



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

Institute of Food and Agricultural Sciences

Hendry County Extension

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# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

January 9, 2004

**Rain fell ahead of a series of cold fronts that crossed the state in mid-December dropping temperatures in many areas of south Florida into the 30's just before Christmas.** Rainfall totals varied widely across the region with some areas reporting from 1–3 inches of rain for the period. Growers in a number of places report that harsh weather had a negative affect on tender crops and note that some pack outs have been below par as a result.

**Unseasonably warm temperatures with many days reaching into the mid 80's toward the end of the December and the first week of the New Year helped many crops recover from setbacks suffered in December and allowed growers to get back on schedule with planting and harvest operations.**

**A cold front that moved into the area this week returned temperatures to more seasonable levels.**

**Crops coming to market include snap beans, cabbage, celery, eggplant, endive, escarole, lettuce, peppers, radishes, squash, strawberries, sweet corn, tomatoes, and specialty crops.**

### FAWN Weather Summary

Date	Air Temp (°F)		Rainfall (Inches)	Hours Below Certain Temperature (hours)							
	Min	Max		40°F	45°F	50°F	55°F	60°F	65°F	70°F	75°F
<b>Bradenton</b>											
12/8/03 – 1/9/04	33.4	81.6	3.23	11.6	34.7	9.4	19.0	20.6	5.5	62.8	143.3
<b>Ft Lauderdale</b>											
12/8/03 – 1/9/04	41.8	81.2	0.37	0.0	9.5	12.0	8.0	62.2	12.3	45.5	79.3
<b>Fort Pierce</b>											
12/8/03 – 1/9/04	36.4	81.6	1.33	23.7	0.9	26.0	14.7	5.4	40.5	37.4	131.6
<b>Homestead</b>											
12/8/03 – 1/9/04	37.3	81.1	0.30	2.1	11.2	7.7	10.1	19.5	60.9	13.2	79.6
<b>Immokalee</b>											
12/8/03 – 1/9/04	31.6	82.5	1.50	1.8	8.7	14.9	27.8	33.2	74.8	21.2	102.1

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COOPERATIVE EXTENSION WORK IN AGRICULTURE, FAMILY AND CONSUMER SCIENCES, SEA GRANT AND 4-H YOUTH, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLORIDA, U.S. DEPARTMENT OF AGRICULTURE, AND BOARDS OF COUNTY COMMISSIONERS COOPERATING

**The short-term forecast from the National Weather Service in Miami calls a second front to move across the area by tomorrow morning bring a slight chance of scattered showers and cooler conditions.**

Temperatures on Sunday morning will reach the low to mid 40s before moderating. Clear skies and cool dry conditions will persist through Thursday with highs in the mid 70's and lows in the mid 40's to low 50's.

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

## **Insects**

**Growers and scouts report mostly light to moderate insect pressure across the area with seasonal increases in leafminer and whitefly pressure.**

### **Whiteflies**

**East Coast growers report a dramatic spike in whitefly pressure in recent weeks with high numbers of whiteflies being found in eggplant, pepper, squash and tomatoes.** Scouts report observing large scale migration of whitefly adults and note that they are finding from 5 – 20 adults per sample in some locations. Counts in squash have been running as high as 20 –25 and a high incidence of silverleaf has been reported. Respondents also note finding numerous whitefly adults and eggs on pepper.

**Growers and scouts in Southwest Florida indicate that whitefly populations are building in older fields and also report lots of whitefly movement in some areas.** Whitefly counts are variable depending on location with low numbers being reported in some places and counts of 4 –5 adults per leaf in others. Some infield transmission of tomato yellow leaf curl has been reported in younger plants at 1<sup>st</sup> tie.

**Over the next few weeks, growers are advised to be alert for migrating whiteflies moving into neighboring crops, as early plantings reach the end of production and start to be destroyed.**

**Reports from Miami-Dade County indicate that whiteflies numbers are present in bean, potatoes and tomatoes.**

**Reports from the Manatee/Ruskin area indicate that although the season is pretty much over there are still some grape and cherry fields and a couple of round fields still being picked.** In some of these fields, respondents note the presence of high numbers of whitefly adults and immatures and apparently little being done to control them. Some of these fields have new TYLCV showing up in the tops of plants. The fear is that if low temperatures do reduce the population, growers may have crops going in the ground in January with high numbers of viruliferous whiteflies around.

**Although the whitefly situation appears to be better this year than at this same time last season, this is a critical time for growers to maintain vigilance and keep up whitefly control measures to avoid a buildup of whiteflies and prevent the movement of infected whiteflies carrying TYLCV into the spring crop.**

**In older plantings growers should strive to maintain control of adults with oils, soaps and materials OTHER THAN nicotinoids.** A strong emphasis should be placed on PROMPT destruction, block by block, as harvest is completed, including oil with herbicide for quick burndown and control of existing whiteflies in those blocks, thus minimizing movement out to other blocks.

**Remember that a big part of an effective resistance management program is not following an application of a nicotinoid with another application (soil or foliar) of the same or different nicotinoid.** Please think twice before doing this!! While they may work now, then what? What will you use next time? There are NO new adulticides coming down the pipe, at least not in the near future. While you may feel you have no

alternatives right now, the nicotinoids may be the only thing standing between a decent crop and disaster. If we were to lose the nicotinoids to resistance, we likely would not be able to grow tomatoes in South Florida.

**Neonicotinoid Resistance Management Strategies for SW Florida** – the following recommendations have been developed through a collaborative effort of UF/IFAS faculty, chemical manufacturers and IPM consultants. **(Neonicotinoids include Admire, Platinum, Provado, Actara and Assail)**

### **Recommendations:**

- 1 Two-month crop free period from mid-June to mid-August
- 2 Correct crop destruction technique means control of existing whitefly populations in addition to the physical destruction of the crop.
  - Prompt and efficient crop destruction between fall and spring crops to maximally decrease whitefly numbers and TYLCV sources available to infect subsequent crops.
  - Use a burn down herbicide such as Paraquat or Diquat in conjunction with a heavy application of oil (2-4 % solution) to quickly kill whiteflies.
  - Time burn down sprays to avoid crop destruction during windy periods, especially when prevailing winds are blowing whiteflies toward adjacent plantings.
  - Destroy crops block by block as harvest is completed rather than waiting and destroying an entire field .
- 3 Reduce overall whitefly populations by strictly adhering to cultural practices including:
  - Plant whitefly-free transplants
  - Delay planting new fall crops as long as possible and destroy old crops immediately after harvest to create or lengthen a tomato free period
  - Control whitefly infested weeds, abandoned crops, and volunteer plants.
  - Control whitefly weed host reservoirs on field edges and ditchbanks.
  - Manage weeds within crops to minimize interference with spraying;
  - Avoid u-pick or pin-hooking operations unless effective control measures are continued
- 4 Use a proper whitefly spray program. *Follow the label!*
  - On transplants, either do not use a neonicotinoid or apply *one time* 7-10 days before shipping; use products in other chemical classes, including Fulfill, before this time;
  - Use a neonicotinoid. Admire (16 ozs/acre) or Platinum (8ozs/acre), at transplanting. Use products of other chemical classes as the control with the neonicotinoid diminishes
  - Do not use Admire at less than 16 oz/a or Platinum at less than 8 oz/acre
  - Do not use a split application of Admire or Platinum (i.e. do not apply at transplanting and then again later)
  - Never follow a soil or foliar application of a neonicotinoid with another soil or foliar application of the same or different neonicotinoid on the same crop or in the same field within the same season (i.e. do not treat a double crop with a neonicotinoid if the main crop had been treated previously, unless the double crop is planted at least 60 days after the main crop).

- 5 **Do unto your neighbor, as you would have him do unto you.** Looking out for your neighbor's welfare may be a strange or unwelcome concept in the highly competitive vegetable industry. Growers need to remember that should SLW develop full-blown resistance to the neonicotinoids, it's not just the other guy that will be hurt—everybody will feel the pain! This is why the Resistance Management Working Group has focused on *encouraging region-wide cooperation in this effort*.

**Knowing what is going on in the neighbor's fields is important.** Growers should try to keep abreast of operations in upwind fields, especially harvesting and crop destruction, which both disturb the foliage and cause SLW to fly. Now that peppers have been added to the list of TYLCV hosts, growers will need to keep in touch with events in that crop as well.

**For additional information:**

IRAC (Insecticide Resistance Action Committee) Website – <http://www.irc-online.org>

Additional suggestions for breaking the whitefly cycle can be found in an article by Dr. Jane Polston in last years Tomato Institute Proceedings, available online at the SWFREC website at [http://www.imok.ufl.edu/veghort/docs/tom\\_inst\\_2002\\_091202.pdf](http://www.imok.ufl.edu/veghort/docs/tom_inst_2002_091202.pdf)

**Leafminers**

**Growers and scouts in the Homestead area, report mostly moderate leafminer pressure primarily in beans, potatoes and tomatoes.**

**Around Southwest Florida leafminer pressure is high in most locations and most tomatoes being treated, as are some cucurbits.** Growers in some areas report heavy pressure in young plantings and report that they have already sprayed couple of times with continuing severe adult pressure – with some counts of up to 20 adults per plant with and severe stippling.

**Growers and scouts in Palm Beach report widespread leafminer activity in susceptible crops.** Some respondents have reported some decreased activity in recent days. Specialty growers report finding some mines are found on the cotyledon and oldest couple of leaves of most of the crucifers – but this is not considered to be a problem.

**Dr Gregg Nuessly, Entomologist UF/IFAS EREC notes that leafminers can sneak up on growers during the winter, particularly when the temperature is cool for several weeks followed by a warming trend as we saw recently.** The cooler temperatures tend to collapse the partially overlapping generations onto each other. Then when it warms significantly the adults emerge en masse and can at least temporarily overwhelm the natural enemies ability to keep them under control. Therefore, growers and scouts should check their fields for leafminer escapes.

**For more information on leafminers, visit the UF/IFAS Featured Creatures website at [http://creatures.ifas.ufl.edu/veg/leaf/vegetable\\_leafminer.htm](http://creatures.ifas.ufl.edu/veg/leaf/vegetable_leafminer.htm) and [http://creatures.ifas.ufl.edu/veg/leaf/a\\_serpentine\\_leafminer.htm](http://creatures.ifas.ufl.edu/veg/leaf/a_serpentine_leafminer.htm)**

**Worms**

**Worm pressure has been fairly low around Southwest Florida although there are still occasional new hatch outs of southern and beet armyworms and the odd hornworm here and there.** There have also been a few reports of fruitworm in tomato is scattered locations, low numbers of pickleworm in squash and a few diamondback moths showing up in crucifers.

**Growers and scouts on the East Coast report finding a few beet armyworms in tomatoes and pepper over the past few weeks along with a few diamondback moth larvae in specialty crucifers.** Reports from the Belle Glade area note that the lepidoptera have been slowed by the cool weather.

**Around Homestead, respondents are reporting increasing worm pressure in a wide variety of crops including beans, pepper, potato and tomato.** Scouts also note increased melon, pickle, and armyworm activity in cucurbits and large hatches of worms in sweet corn.

### **Mites**

**Growers and scouts on the East Coast report finding a few two-spotted and red and spider mite in eggplant, tomato and specialty items.** Broadmites are still present in pepper in a number of locations.

**Around Southwest Florida, broadmites remain very low.** Spidermites have been detected in a few fields on eggplant and tomato. Some respondents note finding higher numbers around crops that are adjacent to sugar cane windbreaks.

**Reports from Homestead report finding a few broad mites and spider mites on eggplant and pepper.**

### **Thrips**

**Strawberry producers in West Central Florida report have some problems with thrips in conjunction with recent warm weather.**

**Respondents in Homestead report some problems with thrips in pepper.**

**Thrips populations remain low around southwest Florida.**

**Thrips numbers are also low around Palm Beach although some isolated reports of *Thrips palmae* damage have been received.**

**Gregg Nuessly notes that growers should be aware of insect movement south on weather fronts during winter.** He notes that significant migration of western flower thrips (*Frankliniella occidentalis*) have been associated with cold fronts in December through January in previous years and suggests that bean, pepper and eggplant growers may want to intensify their sampling for thrips proceeding such fronts.

### **Aphids**

**Aphids remain mostly low around Southwest Florida with some winged aphids moving around.** Reports not that a few bean, cucurbit, pepper and potato fields being colonized. Growers note an increase in aphid activity in specialty brassicas. Respondents report finding both green peach aphids as well as black bean aphids.

**Specialty producers around Palm Beach report that aphid pressure has been constant on specialty crops including turnips, and Tokyo bekana.** Aphids have also been causing problems on young napa while the leaves are still spread out over the ground before cupping starts. Winged aphids have also been active on conventional crops with high numbers turning up in squash and tomatoes in some places.

**Around Belle Glade aphids are present in lettuce and beans.** Growers should be on the lookout for both black bean aphids (*Aphis fabae*) and black legume aphid (*Aphis craccivora*) in legume crops.

**In Homestead, respondents indicate that aphids are widely present in beans, cucurbits pepper potato and tomatoes.**

### **Silk Fly**

**Growers and scout in the Homestead area report a big jump in silk fly pressure with the warmer temperatures of the past few weeks.**

**Dr Gregg Nuessly: Entomologist UF/ FAS EREC in Belle Glade reports that growers have been finding an additional picture wing fly (different species but in the same family as corn silk fly) feeding directly on the anthers in the tassels and apparently on frass (droppings) from armyworms feeding in the tassels. He notes is the first time this type of feeding has been detected in South Florida.**

### **Pepper Weevils**

**Growers and scouts on the East Coast report an increase in pepper weevil activity, reports indicate the highest pressure to be in areas around Fort Pierce and Indian Town.**

**Respondents around southwest Florida indicate that pepper weevil activity is on the rise in a number of locations. Scouts indicate that over the past few weeks, they have detected a significant increase in adult weevil activity in several fields across a wide area.**

**Around Homestead, respondents report pepper weevils remain at mostly low levels with higher incidence in hot varieties.**

### **Diseases**

**Growers and scouts report that disease pressure has relatively low but heavy dews and foggy mornings continue to favor disease development in some places.**

### **Bacterial Spot**

**Respondents around the Homestead area report finding some new bacterial spot activity in pepper and tomato.**

**Around Immokalee, bacterial spot continues to be active in some older pepper and tomato plantings. A few new infections have also been reported in new plantings.**

**Reports from East Coast growers also note a slow increase bacterial spot on pepper and tomato.**

### **Target spot**

**Scouts around Immokalee indicate that target spot continues to be a problem especially on mature tomato plants. Several respondents have noted a big increase in incidence and severity following rainy weather in mid-December and report that fruit infections have reduced pack outs in some cases.**

**Respondents in Palm Beach report that target spot is widely present on tomato. Incidence and severity is mostly low.**

**Growers around Homestead report that target spot is still active on tomato.**

## **Anthrachnose**

**Anthrachnose is present on pepper in a few East Coast locations.** Cubanelle peppers as well as bell peppers have been affected. Incidence and occurrence is low to moderate.

## **Sclerotinia**

**Grower and scouts on the east Coast report increased incidence of sclerotinia in pepper and tomato following recent wet nights.**

**In tomato, 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. Large portions of the field may become diseased, producing large, circular, areas of dead plants.

**A good indicator of Sclerotinia is the presence of small, black sclerotia (resting structures) of the fungus.** Sclerotia vary in size and shape. Sclerotia can form on the surface of plant parts as well as inside the stems of tomato.

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

**Sclerotinia is a fungus that prefers cool, moist weather, causing diseases of great intensity when temperatures range from 60 - 70°.** High humidity with dew formation supports the spread and increases the severity of infections. Topsin has given good results in controlling the disease.

## **Early Blight**

**Reports from Homestead indicate that early blight is still active on tomato and potato. Alternaria is also present on beans.**

**Low levels of early blight are also being reported from widely scattered locations in East Coast growing areas.**

**In southwest Florida, a number of respondents report an increase in the incidence and occurrence of early blight in mature tomato in recent weeks with some fruit infections being reported.**

**Alternaria leaf spot, caused by the fungus *Alternaria brassicae*, has been observed on Chinese cabbage this fall throughout the Glades.** Dr Rick Raid notes that although this disease can be brought into check by some of the broad spectrum protectants, such as chlorothalonil and maneb, strobilurin fungicides registered on this crop have proven to be the most effective. Again, this class of fungicide should be alternated or tank mixed with a broad-spectrum protectant to avoid or reduce the likelihood of fungicide resistance developing and to improve efficacy.

## **Tomato Yellow Leaf Curl Virus**

**Around Homestead, new reports of TYLCV infections have been received as whitefly populations build seasonally.**

**In the Immokalee area, growers and scouts indicate that TYLCV is showing up in more fields.** Along with increased incidence and occurrence, there have been some reports of a few young fields that already have over 3% infection rates and some infield transmission of TYLCV in plants reaching first tie.

**Growers and scouts on the East Coast report mostly low incidence of TYLCV with a few infected plants showing up here and there.** There have been some reports of increased incidence and occurrence in older plantings with secondary infections being observed within fields.

### **Rust**

**Reports that common rust is still low on sweet corn around Homestead.** This situation however is likely to change as we enter the dry season.

**Dr Rick Raid notes that from this point on, sweet corn growers should be alert for common rust, caused by *Puccinia sorghi*, and northern corn leaf blight, caused by *Exserohilum turcicum*.** These two diseases can become quite severe during the spring sweet corn crop. Fungicide applications should be initiated well before disease levels become severe. Locally systemic fungicides such as propiconazole and the strobilurin fungicides are most efficacious. It is recommended that these be alternated or tank mixed with a broad-spectrum fungicide such as mancozeb or chlorothalonil.

### **Bean Golden Mosaic**

**Growers around Homestead report finding some new BGMV especially next to whitefly hosting crops such as grape tomatoes and sunflowers.**

### **Fusarium crown rot**

**Fusarium crown rot in tomato has flared up in a number of locations around Immokalee.**

**Growers in scouts in Palm Beach also report finding a few isolated cases of fusarium in pepper and tomato.**

### **Powdery mildew**

**Respondents in Palm Beach County indicate that they continue to find powdery mildew on squash in a number of locations.** Incidence is low to moderate but drier conditions and crop maturity will favor disease development. Powdery mildew has also been found on beans, pepper and eggplant as well.

**Powdery mildew of pepper is caused by *Leveillula taurica*, which is a very different powdery mildew fungus from that causing powdery mildew on cucurbits.** The fungus, which affects cucurbits *Podasphaera xanthii* (*Sphaerotheca fulginea*) or, occasionally, *Erysiphe cichoracearum*, grows on both surfaces of a leaf and forms haustoria within some epidermal cells to absorb nutrients and produces spores on both surfaces.

**In contrast, *Leveillula taurica* grows only within a leaf until it produces spores, a growth habit which is similar to *Alternaria* and most other foliar plant pathogenic fungi.** Additionally, *Leveillula taurica* only produces spores on the underside of leaves. *Leveillula taurica* is a species complex that infects over 1000 plant species in 74 families, including tomato and eggplant as well as pepper.

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

### **Gummy stem blight**

**Growers and scouts around Immokalee report finding gummy stem blight in spring watermelon.**

## Downy Mildew

Respondents in the Immokalee area report some moderate increase in downy mildew in squash following the recent warm weather.

## Phytophthora

Growers and scouts on the east Coast continue to note widely scattered occurrence of *Phytophthora capsici* on pepper, tomato and squash. Both Phytophthora crown and root rots as well as Phytophthora blight on aerial portions of affected crops have been reported. Incidence is low.

Phytophthora is also present to a lesser extent in a number of areas around Southwest Florida.

## Leaf Mold of Tomato Alert

Dr Ken Pernezny reports that a very unusual outbreak of leaf mold caused by *Fulvia fulva* (formerly *Cladosporium fulvum*) on round tomatoes in east coast production areas. Ken notes that this is only the second time in 27 years that this disease has been documented on outdoor tomatoes in Florida.

Ken writes only foliage symptoms occur and that fruit lesions have not been seen. Initial symptoms consist of numerous pale yellow spots on the upper leaf surface. These spots resemble those that might be associated with nutrient deficiency. Later a very distinct and highly diagnostic olive colored velvety fungal growth is evident on the lower leaf surface below the yellow spots. Under magnification the spores (conidia) appear lightly pigmented and more or less oval with 0 – 3 septa. The conidiophores have characteristic bulges at the cross walls that look like elbows or knees.

Optimum temperature for disease development is around 72 – 74° F and high humidity is an absolute must for development. Research performed at GREC in the 1970's found good control with foliar applications of maneb and chlorothalnilil but less control with maneb and copper mixes.

A few isolated reports of gray leaf mold have also been received from scouts operating around southwest Florida.

## Up Coming Meetings

### Palm Beach County

<b>January 14, 2004</b>	<b>General Standards/Core Test Review</b>	8 AM - 12 AM
	<b>Ag Row Crop Test Review</b>	1 PM – 3 PM

Belle Glade Extension Office  
2976 State Road 15  
Belle Glade, Florida

Contact Laura Powell at 561-996-1655.

Southwest Florida

**January 12 -14, 2003**      **SWFREC Vegetable Specialist Candidate Seminars**      11:00 AM – Noon  
(See attached schedule – below)

UF/IFAS - SW Florida Research and Education Center  
Hwy 29 N, Immokalee, FL

Contact Kris Sytsma at 239-658-3400

**January 19, 2004**      **Plant Pathology Trials Review**      Noon – 1:30 PM  
**and DuPont Crop Protection Product Update, including new Tanos label**

UF/IFAS - SW Florida Research and Education Center  
Hwy 29 N, Immokalee, FL

Contact Gene McAvoy at 863-674-4092

Other Meetings

**March 23-27, 2004**      **ISHS International Symposium on Protected Culture  
in a Mild-WinterClimate**  
Orlando, Florida, USA.

Contact Dr. Daniel J. Cantliffe at 352-392-1928 ext. 203

**June 21-24, 2004**      **1st International Symposium on Tomato Diseases  
and 19th Annual Tomato Disease Workshop**  
Grosvenor Resort at Walt Disney World  
Orlando, Florida

For more information, visit <http://plantdoctor.ifas.ufl.edu/istd.html>

**November 14 – 16, 2004**      **17<sup>th</sup> International Pepper Conference**

Naples Beach Hotel and Golf Resort  
Naples, Florida

For more information, contact Gene McAvoy at 863-674-4092 or visit  
<http://conference.ifas.ufl.edu/pepper>

# Vegetable Specialist Position - Southwest Florida Research & Education Center

## Seminar Schedule

**January 12, 2004 – 11:00 a.m. - Dr. James Shrefler**, “Science, Education and Service for Vegetable Production – Support for a Vital Food Industry Sector.”

**January 13, 2004 – 11:00 a.m. - Dr. Kent Cushman**, “From North Mississippi to South Florida: Taking Excellence in Applied Research to New Heights”

**January 14, 2004 – 11:00 a.m. - Dr. Monica Ozores-Hampton**, “Challenges and Opportunities in Florida Vegetables Production”

**Please RSVP** – Kris Sytsma at 239-658-3400 if you would like to join the candidate(s) for lunch at Rib City afterward.

## Websites

**Southeast Climate Consortium - Southeast Winter Freeze Forecast for 2003/2004** - Damaging freeze events are up to three times more likely in parts of South Alabama, South Georgia, and Florida during the upcoming winter season. Find out why – at [http://www.coaps.fsu.edu/climate\\_center/frz04.html](http://www.coaps.fsu.edu/climate_center/frz04.html)

**The Plant Management Network is a unique cooperative resource for the applied plant sciences.** This website provides fast electronic access to proven solutions and offers an extensive searchable database comprised of thousands of web-based resource pages from the network's partner universities, companies, and associations. Site also offers access to peer-reviewed citable journals, Plant Health Progress and Crop Management providing credible current information in areas important to practitioners, policy makers, and the public. Go to <http://www.plantmanagementnetwork.org/>

## Business Opportunity

**Florida Food Products located in Eustis, Florida is seeking a grower to produce limited acreage of specialty watermelons in South Florida.** Florida Food Products is a Florida-based international agribusiness specializing in the growing and processing of botanical and vegetable-based ingredients for the beverage, cosmetic, food and nutritional industries. Contact Jerry Brown at 352-357-4141 ext 303.

## Employment

**ProSource One is seeking an Ag and Citrus Salesperson for their Immokalee location.** Interested candidates should contact Mike Harowitz at 772-260-5017 or email [maharowitz@agrodist.com](mailto:maharowitz@agrodist.com) for additional information.

## News You Can Use

### New Pest Found in South Florida

The Florida Department of Agriculture and Consumer Services reports that the pigeon pea pod fly, *Melanagromyza obtusa*, has been found in south Florida. Larvae and pupae were found on December 20, 2003 in an infested dooryard planting of pigeon pea pods in Miami. Surveys to date have detected other infested

pigeon pea pods in four 1-square-mile sections in the Miami area.

Although the pigeon pea pod fly's primary host is the pigeon pea, it has been reported on alternate host plants in other countries when pigeon pea is unavailable. Since pigeon pea is grown to a limited extent only in southern Florida, the potential impact of this pest on the continental United States would depend upon its ability to find a suitable alternate host. Potential alternate hosts for the pigeon pea pod fly present in the continental United States, include beans, chickpea, and black-eyed peas.

For more information, go to <http://www.pestalert.org/Detail.CFM?recordID=1>

## **CAPs Program Comes To Florida**

The Cooperative Agricultural Pest Survey (CAPS) is a joint program, currently in all fifty states, that involves the United States Department of Agriculture and each state's agricultural agency. The CAPS Program in Florida is the largest in the country and is comprised of USDA and Florida Department of Agriculture and Consumer Services-Division of Plant Industry representatives. The primary goal of the program is the early detection of exotic, invasive species, which includes: arthropods, bacteria, fungi, viruses, viroids, nematodes, mollusks, and plants. The benefits of early detection will increase the potential success for early eradication, reduce the threat to Florida's agriculture and natural resources, reduce the threat to neighboring states and countries with which we are involved in commerce with, and reduced costs. Public awareness of the issues surrounding exotic species, through a concerted outreach program, is another focus of the CAPS Program.

For more info contact:

Jim Walker  
Pest Survey Specialist  
Cooperative Agricultural Pest Survey  
DPI-DOACS 1911 SW 34th St.  
P.O. Box 147100 Gainesville, FL 32614-7100  
Phone (352) 372-3505 X 466  
Email: [walkerj1@doacs.state.fl.us](mailto:walkerj1@doacs.state.fl.us)

## **Forecasters Predict Damaging Freezes More Likely This Winter**

Climate shifts due to El Niño (warmer than normal ocean temperatures in the tropical Pacific Ocean) and La Niña (cooler than normal) are well-known and are now used to predict seasonal temperature and precipitation trends up to 12 months in advance.

These climate shifts are particularly strong in Florida and the Southeast United States. During the winter and spring months, El Niño brings plentiful rainfall (40% more than normal) and cooler temperatures to Florida. Conversely, La Niña is associated with warm and dry winter and spring seasons in Florida and the Southeast.

While El Niño and La Niña affect the average temperature of the winter season as a whole, they both tend to suppress the severe arctic outbreaks of cold air that cause damaging freezes in Florida. Changes in the jet stream patterns during El Niño and La Niña play a part in the intrusion of cold Canadian air that make their way this far south. A strong subtropical jet accompanies El Niño and for the most part "blocks" the Arctic air masses from entering Florida. La Niña limits the movement of the Polar jet over the United States, steering winter storms and stronger cold fronts to our north. However, in Neutral years the position of the Polar jet is highly variable and it tends to meander over the entire continent. Due to this "unstable" pattern, the southern tier of the US is more susceptible to the dramatic dips (or troughs) in the jet stream that push Arctic air masses south from Canada.

These are the severe Arctic outbreaks that lead to freezing temperatures in the Central and Southern parts of Florida.

It has been noted that 10 out of the last 11 severe freezes in Florida took place during Neutral conditions in the Pacific Ocean. Near normal sea surface temperatures are expected again in the tropical Pacific this year, so the upcoming winter will be considered Neutral (neither El Niño nor La Niña). An examination of minimum temperatures from weather stations all over Florida from the past 50 years shows that freezing events are up to three times more likely to occur in Neutral years than during El Niño or La Niña. For more details, visit [http://www.coaps.fsu.edu/climate\\_center/frz04.html](http://www.coaps.fsu.edu/climate_center/frz04.html)

## **International Pepper Conference comes to Naples in 2004**

The 17th International Pepper Conference will be held November 14-16, 2004 in sunny Southwest Florida at the beautiful Naples Beach Hotel and Golf Club situated on the Gulf of Mexico.

For the past 25 years, this conference has attracted prominent scientists, researchers, breeders, horticulturists, pathologists, entomologists, geneticists, physiologists, virologists, extension agents, seed and chemical company representatives, major processors, growers, and chile aficionados from around the world. This conference is now recognized as the premier venue for the dissemination and exchange of information on Capsicum, and the 2004 program will focus on all pepper types including bell, long green/red chile, high color paprika, ancho, pimiento, cayenne, Tabasco, jalapeno, yellow pickling, serrano, and cherry peppers.

Topics to be presented include:

- Breeding and Genetics - germplasm evaluation and utilization, crop physiology and technology
- Horticultural Management and Production - production methods, cultural systems and sustainable approaches
- Integrated Pest Management - insect and disease management, biological control
- Post Harvest Issues - post harvest physiology and technology, economics, marketing and trade

This conference will give growers, processors, brokers and scientists a place to make new business relationships, meet specialists in the different fields, and have access to the latest technology, products and services to perform their respective jobs better.

If you have an interest in peppers you cannot afford to miss this conference. It will provide an unsurpassed opportunity for networking and the multi-disciplinary sharing and exchange of the latest scientific and practical information related to pepper breeding, production and processing. All day field tours will provide an opportunity to visit state-of-the-art commercial production fields, packing facilities and breeding stations around Southwest Florida.

For more information, visit the conference web site for a preview of what's to come!  
<http://conference.ifas.ufl.edu/pepper>

## **Quotable Quotes**

Correct me if I'm wrong, but hasn't the fine line between sanity and madness gotten finer? - George Price

The scientific name for an animal that doesn't either run from or fight its enemies is lunch. - Michael Friedman

No one is useless in the world who lightens the burden of another. - Charles Dickens

Beer is proof that God loves us and wants us to be happy. -- Benjamin Franklin

A woman drove me to drink and I didn't even have the decency to thank her. - W.C. Fields

It is better to keep your mouth closed and let people think you are a fool than to open it and remove all doubt. - Mark Twain

## **On the Lighter Side**

### **Short Takes**

The teacher had been teaching my seventh-graders about World War II, and a test question was, "What was the largest amphibious assault of all time?"

Expecting to see "the D-Day invasion" as the answer, she found instead on one paper, "Moses and the plague of frogs."

My first grade daughter and her friend both needed new boots as winter approached. The friend got in the car one morning and finally had gotten her boots. "Tina," I commented, "I see you got new boots! Where did you get them?"

"At the store," she answered.

"Which one?" I asked.

She began looking at her new boots and after a pause said, "Both of them!"

A sign posted on the wall of an Army mess read:

"Don't Waste Food -- Food will win the war."

Beneath someone had written:

That's fine, but how do we get the enemy to eat it?

### **Four Brothers**

Four brothers left home for college, and they became successful doctors and lawyers and prospered. Some years later, they chatted after having dinner together. They discussed the gifts that they were able to give to their elderly mother who lived far away in another city.

The first said, "I had a big house built for Mama."

The second said, "I had a hundred thousand dollar theater built in the house."

The third said, "I had my Mercedes dealer deliver her an SL600."

The fourth said, "Listen to this. You know how Mama loved reading the Bible and you know she can't read it anymore because she can't see very well. I met this priest who told me about a parrot that can recite the entire Bible. It took twenty priests 12 years to teach him. I had to pledge to contribute \$100,000 a year for twenty

years to the church, but it was worth it. Mama just has to name the chapter and verse and the parrot will recite it."

The other brothers were impressed.

After the holidays Mom sent out her Thank You notes.

She wrote: "Milton, the house you built is so huge. I live in only one room, but I have to clean the whole house. Thanks anyway."

"Marvin, I am too old to travel. I stay home; I have my groceries delivered, so I never use the Mercedes. The thought was good. Thanks."

"Michael, you give me an expensive theater with Dolby sound, it could hold 50 people, but all my friends are dead, I've lost my hearing and I'm nearly blind. I'll never use it. Thank you for the gesture just the same."

"Dearest Melvin, you were the only son to have the good sense to give a little thought to your gift. The chicken was delicious. Thank you."

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