



UNIVERSITY OF
FLORIDA

E X T E N S I O N

Institute of Food and Agricultural Sciences

Hendry County Extension

PO Box 68 LaBelle, Florida 33975-0068

Phone (863) 674-4092

SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

September 24, 2004

Storm weary South Florida growers are anxiously watching Hurricane Jeanne, the 4th storm of the season to take aim at the peninsula as many growers in Palm Beach, Martin, and St Lucie counties struggle to catch up with plantings and the repair damage left behind by Francis. Storm damage varied widely across the area with the most serious hits being taken by growers in Martin and St Lucie counties, which reports indicate lost more than 80% of their plastic acreage and suffered serious damage to vegetables from wind and water. Severe damage to barns, greenhouses and other structures was also widespread. Estimates from Palm Beach indicate that between 200 –300 acres of peppers and tomatoes were lost.

In other areas many of the problems being seen on vegetables are primarily or at least secondarily related to the winds and water from hurricanes. Depending on the location, delays in planting schedules of 1 to 3 weeks have been reported.

Field preparation and planting is going strong across all south Florida growing areas. Okra harvesting remains active in Dade County.

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 | |
| Bradenton | | | | | | | | | | | | |
| 9/1 – 9/23/04 | 69.6 | 92.1 | 7.47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 | 7.7 | |
| Ft Lauderdale | | | | | | | | | | | | |
| 9/1 – 9/23/04 | 73.6 | 91.4 | 8.25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.8 | |
| Fort Pierce | | | | | | | | | | | | |
| 9/1 – 9/23/04 | 70.5 | 92.2 | 8.94 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.5 | |
| Homestead | | | | | | | | | | | | |
| 9/1 – 9/23/04 | 69.4 | 92.2 | 4.74 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 4.4 | |
| Immokalee | | | | | | | | | | | | |
| 9/1 – 9/23/04 | 68.8 | 91.8 | 3.89 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 22.0 | |

The Institute of Food and Agricultural Sciences is an Equal Employment Opportunity - Affirmative Action Employer authorized to provide research, educational, information, and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin.
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

Temperatures for the period have been slightly above normal with daytime highs in the upper 80's and lower 90's. Nighttime temperatures have been mostly in the low to mid 70's. Although most areas suffered from excessive rainfall and saturated conditions over the past few weeks, a number of areas dried out over the past week to 10 days with several growers reporting problems with heat stress on a few afternoons last week that were very hot with intense sunlight causing some excessive plant stress and plant loss before the return of Ivan brought widespread precipitation to the region. In other areas plantings are just showing the results of some earlier wind damage as plants start wilting from twisted/crack stems at the soil line.

In West Central Florida and to some extent in SW Florida, the oldest tomatoes, especially those that were not tied, were most hard hit, with wind damage including twisted/broken stems, torn tissue, etc. Those that were tied seem to have fared better, with mostly torn foliage but less twisting and girdling of stems.

In the Manatee area, some older plants/plantings have been reset. Younger plantings fared much better, but the further east in general, the worse the damage. One interesting observation that has been reported is the increased percentage of damage to older tomatoes, which were near either tall windbreaks or woods. Depending on the wind direction, especially during Frances, the wind seemed to hit those windbreaks or woods and create little whirlwinds or eddies that cause more damage than was seen in unprotected fields.

Latter plantings in all areas look good.

The short-term forecast from the National Weather Service in Miami calls for deteriorating weather conditions over the next few days as Hurricane Jeanne approaches Florida. How bad it gets in any given location will all depend on what happens with Jeanne. A hurricane watch has been posted for the entire east Coast and extends inland to Lake Okeechobee.

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

Insects

Worms

Various worms are the major insect pest being seen on most farms around southwest Florida. Growers report finding a variety of worm species including beet armyworm, southern armyworm, loopers, a smattering of hornworms, and even some fruitworms depending on the location.

Around west central Florida growers and scouts report that the biggest problem seems to be worms of all varieties. Scouts have detected beet armyworms, southern armyworms, loopers, tomato fruitworms, hornworms, and even a few pinworm eggs.

Fall armyworms are being reported in sweet corn in several locations in Palm Beach and Hendry Counties.

Scouting is extremely important in detecting worms early before they can do significant damage. The **Florida Tomato Scouting Guide** indicates a pre-bloom threshold of 1 larva/6plants and post-bloom threshold of 1 egg mass or larva/field. The different armyworms are similar in color, size and markings and can be difficult to tell apart.

The following information was excerpted from the Florida Tomato Scouting Guide to help growers identify these different worms. The guide can be found on the web at the **Florida Tomato Scouting Guide** has excellent color photographs to help you identify these and other common tomato pests. It can be found on

the web at <http://FTSG.ifas.ufl.edu/intro.htm> and can also be purchased in bound form from the University of Florida/IFAS Publications.

- **Beet armyworm:** (*Spodoptera exigua*) is generally less numerous than southern armyworm but is more difficult to control. The larva is generally green, mottled with white spots with black spot over the middle pair of true legs. 1 -1 1/4 in. long at maturity. The adults have light brownish gray front wings with indistinct lines and are active at night. The eggs are laid in masses of 50-75 eggs covered with a felt-like mass of scales from female's body. Eggs are generally found on underside of leaves and hatch in 3 days.
- **Southern armyworm:** (*Spodoptera eridania*) The larva is a dark caterpillar with a yellowish brown head and a yellowish line along the side of body that is interrupted by a large dark spot on first abdominal segment. Approximately 2 in. long at maturity. Large larvae have 2 rows of dark triangles on dorsal surface. The young larvae feed on under surface of leaflets leaving upper epidermis intact to give a "window pane" appearance. The adult has the front wing streaked with cream, gray, light brown and black and hind wing white with some dark on margins. Large masses of 100-200 eggs covered with moth body scales are found on underside of leaves
- **Tomato fruitworm:** (*Helicoverpa zea*) Larval color is variable, ranging from very dark to light green or pink with alternating longitudinal dark and light stripes. The skin is covered with short sharp micro-spines. Adults are active at night, with a 1-1/2 in. wingspan. Males display a cream-colored forewing with orange or olive cast, while females have a light yellow brown forewing with indistinct vertical lines. Eggs are waxy white and ribbed, with a flat base, and are deposited singly usually on lower surfaces of leaves adjacent to or near flowers. Eggs hatch in 2-3 days.
- **Cabbage or soybean looper:** (*Trichoplusia ni* or *Pseudoplusia includens*) Larva is pale green with white line along side of body and only 3 pair of prolegs. Mature size 1 – 1 1/4 in. Adult is a grayish-brown moth that is active at night. Front wings marked near center with a figure 8-shaped, silver-white spot. Eggs are greenish-white, ridged but flattened laterally and are found singly on upper or lower leaf surfaces of upper canopy leaves. Hatches in 2-3 days.

Whiteflies

Respondents in the Manatee/Ruskin area report that whiteflies are now much less numerous than earlier in the season with some speculation that heavy rains and winds have helped decimate the population.

Around Southwest Florida growers and scouts not that whitefly numbers have been fairly low over the past 2-3 weeks but indicate that a few fields have reached threshold for adults in tomatoes.

Nicotinoid Resistance Management Recommendations

- Reduce overall whitefly populations by strictly adhering to cultural practices including:
 - Plant whitefly-free transplants
 - Delay planting new crops as long as possible and destroy old crops immediately after harvest to create or lengthen a tomato free period
 - Do not plant new crops near or adjacent to infested weeds or crops, abandoned fields awaiting destruction or areas with volunteer plants
 - Use UV-reflective (aluminum) plastic soil mulch
 - Control weeds on field edges if scouting indicates whiteflies are present and natural enemies are absent
 - Manage weeds within crops to minimize interference with spraying;

- Avoid u-pick or pin-hooking operations unless effective control measures are continued
- Do not use a nicotinoid like Admire on transplants or apply only once 7-10 days before transplanting; use other products in other chemical classes, including Fulfill, before this time;
- Apply a nicotinoid like Admire (16 ozs/acre) or Platinum (8ozs/acre) at transplanting and use products of other chemical classes (such as the insect growth regulators Courier® or Knack® as the control with the nicotinoid diminishes. Note: Courier and Applaud are the same active: buprofezin. Courier is labeled for whitefly on tomato and snap bean. The mode of action is chitinase inhibitor. Dimilin and Knack is a juvenile hormone mimic labeled for whitefly control on fruiting vegetables.
- Never follow an application (soil or foliar) of a nicotinoid with another application (soil or foliar) of the same or different nicotinoid on the same crop or in the same field within the same season (i.e. do not treat a double crop with a nicotinoid if the main crop had been treated previously);
- Save applications of nicotinoids for crops threatened by whitefly-transmitted plant viruses or whitefly-inflicted disorders (i.e. tomato, beans or squash) and consider the use of chemicals of other classes for whitefly control on other crops.

Leafminers

A few leafminer are being reported on tomatoes in West Central Florida. Indications are that numbers are low and occurrence is mainly on field ends and borders.

Around Southwest Florida, some leafminers are being seen on tomato and eggplant.

Aphids

Scouts around Southwest Florida have detected low numbers of winged aphids in tomato.

Broadmites

Some broadmites are being seen in some early set pepper around Immokalee.

Other insects

A few reports of cucumber beetles and mole crickets causing some problems have been received from a few sites around southwest Florida.

Diseases

Bacterial Leaf Spot

Respondents from around Ruskin report that all ages of tomato are displaying high incidence of bacterial leaf spot. They note that bacterial spot is being seen in tops of plants, on resets and even on young fruit stems and indicate that the situation was not helped by “the return of Ivan.” Peppers also showing some bacteria spot symptoms but not as severe as older tomatoes.

Reports from the Plant City area tell a similar tale with lot of bacterial disease all over tomato plants where the blowing rain just drove it into the tissue through out the canopy.

Around Immokalee, growers and scouts report that bacterial spot symptoms are increasing in both tomato and pepper and note that fields with early infections, prior to storms, now have moderate to high infections.

Early Blight

Growers around Immokalee report low levels of early blight in some fields.

Botrytis

Some botrytis has been reported in early tomato plantings around the Ruskin area.

Southern Blight

Low incidence of southern blight is being reported on tomatoes in both Southwest and West Central Florida.

Root rots

Pythium is not uncommon in all areas especially in plantings that have been subjected to heavy rains and saturated conditions. Scouts are reporting finding some Pythium infections where plants have been wind whipped and have twisted/crack stems at the soil line. Rhizoctonia has also been recovered from some storm-damaged plants.

Tomato Yellow Leaf Curl Virus

Despite some early finds of TYLCV in the Manatee/Ruskin area respondents indicate that the incidence of virus remains low.

Growers and scouts around Immokalee report some increase in TYLCV incidence in several early-planted locations around Immokalee. At present TYLCV is present in only a few locations.

Respondents in the Plant City area report a few TYLCV hot spots with incidence approaching 10-15%.

Since the Tomato Yellow Leaf Curl is spread by whiteflies, management primarily consists of managing whitefly populations. Growers should to monitor whitefly populations closely and implement the following measures to manage the whitefly vector.

Use virus-free transplants. Transplants should be treated with Pymetrozine (Fulfill) to help suppress possible virus transmission. Note the Fulfill label has been amended to increase the number of Fulfill applications from 2 to 4. Transplant houses should use nicotinoid insecticides (Admire or Platinum) at least 7 days before shipping (for protection during the first week in the field).

Imidacloprid (Admire) or thiamethoxam (Platinum) should be used in the setting water at transplanting or through the drip irrigation system for whitefly control. Monitor whitefly populations by scouts throughout the season. Combinations of the following insecticides could be applied if migrating whitefly populations are high: a pyrethroid with an organophosphate, Thiodan, or soap with a pyrethroid or Thiodan.

Growers are strongly encouraged to practice good resistance management and avoid applying a second application of imidacloprid (Provado) or thiamethoxam (Actara) or products with similar chemistry if plants have been treated with Admire or Platinum. See resistance management suggestions below.

After the efficacy of the soil-applied insecticides begins to decline, whiteflies can be controlled with an insect growth regulator like Knack and Applaud or the insecticides listed above. Since growth regulators interfere with normal growth and development of whiteflies, do not expect immediate response from these

materials. They are not toxic on contact with the insect but do cause treated female adults to lay infertile eggs or adversely affect the development of nymphs.

Sanitation is extremely important. Growers should learn to identify early symptoms of TYLCV and rogue infected and infected-looking plants from field especially at the beginning of the season. This is especially important early in the season when few infected plants are present. All tomato fields should be cleaned up immediately after harvest to prevent the spread of infected whiteflies to subsequent tomato crops.

Growers should inspect fallow fields and field margins for the presence of volunteer tomato plants, which may host whiteflies and act as a source of inoculum.

Plantings of tomatoes should be separated in time and space from plantings of hosts (such as beans, cucurbits, tomatoes and weeds) that are good sources of whiteflies.

Seminis and Hazera have both introduced TYLCV resistant tomato cultivars that may be useful in some situations.

Gummy Stem blight

Gummy stem blight is present on fall watermelons around southwest Florida. Incidence is high in some fields that were affected by multiple hurricanes.

Downy Mildew

Downy mildew is also present on fall watermelons in Southwest Florida. Here again, incidence is dependent on the amount of weather experienced.

Watermelon Vine Decline

At least one watermelon field in southwest Florida has displayed symptoms consistent with watermelon vine decline. Concise diagnosis has been hampered as the planting has been severely abused by multiple hurricanes and is in rough shape.

News for Vegetable Producers Affected by Hurricanes

Steps you need to take to report and apply for USDA assistance

1. Document all crop damages, including land preparation you were in the process of completing (tillage, fertilizer application, weed control measures, etc.).
2. Take representative photographs of damage to crops, trees, fences, debris, and structures. Photos will be needed by FSA for your case file in lieu of a site visit.
3. File a notice of loss with your crop insurance representative (and FSA if you have NAP coverage) within 15 days of when damage became apparent.
4. File a notice of loss with FSA for other crop losses as soon as possible (crops not covered by crop insurance or NAP).
5. If you suffered damages other than crops (buildings, fences, irrigation systems, etc.), you can request an emergency loan with FSA. You must request the loan within 8 months from the disaster event. Loan packages are available in your county FSA office.

6. Emergency conservation Program (ECP) funding may be requested from USDA headquarters from the local FSA office. ECP provides cost share payments of 75% of the total cost to remove debris, repair fences, repair irrigation systems damaged by the hurricane. If you have already done some of this work, please keep accurate records and receipts. Use of personal time and equipment (chainsaw, tractor, irrigation piping, etc.) is usually eligible, provided it is customary and reasonable.

Note: Payment limits apply to all FSA programs.

Low interest emergency loans are available in all counties declared disasters. Qualifying farmers in these counties can apply for emergency loans to help recover from production losses and physical losses to their property. The loans may be used to restore or replace property, pay production and living expenses, reorganize the farming operation and refinance certain debts. Farmers should apply for these loans at their local Farm Service Agency (FSA) county offices.

Please note: Even if you do not need loans, if growing non-insurable crops, growers need to go ahead and contact their FSA county offices and find out what information is needed to “get on record” with that office in case other types of disaster assistance becomes available in the future. To find your local FSA contacts, or for more information on the emergency loan program and other FSA programs, go to

<http://disaster.fsa.usda.gov/emloan.htm>

Information submitted by Darrin Parmenter, Vegetable Agent, UF/IFAS Palm Beach County Extension and Phyllis Gilreath, Vegetable Agent, UF/IFAS Manatee County Extension.

WPS Update

The EPA has signed the final rule that changes glove requirements of the Worker Protection Standard.

1. *All agricultural employees* (harvesters, cultivators, pesticide handlers) *are permitted to wear separable glove liners beneath chemical resistant gloves*; and Workers may choose when to wear the liners. The liners may *not* be longer than the chemical-resistant glove and they may *not* extend outside the glove. The liners must be disposed of after 10 hours of use, or whenever the liners become contaminated. Lined or flocked gloves, where the lining is attached to the inside of the chemical resistant outer glove remain unacceptable. Regulatory action was taken to reduce the discomfort of unlined chemical resistant gloves, especially during hot or cold periods.
2. *Ag. pilots do not have to wear chemical-resistant gloves when entering or exiting aircraft.* Additionally, chemically resistant gloves do not add any appreciable protection against minimal pesticide residues found around the cockpit of an aircraft.

The Worker Protection Standard applies to production operations in forestry, nursery, greenhouse, and row crops. If you are not sure if you should be following WPS, check it out <http://www.epa.gov/pesticides/health/worker.htm>. The cost of not following the rules can be expensive.

Topsin M WSB Section18 Emergency Exemption Extended

Based on requests from Florida tomato, pepper, and eggplant growers and efforts by the Florida Fruit and Vegetable Association on their behalf, the EPA has renewed the Section 18 Emergency Exemption for Topsin M 70WSB Fungicide for use on tomatoes, peppers, eggplants for control of Sclerotinia white mold for the 2004 fall and 2005 spring growing seasons.

Application rate is 0.5 –1 lb of product per acre. A maximum of 4 applications are permitted at 7-14 day intervals. PHI is 2 days and REI is 12 hours. Exemption is for ground application only, chemigation and/or aerial application is not permitted. Total application must not exceed 3.5 lbs of product per acre per crop.

Growers are reminded that when using any Section 18 labeled product, the label must be in the possession of the user at the time of application.

The 17th International Pepper Conference Comes to Naples on November 14 –16, 2004

Hope you are making plans to join us for this premier event. For the past 25 years, the International Pepper 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 and is now recognized as the premier venue for the dissemination and exchange of information on Capsicum. All pepper types including bell, long green/red chile, high color paprika, ancho, pimiento, cayenne, tabasco, jalapeno, yellow pickling, serrano, and cherry peppers will be a focus of the conference.

The conference is scheduled November 14-16, 2004 at the Naples Beach Hotel and Golf Club in Naples, Florida USA. We hope you will take a moment to review the conference web site where you will find everything you need to know about this event, including online registration and links to information about the Naples area. <http://conference.ifas.ufl.edu/pepper>

You can find detailed registration instructions posted on the conference web site under Registration Information. The Naples Beach Hotel and Golf Club is offering participants of the 17th International Peppers Conference a very special guest room rate of \$99.00 (plus nine percent tax) with one or two people in a room. This is an EXCELLENT rate for the Naples area, and we encourage you to stay in the host hotel. The group rate will be honored three days prior and three days following the conference, based on availability. The most convenient method to make a reservation is to go to the conference web site, click on Hotel Accommodations and print out the PDF of the Hotel Reservation Form. If you prefer to contact the hotel by telephone, they can be reached by calling 1-239-261-2222. Be sure to specify you are attending the Pepper Conference when making your reservation and obtain a confirmation number verifying your reservation was recorded. Reservations must be made by Friday, October 1st, 2004 to qualify for the reduced rate and to assure availability in the host hotel.

We look forward to your participation in the conference, and if you have any questions, please don't hesitate to contact me personally. Meanwhile, stay tuned to the web site for updated information at: <http://conference.ifas.ufl.edu/pepper>

For more information,

| <u>Conference Organizer</u> | <u>Conference Coordinator</u> |
|--|---|
| <i>Mr. Gene McAvoy</i> , Extension Agent III Regional Vegetable/Horticulture UF/IFAS Hendry County Cooperative Extension PO Box 68 Labelle, FL 33975 USA PHONE: 1-863-674-4092 MOBILE: 1-239-860-8811 FAX: 1-863-674-4097 EMAIL: gmcavoy@ifas.ufl.edu | <i>Ms. Beth Miller-Tipton</i> Office of Conferences and Institutes (OCI) UF/IFAS PO Box 110750 Gainesville, FL 32611 USA PHONE: 1-352-392-5930 FAX: 1-352-392-9734 EMAIL: bmiller-tipton@ifas.ufl.edu |

DPI Inspectors on the Lookout for Chili thrips *Scirtothrips dorsalis* Hood

One pest that DPI will be watching closely for is the chili thrips, which could pose a significant threat to Florida agriculture. Found primarily in Asia, it is now in St. Vincent and may be spreading in the Caribbean.

Scirtothrips dorsalis is a significant pest of chili pepper, citrus, castor, cotton, onion and other crops in tropical and subtropical regions of Asia, Africa Eastern Europe, Oceania, and Japan. Recently *S. dorsalis* was confirmed for the first time from the Caribbean island of St. Vincent. The insect may also be on the nearby island of St. Lucia. In different parts of the world, the insect is known as castor thrips, chili thrips, berry thrips, Assam thrips or yellow tea thrips.

Scirtothrips dorsalis is widespread throughout much of Asia and is present to a lesser extent in Africa, Eastern Europe, Japan, Oceania and the Hawaiian Islands. In general, this region has a climate that varies from tropical to temperate. The global distribution of *S. dorsalis* suggests that the pest may be most closely associated with temperate broadleaf and mixed forests; tropical and subtropical dry broadleaf forests and tropical and subtropical moist broadleaf forests. Consequently, it is estimated that approximately 28% of the continental US would have a suitable climate for *S. dorsalis*.

This pest is polyphagous and feeds on a variety of wild and cultivated plants including many fruits and vegetables include peppers, tomato, strawberry, mango, grape and many other important crops grown in Florida. *Scirtothrips dorsalis* feeds on new growth of nearly all vegetative plant parts of host plants including buds, leaves, flowers, fruits and stems. Feeding deforms young leaves and stains or scars fruits.

Since thrips are extremely small and very difficult to distinguish from one another, especially when immature, this species may be easily overlooked when first introduced into an area. Interceptions of *S. dorsalis* or "*Scirtothrips* sp." have been reported 89 times since 1984, primarily on cut flowers and fruits (USDA 2003). Interceptions have been associated primarily with airline passengers (53%) and permit cargo (31%). The majority of interceptions have been reported from Los Angeles (28%), JFK International Airport (19%), Dallas (9%), Miami (8%), Atlanta (8%), San Francisco (5%), Chicago (5%), and Des Plaines (5%). Material infested with *S. dorsalis* or "*Scirtothrips* sp." was destined for 18 states, including the District of Columbia (USDA 2003). The most commonly reported destinations were California (36%), Texas (14%), Illinois (10%), Georgia (8%), Florida (8%), New York (4%), and Massachusetts (4%). With the exception of California, some portion of each of these states has a climate and hosts that would be suitable for establishment by *S. dorsalis*.

Despite the limited number of interceptions at ports of entry, *Scirtothrips* has been detected at least twice by PPQ officers at inland locations in Florida.

Since polyphagous thrips rarely occur as a single species on a plant host, therefore it is difficult to estimate the economic impact of *S. dorsalis* alone. However, *S. dorsalis* is often the dominant member of the thrips complex, and in these cases, damage (i.e., reduced yield or marketability of a commodity) is attributed primarily to this one species. Economic impact of *S. dorsalis* may vary widely from season to season depending on factors such as weather conditions, available hosts, and population density. Feeding on the surface of young plant tissues creates wounds, which initially appear shiny and silver and become yellow to greenish-brown. Flowers become brown and wilted in appearance. Under dry weather conditions, population densities tend to increase, and heavier feeding damage results. Symptoms of feeding are also more pronounced and appear more quickly when plants are water stressed.

Scirtothrips dorsalis is a pest of economic importance in citrus growing regions of Asia, where feeding by piercing, sucking mouthparts can cause significant leaf and flower deformation, fruit damage, and yield reduction. *Scirtothrips dorsalis* is also an economically important pest of chili pepper; where feeding can wilt, distort, or stunt young leaves/shoots and cause premature leaf, bud or flower drop. In some varieties of chili peppers, 75% of leaves may be deformed due to the activity of piercing-sucking insects. Yield losses attributed

to *S. dorsalis* in chili pepper range from 20% to nearly 50%. The insect is also a key vector of tomato spotted wilt virus.

Given the fact *Scirtothrips dorsalis* has been detected in or near areas of the US with suitable hosts and climate, establishment potential is believed to be high.

If you see unusual outbreaks of thrips, please either contact the extension service or send samples directly to DPI.

Up Coming Meetings

Manatee County

December 8, 2004 **Row Crop Draft BMP Manual Workshop** 9:30 AM

Manatee County Extension Office
1303 17th Street W
Palmetto, Florida.

Sponsored by FDACS Office of Ag Water Policy. For your reference, the Row Crop Draft BMP manual can be accessed at www.floridaagwaterpolicy.com under Best Management Practices.

December 14, 2004 **CORE/Private Applicator Ag License Training and Test** 9 AM
2 CORE CEUs offered.

Manatee County Extension Office
1303 17th Street W
Palmetto, Florida.

Palm Beach County

October 4, 2004 **General Standards/Core Test Review** 8 AM – 10 AM 2 CEUs

Clayton E Hutchinson Agricultural Center
559 North Military Trail
West Palm Beach, Florida

Contact Laura Powell at 561-996-1655.

October 13, 2004 **General Standards/Core Test Review** 8 AM - 10 AM 2 CEUs
Private Applicator Test Review 1 PM - 3 PM 2 CEUs

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

Contact Laura Powell at 561-996-1655.

Websites

SafePesticideUse.Com - The Florida Department of Agriculture's Agricultural Pesticides Certification and Compliance Program now has instituted a comprehensive website whose mission is to promote safe pesticide use and compliance with state and federal pesticide laws and regulations in the State of Florida. Here you can find out anything regarding pesticides from the latest rule changes, WPS information to the status of your Restricted Use Pesticide License. Go to <http://www.safepesticideuse.com>.

Want updates on the latest tropical weather situation or weather in general? Check out the Weather Underground at <http://www.wunderground.com> for thorough coverage of any situation.

Need some direction in life? Need a map, use the pros for excellent maps and precise directions, go <http://www.randmcnally.com/>.

Quotable Quotes

One can never consent to creep when one feels an impulse to soar. - Helen Keller

How wonderful it is that nobody need wait a single moment before starting to improve the world. - Anne Frank

Discovery of a solution consists of looking at the same thing as everyone else and thinking something different. - Albert Szent-Gyorgyi

Experience is that marvelous thing that enables you to recognize a mistake when you make it again. - F.P. Jones

We should be careful to get out of an experience only the wisdom that is in it - and stop there; lest we be like the cat that sits down on a hot stove-lid. She will never sit down on a hot stove-lid again, and that is well; but also she will never sit down on a cold one anymore. - Mark Twain

On the Lighter Side

What a Difference 30 Years Makes

| | |
|--|--------------------------------------|
| 1974: Long hair | 2004: Longing for hair |
| 1974: KEG | 2004: EKG |
| 1974: Acid rock | 2004: Acid reflux |
| 1974: Seeds and stems | 2004: Roughage |
| 1974: Hoping for a BMW | 2004: Hoping for a BM |
| 1974: The Grateful Dead | 2004: Dr. Kevorkian |
| 1974: Going to a new, hip joint | 2004: Receiving a new hip joint |
| 1974: Rolling Stones | 2004: Kidney Stones |
| 1974: Being called into the principal's office | 2004: Calling the principal's office |

1974: Disco

2004: Costco

1974: Passing the drivers' test

2004: Passing the vision test

1974: Whatever

2004: Depends

Sermonitis

A paramedic was asked on a local TV talk-show program: "What was your most unusual and challenging 911 call?"

"Recently we got a call from that big white church at 11th and Walnut," the paramedic said. "A frantic usher was very concerned that during the sermon an elderly man passed out in a pew and appeared to be dead. The usher could find no pulse and there was no noticeable breathing."

"What was so unusual and demanding about this particular call?" the interviewer asked.

"Well," the paramedic said, "we carried out four guys before we found the one who was dead."

Be Careful What You Wish For

A man walks into a restaurant with a full-grown ostrich behind him. As he sits, the waitress comes over and asks for their orders.

The man says, "I'll have a hamburger, fries and a coke," and turns to the ostrich, "What's yours?" "I'll have the same," says the ostrich.

A short time later the waitress returns with the order. "That will be \$6.40 please," and the man reaches into his pocket and pulls out the exact change for payment.

The next day, the man and the ostrich come again and the man says, "I'll have a hamburger, fries and a coke," and the ostrich says, "I'll have the same."

Once again the man reaches into his pocket and pays with exact change.

This becomes a routine until late one evening the two enter again. "The usual?" asks the waitress.

"No, this is Friday night, so I will have a steak, baked potato and salad," says the man, "same for me," says the ostrich.

A short time later the waitress comes with the order and says, "That will be \$12.62." Once again the man pulls exact change out of his pocket and places it on the table.

The waitress can't hold back her curiosity any longer. "Excuse me, sir. How do you manage to always come up with the exact change out of your pocket every time?"

"Well," says the man, "several years ago I was cleaning the attic and I found an old lamp. When I rubbed it a Genie appeared and offered me two wishes.

My first wish was that if I ever had to pay for anything, I would just put my hand in my pocket and the right amount of money would always be there."

"That's brilliant!" says the waitress. "Most people would wish for a million dollars or something, but you'll always be as rich as you want for as long as you live!"

"That's right. Whether it's a gallon of milk or a Rolls Royce, the exact money is always there," says the man. The waitress asks, "One other thing, sir, what's with the ostrich?"

The man sighs, pauses, and answers, "My second wish was for a tall chick with long legs who agrees with everything I say."

Contributors include: Joel Allingham/AgriCare, Inc, Karen Armbruster/SWFREC, Kathy Carbiener /Agricultural Pest Management, Jim Connor/SWFREC, Bruce Corbitt/West Coast Tomato Growers, Dr. Phyllis Gilreath/Manatee County Extension, Fred Heald/Farmers Supply, Sarah Hornsby/AgCropCon, Cecil Howell/H&R Farm, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, Dr. Mary Lamberts/Miami-Dade County Extension, Leon Lucas/Glades Crop Care, Gene McAvoy/Hendry County Extension, Alice McGhee/Thomas Produce, Jimmy Morales/Pro Source One, Tim Nychk/Nychk Bros. Farm, Chuck Obern/C+B Farm, Teresa Olczyk/ Miami-Dade County Extension, Darrin Parmenter/Palm Beach County Extension, Dr. Ken Pernezny/EREC, Dr. Pam Roberts/SWFREC, Dr. Nancy Roe/Farming Systems Research, Wes Roan/6 L's, Kevin Seitzinger/Gargiulo, Jay Shivler/ F& F Farm, Ken Shuler/Stephen's Produce, Ed Skvarch/St Lucie County Extension, John Stanford/LNA Farm, Mike Stanford/MED Farms, Dr. Phil Stansly/SWFREC, Eugene Tolar/Red Star Farms, Dr. Charles Vavrina/SWFREC, Mark Verbeck and Donna Verbeck/GulfCoast Ag, and Alicia Whidden/Hillsborough County Extension.

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

Gene McAvoy
Extension Agent III
Regional Specialized Agent - Vegetables/Ornamental Horticulture
Hendry County Extension Office
PO Box 68
LaBelle, Florida 33975
Web: <http://hhort.ifas.ufl.edu/>

863-674-4092 phone
239-860-8811 mobile - Nextel Aget 28950
863-674-4097 fax
GMcAvoy@mail.ifas.ufl.edu

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

Thomas Produce Company

Of South Florida
Grower and Shippers of Quality Vegetables
9905 Clint Moore Road
Boca Raton, Florida 33496

Robert Murray

Florida Favorite Fertilizer

787 Overriver Drive
North Fort Myers, Florida 33903
Phone 800-457-0807 Cell 239-707-2272

LaBelle Plant World, Inc.

Tommy Smith: President
Scott Smith: Vice President
We Grow Plants for the Pros
LaBelle, Florida Phone 863-675-2020

Fred Heald

Farmers Supply Inc

710 Broward Street
Immokalee, FL 34142
Phone 239-657-8254 Fax 239-657-2005

Gargiulo

Growers Shippers Importers Exporters
David Pensabene: Production Manager
Naples Operations
Phone 239-353-0300 Fax 239-353-3407

Damon Shelor

ProSource One

Immokalee, Florida
Office 239-657-8374 Cell 239-707-6142
E-mail: dshelor@ProSourceOne.com

Ted and Trudy Winsberg

Green Cay Farms, Inc.

Rt. 1, Box 331B
Boynton Beach, Florida 33437-9727
Phone 561-499-5345

Ed Early

Dupont Agricultural Products

5100 South Cleveland Avenue
Fort Myers, Florida 33907
Phone 239-332-1467 Mobile 239-994-8594

Glades Crop Care, Inc.

**Leaders in Crop Health
Management**

Charlie Mellinger, Ph.D.
Phone 561-746-3740 Fax 561-746-3775

Rachel Walters

Bayer CropScience

5243 Tamiami Court
Cape Coral, Florida 33904
Phone 239-542-8831 Cell 239-707-1198

Glen Kaufman

Paramount Seeds, Inc.

PO Box 1866
Palm City, Florida 34991
Phone 772-221-0653 Fax 772-221-0102

Walter Preston

Manatee Fruit Company

PO Box 128
Palmetto, Florida 34220-0128
Phone 941-722-3279 Fax 941-729-5151

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

Robert F. Gregg

Syngenta Crop Protection

11051 Championship Drive
Fort Myers, FL 33913
Office 239-561-8568 Cell 239-872-8936

CERTIS USA

Dr. Adam Muckenfuss 772-781-2233
Sales: Joe Craig 863-424-5412
Ed Dickinson 863-318-9004
Javelin® Agree® Crymax® Lepinox®

PRODUCTION SOILS LLC

Applied Microbiology
for Commercial Growers
Soils Foliar
Sam Hipp 954-296-9203

Scott Allison

DIAMOND R FERTILIZER

1155 Commerce Drive
LaBelle, Florida 33935
Phone 863-675-3700 Cell 239-851-0613

Bill Hunt Company, LLC

Agricultural Spray Technology
Miami, Florida USA
Phone 305-238-0991 Fax 305-254-6319
bilihun@spraytec.com www.spraytec.com

Ashley Peevy

Dow AgroSciences LLC

9330 Zionsville Road
Indianapolis, Indiana 46268
Phone 706-473-9229

Bobby Hopkins

SIPCAM AGRO USA

Phone 1-800-295-0733 or 770-587-1032
Cell 678-576-4549
www.sipcamagrousa.com
Lrhopkins3@aol.com

Steve Mike Dave

Jamerson Farms

Growers, Packers and Shippers of
Florida's Finest Vegetables
Phone 239-229-5734 Fax 239-368-0969

Sarah Hornsby, CCA

Agricultural Crop Consulting, Inc

Scouting: Manatee, Hillsborough, Collier
Office/Fax 941-776-1122
Cell 941-713-6116
Email: AgCropCon@aol.com

Donald Allen

AGLIME SALES INC

1375 Thornburg Road
Babson Park, Florida 33827-9549
Office 863-638-1481 Fax 863-638-2312
Mobil 863-287-2925

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

Bobbit Jenkins
BASF Corporation
11100 Lakeland Circle
Fort Myers, Florida 33913
Office 239-561-2812 Fax 239-561-6985
Mobil 239-707-1603

PREV AM
Vegetable Pest/Disease Control
www.oroagri.com
Jack Kilgore 239-707-7677
Len Duane 863-221-4725
UAP - PROSOURCE ONE -- TRIANGLE/CPS

Thad G. Boatwright
Monsanto Crop Protection
1089 Forsythia Lane
West Palm Beach, FL 33415
Office 561-478-4970 Fax 561-478-4970
Cell 561-719-6820

Jack E Kilgore II
Chemical Dynamics
"Our business is to help you grow"
7150 E Brentwood Road
Fort Myers, Florida 33919
Cell 239-707-7677 Nextel: 158*17*24422

Chuck Obern
C & B Farm
CR 835
Clewiston, FL 33415
Office 863-983-8269 Fax 863-983-8030
Cell 239-250-0551

Bart Hoopingarner
Cerexagri
11933 73rd St. E
Parrish, FL 34219
Cell 941-737-7444 Fax 941-776-8127
bart.hoopingarner@cerexagri.com

Valent USA
"Products That Work
From People Who Care"
Sarah Hatton 863-673-8699

Jared Revell
United Agri Products
116 Jerome Drive
Immokalee, Florida
239-657-3168 office 239-253-0585 cell

Jay Hallaron
Crompton
321-231-2277 cell 407-256-4667 cell
jay_hallaron@cromptoncorp.com

PUT YOUR NAME HERE

NOTE: The acknowledgement of sponsorship in no way constitutes or reflects an official endorsement of these businesses or their products or services by either the University of Florida, IFAS, the Florida Cooperative Extension Service, or the Hendry County Extension Office. Sponsors have no control over the content of this publication