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E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 9, 2013

March came in like a lion and went out much the same way. Most of South Florida averaged 4- 6 degrees below normal for the period and many of the colder interior areas saw patchy frost on a number of mornings during the month. Unofficial temperature reports for Muse in Glades County broke the record for the latest sub-freezing temps with 31 degrees reported for a brief time on March 24. National Weather Service reports that for only the fifth time in recorded history, March was colder than any of the previous winter months in South Florida.

Fortunately most South Florida growing areas escaped any significant freeze/frost damage but heavy winds accompanying each of the cold fronts battered crops tearing up plants, aborting flowers and scarring fruit affecting quality. Freezing temps on March 4-5 did cause significant damage to corn and beans in some colder areas away from the Lake around Belle Glade and sub-freezing temps did take out some watermelons in central Florida.

FAWN Weather Summary

Date	Air Temp °F		Rainfall (Inches)	Ave Relative Humidity (Percent)	ET (Inches/Day) (Average)
	Min	Max			
Balm					
3/11/- 4/9/13	33.21	86.04	3.40	72	0.11
Belle Glade					
3/11/- 4/9/13	40.30	89.26	2.37	77	0.13
Clewiston					
3/11/- 4/9/13	37.98	88.63	1.48	74	0.12
Ft Lauderdale					
3/11/- 4/9/13	45.37	89.96	2.25	71	0.12
Fort Pierce					
3/11/- 4/9/13	39.25	88.18	0.91	74	0.12
Homestead					
3/11/- 4/9/13	41.82	87.4	3.45	78	0.12
Immokalee					
3/11/- 4/9/13	35.24	90.82	3.40	78	0.13

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All areas reported significant precipitation, with Balm, Homestead and Immokalee all reporting over three inches for the period. Unsettled weather and thunderstorms that moved across South Florida on April 4 brought hail to some locations with some growers in Martin and St Lucie Counties reporting up to quarter-sized hail blanketing the ground.

Crops coming to market include blueberries, cucumbers, eggplant, green beans, herbs, leafy greens, peppers, sweet corn, squash, tomatoes, and various specialty items. A few early watermelons started coming in over the past week as most strawberries are about finished. Volumes have been moderate and prices have been decent. Cold weather has delayed crop growth in the Manatee/Ruskin area some markets may see a gap between south Florida (Immokalee) and the Manatee/Ruskin area.

The National Weather Service forecast indicates that from today on the high pressure ridge currently over the Florida peninsula will slowly weaken. This will allow thunderstorms to have a chance to develop each day, mainly in the afternoon.

By the end of the week, a low pressure system, which is currently bringing snow and thunderstorms to the plains, will move towards the Great Lakes region. A cold front associated with this system will approach south Florida on Friday and Saturday. Models are in pretty good agreement that it will stall somewhere around the northern shore of Lake Okeechobee. This will keep south Florida in the warm sector for the weekend, and allow afternoon thunderstorms to develop Friday through the beginning of next week. The best chance looks to be Saturday and Sunday at this time. It is still too early for precision, but models are indicating that areas north of I-75 will be most affected.

Along with this, high temperatures look to continue on a slow upward trend, reaching the mid-80s on the coast for the weekend and possibly hitting the low 90s in the interior.

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

Insects

Whiteflies

Growers and scouts around Southwest Florida report that whitefly numbers are all over the place, ranging from very high in some locations to relatively few in others, but everyone agrees that almost all are viruliferous with some tomato fields showing 100% TYLCV. Whiteflies are present on tomatoes, peppers, eggplant, squash and melons. Growers report good control of nymphs with products like Movento, Oberon and Knack.

Reports from Homestead indicate that whiteflies are abundant in host crops like tomatoes, beans, eggplants and cucurbits among others.

Respondents in Palm Beach indicate that whiteflies are widely present on anything they like.

Reports from the Hillsborough/Manatee area indicate that whitefly pressure has been pretty quiet in recent days

As crops reach completion growers should strive to disrupt the virus-whitefly by destroying the crop quickly and thoroughly, killing whiteflies and preventing re-growth.

a. Promptly and efficiently destroy all vegetable crops within 5 days of final harvest to decrease whitefly numbers and sources of plant begomoviruses like TYLCV.

- b. Use a contact desiccant (“burn down”) herbicide in conjunction with a heavy application of oil (not less than 3 % emulsion) and a non-ionic adjuvant to destroy crop plants and to kill whiteflies quickly.
- c. Time burn down sprays to avoid crop destruction during windy periods, especially when prevailing winds are blowing whiteflies toward adjacent plantings.
- d. Destroy crops block by block as harvest is completed rather than waiting and destroying the entire field at one time.

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

Worms

In the Manatee Ruskin area, worm pressure is mostly low with pinworms, beet armyworms, and a few fruitworms being reported. Scouts indicate that pinworms are showing up earlier than usual and in numbers not seen in years.

Around Southwest Florida reports indicate worms appear to be making a rebound, with growers finding a few more eggs and new hatches. Respondents report finding a mixed bag of southern armyworms, beet armyworms, fruitworms, loopers, melonworms and some pickleworms.

Around Palm Beach County, respondents report that worm pressure is high and note that while fewer worms are being found in leafy vegetables, more are being found in sweet corn. Reports indicate that diamondback moths common in cabbage and Chinese cabbage.

Respondents in Homestead report that worm pests (fall armyworm, beet armyworm and diamondback moth) are active on a variety of crops.

Thrips

Growers and scouts in Palm Beach County report they are seeing thrips, thrips and more thrips. In many places, damage consistent with western flower thrips is being reported. Crops affected include pepper and eggplants and tomatoes. Respondents report problems with pod damage on pepper and etching on tomato fruit. Some cases of thrips vectored Red Node Virus have been reported in beans around Belle Glade.

Around Homestead, melon thrips are becoming abundant in a number of areas and are causing damage on bean, squash, cucumber, eggplants and pepper.

Respondents in SW Florida report that there are big clouds of thrips moving around the area. Scouts report that in many locations, thrips counts have gone from very low to over 10/blooms in a couple of days. At present these appear to be mainly the relatively innocuous Florida Flower thrips (*Frankliniella bispinosa*) but at high numbers they can cause bloom drop.

Dr Hugh Smith Entomologist at the UF/IFAS GCREC reports that several growers have reported thrips overwhelming crops around the Manatee/Ruskin area and causing damage to a variety of crops including strawberry and eggplant. He notes that in most cases the thrips appear to be almost entirely adults (Western flower thrips, Florida Flower thrips, and some other species) and speculates that the lack of immatures indicates that these infestations are caused primarily by adults migrating in large numbers from outside sources like citrus and oak.

Growers in the Manatee/Ruskin area are reporting that the group 5 materials (spinosad and spinetoram) are not having much effect. Dr Smith notes that whether that is due to tolerance or constant colonization of the crop from outside sources is impossible to say at this point. He notes that soaps and oils may help, but there is a risk of phytotoxicity.

Regular field scouting is essential as western flower thrips are difficult to detect and control because of their small size and tendency to hide in protected plant parts.

Adults can move long distances on air currents to find new food. Adults and larvae also can be transported on transplants.

Few insecticides are effective in controlling western flower thrips - *F. occidentalis*. The key to managing resistance is to reduce selection pressure by rotating between insecticides with different modes of action and reducing the number of insecticide applications.

Western flower thrips have been known to develop resistance rapidly on repeated exposure to one class of insecticide. If poor control is encountered after an insecticide application, do not simply apply the same product again at a higher rate or shorter spray interval and hope for better control. Determine if poor control resulted from application error, equipment failure or unfavorable environmental conditions during or after application. If none of these occurred, the population may be developing resistance.

Western flower thrips cannot be managed with insecticides alone. In fact use of broad spectrum insecticides will often make them worse by destroying beneficial insect populations. For more information on managing thrips in pepper and tomatoes, see <http://edis.ifas.ufl.edu/in401>

Aphids

Growers and scouts around Southwest Florida report that aphids are still moving around. Scouts report finding winged aphids setting on upper leaves in many plants and in some locations colonies have become established in potato, pepper, eggplant and other crops requiring treatment.

Respondents report low to moderate aphid pressure in the Homestead area.

Around Palm Beach County, aphid pressure remains high and steady in all crops.

Hundreds of natural enemies have been recorded and these are value in reducing aphid damage.

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, great 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.

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.

Resistance to some insecticides has been reported in some aphid populations. Rotating pesticide materials may effectively help slow the development of resistance.

Pepper Weevils

Growers and scouts in SW Florida report that pepper weevils seem to be established in just about all pepper fields and pepper weevil pressure continues to increase. Scouts note that each time the weather heats

up, they see another wave of pepper weevil adults coming on. Larvae have become common in several older pepper fields. Some growers report good results with Rimon rotated with Lannate/Vydate.

Reports from East Coast growing areas indicate that pepper weevil pressure is increasing.

Low numbers of weevils are starting out early on pepper around Hillsborough County.

Spider mites

Growers and scouts in Palm Beach County report that spider mites increasing with warm dry weather.

Around Southwest Florida, spidermite pressure is increasing on eggplant, tomatoes and a few cucurbits and they have been treated in a number of locations. Flare ups are often due to change in management practices especially use of broad spectrum chemicals, irrigation, etc.

Broad Mites

Growers and scouts report they are still seeing some broad mite activity in peppers and eggplants around SW Florida with some occasional flare-ups being noted.

On the East Coast, broad mites remain an issue in pepper and to a lesser extent on eggplant.

Low levels of broad mites are also present around Homestead.

Russet Mites

Russet mites have been reported causing problem in tomato grown in protected culture in SW Florida and field grown tomatoes on the East Coast.

Damage starts at the bottom of plants and moves upward and may be confused with nutritional deficiencies, plant disease or water stress. Adults and nymphs have piercing-sucking mouthparts and feeding on the undersides of lower leaves and on petioles and stems produces a greasy appearance, which becomes bronzed. Leaves yellow, curl upwards, dry out and drop.

Russet mites are very small: requiring at least a 14x hand lens to be seen. The mite is tapered and wedge-shaped, with two pairs of legs at the broader head end and long hairs on the tapered, posterior end. They are generally translucent and yellowish, tan or pink in color. Because of the minute size of the mites, monitoring is usually done by watching for damage and then confirming mite presence with a hand lens or with a microscope.

The mite has increased in incidence in recent years. The russet mite feeds primarily on Solanaceous plants such as tomatoes, eggplant, pepper, potato and tomatillo; however, in Florida damage has only been observed on tomato.

Sulfur may be used to manage russet mites, Agrimek and other miticides are also effective. Rotation of products of different chemical classes is an important resistance management tactic.

Silk Fly

Around Homestead, silk flies are abundant and are causing significant damage to sweet corn.

Around Belle Glade, growers and scouts note that silk fly adults are rampant and a constant threat in sweet corn.

Dr. Gregg Nuessley, Entomologist at UF/IFAS EREC advises that if growers don't make changes now to their pyrethroid use in sweet corn that they will have very few to no alternatives to control cornsilk flies in corn in the very near future.

He advises that when using a pyrethroid during ear stage sweet corn, always use the maximum labeled rate. Never use below label rates for pyrethroids at any time in sweet corn. Do not add pyrethroids to another chemical unless it is directly needed for control of something that the other product does not control. If growers need to control armyworm or earworm, but no cornsilk flies are present, then they should not use pyrethroids to control these Lepidoptera, because there are many alternative choices.

Growers should eliminate the use of "insurance sprays" of pyrethroids, because the continuous low residual levels of pyrethroids on corn are leading to resistance development in cornsilk flies to pyrethroids. If there were many other products for control of these flies, then this would not be as critical.

However, there is only one other material that provides good control of the flies and that is the organophosphate, chlorpyrifos. While some contact control is provided by methomyl, this product has no residual control of the cornsilk flies. To conserve the remaining effectiveness and to try to regain previous levels of effectiveness of pyrethroids, growers must eliminate unnecessary pyrethroid treatments.

Leafminers

Around Immokalee, leafminer pressure is mostly low and appears to be declining.

Reports from the East Coast indicate that leafminer pressure has picked up recently on tomato, eggplant and other crops.

In the Manatee/Ruskin area, respondents indicate that some growers continue to spray for leafminers.

Diseases

Late Blight

Around Immokalee, growers are still battling late blight. Overall late blight seems to have slowed in tomatoes but scouts report seeing some flare up in infected fields and report finding some new infections following last week's rainy weather in a number of locations that had been clean. Some fields have been significantly hurt by late blight, either defoliated and/or infecting fruit. Some organic fields have been wiped out completely.

Reports from the East Coast indicate that mostly low levels of late blight are present in conventional tomatoes but note that incidence is high in a number of organic fields.

Respondents indicate that late blight is also present on some tomatoes in Homestead.

Growers and scouts report that late blight has showed up in Manatee and Hillsborough Counties in the past few weeks and is present on tomato and potato.

Dr. Pam Roberts at UF/IFAS SWFREC reports that initial characterization of late blight isolates from this area this season appears to be the US-23 genotype.

This type is sensitive to mefenoxam although two out of twenty isolates were identified as intermediate in our lab assays. None of the LB isolates have been resistant to mefenoxam thus far which is consistent with the US-23 genotypes. The most recent finds were from Homestead area and east coast.

Growers would be well advised to apply protectant sprays and scout susceptible crops carefully as the forecast of humid weather and rainy conditions over the next few days will be conducive to disease development.

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

Late blight symptoms on leaves appear as irregularly shaped brown to purplish lesions with indefinite border lesions that can span veins. The lesions may be seen any time of day, on any stage of plant growth and on leaves of any age. Velvety, white fungal growth may appear on the lower surface of affected leaflets early in the morning before leaves dry and/or in the lower canopy.

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

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

Spray coverage and application frequency are critical to staying ahead of late blight. Younger fields that are rapidly growing are at greater risk. Tomatoes between 2nd and 3rd tie are frequently the size tomatoes that get into trouble.

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

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

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

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

PROTECTIVE applications of chlorothalonil are your first line of defense for managing late blight. Timing is critical - applications must be made when conditions are conducive for disease development and before infection occurs!!!

Systemic products become distributed locally within plant tissues and protect foliage from infection by spores. They may kill some established infections and may suppress production of new spores.

Many growers mistakenly believe that if lesions have dried up, the risk is over. Even a short break in spray schedules, despite what is said regarding some of the newer fungicides, can result in a dramatic increase in blight if weather conditions change favoring disease development.

Fungicides for Late Blight

Product	Brand Name	FRAC Number
chlorothalonil	many brands	M5
maneb/mancozeb	many brands	M3
cyazofamid	Ranman	21
cymoxanil	Curzate	27
strobilurins	Quadris, Cabrio, Flint	11
fluopicolide	Presidio	43
famoxadone + cymoxanil	Tanos	11 + 27
mandipropamid	Revus	40
Dimethomorph	Acrobat, Forum	40
mefenoxam**	Ridomil	4
propamocarb	Previcur Flex	28
zoaxamide + mancozeb	Gavel	22 + M3

** Resistance documented in many races

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

Tomato Yellow Leaf Curl Virus

Around Immokalee, TYLCV is widely present and continues to increase in a number of locations.

Devil's Garden seems to be a hotspot with many fields at 60 -100% infection. Elsewhere, there are fields around with 80-100% of plants showing symptoms and fields below 5% are becoming less and less common.

Growers and scouts in Manatee/Hillsborough are also facing TYLCV issues and reports indicate that some farms in Wimauma and the Myakka area are experiencing very high infection levels with total losses being reported in some early fields. Much of the explanation for high incidence of virus can be attributed to growers picking too late in fall and no freeze to wipeout crops. As usual...sanitation, or the lack thereof, has hurt spring tomatoes in this area. TYLCV remains low around Ruskin.

Reports indicate that TYLCV remains at mostly low levels around Palm Beach County.

Respondents indicate that TYLCV is increasing in Homestead.

Lettuce downy mildew

Lettuce downy mildew has been rampant around Belle Glade but appears to be tapering off in response to fungicide applications and less conducive weather. Dr Rick Raid, Pathologist at EREC advises everyone growing lettuce to be on a PREVENTATIVE program. The phosphites are good tools but should be used in a program with maneb and other compounds that are more efficacious against downy mildew.

The list of fungicides currently labeled for lettuce downy mildew control includes maneb, 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 of Crucifers

Dr Rick Raid reports that downy mildew is rampant on cole crops including cabbage, broccoli, arugula and others and advises growers to begin spraying early with phosphonics and other labeled products.

Infections begin as irregular yellow patches on leaves; these chlorotic lesions later turn tan to light brown. If conditions are favorable, white fluffy growth of the fungus develops on the undersides of leaves. If disease development is extensive, leaves may take on a blighted effect as a result of numerous infection sites. Systemic infections can cause internal black streaks and patches to form in stems and floret branches of broccoli and cauliflower. Early symptoms on transplants may resemble bacterial leafspot symptoms. Severely diseased seedlings may be stunted or die.

The fluffy growth on leaves produces sporangia that are easily disseminated by wind and water to other plants, resulting in rapid disease development under suitable environmental conditions. The sporangia are short lived, but the fungus also produces resting spores, called oospores, that can survive from one season to another in crop residue or soil.

The disease is controlled by rotation to non-cruciferous crops, control of cruciferous weeds (such as mustards, winter cress, shepherdspurse, rocket), use of tolerant varieties and the timely application of fungicides. Fungicide applications are very effective if applied early. Fungicides should be alternated to reduce development of resistance.

Downy Mildew of cucurbits

Around Homestead, respondent indicate that downy mildew has been severe on some cucurbits.

Growers and scouts in SW Florida report that downy mildew remains mostly low in watermelons but has taken off in some squash and cucumbers.

Growers and scouts in the Palm Beach area report downy mildew is present in squash and cukes.

Early symptoms include angular chlorotic lesions on the upper surface of the leaf, these often appear water soaked when observed from below early in the morning.

Downy mildew is favored by:

- Cooler Temps 59-77oF
- High relative humidity (> 90%)
- Periods of extended leaf wetness including heavy morning dew and foggy mornings

Spores are easily dispersed by wind and rain.

Dr Vallad advises that downy mildew is showing resistance to a number of chemicals including the strobilurins (Quadris, Cabrio, and Flint), fluopicolide (Presidio), mandipropamid (Revus), dimethomorph (Acrobat, Forum) and mefenoxam (Ridomil).

Cyazafamid (Ranman), cymoxanil (Curzate), propmacarb (Previcur Flex) and zoaxamide+maneb (Gavel) remain good choices to rotate with protectant fungicides such as chlorothalonil and mancozeb.

Basil Downy Mildew

Basil downy mildew remains very active around South Florida. Growers must be on a preventative program, protecting the crop soon after emergence and regularly thereafter. Quadris, Ranman, and the phosphites are the best labeled products, and an effective program will likely need all three, as sprays must be at least weekly, perhaps more often with heavy pressure.

Growers should be aware of a new foliar disease (Alternaria blight) which has been reported on basil in South Florida. See below.

Alternaria on Basil

Dr Richard Raid, Pathologist at UF/IFAS EREC reports finding new very aggressive Alternaria blight on basil around South Florida. He reports that this disease is possibly seed-borne.

Reports in the literature indicate that in the summer-autumn 2010, basil plants belonging to the cv Genovese grown soilless and in open field in Piedmont (Northern-Italy) showed symptoms of a new leaf spot. Affected plants showed black-brown leaf spot normally circular, usually 1 to 50 mm in diameter surrounded by a yellow halo, frequently located on the tips and margins of leaves. At later stages leaves may turn brown and die. *Alternaria* sp. was consistently isolated from leaf tissues of symptomatic plants. The ITS region of rDNA of the isolate was amplified using the primers ITS1/ITS4 and sequenced. The 523 bp segment obtained showed that the pathogen belongs to *Alternaria alternata*.

This is the first report of *Alternaria alternata* on basil in Italy and in Europe. Recently the same pathogen has been described on basil in Japan. It is not yet known if this is the same disease.

Powdery Mildew

Powdery mildew is widespread on squash and cucumbers around SW Florida. Reports indicate that pressure has increased in recent weeks and is high in older squash.

Scouts report that powdery mildew has become a significant problem in watermelon and report finding powdery mildew showing up in fairly high levels on watermelon rinds, in some fields with little infected foliage. They report that some of the infected melons are within a week or two of harvest when rind infections show up.

On the East Coast, powdery mildew is widespread in squash and cucumbers. Growers have reported good results with a Torino/Rally rotation on squash.

Respondents report that powdery mildew is also causing problems on cucurbits in Homestead.

With cucurbit powdery mildew is kicking into gear in many locations, a broad spectrum protectant such as chlorothalonil should prove useful along with some of the more effective powdery materials, alternating or tank-mixing these depending on pressures and susceptibilities.

Powdery mildew traditionally becomes an increasing problem on watermelon as the season progresses so growers should be on the lookout as we move into warmer drier weather.

On watermelon, leaves may yellow from powdery mildew growing on the bottom side of the leaf. In Florida, it is often difficult to detect the powdery mycelia without a microscope and often yellowing foliage is the only symptom visible to growers. Cucurbit powdery mildew in some areas has become resistant to strobilurin and DMI fungicides. The recommended fungicides for powdery mildew are Quintec, Pristine, or Switch.

Low levels of powdery mildew have also been reported on peppers, tomatoes and eggplants on both coasts. Around Immokalee, powdery mildew is starting to build up on the older leaves in a number of older pepper fields.

Detecting powdery mildew on pepper and tomato can be difficult. The white powdery growth characteristic of powdery mildew diseases occurs only on the underside of leaves and will often turn brown rather than remaining white. Diffuse yellow spotting often develops on the upper surface and in pepper, affected leaves tend to drop off the plant, as occurs with bacterial leaf spot.

Powdery mildew of pepper and tomato is caused by *Leveillula taurica*, which is a very different powdery mildew fungus from that causing powdery mildew on cucurbits. This powdery mildew pathogen differs from powdery mildew pathogens in other genera in that it primarily occurs inside the leaf rather than on the leaf surface.

Around Belle Glade, powdery mildew has become common on cabbage and beans (partially due to some reluctance by growers to spray close to harvest because of market tolerances in crops targeted for export)

Bacterial Spot

Around Immokalee, growers and scouts report that bacterial spot infections have flared up on tomato and pepper fields following recent rains but note that many fields remain spot free.

Respondents in Palm Beach County report low levels of new bacteria on beans and tomato behind recent rains. Bacterial spot is also continuing to creep along in older pepper fields where it is established.

Around Homestead, bacterial spot is widely present in tomato and pepper.

Target Spot

Low levels of target spot continues to show up on tomato in a number of locations around South Florida and is moving up into lower plant canopies in a number of places.

Target spot is widely present in tomato fields around SW Florida and continues to defoliate some mature tomatoes from the inside out.

Target spot remains mostly low on East Coast tomatoes. Some target spot has been reported on cucumber around Palm Beach County.

Target spot is frequently misdiagnosed as in its early stages as symptoms are difficult to recognize and can be confused with bacterial spot and early blight.

Alternaria

Growers and scouts report seeing more Alternaria (black mold) on older tomato around South Florida.

Gummy Stem Blight

Growers and scouts report a little flare of gummy stem on watermelon behind recent rains but note that gummy stem blight remains at mostly low levels of on watermelon and cucumbers around South Florida.

Fusarium

Growers and scouts in the Manatee Ruskin area report lots of issues with Fusarium wilt since temperatures have warmed up. Incidence in some fields has reached high levels of incidence (40 – 60% in some places).

Fusarium crown rot is present on tomatoes around Immokalee but has declined in recent weeks.

Fusarium wilt is also popping up in a few watermelon fields and a couple of locations which have had historical problems are getting hurt.

Rust

Growers and scouts are reporting low levels of rust on green beans around Belle Glade.

Northern Corn Leaf Blight (NCLB)

Dr Rick Raid, Pathologist at UF/IFAS EREC reports that northern corn leaf blight (NCLB) caused by the fungus *Exserohilum turcicum* is present and increasing on sweet corn in the Glades.

Triazoles and strobilurins both give control, with some of the pre-mixtures of these two classes giving superior control.

NCLB produces a long, elliptical lesion, while those of southern corn leaf spot tend to be shorter, oblong, and sometimes target like in appearance.

Southern Corn Leaf Blight

Growers and scouts also report that southern corn leaf blight (SCLB) caused by the fungus *Bipolaris maydis* is present and increasing on sweet corn in the Glades. Incidence of both diseases remains at moderate levels.

Groundnut Ringspot Virus

Growers and scouts are reporting finding low levels of mostly scattered single plants infected with GRSV around South Florida. Respondents on the East Coast note that GRSV has become more common over the past few weeks corresponding with high thrips populations.

Tomato Chlorotic Spot Virus

Very low levels of tomato chlorotic spot virus (TCSV) continue to be found around South Florida.

Tomato chlorotic spot virus is similar but distinct from other tospoviruses, such as Tomato spotted wilt virus (TSWV) and Groundnut ringspot virus (GRSV), viruses with which some Florida tomato growers may be familiar. The genus of Tospoviruses takes its name from the discovery of the Tomato spotted wilt virus (TSWV) in Australia in 1915.

Early symptoms of infection are difficult to diagnose. In young infected plants the characteristic symptoms consist of inward cupping of leaves and leaves that develop a bronze cast followed by dark necrotic spots.

Tomato chlorotic spot virus causes necrosis in tomato leaves and stems, and causes ringspots and other deformations of the fruit. The symptoms are nearly identical to those of groundnut ringspot virus and laboratory diagnosis is necessary to distinguish on from the other.

Bean Golden Mosaic

Bean Golden Mosaic Virus is present on beans around Homestead.

Cucurbit leaf crumple virus

Low levels of cucurbit leaf crumple virus is showing up in watermelons around Southwest Florida.

News You Can Use

March 2013 Weather Summary

For only the fifth time in recorded history, March was colder than any of the previous winter months in South Florida. Past years in which this occurred were 1915, 1932, 1937 and 1949.

Average temperatures across South Florida were anywhere from four to six degrees below normal, ranking among the coldest on record for the month of March and the coldest March since 2010. In fact, the morning of March 4th in which lows were in the 30s and 40s across South Florida ended up being colder than any day this past winter (Naples being the exception as February 18th was one degree colder).

Freezing temperatures were recorded across parts of interior southwest Florida on the mornings on March 4th and March 27th, with the freeze on the 4th being more significant as far as impacts are concerned. The low temperature reading of 32 degrees in Muse (western Glades County) on March 27th represents what could be the latest freezing temperature on record for southern Florida; however this can't be confirmed due to the short period of record at that site.

Nearby locations with longer periods of record such as LaBelle and Devils Garden, for example, have their latest freeze dates during the March 22-24 time frame.

What was the cause of the cool March? Generally speaking, a low pressure area in the mid to upper levels of the atmosphere prevailed over eastern North America, causing a northwest to southeast flow of air across the eastern half of the United States. This pattern is similar to conditions typically observed during the negative phase of the North Atlantic Oscillation.

The cause of the colder temperatures also led to drier than normal conditions in March across virtually all of south Florida, as the cool air which affected the area was also quite dry. Monthly rainfall amounts were generally less than one inch across southern metro Palm Beach County, almost all of metro Broward County and parts of Miami-Dade County. Rainfall was higher to the north with two to three inch amounts on average over interior sections around Lake Okeechobee.

Only two thunderstorm/strong wind events occurred last month (20th and 24th) in which winds over 40 mph and/or hail were reported.

The drier-than-normal continued the overall pattern of dry conditions going back to last November, resulting in moderate drought conditions over parts of Miami-Dade, Broward, Collier and Mainland Monroe counties.

Outlook for April-June

The outlook by the NOAA Climate Prediction Center calls for a slightly- increased likelihood of warmer and drier than normal conditions through June.

The drier than normal pattern expected through the end of our dry season (mid-May), in combination with increasing temperatures, means that the threat of wildfires will continue to increase over the next few months. A total of 96 wildfires have been reported so far in 2013 across south Florida which is actually only about half of the normal.

However, these numbers are expected to increase as we enter the peak of wildfire season in April and May. All persons are urged to take measures to reduce the chance of wildfires. Visit the Florida Forest Service web site for more information on how to help prevent wildfires.

April and May also typically bring an increase in easterly winds to the area, which significantly increases the risk of rip currents along the east coast beaches. A sharp increase in drowning deaths and rescues caused by rip currents occurs during the spring months due in part to this shift in the wind patterns. All residents and visitors visiting area beaches are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. Visit the National Weather Service Rip Current Awareness page for more information.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at weather.gov/southflorida.

First report of a novel Potyvirus from Florida causing chlorotic mottling in squash (*Cucurbita pepo*)

O. A. Abdalla and A. Ali* - Department of Biological Science, the University of Tulsa, Tulsa Oklahoma, 74104

During the 2010-2011 growing seasons, nine cucurbit leaf samples including cantaloupe, cucumber, pumpkin, squash and watermelon, showing mosaic and mottling were collected from fields in Homestead and Tampa areas in Florida (1). Eight of the nine samples were positive by dot-immunobinding assay (DIBA) and reverse transcription-polymerase chain reaction (RT-PCR) for either Watermelon mosaic virus (WMV), Papaya ringspot virus (PRSV-W) or mixed infection of both viruses. One squash sample from Homestead area showing unique symptoms including chlorotic spots, yellowing, mottling, vein clearing and mild mosaic was negative by RT-PCR against PRSV-W, Squash vein yellowing virus (SqVYV), WMV, and Zucchini yellow mosaic virus (ZYMV).

The presence of virus-like particles (VLP) from symptomatic squash leaves (1) was prepared as described previously (2). Typical potyvirus-like particles approximately 700 nm in length and 12-14 nm in width were observed by electron microscope from VLP preparations. Analysis of VLP on sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) demonstrated a slightly larger coat protein [37 kDa in comparison to PRSV-W (35 kDa)]. Sap from symptomatic squash leaf samples or VLP was mechanically inoculated to 10 squash seedlings at cotyledon stage using 0.1 M K₂HPO₄ buffer. Chlorotic spots were observed on the first true leaf seven days after inoculation. However, symptoms became more severe by 2 to -3 weeks post-inoculation and systemically infected leaves showed chlorosis, mottling which were similar to the original symptoms when tissues were collected from the field. Mock-inoculated control squash seedlings did not produce any symptoms. Symptomatic leaves from mechanically infected squash plants were used for VLP preparations and virus particles and size of the coat protein (CP) on SDS-PAGE was observed as before.

Total RNA was extracted from VLP (2) and tested by RT-PCR using universal Potyviridae primers (forward primer 5'-CACGGATCCCGGG (T)17AGC and reverse primer 5'-GGBAAYAAAYAGYGGDCARCC (3) to

amplify a fragment from the 3' end of the genome (including part of Nib gene, whole coat protein). A band of 1.2 kb was observed when the PCR product was analyzed on 1% agarose gel. PCR product was purified using QIAquick PCR Purification Kit (QIAGEN, USA), cloned (pGEM-T Easy Vector (Promega, USA) and sequenced in both directions. Consensus sequence was obtained from at least 5 clones and submitted to GenBank (Accession no. KC522968). A BLASTn comparing the sequence from the squash potyvirus to others in GenBank found the highest similarity was 72.0 % at nucleotide level and 64.8% at amino acid level with PRSV-W (Accession JN831646), and less than 70% nucleotide similarity with WMV (Accession no. NC_006262) and SqVYV (Accession no. NC_010521).

Based on the particle morphology, CP size on SDS-PAGE, nucleotide identity with other cucurbit potyviruses and unique symptoms, it is concluded that this could be a new Potyvirus. The threshold for classifying distinct species in Potyviridae is less than 76% identity at nucleotide level for either CP gene or the whole genome (4).

This virus has been tentatively named as Squash chlorosis mottling virus (SqCMV). Florida is one of the leading states in acreage and production of cucurbits in the United States. The emergence of this new virus could be a potential future threat to cucurbits production.

References: (1) A. Ali et al. Plant Health Progress Online publication. doi:10.1094/PHP-2012-0824-01-RS. (2) A. Ali, et al. Plant Dis.96:243, 2012. (3) A. Gibbs and A. Mackenzie J. Virol. Methods. 63:9, 1997. (4) A. M. Q. King et al. Virus Taxonomy-ICTV 9th Report:1071, 2012.

USDA Releases 2011 PDP Report

The U.S. Department of Agriculture's Agricultural Marketing Service (AMS) released the latest summary of the Pesticide Data Program (PDP) last month. In its 21st annual summary of the program, the AMS stated that for the calendar year 2011 overall pesticide residues found on foods tested were below the maximum legal residue levels set by the U.S. Environmental Protection Agency to protect consumers and workers from exposure to pesticides. In plain terms, the AMS stated in its report: "The data reported by PDP corroborate that residues found in fruit and vegetables are at levels that do not pose risk to consumer."

According to the report, in 2011, 11,894 food samples were tested by PDP; 32 samples (0.27 percent) exceeded the pesticide residue tolerance level set by the EPA and 399 samples (3.4 percent) were found to have residues with no established tolerance level. Of the 32 samples with residue levels exceeding established tolerance levels, 25 were imported and 7 were domestic. Of the 399 samples that tested positive for residues with no established tolerance, 280 were imported, 115 were domestic and 4 were of unknown origin.

The PDP sampling and testing program operations are carried out with the support of 13 states: California, Colorado, Florida, Maryland, Michigan, Minnesota, Montana, New York, North Carolina, Ohio, Texas, Washington and Wisconsin. Testing occurs at both state laboratories and at the AMS National Science Laboratory and the USDA Grain Inspection, Packers and Stockyards Administration Laboratory. While it is not designed for enforcement of tolerances, PDP informs the U.S. Food and Drug Administration and the EPA if residues exceeding the tolerance are detected or if no EPA residue tolerance has been established for a residue found.

Fresh and processed fruit and vegetables made up 82.3 percent of total samples tested in 2011. The AMS estimated that 72.7 percent of samples were from U.S. sources, 22.8 percent were imports, 2.8 percent were of mixed origin and 0.7 percent were of unknown origin. Those foods included: baby food (green beans, pears and sweet potatoes), canned beets, cabbage, cantaloupe, cauliflower, cherry tomatoes, hot peppers, lettuce, mushrooms, onions, orange juice, papayas, plums, snap peas, canned and frozen spinach, sweet bell peppers, tangerines and winter squash. Commodities were also tested. Samples are collected close to the point of

consumption and are prepared with a process assigned to emulate consumer practices. Drinking water samples collected at water treatment facilities in three states and from private domestic wells and school or childcare facilities showed low levels of detectable residues. Residues found in drinking water were found in both drinking water and groundwater. None exceeded established maximum Contaminant Levels, Health Advisories, Human Health Benchmarks for Pesticides, or Freshwater Aquatic Organism criteria.

The PDP was initiated in 1991, and plays an important role in the implementation of the 1996 Food Quality Protection Act, which directs the Secretary of Agriculture to collect pesticide residue data on foods that are highly consumed—particularly by infants and children. Those foods include both domestic and imported canned and fresh vegetables, soybeans, eggs, dairy products and water. The U.S. EPA uses PDP data in its verification process to ensure all sources of exposure to pesticides meet the safety standards set forth in the Act. (Food Safety News, 3/4/13).

The Association of Farmworker Opportunity Programs has developed new pesticide safety training materials for use in training farmworkers and their families to prevent pesticide take-home exposure. Pesticide take-home exposure occurs when farmworkers take home pesticide residues that may cling to their skin, clothing, hats, boots, tools, lunch coolers, car seats and any other items in the work environment. Their family may then be exposed to these pesticide residues.

The new training materials, called Project LEAF (Limiting Exposures Around Families), feature the Soto family, a fictional farmworker family desiring to reduce pesticide exposure in the home. Health care providers or those working in pesticide safety education can receive one free copy of Project LEAF materials by calling the National Service Center for Environmental Publications at (800) 490-9198. Project LEAF PDFs of brochures, cards and posters are downloadable at <http://go.usa.gov/28hk>

To order more than one copy of these materials, please contact Ms. Ashley Nelsen at nelsen.ashley@epa.gov (EPA Release, 3/14/13).

Up Coming Meetings

April 26, 2013

LaBelle Human Trafficking Training

8:30 AM - 4:30 PM

Dallas B. Townsend Agricultural Building
1085 Pratt Blvd
LaBelle, Florida 33935

Hosted by the SW Florida Regional Human Trafficking Coalition

A full day of information is offered to build and strengthen partnerships, and strengthen outreach and public awareness efforts related to human trafficking.

Training and education assistance is open to law enforcement, lawyers, healthcare and social service providers, teachers, the faith community, and the community - at-large on issues related to the crime of human trafficking which is a violation of human rights.

Forum objectives are to train and educate by providing effective and applicable tools to increase awareness of human trafficking, how to identify and protect human trafficking victims while ensuring access to help, including social services and immigration relief, and to develop strategies to identify, prevent, and successfully combat this crime.

The forum is open to related professionals and the public in the 3-county area of Hendry, Glades, and Lee counties. Seating is limited and advance registration is required to attend.

Registration is free, but please register to ensure you have a seat.

For questions and information please contact: Nancy Acevedo at nacevedo@actabuse.com or Yaro Garcia at ygarcia@actabuse.com Phone: (239)939-2553 or you can contact Maricela Morado at maricela@healthystartswfl.com

**April 29, 2013 Core and Private Applicator Training
and Exams**

Dallas B. Townsend Agricultural Building
1085 Pratt Blvd
LaBelle, Florida 33935

Core – 7:45AM-12PM, Private 1-4 PM

Two separate exam prep classes will be held to help you prepare for the Core and Private Applicator RUP license exams. Exams will be offered immediately following the classes. Cost is \$10 per class.

If you are already a license holder, 3 CEUs in Core and 3 in Private are offered for both classes, respectively. For details and registration call Debra at 863-674-4092

April; 30, 2013 Natural Area Weed Control 8:30 am

April 30, 2013 Right of Way Weed Control 1:00 pm

May 3, 2013 Ag Row Crop or Ag Tree Crop Class 8:30 am

May 3, 2013 Aquatic Weed Control Category Class 1:00 pm

Dallas B. Townsend Agricultural Building
1085 Pratt Blvd
LaBelle, Florida 33935

Exams will be offered immediately following each of the classes. Cost is \$10 per class. CEU's will be provided for license holders. For details and registration call Debra at 863-674-4092

May 1, 2013 2013 Spring Vegetable Field Day 9:00 AM – 1:30 PM

UF/IFAS Southwest Florida Research and Education Center
2685 SR 29 N
Immokalee, Florida 34142

Agenda

9:00 – 9:05 Welcome – Dr. Jackie Burns – Center Director

9:15 – 9:45 - Irrigation and Water Quality - Dr. Sanjay Shukla

- Demonstration of dye method for evaluating drip irrigation management

9:55 – 10:25 Entomology Field Trials – Dr. Phil Stansly

- Incidence whitefly parasitism on different crops
- Whitefly control on tomato
- Broadmite control on bell pepper and eggplant
- Control of diamondback moth on cabbage
- Control of pickleworm and/or melonworm on yellow squash
- Pepper weevil control on Jalapeños

10:35 – 10:55 – Soil Science – Dr. Kelly Morgan

- Use of irrigation applied polymers to increase soil water holding capacity and improve irrigation efficiency

11:00 – 11:20 Plant Pathology Field Trials – Dr. Pam Roberts

11:20 – Return to Auditorium

11:30 – 11:50 – Dr Kelly Morgan

- Weather data based irrigation scheduling tools for vegetable production
- Comparison of multiple soil test extractants for fertilizer recommendations

11:50 - 12:10 Farm Labor -- Dr Fritz Roka

- Update on Immigration Reform and Its Impact on Florida Farm Workers
- Impact of the Affordable Care Act on Agricultural Employers

12:10 – 12:30 – Dr. Monica Ozores-Hampton

- Broccoli Production in South Florida

12:30 – 12:50 – Dr. Sanjay Shukla

- Water quality treatment from vegetable farm reservoirs
- Predicting groundwater P concentrations using soil test data from vegetable farms

Lunch – Courtesy of Bayer Crop Science

1:10 – 1:30 PM – Bayer Crop Science Product Update

Opportunities

FMC Agricultural Products Group - Retail Market Manager (Salesperson)

FMC, a diversified chemical company serving agricultural, industrial and consumer markets globally for more than a century has an immediate opening for a Retail Market Manager (Salesperson) in its South Florida territory. This territory's focus crops include citrus, sweet corn, snap beans, cucurbits, peppers, lettuce, tomatoes, blueberries and sugarcane. The sales territory has a mix of insecticide, herbicide and fungicide business and having a background in these areas is a crucial. The incumbent will be responsible for the management of customer accounts, identify and develop new prospects to sell APG product. This Salesperson will have a strong ability in building customer business relationships to develop and execute an account plan to meet/exceed sales targets. This position requires 50% travel to service territory responsibilities.

Qualifications:

- BS Weed Science, Agronomy, Pest Management or similar degree in Agriculture
- Certified Crop Advisor (CCA) a plus
- 5+ years of agriculture sales experience developing and servicing new/existing accounts
- Proven ability building a South Florida sales territory
- Experience in selling insecticides, herbicides and/or fungicides

All qualified candidates interested in this opportunity to build an agriculture sales territory in South Florida should send resumes to Brigit Turner at Brigit.turner@fmc.com.

Organic Farm Manager in South Carolina. Compensation is \$70K-90K w/ bonus potential.

The Organic Farm Manager position will assist in establishing the Company's organic farming operations. The Organic Farm Manager will report to the Director of Field Operations and will be responsible for the development, management, planning and control of our organic farming operation. Additional responsibilities will include:

- Identifying, developing, and maintaining local farm land for organic agricultural use.
- Determining crop varieties for planting.
- Inspecting crops, fields, or plant stock to determine conditions and need for cultivating, spraying, weeding, or harvesting.
- Assigning duties, such as cultivation, irrigation, or harvesting of crops or plants, product packaging or grading, or equipment maintenance.
- Overseeing the development of the Company's composting operation.
- Preparing reports regarding farm conditions, crop yields, machinery breakdowns, or labor problems.
- Identifying and developing alternative supplies of organic product (i.e. other farming locations, contract growers, etc.)
- Developing, collecting, and reviewing product data, including planting and harvesting schedules.
- Participating with other departments, managers and/or owners in establishing Company strategic plans and objectives related to organic product supply.
- Interacting regularly with senior managers, customers and vendors.
- Reinforcing compliance with GAP (Good Agricultural Practices), GHP (Good Hygiene Practices), SOPs (Standard Operation Procedures), SSOPs (Sanitation Standard Operation Procedures) and company policies and specifications.

MINIMUM REQUIREMENTS: Three (3) to five (5) years work experience in organic agriculture; a four year degree in Agronomy, Horticulture or related major is preferred but not required in lieu of direct experience; excellent verbal and written communication skills, basic math, reading, and strong organizational skills; computer literate; experience with MS Office programs (i.e. Word, Excel, and Outlook); valid driver's license and clean driving record; capable of lifting up to 50 pounds, walking fields, climbing on equipment. Bilingual in English and Spanish a plus.

VP of Farming Operations- A cutting edge produce company is seeking a VP of Farming Operations to join their team based in S. California! Someone with extensive, high level of experience managing farm operations and putting together grower contracts is required. Manufacturing experience would be a plus. \$150K-\$200K base plus bonus incentive.

If interested in either of these two positions (Organic Farm Manager or VP of Farm Operations), please contact:

Vanessa Garcia Hall
Executive Search Consultant
JBN & Associates, LLC

Direct: 480.222.5517
Cell: 480.236.9505
Fax: 480.344.2830
vanessa@jbnassociates.com

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

The Guide to Seed Treatment Stewardship is the product of industry-wide collaboration between seed companies, seed treatment providers and universities – and it draws from data collected worldwide. Jointly produced by the American Seed Trade Association and CropLife America, its purpose is to provide farmers and seed companies with critical information and up-to-date guidelines for managing treated seeds effectively to minimize the risk of exposure to non-target organisms. – Go to <http://seed-treatment-guide.com/about/overview/>

National Commodity-Specific Food Safety Guidelines for Cantaloupes and Netted Melons
<http://www.cantaloupe-guidance.org/sites/default/files/docs/Natl%20Cantaloupe%20Guidance.pdf>

EPA-approved Fumigant training program for certified applicators using methyl bromide, chloropicrin, chloropicrin and 1,3-dichloropropene, dazomet and metam sodium and potassium -
<http://www.fumiganttraining.com/>

EPA-approved training program for certified applicators using dimethyl disulfide (DMDS) -
<http://paladin.trainingmine.com/>

Quotable Quotes

“Learn from yesterday, live for today, hope for tomorrow.” - Albert Einstein

"Don't mistake my kindness for weakness. I am kind to everyone, but when someone is unkind to me, weak is not what you are going to remember about me." - Al Capone

There's no trick to being a humorist when you have the whole government working for you. - Will Rogers

The secret of joy in work is contained in one word - excellence. To know how to do something well is to enjoy it. - Pearl S. Buck

You cannot legislate the poor into prosperity by legislating the wealthy out of prosperity. – Adrian Rogers

Concord Hymn - Edward Waldo Emerson

By the rude bridge that arched the flood,
Their flag to April's breeze unfurled,
Here once the embattled farmers stood,
And fired the shot heard round the world.

The foe long since in silence slept;
Alike the conqueror silent sleeps;
And Time the ruined bridge has swept
Down the dark stream which seaward creeps.

On this green bank, by this soft stream,
We set to-day a votive stone;
That memory may their deed redeem,
When, like our sires, our sons are gone.

Spirit, that made those spirits dare,
To die, and leave their children free,
Bid Time and Nature gently spare

On the Lighter Side

Two Norwegians go to Collect Unemployment

Sven and Ole worked together in a Minnesota factory.....and both were laid off.

So...dey vent to der Unemployment Office togedder.

Asked his occupation, Ole said, "Panty Stitcher. I sew da elastic onto da ladies cotton panties."

The clerk looked up Panty Stitcher. Finding it classified as unskilled labor, she gave Ole \$300 a week in unemployment compensation.

Sven, when asked his occupation replied, "Diesel Fitter".

The clerk looked up Diesel Fitter...and it was classified as skilled. So, the clerk gave Sven \$600 a week in unemployment compensation.

When Ole found this out, he was yus furious! He stormed back into the office to find out why his friend and co-worker was collecting double his benefits.

The clerk explained, "Panty Stitchers are unskilled labor and Diesel Fitters are skilled labor."

"Vat skill?, yelled Ole. "I sew da elastic on da panties. Sven puts dem over his head and says, "Yah, -----
DIESEL FITTER".

(If you don't understand a word of this, then you're not Norwegian or from Minnesota !)

Speeding

A senior citizen drove his brand new Corvette convertible out of the dealership. Taking off down the road, he floored it to 80 mph, enjoying the wind blowing through what little gray hair he had left.

"Amazing," he thought as he flew down I-95, pushing the pedal even more. Looking in his rear view mirror, he saw a Florida State trooper behind him, lights flashing and siren blaring. He floored it to 100 mph, then 110, then 120. Suddenly he thought, "What am I doing? I'm too old for this," and pulled over to await the trooper's arrival.

Pulling in behind him, the trooper walked up to the Corvette, looked at his watch, and said, "Sir, my shift ends in 30 minutes. Today is Friday. If you can give me a reason for speeding that I've never heard before, I'll let you go."

The old gentleman paused. Then he said, "Years ago, my wife ran off with a State trooper. I thought you were bringing her back."

"Have a good day, sir," replied the trooper.

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.

Contributors include: Joel Allingham/AgriCare, Inc, Jeff Bechtel/Syngenta Flowers, Bruce Corbitt/West Coast Tomato Growers, Gordon DeCou/Agri Tech Services of Bradenton, Dr Nick Dufault/ UF/IFAS, Carrie Harmon/UF/IFAS Plant Disease Clinic, Fred Heald/The Andersons, Sarah Hornsby/AgCropCon, Cecil Howell/H & R Farms, Bruce Johnson/General Crop Management, Barry Kostyk/SWFREC, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Chris Miller/Palm Beach County Extension, 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. 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, Dr. Phil Stansly/SWFREC, 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.

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