



UNIVERSITY OF
FLORIDA

E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 26, 2004

Windy conditions and below average temperatures prevailed across South Florida for much of the past few weeks. Stormy weather on April 12 and 13 brought scattered showers and violent winds to many areas. Gusts as high as 80 mph were reported from several locations across Southwest Florida. Some damage to crops and structures has been reported. Temperatures over the past few days have warmed up considerably and many of the normally warmer interior locales saw their first 90-degree temperatures since last fall.

Temperatures have averaged 2 –6 degrees below normal with warm days and cool nights. Daytime temperatures have been in the 70's and 80's with nighttime lows ranging in the low 60's 50's, and a few nights in the 40' s in normally colder areas. Most locations received significant amounts of rainfall with totals ranging from 1 to over 2.5 inches of rain for the period.

Cool night temperatures have delayed harvest on some commodities, while mostly dry windy conditions have increased irrigation frequency. Pan-evaporation has been averaging around 0.125 - 0.15 inches per day.

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 | | | | | | | | | | | |
| 4/4 – 4/26/04 | 46.5 | 86.6 | 2.69 | 0.0 | 0.0 | 20.4 | 17.0 | 23.8 | 62.4 | 42.4 | 5.3 |
| Ft Lauderdale | | | | | | | | | | | |
| 4/4 – 4/26/04 | 51.4 | 90.5 | 2.45 | 0.0 | 0.0 | 0.0 | 8.7 | 11.9 | 18.4 | 22.5 | 5.4 |
| Fort Pierce | | | | | | | | | | | |
| 4/4 – 4/26/04 | 43.6 | 87.4 | 1.40 | 0.0 | 0.7 | 18.3 | 15.6 | 1.4 | 16.5 | 87.5 | 3.9 |
| Homestead | | | | | | | | | | | |
| 4/4 – 4/26/04 | 45.5 | 87.5 | 1.40 | 0.0 | 0.0 | 7.3 | 26.2 | 9.8 | 27.5 | 23.9 | 61.0 |
| Immokalee | | | | | | | | | | | |
| 4/4 – 4/26/04 | 44.1 | 89.9 | 1.39 | 0.0 | 2.2 | 30.0 | 17.7 | 10.5 | 68.7 | 124.5 | 40.6 |

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Watermelon picking is slowly gaining momentum in most central and southern Peninsula production areas. Strawberry harvesting in the Plant City area is nearly done with several fields open to the U-Pick market. Most lettuce harvesting is also finished for the season and growers in Homestead report that beans, tomatoes and squash will all be through in the next few weeks. Vegetables and non-citrus fruit coming to market include snap beans, blueberries, cabbage, celery, sweet corn, cucumbers, eggplant, endive, escarole, peppers, potatoes, radishes, squash and tomatoes. Quality is mostly good with some wind scarring reported.

The short-term forecast from the National Weather Service in Miami indicates that moist air to the south and west of the state will move over the peninsula this evening bringing possible thunderstorms and a chance of showers on Tuesday. This system will be followed by a weak cold front that is forecast to stall over the area, the front will be pushed back north on Thursday and Friday bringing another chance for precipitation this weekend. Temperatures will remain in the 80's during the day and 60's at night.

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

Insects

Insect pressure remains mostly low but with some seasonal increase in pest activity being reported.

Whiteflies

Reports from the Manatee/Ruskin area indicate that silverleaf whitefly numbers are slowly increasing, possibly held back some by lower than normal temperatures. Higher levels of nymphs and eggs are now being reported on early plantings. IGRs are being applied and growers are aggressively treating adults. In light of heavy virus incidence in some older fields, Dr. Dave Schuster reports that since IGR thresholds were developed for irregular ripening and not virus, when nymphs are present, lower thresholds may be appropriate for use of IGRs to reduce infield spread of virus. Higher SWF numbers in the past have also been associated with potato harvest in nearby fields. Keep in mind that while SWF coming in from these fields likely will not be viruliferous, they can act as vectors for spreading virus already in fields.

Growers and scouts around Southwest Florida indicate that whiteflies are reaching moderate to very high populations in a number of places with nymphs building in several fields. Most tomato fields in the area are at a fairly advanced stage of maturity and past high risk of TYLCV problems. Some fields, however, are approaching population levels where growers are reporting some problems with irregular ripening. Pressure is also high in cucurbits and eggplant and silverleaf is widely present in squash. Some movement of adults has been noted when neighboring fields are destroyed.

Growers in Palm Beach County report variable whitefly numbers with populations building in older plantings. Whiteflies are present in eggplant, pepper, squash and tomatoes. Pressure has been persistent in squash and some silverleaf is being reported in places.

Reports from Miami-Dade County indicate intense whitefly pressure in beans, cucurbits, and tomato. TYLCV and bean golden mosaic virus are both present at high levels as crop near termination. Reports indicate that many growers are destroying crops immediately after harvest hoping that good sanitation will reduce virus pressure in the fall.

Growers in all areas are urged to practice good sanitation measures after harvest including a strong emphasis 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.

Worms

Growers and scouts around southwest Florida report that pinworms are building in a number of locations with a few older fields reaching high levels. There have been some reports of low levels of fruit damage from pinworms. Growers should be aware that tomato volunteers and regrowth in double crop watermelons could allow pinworms (as well as leafminer and whiteflies) to build up affecting nearby fields. To avoid problems, volunteers and regrowth should be scouted and controls applied as necessary.

In the Manatee/Ruskin area reports indicate that pinworm numbers are fairly low but pressure has been persistent. Some hotspots are reporting higher numbers have been noted.

East Coast producers report increasing problems with pinworms in eggplant and tomato with some fairly high populations building in places.

Around Southwest Florida, worm pressure remains mostly low but several respondents note increased armyworm activity in places. Some traps counts as high 50 beet armyworm moths every 3 days have been noted in places. Beet armyworms are reportedly causing problems in some melon fields where they have been attacking fruit.

In West Central Florida, both beet and southern armyworm are present in low numbers. Some loopers have also been reported in cantaloupe.

On the East Coast reports indicate that worm pressure is mostly low possibly due to control efforts aimed at whiteflies.

Growers and scouts in the Homestead area report increasing worm pressure in a variety of crops including beans, cucurbits, and tomato with most growers concentrating on harvesting remaining crops.

Diamondback moths have been reported in collards and specialty brassicas around South Florida. Reports indicate that pressure has been particularly severe in oriental brassicas in Palm Beach County with some growers reporting significant losses.

Pickleworms are being reported at high levels in some fields in the Manatee Ruskin area with both eggs and larvae being detected.

Growers and scouts around Southwest Florida report major problems with pickleworms in some areas. Some growers report difficulty in gaining control of the situation and report finding both dead and live worms in the same bloom after multiple applications of insecticides.

Respondents on the East Coast also report problems with melon/pickle worms on cucurbits.

With the return of warmer weather, both melonworms and pickleworms are likely to become active and cause problems on cucurbits.

Both caterpillars attack only cucurbits. Although the pickleworm prefers summer squash, it may severely damage cucumber and cantaloupe also. The melonworm prefers foliage of muskmelon, squash, and cucumber. It very rarely attacks watermelon.

The pickleworm (*Diaphania nitidalis*) moth has pale yellow hind wings with a wide, dark brown border and a large, pale yellow spot near the center of each dark brown forewing. A cluster of dark brush-like hairs is present on the tip of the abdomen. The newly hatched pickleworm larva is almost colorless except for slightly darker jaws and a black spot on each side of the head. Third and fourth instar larvae are about 6 to 12

mm long and pale yellow with dark spots, each spot containing a large bristle. The dark-headed fifth instar larva has a yellow-green body with no spots and may be 1 – 1 ¼ inch long.

The melonworm (*Diaphania hyalinata*) moth has a brown head and a white-tipped abdomen with bushy hair-like scales. Its white wings have a narrow dark band around the margin and span up to 43 mm. The larval stages have two dorsal white stripes running the length of the body. Otherwise, they resemble the pickleworm larva and can grow 1 ¼ inches long.

The most important economic damage is caused by the pickleworm due to its habit of attacking the fruit. Young pickleworms usually feed for a time among small leaves at the growing tips of vines or within blossoms. A favorite place is the large staminate flowers of squash where larvae hide under the ring of stamens at the base of flowers. When about half grown, pickleworms normally bore into the sides of fruits or stems and continue to feed in the fruit, causing internal damage and producing soft excrement. Both young and old fruits are attacked, but they prefer young fruits before the rind has hardened.

Insecticide applications should begin immediately when pickleworms or their damage appears. More frequent applications may be needed if populations and temperatures are high. Apply in early evening to minimize bee kills.

When the crop is young, Bt insecticides are recommended for the control of melonworms but are less effective against pickleworm due to their habit of boring into fruit.

Growers must remember that it's absolutely essential to use insecticides that will not harm the bees required for cross-pollination of melons and other cucurbits. Secondly avoiding "harsh" insecticides early in the crop will help preserve the beneficials that keep leafminers from getting out of hand. In addition to the range of Bt compounds on the market, a number of "soft" insecticides including Confirm, Spintor and Neemix are now available to growers. Trials conducted by Dr Phil Stansly in SW Florida have demonstrated good results with Confirm (Intrepid) as well as Avaunt.

After the crop is pollinated it may be necessary to use more harsh materials along with Bts, although in most instances growers can achieve good control using "soft" materials. For younger worms after the crop is pollinated, synthetic pyrethroids are often used. Sevin and Thiodan have also been used with mixed results. For larger worms, Lannate is often the chemical of choice.

It is important to rotate between different classes of insecticides and to avoid back-to-back applications of pyrethroids to help prevent the buildup of resistance in pest populations.

Scouting to ensure early detection of these pests and thorough coverage will help ensure success in managing these pests.

Pepper Weevils

Respondents around southwest Florida indicate that pepper weevils are increasing seasonally in a number of places. Depending on the location, growers' reports run the gamut from little or no problem to fields with extremely high infestations

Growers and scouts on the East Coast report pepper weevil building to high levels in some locations.

Aphids

Around Southwest Florida some growers are still battling with aphids in variety of crops especially cucurbits and pepper.

Reports from the Bradenton area indicate that winged aphids are still around, surprising in light of heavy spraying for whiteflies.

Growers and scouts around Palm Beach indicate some increase in aphid activity. Aphids have been reported in cucurbits, herbs, peppers, tomatoes and specialty crops including oriental brassicas.

Thrips

Around southwest Florida, flower thrips activity has declined in most areas. Respondents note that a few locations have seen some *Thrips palmi* activity and slight damage has been reported.

Reports from Homestead note “heavy” thrips pressure in beans, cucurbits, eggplants and pepper.

Respondents on the East Coast indicate few problems with thrips with some activity noted in eggplant, pepper and tomato. Some isolated reports of *Thrips palmi* damage on pepper including fruit etching and stem damage continue to be received.

Around Manatee County, reports indicate some increase in thrips pressure over the past few weeks with high pressure reported in some isolated pepper, squash and melon plantings.

Leafminers

Growers and scouts around Manatee County report that leafminer activity has increased in tomatoes and growers have been battling leafminers particularly in young plantings over the past few weeks. On the positive side correspondents note that pressure has abated somewhat in cucurbits.

Growers and scouts in the Homestead area continue to report some problems with leafminer.

Leafminers are still present around southwest Florida but pressure varies between locations with several areas reaching treatment threshold levels and other areas reporting little pressure. Leafminers have been particularly active in melons and other cucurbits. Crops affected include beans, cucurbits, eggplant, tomatoes and specialty crops.

East Coast growers report that leafminers are still active in some places on a variety of crops including beans, cucurbits, eggplant, leafy vegetables and tomatoes.

Mites

Growers and scouts on the East Coast report that broadmites are present in pepper and eggplant in mostly low numbers but indicate that they are worse in some locations where they have persisted throughout the season.

Around Southwest Florida, reports indicate spidermites are present on the lower foliage of crops in a number of places and note that in a few locations colonies have begun to buildup and move up into the upper canopy. Some new broadmite activity has been reported in a few pepper and eggplant fields.

Reports from Homestead report that red and two spotted spider mites are becoming more numerous in a variety of crops including beans, cucurbits, eggplant, and tomatoes.

Growers in West Central Florida report some problems with broadmites in pepper.

Diseases

Growers and scouts report that disease pressure remains low to moderate in most locations.

Tomato Yellow Leaf Curl Virus

Around Homestead, respondents report that TYLCV infections are at high levels in a number of places as crops approach termination.

In the Manatee Ruskin area, respondents indicate that new Tomato Yellow Leaf Curl outbreaks are still being noted in many fields but report that incidence has generally leveled off. Phyllis Gilreath reports that cooler than normal weather has helped keep whitefly numbers lower than they might have been but cautions growers that as the weather warms, they should be on the look out as populations are likely to increase.

Growers are urged to maintain strict whitefly control programs even during harvest because of the high incidence of TYLCV in many fields. Phyllis notes that even if virus only shows up in the top of an older plant that entire plant is still infected and is attractive to whiteflies, which can transmit the virus to unaffected plants. In addition, spray programs should also be maintained on TYLCV resistant cultivars since these cultivars still serve as a symptom less host for the virus.

Around Southwest Florida, Tomato Yellow Leaf Curl Virus incidence continues to increase seasonally as whitefly populations build in tomatoes. Infection rates vary widely with fields ranging from less than 5% up to over 75% infection in some places.

Growers and scouts on the East Coast report increasing incidence of TYLCV as the season progresses with some places reporting 100% infection as crops near termination.

Fusarium crown rot

Fusarium crown rot in tomato is widely present around Immokalee. Incidence and severity is variable and ranges from low to fairly high depending on the location. The incidence in some fields with a history of this disease has approached high levels and is to quote one source – “horrible.”

Fusarium crown rot is widely present in scattered locations across East Coast tomato producing areas.

Fusarium Wilt

Around Southwest Florida incidence of fusarium wilt is increase significantly in a number of widely scattered locations in watermelon over the past few weeks. Incidence and severity varies but is moderate to high in a number of locations.

Reports from the Bradenton area indicate that fusarium wilt is present in melons in a number of widely scattered locations. To date no cases of “vine decline” have been reported.

Watermelon Vine Decline

Over the past few weeks several cases of “vine decline” similar to that seen around the area last season are being reported around Southwest Florida and up into south-central Florida from areas such as Okeechobee and Wauchula. Incidence has spiked markedly over the past few days as temperatures have approached the 90-degree mark.

For at least the past 2 seasons, central and southwest Florida growers have experienced problems with

watermelon vine decline late in the crop cycle approaching harvest characterized by wilting in the plant, scorched leaves, defoliation and rapid vine collapse on maturing vines. Frequently, fruit were observed with greasy, necrotic lesions on the interior portion of the rind that rendered the fruit non-marketable.

Investigations to date have been inconclusive for identifying a cause. No pathogen has been consistently associated with the symptoms nor have any cultural or environmental factors identified as the cause.

If you see or suspect a problem, please notify your county extension agent or the Plant Disease Clinic in Immokalee so we can begin collecting samples and information to try and pinpoint a cause. Under the leadership of Dr. Pam Roberts at Immokalee, we now have additional manpower and funding to follow-up more closely on disease reports and to address this problem if or when it appears this season. A significant number of melons have been lost to this problem and we need to find a solution.

Gummy stem blight

Growers and scouts around Immokalee indicate although gummy stem blight is widely present in watermelon, new activity has abated in recent days with some exceptions.

Respondents in Manatee County report that gummy stem blight is still present in melons and squash.

Reports from Palm Beach and surrounding counties indicate that gummy stem blight is present at mostly low levels on melons in a number of locations.

Late Blight

Late blight continues to be reported on tomato from a few locations around Southwest Florida. Incidence and occurrence is sporadic and severity low in most places.

Gray Mold

Growers and scouts increased botrytis activity in tomato in several locations around Southwest Florida following rains in mid-April.

Respondents in the Bradenton area note that some new botrytis infections following recent rains.

Bacterial Spot

Around Southwest Florida, bacterial spot is still widely present on tomato and to a lesser extent pepper. Incidence and severity ranges from low to moderate with a few locations reporting fruit infections. Some increase following storms that affected the area in mid April has been noted.

East Coast growers report that bacterial spot is widely present in tomato and pepper and exhibited a slow increase in incidence in incidence and occurrence in recent weeks.

Respondents in Manatee/Ruskin area report that bacterial spot is still around and remains low to moderate in most fields although some increase may be expected following recent rains.

Early Blight

Early blight is widely present on tomatoes in East Coast growing areas. Incidence and occurrence is mostly low to moderate but specialty growers report higher incidence and severity in heirloom varieties.

Around southwest Florida, respondents report low levels of early blight activity in tomato.

Reports indicate that *Alternaria* leaf spot is present at low levels in melons around Southwest Florida and in Manatee County.

Target spot

Respondents in Palm Beach County report that target spot is widely present on tomato. Incidence and severity is mostly low and but some slow creep inside plant canopies has been noted.

Growers and scouts around Southwest Florida indicate that target spot is widely present but indicate that the situation remains relatively stable over the past few weeks.

Rust

Rust has also been reported on beans around Clewiston and in the Devils Garden area of Hendry County.

Respondents indicate that bean rust is also widely present around Palm Beach County and other east Coast production areas including Homestead primarily on non-resistant varieties.

Downy Mildew

Reports indicate that downy mildew is active in squash and cantaloupes in a number of locations across South Florida. No reports have been received of downy mildew on watermelon to date.

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 reported on beans, cucumbers, eggplant, pepper and specialty vegetables as well. Infections in pepper have reached moderate to high levels in some locations and some leaf drop has been reported.

Powdery mildew is also widely present on squash around southwest Florida. Scouts operating around Immokalee note they are seeing some powdery mildew in older pepper in a few locations. Powdery mildew is also present in watermelon in a number of locations and incidence and occurrence has increased in recent days.

Dr Richard Raid, Plant Pathologist at the UF/IFAS Everglades Research and Education Center in Belle Glade reports that powdery mildew; a fungal disease caused by *Erysiphe polygoni* has been observed on snap beans in the Belle Glade area. Appearing as white superficial growth on the leaf surface, the pathogen can cause premature yellowing and senescence of bean foliage. Infected pods may appear stunted and malformed. It is thought that drier than normal conditions may be responsible for the appearance of the disease in bean fields. While the disease is rarely severe enough to merit control, there are a number of fungicides that may aid in control.

Tomato Spotted Wilt Virus

The tospovirus, tomato spotted wilt virus has been confirmed on lettuce in South Florida. The disease was observed on romaine lettuce grown in Okeechobee County. Capable of being transmitted by several species of thrips, the virus causes marginal wilting, leaf yellowing and brown necrotic flecking of leaves and petiole. Infected plants may present a twisted appearance, as infections may be more advanced on one side of the plant

than the other. Infections result in lettuce that is unmarketable. Tomato spotted wilt has a wide host range with a number of weeds serving as potential reservoirs. Lettuce growers should be on the look out for plants exhibiting the above symptoms and contact Richard Raid at 561-993-1564 to report possible outbreaks.

Tomato spotted wilt has also been reported affecting pepper at several locations around St Lucie and Martin Counties.

Phytophthora

Reports from the East Coast continue to note that new infections by *Phytophthora capsici* have declined in recent weeks.

Phytophthora is still present on pepper and squash in a several locations around southwest Florida and some new activity has been noted.

Mosaic

Mosaic is widely present on squash around southwest Florida. Incidence and severity varies from low to high depending on location. Mosaic is also present at low levels in watermelon in few locations and has increased in incidence and occurrence in recent days.

Dr. Susan Webb, Entomologist at UF/IFAS notes the virus is spread by aphids but not necessarily melon aphids but is often vectored by transitory aphid species that probe weedy hosts and cucurbits searching for a suitable host thus spreading the disease. Surveys conducted in South Florida over the past few years indicate that most mosaic symptoms observed in this area tends to be caused by the papaya ringspot virus.

Up Coming Meetings

Palm Beach County

| | | |
|--------------------|-------------------------------------------|-----------------------|
| May 3, 2004 | General Standards/Core Test Review | 8 AM - 12 Noon |
| | Private Applicator Test Review | 1 PM – 3 PM |

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

Contact Laura Powell at 561-996-1655

Southwest Florida

| | | |
|--------------------|---------------------------------------------------------|--------------------|
| May 5, 2004 | Production And Utilization Of Compost In Florida | 8 AM - 5 PM |
|--------------------|---------------------------------------------------------|--------------------|

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

Pre-registration required, contact Dr Monica Ozores-Hampton at 239-658-3400

June 5, 2004

UF/IFAS Farm Safety Day

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

Contact Barbara Hyman at 239-658-3400

Other Meetings

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

17th 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>

Websites

17th International Pepper Conference - 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. This year, the meeting will be held in Naples, Florida on November 14 –16, 2004. For more information, go to <http://conference.ifas.ufl.edu/pepper/>.

ATTRA National Sustainable Agriculture Information Service, funded by the US Department of Agriculture, is managed by the National Center for Appropriate Technology and provides information and other technical assistance to farmers, ranchers, Extension agents, educators, and others involved in sustainable agriculture in the United States. Publications (more than 200 titles) address current topics in sustainable agriculture. Typical publications provide a 5- to 20-page summary of a topic, accompanied by references and a resource list of additional contacts, key literature, and sources of products. Check it out at <http://attra.ncat.org/index.html>

News You Can Use

Tank Mixes

Growers are urged to pay close attention to labels or other information for warnings or precautions about tank mixes. For example: The manufacturer does not recommend tank-mixing Topsin with boron due to the potential of a bad reaction with the soluble bag.

Cabrio contains a warning about tank mixing with certain other pesticides on cucurbits. According to Joe Mitchell with BASF, the reason for the tank mix restriction on the cucurbit vegetables group (primarily netted melons) is that they have seen some occasional spotting if an EC formulation of those insecticides is used. Basically, they do not recommend the use of any oil based or silicon based products in combination with Cabrio on cucurbits.

They have had growers who have used these insecticides in a dry flowable formulation with no problems. On tomatoes, they have never heard of any issues with combinations of Cabrio and insecticides. But to err on the side of caution, they just don't recommend the use of Cabrio with oil or silicon based products whether as an additive or a product, regardless of the crop. The only additive they recommend if someone really wants to use an additive on either cucurbits or tomatoes is a non-ionic surfactant.

Contributed by Phyllis Gilreath, Vegetable Extension Agent IV, Manatee County.

Managing Fungicide-Resistant Gummy Stem Blight

Gummy stem blight (caused by *Didymella bryoniae*) is the most important fungal disease of watermelon in Florida and is very difficult to control during warm, rainy weather. Crown blight, leaf defoliation, and fruit rot can all occur when watermelon vines are infested with this fungus. Chlorothalonil products are fairly effective, but there is limited near harvest, and EBDC products are less effective in rainy weather. Strobilurin fungicides were introduced a couple of years ago, and both azoxystrobin (Quadris®) and pyraclostrobin (Cabrio®) initially provided systemic protection against gummy stem blight.

Despite the recognition that resistance was an issue and labeling that limited the number and sequence of applications, resistance to this class of fungicide in watermelon has been observed, with less control of gummy stem blight each year. There is a new fungicide, boscalid that has a unique mode of action. Like the strobilurins, the site of action is in the mitochondrion, but at a different point in the respiratory chain. Preliminary results in watermelon with this material in conjunction with pyraclostrobin and chlorothalonil demonstrate adequate gummy stem blight control. The addition of boscalid (plus the use of thiophanate-methyl in those areas not resistant to carbendazim fungicides) brings to a total of at least five effective chemistries that can be rotated to reduce the potential for gummy stem blight resistance.

Citrus & Vegetable Magazine, February 2004

EUREPGAP Standards for Fresh Produce

Recently, the UF/IFAS Pesticide Information Office received calls from individuals asking about being certified in a post-harvest pesticide applicator category. Florida does not have a post-harvest applicator category since post harvest fungicides are not classified as restricted use; therefore, according to federal and Florida law, a certified applicator is not required to apply or supervise their application. The request came about as a result of some citrus packinghouses efforts in documenting compliance with European Retail Parties Good Agricultural Practices (EUREGAP) requirements in order to export citrus to Europe. What is EUREPGAP, you may ask.

European retailers [Dutch and UK retailers primarily] created the Euro Retailer Producer Working Group (EUREP) in 1997, which is working with producer and certification groups to establish a standard for Good Agricultural Practices (GAP) for fresh produce. The standard for fruits and vegetables was first presented at the EUREPGAP 2001 Conference in Italy and was updated in September 2003. Several European retailers (Great Britain in particular) began in late 2003 requesting EUREPGAP certification for fresh produce. Verification of compliance with EUREPGAP standards is by an independent verification body approved by EUREPGAP. Recently, inspectors from the British Retail Consortium have been in Florida checking citrus packinghouses to document compliance with the EUREPGAP standards.

EUREPGAP is a standard for production practices up to the farm gate. It is based on the principles of risk prevention, risk analysis [such as Hazard Analysis Critical Control Points (HACCP)], integrated pest Management (IPM) and Integrated Crop Management (ICM). The standard for fruits and vegetables identifies a total of 210 control points, divided into 47 "Major Musts," 98 "Minor Musts," and 65 "Recommendeds." The control points are divided among the following categories: Traceability; Recordkeeping; Varieties and Rootstocks; Site History & Management; Soil & Substrate Management; Irrigation/Fertiligation; Crop Protection; Harvesting; Produce Handling, Waste & Pollution Management; Recycling & Use; Worker Health, Safety & Welfare; and Environmental Issues. Over one third of the total control points in the EUREPGAP standard for Crop Protection address crop protection chemical use and handling practices which for the most part are included in applicator educational materials and programs. Specifically Pest Management consists of 62 control points that include knowledge of IPM; competence of advisor or farmer in selection of crop protection product; applicator records; pre-harvest intervals; use of application equipment; disposal of surplus mix, containers, and obsolete products; and storage of products. Protective clothing issues are addressed under Worker Health and Safety.

EUREPGAP published standards for flowers and ornamentals in late 2003 and is working on protocols for grains and livestock. The EUREPGAP web page is at <http://www.eurep.org>. Click on documents to view the Checklists, Control Points and Compliance Criteria, and General Regulations documents. This initiative follows a trend in certain European Union countries for individual retailers to impose their own third-party certified standards on suppliers in response to food safety scares in Europe. It is thought that EUREPGAP standards will eventually become a pre-requisite in order for growers to supply product into the European markets.

Excerpted from information provided by O. N. Nesheim, UF/IFAS Pesticide Information Coordinator.

Operation Cleansweep

Have a bunch of pesticides or other toxic products you want to get rid of? The State of Florida may be able to assist you.

After holding Cleansweep one-day collection events that served 62 of Florida's 67 counties between December 2000 and May 2002, FDACS has retooled the program to offer free pick-up and disposal of cancelled, suspended and unusable pesticides. There will no longer be collection events. Now, a contractor will come to your site, package, transport and dispose of your cancelled, suspended and unusable pesticides.

Between April and June 2003, Operation Cleansweep provided this pickup and disposal service to more than 110 participants in 33 counties and will continue to offer this pickup and disposal service statewide through June 2004.

The Florida Department of Agriculture and Consumer Services, with the help of county ag agents, county solid waste personnel, product dealers and trade associations, will collect names, addresses, quantities and types from participants and verify this information. When they have a sufficient quantity of product in a defined area, we will dispatch the contractor to each participant's farm or business facility to pick up the pesticides. For more information or to sign up for the program, you may call Keith Myhre of the Department of Agriculture and Consumer Services toll-free at 877-851-5285 or email myrhek@doacs.state.fl.us

Quotable Quotes

A positive attitude may not solve all your problems, but it will annoy enough people to make it worth the effort.
-- Herm Albright

Most folks are about as happy as they make up their minds to be. -- Abraham Lincoln

Happiness is nothing more than good health and a bad memory. -- Albert Schweitzer

To me, old age is always 15 years older than I am. -- Bernard M. Baruch

If A is success in life, then A equals x plus y plus z. Work is x; y is play; and z is knowing when to keep your mouth shut. -- Albert Einstein

Personality can open doors, but only character can keep them open. -- Elmer G. Letterman

On the Lighter Side

How Old Is Grandpa?

One evening a grandson was talking to his grandfather about current events. The grandson asked his grandfather what he thought about the shootings at schools, the computer age, and just things in general.

The Grandfather replied, " Well, let me think a minute, I was born, before television, penicillin, polio shots, frozen foods, Xerox, contact lenses, Frisbees and the pill.

There were no credit cards, laser beams or ballpoint pens. Man had not invented pantyhose, air conditioners, dishwashers, clothes dryers, and the clothes were hung out to dry in the fresh air and man had yet to walk on the moon.

Your Grandma and I got married first and then lived together. Every family had a father and a mother.

Until I was 25, I called every man older than I, "Sir" - - and after I turned 25, I still called policemen and every man with a title, "Sir"

We were before gay-rights, computer-dating, dual careers, daycare centers, and group therapy.

Our lives were governed by the Ten Commandments, good judgment, and common sense.

We were taught to know the difference between right and wrong and to stand up and take responsibility for our actions.

Serving your country was a privilege; living in this country was a bigger privilege.

We thought fast food was what people ate during Lent. Having a meaningful relationship meant getting along with your cousins.

Draft dodgers were people who closed their front doors when the evening breeze started.

Time-sharing meant time the family spent together in the evenings and weekends-not purchasing condominiums.

We never heard of FM radios, tape decks, CDs, electric typewriters, yogurt, or guys wearing earrings.

We listened to the Country Bands, Jack Benny, and the President's speeches on our radios. And I don't ever remember any kid blowing his brains out listening to Hank Williams.

If you saw anything with 'Made in Japan' on it, was junk. The term 'making out' referred to how you did on your school exam.

Pizza Hut, McDonald's, and instant coffee were unheard of. We had 5 & 10-cent store where you could actually buy things for 5 and 10 cents. Ice-cream cones, phone calls, rides on a city bus, and a coke were all a nickel.

And if you didn't want to splurge, you could spend your nickel on enough stamps to mail one letter and two postcards.

You could buy a new Chevy Coupe for \$600 but who could afford one? Too bad, because gas was 11 cents a gallon.

In my day, "grass" was mowed, "coke" was a cold drink, "pot" was something your mother cooked in, and "rock music" was your grandmother's lullaby.

"Aids" were helpers in the Principal's office, Chip," meant a piece of wood, "hardware" was found in a hardware store, and "software" wasn't even a word. "Gay" meant happy & carefree

And we were the last generation to actually believe that a lady needed a husband to have a baby.

No wonder people call us "old and confused" and say there is a generation gap... and how old do you think I am???

*** Grandpa is Only 58.

Lunch with God

A little boy wanted to meet God. He knew it was a long trip to where God lived, so he packed his suitcase with a bag of potato chips and a six-pack of root beer and started his journey.

When he had gone about three blocks, he met an old woman. She was sitting in the park, just staring at some pigeons.

The boy sat down next to her and opened his suitcase. He was about to take a drink from his root beer when he noticed that the old lady looked hungry, so he offered her some chips. She gratefully accepted it and smiled at him.

Her smile was so pretty that the boy wanted to see it again, so he offered her a root beer. Again, she smiled at him. The boy was delighted! They sat there all afternoon eating and smiling, but they never said a word.

As twilight approached, the boy realized how tired he was and he got up to leave, but before he had gone more than a few steps, he turned around, ran back to the old woman, and gave her a hug. She gave him her biggest smile ever!

When the boy opened the door to his own house a short time later, his mother was surprised by the look of joy on his face. She asked him "What did you do today that made you so happy?" He replied, "I had lunch with God." But before his mother could respond, he added, "You know what? She's got the most beautiful smile I've ever seen!"

Meanwhile, the old woman, also radiant with joy, returned to her home. Her son was stunned by the look of peace on her face and he asked, "Mother, what did you do today that made you so happy?" She replied, "I ate potato chips in the park with God." However, before her son responded, she added, "You know, he's much younger than I expected."

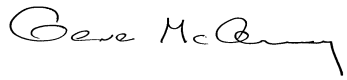
Moral of the story:

Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around. People come into our lives for a reason, a season, or a lifetime...Embrace all equally!

Have lunch with God.... bring chips!!! Pass this on to people who have touched your life in a special way. Let them know how important they are to you...I just did....

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