December 4, 2011

A cold front moved across the area last week bring cooler drier air and dropping lows into the low to mid 40’s in the interior. In general November was mild and mostly dry although foggy mornings and heavy dews have kept diseases active in many places.

Temperatures for the past few weeks have been seasonable with nights dipping into the 50’s and 60’s and daytime highs reaching into the low to mid 80’s. Most areas received less than an inch of rain for the month except for a couple of East Coast locations. Growers report that isolated showers dropped several inches between Loxahatchee and Belle Glade.

Lake Okeechobee levels continued to rise this month and are currently at around 13.77 feet above sea level.

FAWN Weather Summary

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<th>Rainfall (Inches)</th>
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Growers geared up for the Thanksgiving market with a wide range of crops coming to market including green beans, corn, cucumbers, eggplants, peppers, squash, radishes, tomatoes and specialty vegetables. Early strawberries are coming to market in the Plant City area.

The National Weather Service forecast for the coming week indicates that a southerly flow will bring dry and warm conditions Tuesday and Wednesday with daytime highs in the low to mid 80s across most locales. A weak cold front will move slowly through the state Wednesday into Thursday with a slight chance of showers as it passes. Guidance suggests that a secondary cold front may attempt to move through the area Saturday. Low level flow will quickly become easterly behind the front with the possibility of a few showers and continued mild temperatures.

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

Insects

Leafminers

Reports from the Manatee Ruskin area indicate that leafminers are still active in tomatoes.

Around Immokalee, leafminer is emerging as the number one concern in tomato and in some areas just will not quit. Some growers report that leafminer has been the worst they have seen in a long time with adults showing up on plants in ground 4 or 5 days.

Respondents on the East Coast report a few early leafminers showing up in young eggplant. Growers have also noted some problems in basil as well. Around Belle Glade, some leafminer activity has been noted in leafy greens.

Around Homestead leafminers numbers are high in a variety of crops.

Worms

Around Homestead, a variety of worm pests including fall armyworm, beet armyworm and diamondback moth are active. Growers and scouts report that fall armyworms are abundant in sweet corn and melonworm and pickleworm are present in high numbers in cucumber.

Grower and scouts in SW Florida report that worm pressure remains steady with some decline in numbers being noted as temperatures declined this past week. Pepper growers continue to report issues with mostly beet and southern armyworms. Respondents report that melonworms are still going strong in some cucurbits. Reports indicate that fall armyworms have been “bad” in sweet corn with growers spraying daily to maintain control.

Respondents in the Glades report that worm pressure has started to slow in both sweet corn and leafy greens.

In the Palmetto/Ruskin area, respondents note that worms have dropped off significantly over the past ten days although some problems are still being reported.

Around Palm Beach County, reports indicate that worm pressure is fairly low in most vegetables and growers have maintained effective control but scouts are reporting pretty heavy pressure in cabbage and some herbs like cilantro.
Respondents indicate that melonworms are at seasonally high numbers in cucurbits but note that Bt’s are still offering good control until the canopy or worms get too big.

**Aphids**

Around SW Florida, scouts report that winged aphids are moving around and have established colonies in several places.

Around Palm Beach County, aphid pressure is increasing with some hotspots being noted in a variety of crops including oriental greens, as well as cucumbers, peppers and squash.

Respondents in Homestead report that green peach aphids continue to be abundant in eggplant but remain low in other crops.

In the Belle Glade area, green peach aphid and potato aphid continue to be found in leafy greens.

**Excessive and unnecessary use of insecticides should be avoided.** Early in the season, aphid infestations are often spotty, and if such plants or areas are treated in a timely manner, damage can be prevented later in the season. In some cases, use of insecticides for other, more damaging insects sometimes leads to outbreaks of green peach aphid. Inadvertent destruction of beneficial insects is purported to explain this phenomenon, but aphid resistance to some types of insecticide may also be involved.

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

**Pepper Weevils**

Growers and scouts in Palm Beach report that weevils can now be found in most mature pepper fields at some level.

Around Southwest Florida, pepper weevil numbers seem to be increasing rapidly and have become established in several fields around the area.

**Corn silk Fly**

Respondents in Homestead indicate silk flies remain active in Homestead and the Glades.

**Broad mites**

Respondents in Hillsborough County report that broad mites have been showing up early in peppers this year.

Around Immokalee, broad mites continue to be problematic in peppers and eggplant.

Reports from Homestead indicate that broad mite numbers remain high in some beans and cucurbits.

Growers and scouts in Palm Beach report that broad mites are common in a variety of crops including pepper and eggplant as well as some herbs.
Broad mite feeding distorts plant tissue, causing leaves to become hardened, thickened and narrow, giving them a “strappy” appearance. The blooms abort and plant growth is stunted when heavy pressure is present.

**Mites are usually seen on the newest leaves and small fruit.** Leaves turn downward and turn coppery or purplish. Internodes shorten and the lateral buds break more than normal.

**Malformed terminal buds and stunted growth is often a telltale sign that broad mites are present.** Broad mites are extremely tiny and are difficult to see without a 10X or stronger hand lens. The mites may crowd into crevices and buds. Mites prefer the shaded side of fruit and the underside of leaves, which usually faces the plant, so scouts must be diligent and carefully inspect affected plants to detect these tiny creatures.

**Whiteflies**

Growers and scouts in the Homestead area report that whiteflies pressure is increasing in a variety of crops.

**In the Manatee Ruskin area, whitefly numbers are high in many locations**

Around SW Florida, reports indicate that silverleaf whitefly numbers are increasing but remain patchy with some locations fighting them and very few present in other places.

Respondents on the East Coast, report that whitefly pressure is mostly low but note that numbers are beginning to increase in some places.

**Spidermites**

A few two-spotted mites are present on tomatoes and eggplants around South Florida but numbers remain mostly low – very low.

Respondents in the Plant City area note that strawberries are also showing early mite pressure.

**Thrips**

Thrips remain low in most areas.

Reports from Palm Beach County note that groundnut ring spot virus has reached 1 -2% in some tomato fields indicating thrips activity.

Around Plant City, respondents indicate that chili thrips have shown up in strawberries already and numbers really increased this past week.

**Diseases**

Foggy weather and heavy dews have helped keep diseases active following October’s rains.

**Bacterial Spot**

Around Immokalee, bacterial spot has hurt has hurt many area tomato fields but cooler drier weather over the past week has helped slow disease progress. Some young fields that looked rough a few weeks ago have flushed out with new growth but it wouldn’t take much to fire them up again.
Peppers have been either hit hard with bacterial spot or are really clean with not many fields in the middle. Bacterial spot resistant varieties have worked well in many places but in some fields new infections in race 1-5 resistant varieties indicate that race 6 is present.

Respondents in the Manatee Ruskin area report finding lots of bacterial spot and even a little bacterial speck...worse in older fields. Pressure has been up and down with weather/humidity but reports indicate that growers are spraying conservatively as the crop is winding down and they are trying to cut costs. Scouts report that the lower canopy is gone in many fields from a combination of diseases including bacterial spot and target spot.

In Homestead respondents indicate that bacterial leaf spot has taken off in some hot spots but note it is not uniformly distributed throughout the fields.

Around Palm Beach, bacterial spot is present in some pepper and tomato but scouts report that it has slowed down in most places and plants are growing out with the exception of a few hotspots.

Bacterial spot is caused by several species of Xanthomonas spp. Four species have been identified on tomato: X. euvesicatoria, X. vesicatoria, X. perforans, and X. gardneri. In Florida, the major species encountered is X. perforans.

Symptoms of bacterial spot appear as small, water-soaked, greasy spots on infected leaflets. On tomatoes, distinct spots with or without yellowing occur. Individual leaf spots may coalesce with each other, resulting in the browning of entire leaflets. Fruit spots often begin as dark specks with or without a white halo. As spots enlarge, they become raised and scab-like.

Dr. Gary Vallad, Plant Pathologist at GCREC writes that there is some evidence that there are changes occurring within our Xanthomonas population. In the past, X. perforans has typically been an aggressive foliar pathogen which did not cause severe lesions on fruit. More recently however the T4 strains of X. perforans have been identified in Florida which are extremely aggressive and cause large lesions on fruit.

Gary notes that many of the strains examined are highly copper tolerant and advises that growers need to keep in mind that fruit infection is tied to fruit development, with the highest fruit susceptibility occurring about 2 weeks after anthesis. Afterwards susceptibility to Xanthomonas and Pseudomonas infection drops.

An integrated approach is needed to manage this disease.

Exclusion is the best means of managing bacterial spot on tomato. Unfortunately, even the best bactericidal treatment offers only limited protection when environmental conditions are favorable for rapid disease development, especially during periods of heavy, wind-driven rains.

Since water movement spreads the bacteria from diseased to healthy plants, workers and farm equipment should be kept out of fields when fields are wet because the disease will spread readily under wet conditions.

No resistant tomato varieties are available commercially. In pepper, a number of commercial varieties with varying levels of resistance to races 1 – 6 are available and resistant varieties have performed very well in the field.

It is important to apply sprays before and during rainy periods. If conditions are favorable, frequent spraying may not be sufficient to maintain bacterial spot below damaging levels.
The traditional recommendation for bacterial spot control consists of copper and mancozeb. Attention to application techniques is as important as choice of material in achieving adequate control. The effectiveness of copper is limited, because of the widespread occurrence of copper tolerance among strains of Xanthomonas.

In the past few years several new products have come on the market that have given good results in research trials when used in rotation or together with traditional controls such as copper. These include Tanos (Dupont) as well as the SAR elicitor Actigard (Syngenta), Regalia (Maronne Bioinnovations) and Serenade and Sonata (AgraQuest).

Dr. Vallad reports that in his trials weekly applications of low rates (0.50 oz./acre) of Actiguard has given good control.

Over the past few years, a number of growers and researchers have experienced success with the bacteriophage (bacterial virus) AgriPhage (Omnilytics) for the control of bacterial spot. Success with AgriPhage requires a high level of management and sampling to detect new strains of bacteria and submit the samples to Omnilytics for reformulation.

Some growers have also reported good results using Oxidate (Biosafe Systems) as a sanitizing agent following cultural operations or weather events favoring the development and spread of the disease.

**Target Spot**

Respondents from the Manatee Ruskin area indicate that target spot is increasing in incidence and severity in most tomato fields with some fruit infections present in a couple of places.

Around Immokalee, reports indicate that target spot has taken off in several tomato fields but overall it is not too bad.

Reports from Palm Beach and Homestead indicate that target spot remains low in those areas.

Dr. Gary Vallad, Plant Pathologist at the UF/IFAS GCREC reminds growers and scouts need to be extra vigilant as target spot can progress rapidly on the inside of the canopy with little evidence of disease on the outer leaves, especially as the humidity starts creeping up again.

Dr. Gary Vallad, Plant Pathologist at GCREC writes foliar symptoms of target spot caused by *Corynespora cassiicola* consist of brown-black lesions with subtle concentric rings giving them a target-like appearance. These can be confused with early blight. Fruit symptoms of target spot often consist of small sunken lesions, but can develop larger zonate lesions.

Target spot has a broad host range and is favored by periods of high humidity and free moisture (rain or dew) and temperatures between 70 - 94 °F.

Management strategies for target spot require an integrated approach for best results.

- Rotate tomato fields to avoid carryover on crop residue.
- Avoid rotations among solanaceous crops.
- Eliminate any volunteers and weed species (especially solanaceous weeds) that can act as a reservoir.
- Start with clean, healthy transplants preferably produced in facilities removed from tomato production.
- Maintain proper fertility, nitrogen deficiencies favor the development of early blight.
- Apply fungicides in a preventive manner when conditions favor disease development.
Gary indicates that based on his spray trials, he would rate available products for efficacy against Target spot (and Early blight) as follows:

1) Switch, Inspire Super  
2) Revus Top, Scala  
3) Tanos, Endura, Quadris (and other strobilurins), Reason  
4) Bravo (chlorothalonil)  
5) Mancozeb, Copper

He advises target spot will often go unnoticed by growers and scouts; who will often misidentify it as bacterial spot. He advises growers to hit target spot harder early on, as it is difficult to control once plants get to the 2nd-3rd tie as it is difficult to get good penetration with any contact fungicide into the interior of the plant.

Both target spot and early blight will do very well in this weather, especially with the heavy dews we’ve been having.

Early Blight

Low levels of early blight have been reported widely around South Florida.

Sclerotina

Respondents on the East Coast report that Sclerotinia has become fairly common in St. Lucie area peppers but remains rare in tomato. Reports indicate that it is present at low levels in pepper in Palm Beach County and is affecting some cabbage plantings in Martin County.

Sclerotinia is also present at low – very low levels on tomato and pepper in the Immokalee area.

The fungus, *Sclerotinia sclerotiorum*, is responsible for a number of vegetable diseases attacking a wide range of crops. Common names for Sclerotinia diseases in Florida are white mold (beans), drop (lettuce), stem rot (pepper, potato and tomato), and nesting (post-harvest disease of bean).

A good indicator of Sclerotinia disease is the presence of small, black sclerotia (resting structures) of the fungus. Sclerotia can form on the surface of plant parts as well as inside the stems of pepper and tomato. The sclerotia enable the fungus to survive from season to season and are the source of inoculum to infect crops.

Another common indicator of Sclerotinia diseases is the presence of white, cottony-like mycelium of the fungus when weather conditions are cool and moist.

Symptoms vary between crops. White mold in beans usually appears after flowering. The disease often appears in leaf axils and advances into the stem, producing water-soaked spots that increase in size, girdling the stem, and killing it above the point of infection. The disease can also enter the plant through leaves or pods that touch the soil where sclerotia or infected plant parts act as inoculum.

In tomato, potato and pepper, infection typically starts at flowering. Water-soaked spots are usually the first symptom, which is followed by invasion of the stem, girdling, and death of the upper part of the stem that turns a light gray. The disease can also begin where the plant contacts the soil or infected plant debris. Large portions of the field may become diseased, producing large, circular, areas of dead plants. The black sclerotia formed by the fungus are often found inside infected stems.
Almost all Sclerotinia diseases are field diseases, but when they occur in post-harvest situations they can be very damaging. In beans, the fungus may create a mass of diseased pods that is stuck together by fungal growth, resembling a nest (hence, the name "nesting").

In beans, fungicides including Botran 75 W, Endura 70 WG, Iprodione 4 L Quadris F, Rovral 4 F and Switch applied at bloom stage have been effective in controlling white mold. Iprodione and Rovral 4 F have been used with good results in lettuce. For potato, Iprodione 4 L, Rovral 4 F and Topsin M WSB and 4.5 L are recommended for Sclerotinia control while in tomato Amistar 80 DF has given good results. Biologicals like Contans WG, Serenade Max and Sonata have also provided various degrees of control alone and in combination with other fungicides.

Consult UF/IFAS recommendations for currently labeled fungicides for sclerotinia control in Florida vegetables.

Downy Mildew

Respondents in the Manatee/Ruskin area reports that downy mildew is widely present in cucurbits and is severe in some places.

Around SW Florida respondents report that downy mildew incidence is high in older cucumbers and has taken off in some older watermelons as well, nearly defoliating entire fields.

Growers and scouts in Palm Beach County report downy mildew is present at mostly low levels in squash and cucumber.

Leaf symptoms can be used to diagnose downy mildew in the field in some cases. On cucurbits other than watermelon, small yellowish spots occur on the upper leaf surface initially away from the leaf margin. Later, a more brilliant yellow coloration occurs with the internal part of the lesion turning brown. Lesions are usually angular as leaf veins restrict their expansion. When the leaves are moist, a downy grayish fungal growth may be seen on the underside of lesions.

On watermelons, yellow leaf spots may or may not be angular and later turn brown to black in color. On watermelons an exaggerated upward leaf curling occurs that growers sometimes liken to a dead man’s hand.

If cucurbits are planted close to established fields infected with downy mildew, a spray program should be initiated as soon as the first true leaves are present.

Spray programs for downy mildew are most effective when initiated prior to the first sign of disease since once a planting becomes infected; it becomes more and more difficult for fungicides to control downy mildew.

A range of fungicides is available for the control of downy mildew depending on the crop. Use of Bravo should be avoided on watermelon after fruit set as it may increase the risk of sunburn. Consult UF/IFAS recommendations for currently labeled fungicides for downy mildew control in Florida.

Basil Downy Mildew

Basil downy mildew has been very severe around South Florida given the warm, moist conditions of the last couple of weeks. Dr. Richard Raid, Plant Pathologist at UF/IFAS EREC recommends a preventative program using a good phosphate fungicide, alternated or tank-mixed with azoxystrobin.
Under favorable conditions for disease development, sprays must be at least weekly, perhaps even more frequently. Since there is abundant inoculum all over south Florida, growers should not wait until the disease shows up. Dr. Raid writes that we are still working on gaining more registrations through IR-4.

**Gummy Stem Blight**

Gummy stem blight is present in watermelon in a number of areas including the Manatee Ruskin area and SW Florida. Growers and scouts around southwest Florida report that gummy stem blight is hurting some watermelon fields not affected by downy mildew.

Multiple applications of fungicides are necessary to control gummy stem blight.

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

Recently Dr. Anthony P. (Tony) Keinath, Vegetable Pathologist, Clemson University Coastal Research and Education Center and Dr. Pam Roberts, UF/IFAS SWFREC have noted the occurrence of fungicide resistant isolates of gummy stem blight around Immokalee. They found boscalid and pyraclostrobin-insensitive isolates of the gummy stem blight fungus from a watermelon farm in the Immokalee area.

As a result growers are advised that Pristine should not be used any longer in the Immokalee area.

Dr. Keinath also notes that he also has not seen any improved control of GSB with Topsin-M when he compared programs with and without Topsin-M several times over the years. He suggests Inspire Super as an option in place of Pristine.

**Southern and northern corn leaf blight**

Around the Glades, respondents indicate that southern corn leaf blight and northern corn leaf spot have slowed up in sweet corn in the past few weeks. Northern corn leaf (Bipolaris carbonum (formerly Helminthosporium carbon)), a bigger and darker lesion than maydis, is increasing in lower foliage of mostly older plantings. It has been appearing in greater incidence over the past few years.

Southern corn leaf blight (Maydis bipolaris) has been the most prevalent foliar disease fall-planted sweet corn, favored by the warm, moist conditions.

Strobilurin and triazole fungicides rotated with a good broad spectrum fungicide, such as mancozeb or chlorothalonil, are very effective in controlling both of these diseases. Common rust has not been an issue and probably won’t be until after the first of the year.

**Powdery Mildew**

Growers and scouts in southwest Florida report powdery mildew has been spreading rapidly in squash increasing in incidence and severity.

Respondents in the Manatee Ruskin area note that powdery mildew is widely present in squash.
Tomato Yellow Leaf Curl Virus

Growers in the Manatee Ruskin area continue to reporting mostly low levels of TYLCV infections but note that it is definitely increasing in older crops

Around Southwest Florida, TYLCV remains fairly low but some older fields are showing new symptoms in tops of plants which is a sign the inoculum is building around the area. Most fields remain in the 1 - 2% TYLCV infection rate but ranges up to up to 20% TYLCV in some fields.

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

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

Groundnut Ringspot Virus

A few GRSV infected tomato plants have been reported from fields around Homestead, Palm Beach and SW Florida.

Respondents in Palm Beach County report that GRSV incidence is running around 1 - 2% in some fields but one noted that they have rouged out 20 plants with GRSV for every 1 with TYLCV.

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

Fusarium Crown Rot

Growers and scouts in west Central and Southwest Florida are beginning to report finding some fusarium crown rot in tomato. Incidence is low and occurrence is patchy.

News You Can Use

Rule Bans Hand-Held Cell Phone Use by Drivers of Buses and Large Trucks

WASHINGTON - U.S. Transportation Secretary Ray LaHood today announced a final rule specifically prohibiting interstate truck and bus drivers from using hand-held cell phones while operating their vehicles. The joint rule from the Federal Motor Carrier Safety Administration (FMCSA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA) is the latest action by the U.S. Department of Transportation to end distracted driving.

"When drivers of large trucks, buses and hazardous materials take their eyes off the road for even a few seconds, the outcome can be deadly," said Transportation Secretary Ray LaHood. "I hope that this rule will save lives by helping commercial drivers stay laser-focused on safety at all times while behind the wheel."

The final rule prohibits commercial drivers from using a hand-held mobile telephone while operating a commercial truck or bus. Drivers who violate the restriction will face federal civil penalties of up to $2,750 for each offense and disqualification from operating a commercial motor vehicle for multiple offenses. Additionally, states will suspend a driver's commercial driver's license (CDL) after two or more serious traffic violations. Commercial truck and bus companies that allow their drivers to use hand-held cell phones while
driving will face a maximum penalty of $11,000. Approximately four million commercial drivers would be affected by this final rule.

In September 2010, FMCSA issued a regulation banning text messaging while operating a commercial truck or bus and PHMSA followed with a companion regulation in February 2011, banning texting by intrastate hazardous materials drivers.

The final hand-held cell phone ban rule can be accessed here - http://1.usa.gov/slA4X6

**Lawsuit Filed to Head-off Proposed State Water Quality Rules**

Earthjustice law firm on Thursday filed a legal challenge against state water quality rules that would replace controversial federal rules that are scheduled to be implemented in March.

The Florida Department of Environmental Protection rules would establish specific limits on nitrogen and phosphorus in lakes, rivers and streams unless studies show there won't be harm to aquatic life. Nitrogen and phosphorus can feed the growth of algae in lakes and streams and of toxic red tide along the coast, according to the U.S. Environmental Protection Agency.

David Guest, Earthjustice's managing attorney in Tallahassee, said the petition filed Thursday on behalf of environmental groups should delay the rule adoption next week. But a DEP spokeswoman said Thursday the department still plans to present the rules as scheduled on Dec. 8 to the Environmental Regulation Commission.

The state rules would replace the federal EPA rules that wastewater utilities, agriculture and industry groups say will be too expensive and difficult to comply with. The EPA agreed in 2009 to establish those rules to settle a lawsuit filed by Earthjustice on behalf of environmental groups.

Guest said Thursday the proposed state rules would make water quality in the state worse by burying enforcement of the federal Clean Water Act with studies.

DEP officials have said their proposed rules would be cheaper and provide flexibility while meeting the restoration goals of the federal rules.

“The Florida Department of Environmental Protection remains confident that adopting our nutrient rules is the right thing for Florida," Department spokeswoman Dee Ann Miller said in statement on Thursday.

The Legislature, which holds its regular session beginning Jan. 10, must approve the state rules. The federal EPA, which would implement its own rules in March, has given its tentative approval of the proposed state rules.

The challenge was filed on behalf of the Florida Wildlife Federation, the Sierra Club, the Conservancy of Southwest Florida, the Environmental Confederation of Southwest Florida and the St. Johns Riverkeeper. Those are the same groups that filed the federal lawsuit that led to the EPA in 2009 agreeing to issue the federal water quality rules.

Bruce Ritchie
The Current
12/01/2011
TPR SECURES SPECIAL LOCAL NEED DUAL MAGNUM® HERBICIDE LABEL

Third Party Registrations Inc. recently obtained a Special Local Need 24(c) registration for the use of Dual Magnum® Herbicide for pre-emergence weed control in the Root Vegetables Crop Group 1-B and the Tuberous and Corm Vegetables Crop Group 1-C. A notice and sample label has been mailed to FFVA members who may be interested to allow review before usage.

TPR's service for securing labels is available only to FFVA members in good standing. These labels are obtained via the third party process primarily because of liability concerns of the primary registrant that would otherwise completely preclude registration of a particular use.

Approved crops for this new Dual Magnum Herbicide SLN label include:
  - Root Vegetables Subgroup (1-B) Crops (except sugar beet and horseradish): garden beet, edible burdock, carrot, celeriac, turnip-rooted chervil, chicory, ginseng, turnip-rooted parsley, parsnip, radish and oriental radish, rutabaga, salsify, black salsify, Spanish salsify, skirret, and turnip.
  - Tuberous and Corm Vegetables Subgroup (1-C) Crops (except potato and chufa): arrachacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, bitter and sweet cassava, root chayote, dasheen, ginger, leren, sweet potato, tanier, turmeric, bean yam and true yam.

To obtain access to this TPR 24(c) Supplemental Label, you must be an active producer member of FFVA. You also must sign a Registration Agreement and a Waiver and Limitations of Warranty and Liability Agreement, which provide protection to the chemical manufacturer and distributor for crop damage and nonperformance liability in return for the right to have access to this product for your particular need. You also must agree to pay an annual administrative fee of $2 per acre (or a minimum charge of $250 will apply if less than 125 acres).

If you wish to acquire this Dual Magnum Label, please contact either Mike Aerts or Dan Botts at (321) 214-5200.

Minimum Wage Increases on January 1st.

The minimum wage will change again for the State of Florida this coming January 1st! Florida's minimum wage went to $7.31 an hour on June 1, 2011 due to a law suit brought by several labor organizations. The initiative passed by the legislature requires that each September the state re-calculate the Florida minimum wage for the following year. This year they have decided to increase the current of $7.31 per hour to $7.67 per hour effective January 1, 2012.

This means that you will have to update your Worker Information - Terms and Conditions of Employment forms (WH-516) and change to the new minimum wage poster effective January 1, 2012. Please remember to update all your postings. This is a good time to review your “broken-arm” posters to make sure your dates of coverage on the labels are still valid.

Workman’s Comp up on Citrus and Vegetable Harvesters

The Florida Insurance Commissioner approved a workers’ compensation rate increase for January 1st! Citing increases in medical and pharmaceutical costs, the insurance commissioner granted an overall 8.9% rate increase effective on all policies on and after January 1, 2012. As usual, this is not an across the board increase; some rates actually went down a small amount while others went up higher than the average (citrus and vegetable harvesting will see about a 16% increase).
Up Coming Meetings

December 7, 2011  WPS Train the Trainer Workshop  9 AM – 11AM
Manatee County Extension.

For agenda and registration please visit: http://wpsmanatee120711.eventbrite.com/ or call Jennifer at (941)722-4524

December 8, 2011  Good Agricultural Practices (GAPs): Developing a Food Safety Program for Vegetable and Fruit Growers/Packers
8:30 AM – 4:30 PM
Gulf Coast Research and Education Center
14625 CR 672
Wimauma, FL 33598

Registration Fee: $60.00 includes lunch and class workbook.
Register online at http://gaps12-7-11.eventbrite.com
For help with registration, please contact Jennifer at jeglass@ufl.edu or 941-722-4524

December 13, 2011  Core and Private Applicator Exam Training
Core 9am-11am
Private 11am-1pm
Manatee County Extension Service.

Can be taken for exam preparation or CEUs for current license holders. CEU’s available are: 2 in Core for Core class, 2 in Private Applicator for Private class.

Registration: http://12-13-11coreprivate.eventbrite.com/, or call Jennifer at 941-722-4524

February 26 -27, 2012  Florida Weed Science Society Annual Meeting
Florida FFA Leadership Training Center
5000 Firetower Road
Haines City, FL 33844

Online registration for the meeting will be at www.floridaweedsciencesociety.com  Check this website often for updates!

Opportunities

Farm Land for Lease

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

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

**EPA Pesticide Chemical Search** is a new Web-based application that will allow users to easy access to chemical-specific information from the Office of Pesticide Programs' website and several other important sources. Pesticide Chemical Search is designed to consolidate information related to pesticide chemicals (active ingredients), making it easier to find related regulatory and scientific information. Go to [http://www.epa.gov/pesticides/chemicalsearch](http://www.epa.gov/pesticides/chemicalsearch)

The new application collects existing Web pages on specific chemicals on EPA's Office of Pesticide Programs' website and allows users access to this information through a single portal. Users will also be able to quickly find the current status of a chemical and where it is in the review process. Another key feature is the ability to determine if there are any dockets open for public comment for a given chemical.

Other key features of Pesticide Chemical search include:
- 20,000+ regulatory documents such as fact sheets and REDs
- Links to over 800 dockets in Regulations.Gov
- Links to important information, including pesticide tolerances in the eCFR
- Web services that provide a wide variety and depth of information about a particular chemical
- 100,000+ chemical synonyms to power the search engine.

Pesticide Chemical Search will be expanded to include pesticide product labels and other relevant information in the near future.

**The SARE - Sustainable Agriculture Research and Education website** has a number of publication on the use of grafting in vegetable production of interest to vegetable growers including Tomato Grafting for Disease Resistance and Increased Productivity as well as Inducing Disease Resistance and Increased Production in Organic Heirloom Tomato Production Through Grafting, Potential of grafting to improve nutrient management of heirloom tomatoes on organic farms, Grafting Rootstocks onto Heirloom and Locally Adapted Tomato Selections to Confer Resistance to Root-knot Nematodes and other Soil Borne Diseases and to Increase Nutrient Uptake Efficiency in an Intensive Farming System for Market Gardeners, and Grafting Heirloom Tomatoes on Disease Resistant Rootstock in Western North Carolina. Go to [http://www.sare.org/Learning-Center/Fact-Sheets/National-SARE-Fact-Sheets/Tomato-Grafting-for-Disease-Resistance-and-Increased-Productivity](http://www.sare.org/Learning-Center/Fact-Sheets/National-SARE-Fact-Sheets/Tomato-Grafting-for-Disease-Resistance-and-Increased-Productivity)

**Quotable Quotes**

“When I was 5 years old, my mother always told me that happiness was the key to life. When I went to school, they asked me what I wanted to be when I grew up. I wrote down "happy". They told me I didn’t understand the assignment. I told them they didn’t understand life.” — John Lennon

Do what you can, with what you have, where you are. - Theodore Roosevelt

This above all: To your own self, be true. - William Shakespeare

Always do right. This will gratify some people and astonish the rest. - Mark Twain

Have a heart that never hardens, a temper that never tires, a touch that never hurts. - Charles Dickens
On the Lighter Side

The Year Is 1911

What a difference a century makes!
Here are some statistics for the Year 1911:

The average life expectancy for men was 47 years.
Fuel for cars was sold in drug stores only.
Only 14 percent of the homes had a bathtub.
Only 8 percent of the homes had a telephone.
There were only 8,000 cars and only 144 miles of paved roads.
The maximum speed limit in most cities was 10 mph.

The tallest structure in the world was the Eiffel Tower!
The average US wage in 1910 was 22 cents per hour.
The average US worker made between $200 and $400 per year.
A competent accountant could expect to earn $2000 per year,
A dentist $2,500 per year, a veterinarian between $1,500 and $4,000 per year, and a mechanical engineer about $5,000 per year.

More than 95 percent of all births took place at home.
Ninety percent of all Doctors had NO COLLEGE EDUCATION!
Instead, they attended so-called medical schools, many of which were condemned in the press and the government as "substandard."

Sugar cost four cents a pound.
Eggs were fourteen cents a dozen.
Coffee was fifteen cents a pound.
Most women only washed their hair once a month, and used Borax or egg yolks for shampoo.
Canada passed a law that prohibited poor people from entering into their country for any reason.

The Five leading causes of death were:
1. Pneumonia and influenza
2. Tuberculosis
3. Diarrhea
4. Heart disease
5. Stroke

The American flag had 45 stars...
The population of Las Vegas, Nevada, was only 30!!!
Crossword puzzles, canned beer, and iced tea hadn't been invented yet.

There was neither a Mother's Day nor a Father's Day.
Two out of every 10 adults couldn't read or write and only 6 percent of all Americans had graduated from high school.

Marijuana, heroin, and morphine were all available over the counter at the local corner drugstores.

Back then pharmacists said, "Heroin clears the complexion, gives buoyancy to the mind, Regulates the stomach and bowels, and is, in fact, a perfect guardian of health!"
Eighteen percent of households had at least one full-time servant or domestic help. There were about 230 reported murders in the ENTIRE U.S.A.!

What will be like in another 100 years?

**Catholic Dog**

Muldoon lived alone in the Irish countryside with only a pet dog for company. One day the dog died, and Muldoon went to the parish priest and asked, 'Father, my dog is dead... Could ya' be saying' a mass for the poor creature?'

Father Patrick replied, 'I'm afraid not; we cannot have services for an animal in the church.... But there are some Baptists down the lane, and there's no tellin' what they believe. Maybe they'll do something for the creature.'

Muldoon said, 'I'll go right away Father. Do ya' think $5,000 is enough to donate to them for the service?'

Father Patrick exclaimed, 'Sweet Mary, Mother of Jesus! Why didn't ya tell me the dog was Catholic?

**Note:** State and local budgets cuts are threatening to further reduce our funding – if you are receiving currently receiving the hotline by mail and would like to switch over to electronic delivery – just drop me an email. It is much quicker and you will get the hotline within minutes of my completing it and help conserve dwindling resources at the same time. Thanks to those that have already made the switch.

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The **South Florida Pest and Disease Hotline** is compiled by **Gene McAvoy** and is issued on a biweekly basis by the **Hendry County Cooperative Extension Office** as a service to the vegetable industry.

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