservoirs in Broward County were running around 11.6 feet which is 0.6 feet above normal, and in Miami-Dade County the underground water reservoirs where running at 9.2 feet which is 0.5 feet below normal.

The level of Lake Okeechobee was around 12.4 feet as of February 11, which is about 2.2 feet below [normal](http://forecast.weather.gov/glossary.php?word=NORMAL) for this time of the year. The level of Fisheating Creek was around 1.6 feet, which is around 39 percent of normal for this time of year.

**EPA Has New Virtual Toolbox for Soil Fumigation**

EPA has created a new virtual toolbox for information on soil fumigation, which is available at: <http://www.epa.gov/pesticides/reregistration/soil_fumigants/>.  The soil fumigants toolbox now provides easy access to a variety of soil fumigant training, outreach, and other resource materials for applicators and handlers, communities, state and local agencies, and others interested in understanding and implementing the current requirements for safe use of soil fumigants.  Key features of the toolbox include safety brochures for handlers of soil fumigants, training modules on the new soil fumigant requirements, templates for soil fumigant management plans, and updated fact sheets on the soil fumigant mitigation measures and implementation schedule.  New materials will be added to the toolbox as they become available during 2011.  (EPA OPP Update, 12/15/10).

**USDA Announces Assistance for Farmers and Ranchers who suffer Losses Due to Natural Disasters**

2009 Supplemental Revenue Assistance Payments Program Application Period begins on January 10, 2011

WASHINGTON, Dec. 15, 2010 - Agriculture Secretary Tom Vilsack announced that the sign-up period for the 2009 crop year Supplemental Revenue Assistance Payments (SURE) program begins on Jan. 10, 2011. SURE is one of five disaster programs included in the Food, Conservation, and Energy Act of 2008 that provides assistance to farmers and ranchers who have suffered losses due to natural disasters.

"This program provides a tremendous amount of assistance to producers who have suffered from natural disasters, and is part of the 'safety net' designed to assist farmers and ranchers who feed America and the world," Vilsack said. "USDA encourages producers who suffered losses during the 2009 crop year to visit their local FSA office to learn more about the SURE program."

To be eligible for SURE a farm must have:

* At least a 10 percent production loss on a crop of economic significance;
* A policy or plan of insurance under the Federal Crop Insurance Act or the Noninsured Crop Disaster Assistance Program (NAP) for all economically significant crops;
* Been physically located in a county that was declared a primary disaster county or contiguous county by the Agriculture Secretary under a Secretarial Disaster Designation. Without a Secretarial Disaster Designation, individual producers may be eligible if the actual production on the farm is less than 50 percent of the normal production on the farm due to a natural disaster.

Producers considered socially disadvantaged, a beginning farmer or rancher, or a limited resource farmer may be eligible for SURE without a policy or plan of insurance or NAP coverage.

For more information on the 2009 SURE program, visit any FSA county office or <http://www.fsa.usda.gov/sure>

Note: crops have different established final planting dates so the case on tomatoes may not be the same for another crop….

The final planting date established by the Risk Management Agency (RMA) for crop year 2009 for fresh market tomatoes is 9/15/2009. So a planting made in 10/09 would actually be considered a 2010 crop and SURE wouldn’t be available until 2011. – GM.

**Pesticide Potpourri**

Syngenta Crop Protection advises that effective immediately Botrytis control in tomatoes has been added to the

Inspire Super label.

**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**

**Palm Beach County**

**February 16, 2011 Sprayer Technology and Calibration Workshop 9:30 am – 12:30 pm**

UF/IFAS Everglades Research & Education Center

3200 E. Palm Beach Rd

Belle Glade, FL 33430

RSVP by phone 863-674-4092 begin\_of\_the\_skype\_highlighting or end\_of\_the\_skype\_highlightingemail: lbaucum@ufl.edu

**February 22, 2011 Lettuce Advisory Meeting 12 noon**

UF/IFAS Everglades Research & Education Center

Conference Center

3200 E. Palm Beach Rd

Belle Glade, FL 33430

For more information, call (561) 993-1500

**Southwest Florida**

**February 18 - 19, 2011 South Florida Ag Expo and Weeks Heavy Equipment Sugarland Auction**

Clewiston, Florida.

For more information, go to <http://southfloridaagexpo.com/>

**March 3, 2011 Nutrient Management Workshop 9:30 AM – 1 PM**

UF/IFAS Southwest Florida Research & Education Center

2686 SR 29 N

Immokalee, Fl 34142

Lunch courtesy of Haifa NutraTech Inc.

RSVP – call Debra Cabrera at 863-674-4092

**Other Meetings**

**March 23, 2011 Sustainable Cabbage /Crucifer Production Field Day 9:30 AM – 1 PM**

University of Florida Station

9500 Cowpen Branch Road

Hastings, FL

For information call904-484-6097

**February, 21-22, 2011 FFVA** is co-sponsoring two **United Fresh Produce Association industry meetings**

in South Florida to discuss key issues and opportunities facing the Florida

produce industry.

The first is set for 11:30 a.m. to 1:30 p.m. Feb. 21 at the UF/IFAS Everglades Research and Education Center, 3200 E. Palm Beach Road, Belle Glade.

The second will be 11:30 a.m. to 1:30 p.m. Feb. 22 at the UF/IFAS Southwest Florida Research and Education Center, 2685 State Road 29 North, Immokalee.

Topics will include the impact of the Food Safety Modernization Act on the Florida produce industry and increasing produce sales through federal nutrition programs. To RSVP, contact Miriam Miller at United Fresh via email or call (202) 303-3410. end\_of\_the\_skype\_highlightin

**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

15 acres along Highway 17 available for rent or lease.  Please contact Lora Allison at 941-920-5728 (cell) or email at [medsolla@verizon.net](mailto:medsolla@verizon.net)

**Help Wanted:**

Field Development Position, United Phosphorus, Inc.

Field Development Representative, Alabama, Florida, Georgia, North and South Carolina.

Minimum of 5 years experience working with AgChem products in high value crops.

Position responsible for technical service of sales and implementing product development projects within the assigned region.

Responsibilities will include the monitoring and evaluation of plant protection technologies and development of new label use instructions for new and existing products.

Candidates will be responsible for the compilation, interpretation and presentation of project data in written and oral formats. Tasks will also include support of sales personnel within the region by conducting meetings, tours, and demonstrations as requested.

Advanced degree in Plant Sciences (Entomology, Plant Pathology, or Plant Physiology). Strong inter-personal and communication skills with researchers, regulatory, marketing and sales community. No closing date. This position will remain open until filled.

Submit resume to:

Philip W. Robinson

United Phosphorus, Inc.

1480 Woodpond Roundabout

Carmel, Indiana 46033

317.815.9120 or e-Mail: [phil.robinson@uniphos.com](mailto:phil.robinson@uniphos.com)

**Survey**

Please take a few minutes to complete a brief survey and let me know what you think about the South Florida Vegetable List Serve - SFLVEG-L and how I might improve it?

Please go to <http://www.surveymonkey.com/s/9DCLLSV> to take the survey - only 10 questions.

Thanks for your assistance with this.

**Websites**

**What** **happened the year you were born**? Blast from the Past! Type in the year of your birth and find out. Go to <http://whathappenedinmybirthyear.com/>

**Today’s Front Pages** - Through a special agreement with more than 800 newspapers worldwide, the Newseum displays these front pages each day on its website. The front pages are in their original, unedited form. Go to <http://www.newseum.org/todaysfrontpages/flash/>

**Quotable Quotes**

Life isn't about waiting for the storm to pass, it's about learning to dance in the rain. - Author Unknown

Everyone has inside of him a piece of good news: The news is that you don't know how great you can be! How much you can love! What you can accomplish! - Anne Frank  
  
The hardest thing to open is a closed mind. - Author Unknown  
  
Two roads diverged in a wood, and I - I took the one less traveled by, and that has made all the difference. -   
Robert Frost  
  
For beautiful eyes, look for the good in others; for beautiful lips, speak only words of kindness; and for poise, walk with the knowledge that you are never alone. - Audrey Hepburn  
  
Keep your friends close, and your enemies closer. - Sun-tzu

**On the Lighter Side**

**Nice Lines**

1. **Prayer is not a "spare wheel" that you pull out when in trouble, but it is a "steering wheel" that directs the right path throughout.**
2. **So why is a car's WINDSHIELD so large & the Rear view Mirror is so small? Because our PAST is not as important as our FUTURE. So, Look Ahead and Move on.**
3. **Friendship is like a BOOK. It takes few seconds to burn, but it takes years to write.**
4. **All things in life are temporary.  If going well, enjoy it, they will not last forever. If going wrong, don't worry, they can't last long either.**
5. **Old Friends are Gold. New Friends are Diamonds. If you get a Diamond, don't forget the Gold. Because to hold a Diamond, you always need a Base of Gold!**
6. **Often when we lose hope and think this is the end, GOD smiles from above and says, "Relax, sweetheart, it's just a bend, it's not the end!"**
7. **When GOD solves your problems, you have faith in HIS abilities; when GOD doesn't solve your problems HE has faith in your abilities.**
8. **A blind person asked St. Anthony: "Can there be anything worse than losing your eye sight?" He replied: "Yes, losing your vision!"**
9. **When you pray for others, God listens to you and blesses them, and sometimes, when you are safe and happy, remember that someone has prayed for you.**
10. **WORRYING does not take away tomorrow's TROUBLES; it takes away today’s PEACE.**

**Bubba and Billy Bob**     
    
Bubba and Billy Bob are walking down the street in Atlanta, and they see a sign on a store which reads, "Suits $5.00 each!, shirts $2.00 each, trousers $2.50 each. "   
  
Bubba says to his pal, "Billy Bob, look here! We could buy a whole gob of these, take 'em back to Sand Mountain, sell 'em to our friends, and make a fortune. Just let me do the talkin' 'cause if they hear your accent,   
they might think we're ignorant and won't wanna sell that stuff to us. Now, I'll talk in a slow Georgia drawl so's they don't know we is from Alabama."   
  
They go in and Bubba says with his best fake Georgia drawl, "I'll take 50 of them suits at $5.00 each, 100 of them there shirts at $2.00 each, 50 pairs of them there trousers at $2.50 each. I'll back up my pickup and..."   
  
The owner of the shop interrupts, "Ya'll from South Alabama, ain't ya?"

"Well...yeah," says a surprised Bubba...."How come you knowed that?"   
  
"Because this is a dry cleaners"

**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.

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