SOUTHWEST FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 20, 2001

Warmer temperatures and breezy dry conditions characterized the overall weather pattern for most of the past two weeks until the passage of a cold front on April 18th. Temperatures averaged from three to nine degrees above normal with daytime highs mostly in the mid to upper 80s with a few days reaching into the low 90’s. Nighttime lows were mostly in the 60s. The strong cold front that passed across the region dropped daytime highs back into the low to mid 70’s with most of the area reporting nighttime lows in the low to mid 40’s. Several stations in northern parts of the state reported below freezing temperatures in conjunction with this front.

The FAWN Weather Station in Immokalee reports no measurable precipitation over the past two weeks.

Hot dry windy conditions have resulted in reports of plant stress and wind damage including marginal leaf burn and fruit scarring, particularly in sensitive crops like cucurbits. Pan-evaporation measured at the FAWN Weather Station in Immokalee has ranged between 0.19 and 0.22 inches per day over the past two weeks. Several respondents growing exclusively on drip irrigation have indicated difficulty in maintaining adequate soil moisture levels in crops to keep plants from wilting in the hottest part of the day.

Reports of salt-related problems and salt damage in plantings remain widespread, as are reports of rising salinity levels in well water being pumped in coastal areas.

Picking of watermelons has started in the Immokalee area and harvesting of most other crops is in full swing. Vegetables available include tomatoes, potatoes, sweet corn, peppers, cabbage, snap beans, squash, cucumbers, eggplant, Chinese cabbage, blueberries watermelons and specialty crops. Quality is mostly good. Some tomato growers are making first and second picks and passing up a third pick due to the market conditions.

The National Weather Service in Miami forecast is calling for a warming trend over the next few days with daytime highs returning to the mid to upper 80’s and nighttime temperatures in the mid 60’s. Skies will be mostly clear and breezy. The forecast calls for a chance of afternoon showers later next week.
Modified PHASE 2 restrictions for water use remain in effect for South Florida. This includes: Palm Beach, Monroe, Miami-Dade, Broward, Collier, Hendry, Lee, and parts of Glades, Charlotte, and Okeechobee counties.

In general, pest and disease pressure is relatively light.

Pepper weevils are being widely reported from across the area. Populations are increasing to seasonally high levels. A number of respondents have reported observing extensive weevil damage to flower buds and small fruit. Several growers report serious losses from weevils especially in hot pepper varieties.

Fallen fruit should be checked to determine if weevils are responsible. Infested fruits can be recognized before they fall by the yellow calyx the presence of oviposition punctures that look like small dimples.

Pheromone traps made by Trece are a good way to detect populations early. Spraying needs to commence at the first sign of weevils or with flowering in fields with a history of problems. Vydate is the standard control and has given pretty good results even at 2 pts/acre when sprayed weekly in Phil Stansly’s trials at the Southwest Florida Research and Education Center. A total of 24 pts can be applied for the season.

Many growers have indicated disappointing results in obtaining satisfactory control in the field. Some growers have terminated older plantings where weevils had become unmanageable. A number of growers have indicated obtaining good results in controlling weevils with either Capture or cryolite. All currently labeled materials are difficult to work into an IPM program once plantings begin to be harvested due to the 7 day PHI in force for all of them.

Sanitation is important. Remove old crops and nightshade (an alternate host) and disk crop residues under as soon as harvesting has terminated. Maintain fields free of volunteer pepper and other potential hosts to reduce survival of pepper weevil populations over the summer.

Growers are advised to be alert for spider mites. Several respondents have reported problems with spider mites in eggplants and tomatoes as well as in watermelon and other cucurbits. A number of growers report applying repeat applications of miticides aimed at spider mites.

Growers should be sure to scout stands of nightshade adjoining plantings, as this is a potential source of infestation and may help them circumvent possible problems. Recent field surveys have indicated high populations of mites on nightshade along ditch banks and field margins.

Most common spider mites are closely related species in the genus Tetranychus and cannot be reliably distinguished in the field. However, there is little need to do so since their damage, biology, and management are virtually the same. The presence of webbing is an easy way to distinguish them from all other types of mites.

To the naked eye, spider mites look like tiny moving dots; however, you can see them easily with a 10X hand lens. Adults have eight legs and an oval body with two red eyespots at the head end of the body. Females usually have a large, dark blotch on each side of the body and numerous bristles covering the legs and
body. Immatures resemble adults, except the newly hatched larvae have only six legs. Eggs are spherical and translucent, like tiny droplets, becoming cream colored before hatching.

**Mites cause damage by sucking cell contents from leaves.** A small number of mites is not usually reason for concern, although populations levels high enough to show visible damage to leaves can be damaging to plants. Initial damage shows up as a stippling of light dots on the leaves; sometimes the leaves take on a bronze color. As feeding continues, the leaves turn yellow and drop off. On vegetable crops, such as squash, melons, and watermelons, loss of leaves can have a significant impact on yield and result in sun burning. Often leaves, twigs, and fruit are covered with large amounts of webbing. Damage is worse when compounded by water stress.

**Spider mites have many natural enemies that often limit populations.** Adequate irrigation is important because water-stressed plants are most likely to be damaged. Broad-spectrum insecticide treatments for other pests frequently cause mite outbreaks, so avoid these when possible.

**Growers have had good results with back-to-back applications of sulfur and/or Kelthane.** Since spider mites reproduce rapidly in hot weather and generation time can be less than a week, it is imperative that subsequent treatments be made every 5 days to target new larvae emerging from eggs.

**Sulfur can be used on some vegetables, but will burn cucurbits.** Do not use sulfur if temperatures exceed 90°F and do not apply sulfur within 30 days of an oil spray.

**Whiteflies populations are building up across the area.** Counts as high as 50 per plant have been reported, with eggs and immatures present. IGR’s such as Knack and Admire can help populations in check where Admire has begun to wear off. With the current tomato market, many growers are hesitating to spray.

**Growers can also turn to broad-spectrum materials including a variety of pyrethroids, such as Asana, Baythroid, Danitol and Warrior as well as some of the organo-phosphates (Monitor) and carbamates such as Thiodan.** As we approach the end of the season, effects on beneficials become less of a concern and cost and efficacy assume greater importance.

Respondents indicate that leafminer populations are beginning to decline in most places.

**Worm activity remains light.** There have been a few reports of southern army worm, loopers and tomato fruit worms from widely scattered locations.

**Melonworms and pickleworms are being reported on squash in a number of locations.**

**Reports indicate that pinworms are increasing in a number of areas especially on field margins.** The tomato pinworm (*Keiferia lycopersicella*) is a small, microlepidopteran moth that is often confused with closely related species with similar habits.

**Eggs are laid singly or grouped in two's and three's.** The eggs are opaque to pale yellow, but turn orange before hatching. The first instar larvae spin a tent of silk over themselves and tunnel into the leaf. Mature larvae abandon the host and form a loose pupal cell of sand grains near the soil surface. The adult emerges from this pupal cell two to four weeks later. Although the life cycle is lengthy, multiple generations overlap and infestations quickly mount to damaging proportions. Seven or eight generations or more per year can be expected.

**Damage to tomatoes results from the feeding of larvae on leaves, stems and fruit. Initial injury is slight and appears as a small leaf mine.** Later injury includes leaf folding and leaf tying. Mature larvae may abandon the leaf and bore into the fruit leaving a small "pin" size hole. Secondary damage results when plant tissues become infected by pathogens and the plant dies or the fruit rots. Approximately 60 to 80 percent of tomato fruits may become infested in a single season.
**Pheromone traps will help give an earlier warning.** Place one trap per 10 acres at least 25 paces inside of field. When 3 to 5 moths are caught per trap per night, then mating disruption should be initiated. Insecticidal control can be achieved with products such as SpinTor, AgriMec, Proclaim and Avaunt.

**Tomato, potato, eggplant, and tropical soda apple (S. bahamese L), a solanaceous weed, are the only recorded hosts in Florida.** Thus, the summer break is effective in reducing populations to low levels, except possibly where soda apple is prevalent. Pinworms attack both leaves and fruit. Images and guidelines can be found in the Tomato Scouting Guide [http://ftsg.ifas.ufl.edu/](http://ftsg.ifas.ufl.edu/).

**Several producers have noted pickleworm activity on cucurbits.** Most reports indicate low to moderate pressure, which is being kept easily under control with a variety of lepidoterean specific products. Crops affected include cucumber, squash and melons.

**Low to moderate diamondback pressure is being reported in brassicas.** Some respondents indicate that numbers are increasing.

**Increased broadmite activity is being widely reported in pepper and to a lesser extent on eggplant.**

**Aphids are still around and populations are reported to be up-and-down seen in peppers and cucurbits.**

**Market blight is currently the most severe disease problem being experienced by most growers.**

**Gummy stem blight has been reported in watermelon from widely scattered locations.** In some places incidence is moderate.

**Gummy stem blight typically progresses from the central stem of the plant to growing tips.** Leaf spots are variable in shape, red-brown in color and initial infections are generally seen on leaf margins and veinal areas. Use of a hand lens will reveal small, clear white (when young) to black (when old), pimple-like pycnidia embedded in older diseased tissue.

**Because other plant disorders can cause exudation of a gummy substance, “gummy-ness” should not be relied upon for diagnosis of gummy stem blight.** Anthracnose and inadequate liming can both cause stem lesions and gumming.

**Nighttime temperatures and moisture conditions are ideal during much of the season in S Florida.** Gummy stem blight is most severe in wet years since moisture from dew, rain or irrigation is necessary for spore germination.

**Growers often comment on this disease occurring “overnight.”** What they are actually seeing are the results of secondary spread, which is more difficult to control than primary spread simply because of increased spore numbers with increased diseased tissue.

**Multiple applications of fungicides are necessary to control gummy stem blight.** It is important to begin a fungicide program prior to the first sign of gummy stem blight. In south Florida, the spray program should be initiated soon after emergence.

**Bacterial leaf spot has become widespread on pepper and tomato in several locations following the showers experienced a few weeks ago.**

**Although most reports indicates that the incidence of TYLCV remains low, several respondents have reported a significant increase in the incidence of tomato yellow leaf curl with some fields exhibiting between 3-5 % infection rates.** Even higher incidence of the disease has been observed in some fields that...
have been turned over to pin hookers. Given the potential ability of whiteflies to transmit the disease rapidly under optimal conditions to new plantings, growers should be alert for whitefly buildup and take measures to control them.

**Reports from the Ruskin area, indicate TYLCV incidence of over 50% in the most severely affected fields.**

**Potyvirus is also being reported on tomato from several widely scattered locations. In some cases incidence is over 10%.**

**Late blight is still widely present on tomato but lesions are dry and little recent spread has been noted.**

**A few isolated reports of pepper mosaic have been received but seem to be confined to single plants here and there.**

**Pepper mottle virus has been detected in several fields in eastern Hendry County.** Incidence and severity is moderate to high in some fields. The virus results in unthrifty stunted plants.

**Downy mildew is causing serious problems in squash in several locations.** There have also been a few isolated reports of downy mildew on cantaloupes and watermelon.

**Fusarium crown rot is still causing problems on tomato is some locations.** Scattered occurrence of fusarium wilt race 3 has also been reported.

**Rotation and resistant varieties coupled with a pre-plant fumigant are the main components of an IPM program aimed at controlling these diseases.** At their Spring Variety Field Day held on April 19, BHN Research highlighted several promising new fusarium crown rot and fusarium race 3 resistant lines as well as two commercially available crown rot resistant lines (BHN 273 and BHN 348). BHN X585, X586, and X587 incorporate fusarium crown rot resistance and BHN X 575, which is resistant to fusarium race 3, will be available for trial this coming season.

**Powdery mildew is widely present on squash.** Incidence is moderate in some older fields.

**Powdery mildew is present in scattered locations in older pepper fields.** Powdery mildew is uncommon on pepper in SW Florida. The disease in pepper is caused by the fungi *Leveillula taurica.*

**Powdery mildew primarily affects leaves, but is occasionally seen on other parts of the pepper plant.** Although the disease commonly occurs on older leaves just before or at fruit set, it can develop at any stage of crop development. Symptoms include patchy, white, powdery growth that enlarges and coalesces to cover the entire lower leaf surface. At times the powdery growth is present on the upper leaf surface as well. Leaves with mildew growing on the undersurface may show a patchy yellowish or brownish discoloration on the upper surface. The edges of infected leaves may roll upwards exposing the white, powdery fungal growth. Diseased leaves drop from the plants and leave the fruit exposed to the sun, which may result in sunburning.

**Powdery mildew can be severe and can cause heavy yield losses.** The pathogen has a very wide host range and inoculum from one host plant species can cross infect other host plants. Infection of plants can occur over a wide temperature range (64 to 91° F) under both high and low humidity. Under favorable conditions, secondary infections occur every 7 to 10 days and disease can spread rapidly.

**The fungus survives between crop seasons on other crops and on weed species.** The degree of survival depends on environmental conditions. Because of the wide host range of the fungus, it is difficult to control the amount of inoculum that survives from one season to the next. Thus, simple sanitation methods in and around
pepper fields may not provide a sufficient reduction in the primary inoculum to provide disease control. Most pepper cultivars do not possess acceptable levels of resistance to powdery mildew.

**Fungicides can provide satisfactory control and prevent economic loss if applied during the early stages of the epidemic.** Effective control requires spraying with high pressure and high volume for optimum penetration of the crop canopy by the fungicide. Good coverage is necessary for satisfactory control.

Several respondents indicate observing low levels of early blight and target spot in tomato.

**STUDY FINDS IPM ADVANCES IN FOOD CROPS**

A recently completed, data-rich study of pest management trends among growers in Florida’s intensive fruit and vegetable production areas reveals an overall decline in both usage of and reliance on pesticides accompanied by increased acceptance of multi-tactic IPM systems.

The review study, commissioned under a US Department of Agriculture grant was conducted by Glades Crop Care, a long established, Florida Based commercial research and consulting firm and resulted in the publication of an in-depth report, **PEST MANAGEMENT SOLUTIONS TO SUSTAIN HIGH VALUE FLORIDA VEGETABLE PRODUCTION.** The 186-page study can be downloaded at [http://www.gladescropcare.com/PMAP_report.html](http://www.gladescropcare.com/PMAP_report.html). The study documents the evolution along the IPM continuum by regional tomato and pepper producers.

**VISA DEADLINE APPROACHES**

April 30 is the deadline to apply for visas for eligible undocumented immigrants who want to attain legal residence status by paying a fine and staying in the U.S. The Legal Immigration Family Equity (LIFE) Act and its amendments became law last December. Section 245(i) allows certain persons to apply in the U.S. if they pay a $1,000 penalty, rather than having to return to their home countries to apply.

Previously, immigrants faced a 3- or 10-year ban from returning to the U.S. if they were found to have been in this country illegally. For info call (800) 375-5283; [http://www.ins.usdoj.gov](http://www.ins.usdoj.gov)

**Burn Ban Resumes With Return Of Hot Dry Weather**

Hotter drier conditions have prompted state officials to re-impose a statewide burn ban in Florida.

**Web Sites**

**Sending produce to another state?** This USDA/APHIS site can help avoid costly delays. The Federal & State Quarantine Summaries is designed as a reference tool for nursery stock growers, brokers, purchasers, and others involved in the buying, selling, and interstate transport of nursery and greenhouse plant crops. It outlines the basic quarantine and other plant health requirements of APHIS, all 50 states, and Puerto Rico. The information presented is designed as an aid to help users avoid delays, rejections of plant material shipments, and introduction of harmful pests into new areas. Go to [http://www.aphis.usda.gov/npb/F&SQS/sqs.html](http://www.aphis.usda.gov/npb/F&SQS/sqs.html)

**Florida Agricultural Statistics Service** – Hosted by the USDA, this site provides information on Florida farm commodities. Set your browser to [http://www.nass.usda.gov/fl/](http://www.nass.usda.gov/fl/)

**UF/IFAS Pesticide Information Links** – A comprehensive list of pesticide information, fact sheets, newsletters and agriculture info as well as government agencies and Internet search engines that will help you stay abreast of pesticide and IPM related information. Check it out at [http://pest.ifas.ufl.edu/](http://pest.ifas.ufl.edu/)
ATTENTION ALL VEGETABLE FARMERS

Magnolia Packing, Inc. will be opening in October 2001. Magnolia Packing will be located on HWY 80 between Clewiston and LaBelle (the old Dole Citrus property). Roy Lee Smith Produce Sales, Inc. with more than 40 years experience in marketing will be in charge of sales.

Magnolia Packing, Inc. will be operating in Florida October through May, and in Georgia May through October.

New state-of-the-art packing lines include:
I. Flume cooling
II. Flume packing
III. Gentle handling and
IV. Forced fan air-cooling for green beans, wax beans, Kentucky beans, eggplant, squash, bell pepper, cubanelle and cucumbers.

If you are interested in becoming part of the program, whether it is in picking, packing and marketing or your field packing and Magnolia’s receiving, cooling and marketing program please contact:

Magnolia Packing, Inc.
PO Box 863
Americus, GA 31709

Ask for Roy Lee Smith, Taylor Neighbors, or George Thurmond.

In LaBelle speak to Calvin O’Bannon 941-860-2606.

They will be happy to furnish a list of current growers in the Clewiston, Immokalee, and LaBelle areas so you may contact them on past performance.

Up Coming Meetings:

April 22-26, 2001 85th Annual Meeting of the Potato Association of America (PAA 2001)
St. Augustine, Florida.
Hosted by the University of Florida/IFAS Hastings Research and Education Center, the conference theme is Potato Plant Health into the New Millennium. Emphasis will be on challenging soil-borne diseases.

For more information visit the conference website: http://www.ifas.ufl.edu/~conferweb/paa/ or contact the University of Florida, IFAS Office of Conferences by phone (352) 392-5930 or by fax (352) 392-9734, or by Email: mtatlock@gnv.ifas.ufl.edu

May 14 –18, 2001 Aquatic Weed Control Short Course - Earn up to 28 CEU’s
Fort Lauderdale Research and Education Center
Fort Lauderdale, Florida
Contact Dr Vernon VanDiver – 954-577-6316

May 15, 2001 Gulf Coast Research and Education Center Vegetable Field Day
Bradenton, FL.
Contact Don Maynard at 941-751-7636 x239 or dnma@mail.ifas.ufl.edu.
May 17, 2001  Spring Vegetable Field Day and Pest and Disease Scouting Workshop  
Southwest Florida Research and Education Center  
Immokalee, Florida  
For information, contact 863-674-4092

June 6, 2001  KaPam/VaPam Certification Course  
Southwest Florida Research and Education Center  
Immokalee, Florida  
For information, contact 863-674-4092

August 3, 2001  Florida Certified Crop Advisor Exam  
South Florida Community College  
Avon Park, Florida  
Call FFAA at (863) 293-4827 for registration information.

Sept. 5, 2001  Florida Tomato Institute  
Naples, FL.

Oct. 2-3, 2001  FACTS Meeting  
Lakeland, Florida

November 8-9, 2001  17th Annual Tomato Disease Workshop  
West Palm Beach, Florida.

Presentations and discussions on the occurrence and management of tomato diseases. Both processing and fresh market tomato problems will be addressed. Colleagues from industry, academia, and extension are welcome.

For additional information visit:  http://erec.ifas.ufl.edu/TDW.htm

December 8-12, 2002  Cucurbitaceae 2002  
Naples Beach and Golf Club, Naples, Florida  
Contact Don Maynard at 941-751-7636 ext 239 or dnma@mail.ifas.ufl.edu.

Your Fall IPM Program Should Start Now!

As we approach the end of the spring season, it is not too early to start thinking about and even implementing your fall season IPM program. With all the advances in pest management, new chemistries and space age spray rigs, it is often easy to overlook some of the basics.

Field sanitation is one of the most important tactics in vegetable pest and disease management. The best thing that growers can do for themselves and their neighbors is to clean up crop residues promptly after harvest. Sanitation is an important IPM technique that should not be overlooked as an effective, preventative tool against many vegetable pest and disease problems. Sanitation includes any practice that eradicates or reduces the amount of pathogen inoculum, pests, or weed seeds present and thus helps reduce or eliminate subsequent pest and disease problems.

Prompt crop destruction at the end of the season will immediately end the production of disease inoculum and insects and eliminate the spread of diseases and pests to any other host plants in the vicinity. Downy and powdery mildew on melons can spread via wind from older, diseased plants to plants in surrounding fields that are still maturing. These diseases are obligate parasites. This means that they can only grow and multiply on living host tissue. Some plant pathogens, such as the bacterium that causes bacterial spot of tomato and
pepper, are unable to survive for extended periods of time outside of the host tissue. Plowing or disk ing under infected plant debris helps not only by covering up the inoculum but also speeds up the disintegration of plant tissue and kills the pathogen. Good sanitation will help control a number of important vegetable pathogens.

**Destruction of tomato vines** will kill off white fly populations and eliminate transmission of the tomato yellow leaf curl virus to subsequent crops and also eliminate inoculum from late blight and other fungal diseases. This is particularly important in the case of TYLCV, as sanitation and whitefly control are the only tools currently available for the management of this disease. A crop-free period is also considered a necessity for the control of a number of other important vegetable pests such as pepper weevil, tomato pinworm, and Thrips palmi and is recommended for management of all vegetable pests.

**Weeds and volunteers should also be removed** to prevent the survival and over-summering of pathogens that could serve as inoculum reservoirs for the next crop. Techniques such as mowing off pepper should not be relied upon as this often results in re-sprouts, which can harbor pests and disease problems over summer.

**The use of cover crops and summer fallowing of fields are also effective tools** in reducing weed populations that can cause problems in the subsequent crop. The role of summer fallow in weed management is often overlooked. Summer fallow keeps new weed seeds from being added to the soil seed-bank. It also reduces the increases in asexual propagated plants such as nutsedges. Yellow nutsedge can put out 70 new tubers (nuts) every two months. Keeping the weeds from propagating will reduce the weed problems encountered during the next cropping season and help reduce insects and diseases that may over summer in weedy fields.

**Chemical fallowing is a twist on the traditional method of fallowing** that depends on discing fields through out the summer period to reduce weed pressure in subsequent crops. One approach uses Roundup to kill weeds during the crop free period.

**The key to a successful chemical fallow program** is the timing of the applications. Two Roundup Ultra treatments with one tillage trip in between should cover the entire fallow period.

**Procedure**

Disc field after harvest.
Allow weeds to germinate and grow to a desirable height (approximately 25-30 days).
Treat with Roundup Ultra (first treatment).
Allow treated weeds time to translocate product throughout plant (at least one week).
Lightly disk field (can be one to five weeks after herbicide treatment).
Allow weeds to germinate and regrow to a desirable height (approximately 25-30 days).
Treat with Roundup Ultra (second treatment)
Allow treated weeds time to translocate product throughout plant (at least one week).
Prepare field for planting (can be one to five weeks after herbicide treatment).

**Note:** Allow 3 days between last application and planting.

**Field sanitation will be come an increasingly important tool to growers in face of the impending loss of methyl bromide** – whose ease of use and effectiveness in controlling a wide range of problems allowed us to neglect some of these practical common sense pest management techniques.

At our April Vegetable Growers Meeting, Dr Jim Gilreath and Dr Joe Noling presented information on the use of virtually impenetrable films (VIF) to extend dwindling methyl bromide supplies. Trial have demonstrated favorable results in controlling soil borne problems with 25 – 50 % rates of methyl bromide using VIF mulches. This technology will enable to extend available supplies of methyl bromide and provide a stop-gap measure to help them through the next few years. It is predicted that methyl bromide
formulation will again change and that next season 50% formulations will be the rule. Prices are also predicted to increase as supplies dwindle and demand for those supplies increases. Dr Noling indicated that methyl bromide prices of $4.00 per pound or more would not be unrealistic in the near future.

Representatives from Pro Source One and Klerks – a VIF plastic manufacturer advised growers that orders for VIF mulch must be received by May 1 to ensure July 15th deliveries. Contact your nearest Pro Source One rep for details.

**Azoxystrobin Resistant Gummy Stem Blight Isolated**

Syngenta, the company formed by the merger of Zeneca and Novartis has indicated that resistant (insensitive) isolates to of Didymella bryoniae, the fungal pathogen that causes gummy stem blight in cucurbits, have been found in Delaware, Maryland, and Georgia.

According to Dr. David Langston, Extension Plant Pathologist in Georgia, the resistant (insensitive) isolates to azoxystrobin that have been found so far in Georgia have originated from watermelon and cucumber.

Azoxystrobin affects sensitive isolates at a single site associated with electron transfer in the **mitochondria**. Such single site-type of compounds are highly likely cause a selection pressure for resistant (insensitive) strains.

**THUS, USE RESISTANT MANAGEMENT STRATEGIES WHEN USING AZOXYSTROBIN BY:**

1) REDUCING INOCULUM FOR DISEASE WITH EVERY POSSIBLE NON-CHEMICAL TECHNIQUE AVAILABLE,

2) ALTERNATING THE USE OF AZOXYSTROBIN WITH BROAD-SPECTRUM FUNGICIDES SUCH AS MANCOZEB OR CHLOROTHALONIL, AND

3) AVOIDING THE INTRODUCTION OF RESISTANT STRAINS ONTO YOUR PLACE OF BUSINESS BY PRODUCING OR PURCHASING DISEASE-FREE TRANSPLANTS.

Thanks to Dr Tom Kucharek - PLant Pathologist UF/IFAS

**On the Lighter Side**

**What Happens when you play a country record backwards?**

You get your wife back, you get your truck back, you get your dog back…..

**THINGS YOU'D LOVE TO SAY AT WORK, BUT CAN'T!**

- I don't know what your problem is, but I'll bet it's hard to pronounce.
- How about never? Is never good for you?
- I'll try being nicer if you'll try being smarter.
- I'm out of my mind, but feel free to leave a message...
- I like you. You remind me of when I was young and stupid.
- You are validating my inherent mistrust of strangers.
- I have plenty of talent and vision. I just don't give a damn.
- I'm already visualizing the duct tape over your mouth.
I will always cherish the initial misconceptions I had about you.

Thank you. We're all refreshed and challenged by your unique point of view.

Any connection between your reality and mine is purely coincidental.

What am I? Flypaper for freaks!? 

Do I look like a people person?

This isn't an office. It's Hell with fluorescent lighting.

I started out with nothing and still have most of it left.

How do I set a laser printer to stun?

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

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