April 26, 2002

It is that time of year in South Florida and it is getting hot. The National Weather Service reports that temperatures have been above average for most of the period with several records being set in recent days. High temperatures have ranged upper 80’s to low 90’s with nighttime lows mostly in the low to mid 60’s. Warmer temperatures are keeping evapo-transpiration rates high and some growers have indicated difficulty in irrigating and seeing signs of moisture stress in some crops on hot afternoons with blossom end rot and sunscald becoming more common.

Although some areas have received some rainfall in the form of isolated widely scattered afternoon showers over the past two weeks, it remains dry in many places with most sites experiencing a total annual rainfall several inches below normal so far this year.

Crops across the area are in mostly fair to good condition. Harvesting of most vegetables in Dade County is beginning to slow as temperatures become hot. Growers around Homestead and elsewhere are cutting strings and cleaning up fields, starting to plant cover crops or at least considering the chemical fallow option. Watermelon harvest is in full swing around Immokalee and harvest of many crops will be slowing down in the next few weeks. Vegetables being harvested include tomatoes, peppers, cabbage, cantaloupe, Chinese cabbage, eggplant, parsley, potato, radishes, snap beans, squash, sweet corn, strawberries, specialty vegetables and watermelons.

<table>
<thead>
<tr>
<th>Date</th>
<th>Air Temp (°F)</th>
<th>Rainfall (Inches)</th>
<th>Hours Below Certain Temperature</th>
<th>(hours)</th>
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<td></td>
<td>Min</td>
<td>Max</td>
<td>40°F</td>
<td>45°F</td>
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<td>Ft Lauderdale</td>
<td>4/15 – 4/26/02</td>
<td>67.3</td>
<td>89.4</td>
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<td>Fort Pierce</td>
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<td>61.2</td>
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<td>61.7</td>
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<td>Immokalee</td>
<td>4/15 – 4/26/02</td>
<td>58.2</td>
<td>91.4</td>
<td>0.00</td>
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The short term forecast from the National Weather Service in Miami calls for mostly clear skies with a chance of afternoon showers and thunderstorms through Friday. Daytime temperatures should top 90 most days with nighttime lows in the mid 60’s. For additional information, visit the National Weather Service in Miami website at http://www.srh.noaa.gov/mia/newpage/cgi-bin/master.pl?suite=home.

Reports indicate that pest pressure is building but with most crops only a few weeks from termination many growers are reducing pesticide applications and are mainly concerned with preventing major outbreaks of highly destructive pests like worms.

Reports from Homestead indicate an increase in worm activity as the full moon approaches. Highest pressure is from melon worms and southern armyworms.

Respondents in Palm Beach are reporting some hatches of southern armyworm in pepper. Scouts indicate that only a few larva of beet and fall armyworms are being found although moths have been observed flying around.

Around Immokalee, growers are reporting only scattered problems with worms. Growers are finding a few southern armyworms and loopers with an occasional beet armyworm or fruitworm on tomato and pepper. There have been a few reports of armyworms causing rind damage in melons.

Several growers in southwest Florida are reporting increased pressure from melonworms in cucurbits especially cucumber and cantaloupe and squash.

Growers in Homestead report increased pinworm activity in the few late tomato fields still in production.

Pinworms are also becoming common on tomato foliage in some locations around southwest Florida although there have been few reports of pinworms causing problems with fruit.

Some growers around south Florida are reporting strong worm pressure in brassicas with 2 - 3 different species being found in addition to diamond backs.

Around south Florida whitefly pressure remains high to very high on a variety of crops.

Scouts in Palm Beach report seeing whitefly problems in cucumber as well as squash where silver leaf is not uncommon depending on the age of the crop and control measures employed.

Scouts in Homestead indicate very high whitefly numbers in remaining bean fields.

Growers around Immokalee indicate that the whitefly situation is bad and several respondents have noted whitefly populations are very high. In addition to tomato, some growers are reporting heavy pressure in watermelon, squash and other cucurbits.

Growers are reminded of the importance of sanitation and rapid destruction of crop residues once harvest is complete. Given the extremely high whitefly pressure and widespread tomato yellow leaf curl infections seen this season; sanitation and prompt crop destruction may play a critical role in reducing potential problems in the fall tomato crop!

Reports from Homestead indicate that heavy Thrips palmi pressure, especially beans.

Around Palm Beach scouts are finding a few T. palmi along with miscellaneous immature flower thrips. In general, populations are not high enough to warrant control measures as harvesting operations are nearly complete.
Around southwest Florida flower thrips are widely present on a variety of crops at mostly low levels and are causing few problems. Some dimpling has been noted on tomato fruit.

Reports from southwest Florida indicate that aphid populations continue to increase in some locations. Problems have been mostly on brassicas, pepper and melons. Several growers have reported colonies building in crops especially pepper.

Growers in Homestead and southwest Florida report scattered problems with red and two spotted spider mites on several crops.

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.

Growers and scouts around southwest Florida report a surge in broadmite pressure in recent weeks and several growers are struggling to keep them under control. Since 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.

Pepper weevil pressure has reached season high levels in many parts of southwest Florida but given the fact that many fields are close to termination, most growers have little interest in control measures.

Respondents in Palm Beach reports that pepper weevils are currently not a problem. Indications are that sprays of Baythroid and Pravado may have helped keep weevil populations down.

Dry conditions have slowed most diseases with the notable exception of rust and powdery mildew.

Late blight activity has slowed around southwest Florida, although a few new lesions have been observed in some places.

Dow AgroScience reports that their new broad-spectrum fungicide Gavel is now conditionally approved for use in Florida for late blight control in tomato and potato. Gavel contains a combination of mancozeb and zoxamide. Product has been distributed to distributors and should be available to growers.

Note that Gavel has been designated a dermal sensitizer and for tomatoes and cucurbits requires oral and written notification of workers that fields have been treated with dermal sensitizer. Potatoes require only oral notification. Incidents of dermal sensitivity should be reported to Dow. See the Gavel labeling for full details.

Tomato yellow leaf curl virus continues to spread around southwest Florida along with high whitefly pressure. Infection levels this spring are much higher than seen before in southwest Florida. Many fields have plenty of early-infected plants that will hurt yields. At this late date growers are advised to concentrate on rapid crop destruction and “off-season” control of volunteers and other potential weed hosts to reduce problems next fall.

Respondents from Palm Beach indicate that bacterial spot is present in pepper but has shown little spread.

Around Immokalee and southwest Florida bacterial leaf spot continues move in tomato and pepper and has intensified in some places following recent showers reaching high into the canopy. Target spot and early blight activity has also picked up following the scattered rains about two weeks ago.
Gummy stem blight remains is widely present on watermelon southwest Florida. In most cases incidence and severity remains low to moderate. In some places infections that started early in the season are girding vines causing wilting.

Some growers are questioning the efficacy of strobilurin-based fungicides on gummy stem blight although there have not been any confirmed cases of resistance in Florida to date.

Scouts in Palm Beach are reporting light infestations of gummy stem blight in watermelon.

East coast respondents indicate that powdery mildew remains active in some eggplant, cucumber, pepper, and watermelon. Use of Quadris on watermelon has helped keep it under control.

Powdery mildew remains active on squash around Immokalee. Powdery mildew is widespread in older cucurbits especially squash. Incidence and severity is generally low to moderate although some severe infections have been noted in older plantings. Scouts report that they are beginning to detect powdery mildew in watermelon as well.

When powdery mildew occurs on watermelon, it often will not display clear white powdery growth on the leaves as it does on squash and other plant species. The yellowing of leaves is often the first indication that powdery mildew is present. Symptoms may begin as a faint interveinal yellowing on the upper leaf surface of leaves near the crown of a few plants. With the aid of a hand lens, faint white mycelial growth may be seen on the lower side of the leaves. Powdery mildew is capable of producing typical white powdery growth on leaves of watermelon, but in many cases it does not appear that way. Chlorothalonil or Quadris do well in suppressing powdery mildew. To promote good a resistance management strategy, do not use block sprays of Quadris. Alternate Quadris with chlorothalonil and other fungicides. The manebs and mancozeb fungicides will also suppress powdery mildew to some extent and they are broad-spectrum types, which makes them good choices for alternating with Quadris.

Powdery mildew is present in scattered locations in older pepper fields around southwest and in some locations is causing serious defoliation

Downy mildew is widely present in older squash plantings around Immokalee and is now being seen more widely on cantaloupe and watermelon around southwest Florida.

Scouts in Homestead are reporting heavy infestations of powdery and downy mildew on cucurbits.

Reports from Palm Beach indicate that some cucumber fruit is being found with Phytophthora even though symptoms are not being found on the leaves and stems.

Following recent heavy showers in interior sections of southwest Florida, there have been reports of patchy occurrence of Phytophthora in pepper.

Fusarium wilt is widely present on watermelon across southwest Florida. Incidence and severity is mostly low. Growers also report problems with fusarium crown rot in cantaloupe.

Growers around southwest Florida report that the incidence of fusarium crown rot continues to racket up slowly in tomato.

Mosaic is widely present on squash in southwest Florida. Mosaic symptoms are also beginning to show up in watermelon. Incidence is low. Some fields have some mosaic hotspots in a corner where several plants are infected but most fields just have a random plant or two.
Respondents in Palm Beach also note the appearance of mosaic in older squash.

Gene McAvoy assisted Dr Susan Webb with a virus survey on cucurbits in late March. All samples were taken from squash at three locations around southwest Florida. Although other cucurbits were scouted for virus no infections were found at that time. Samples were tested for the following viruses: papaya ringspot virus-watermelon strain (PRSV-W), zucchini yellow mosaic virus (ZYMV), cucumber mosaic virus (CMV), watermelon mosaic virus (WMV-2), squash mosaic (SqMV), watermelon leaf mottle virus (WLMV), tobacco streak virus (TSV), tomato spotted wilt virus (TSWV), and geminiviruses.

Site one (planted in susceptible and virus resistant cultivars): every sample was positive for PRSV-W. No other viruses detected. Although virus resistance has been incorporated into a number of squash varieties most of these remain susceptible to PRSV-W

Site two: samples tested positive for PRSV-W (34) and ZYMV (17). Note that some doubly infected samples tested positive for both PRSV-W and ZYMV. These plants appeared different than plants hosting a single infection.

Site three: Samples tested positive for PRSV-W (39) and WLMV (1). This find is the first time since the original isolate of WLMV was collected in 1990, also from Hendry County, that watermelon leaf mottle virus has been detected in southwest Florida.

Growers are experiencing problems with sunscald on a number of crops. Calcium Carbonate (white wash) helps but must be used carefully since it is difficult to wash off, depending on the crop. Do not use on pepper. Another sunscald option would be the kaolin clay based products such as Surround. Some growers report difficulty in removing the residue from fruit and have moved to generic kaolin with better results. Kaolin is also reported insecticidal properties and or to provide a barrier to insects and is being used widely by organic producers.

Nematode problems are being widely observed in vegetable fields in scattered locations across south Florida. High temperatures and moisture stress often make nematodes problems more readily apparent in the late spring since they primarily affect the root system reducing the plants ability to cope with stress. Growers can take advantage of this fact to help identify problem areas and plan control strategies for the coming season.

Crop production problems induced by nematodes generally occur as a result of root dysfunction, reducing rooting volume and efficient utilization of water and nutrients. Typical symptoms of nematode injury can involve both above ground and below ground plant parts. Foliar symptoms of nematode infestation of roots generally involve stunting and general unthriftiness, premature wilting and slow recovery to improved soil moisture conditions, leaf chlorosis (yellowing) and other symptoms characteristic of nutrient deficiency.

Many different genera and species of nematodes occur in vegetables in Florida. In many cases a mixed community of plant parasitic nematodes is present in a field, rather than having a single species occurring alone. In general however, the most widespread and economically important nematode species include the root-knot nematode, Meloidogyne spp., and sting nematode, Belonolaimus longicaudatus.

Based on the fact that the root-knot nematode causes the formation of large swollen areas or galls on the root systems of susceptible crops, relative population levels and field distribution of this nematode can be determined by simply examining the crop root system for root gall severity. Root gall severity is merely a measure of the proportion of the root system that is galled. Immediately after final harvest, a sufficient number of plants should be carefully removed from soil and examined to characterize the nature and extent of the problem within the field. In general, soil population levels increase with root gall severity. This form of sampling can in many cases provide immediate confirmation of a nematode problem and allows mapping of
current field infestation. The detection of any level of root galling usually suggests a nematode problem for planting a susceptible crop, particularly within the immediate areas from which the galled plant(s) were recovered.

Advisory or Predictive Sample

Samples to predict the risk of nematode injury to a newly planted crop must be taken well in advance of planting to allow for sample analysis and treatment if required. For best results, you should sample for nematodes at the end of the growing season before crop destruction, when nematodes are most numerous and easiest to detect. Collect soil and root samples from 10 to 20 field locations using a cylindrical sampling tube, or if unavailable, a trowel or shovel. Since most species of nematodes are concentrated in the crop-rooting zone, samples should be collected to a soil depth of 6 to 10 inches. Collect samples in a regular pattern over the area, sampling across rows rather than along rows. One sample should represent no more than 10 acres for relatively low-value crops and no more than 5 acres for high value crops. Fields which have different crops (or varieties) during the past season or which have obvious differences either in soil type or previous history of cropping problems should be sampled separately. Sample only when soil moisture is appropriate for working the field, avoiding extremely dry or wet soil conditions.

Once the samples are collected, the entire sample should then be mixed thoroughly and a 1 to 2 pint sub-sample removed to an appropriately labeled plastic bag. Remember to include sufficient feeder roots. The plastic bag will prevent drying of the sample and guarantee an intact sample upon arrival at the laboratory. Never subject the sample(s) to overheating, freezing, drying, or to prolonged periods of direct sunlight. Samples should be submitted immediately to a commercial laboratory or to the University of Florida Nematode Assay Laboratory for analysis. If sample submission is delayed, then temporary refrigerated storage at temperatures of 40 to 60°F is recommended.

Nematode Management

Currently nematode management strategies include crop rotation of less susceptible crops or resistant varieties, cultural and tillage practices, use of transplants, and preplant nematicide treatments. More information can be found in the UF/IFAS publication Nematode Management for Commercial Vegetable Production – available through your County Extension Office or on the web at http://edis.ifas.ufl.edu/NG004. Where practical, these practices should be integrated into the summer ‘off-season’. It should be recognized that not all cultural control practices are equally effective in controlling plant parasitic nematodes and varying degrees of nematode control should be expected. These methods, unlike other chemical methods, tend to reduce nematode populations gradually through time.

Growers are reminded not to overlook the importance of rapid destruction of the infested crop root system following harvest. Disking fields as soon as possible after the crop is harvested will not only prevent further nematode population growth but subject existing populations to dissipation by sun and wind. In cases of particularly severe nematode infestations growers may wish to consider combining a broadcast treatment of a chemical fumigant at the end of the crop followed by preplant in-bed fumigation prior to planting.

Sanitation, Sanitation, Sanitation...

As we near the end of the season growers are reminded of the importance of sanitation in an integrated pest management program.

Leon Lucas with Glades Crop Care indicates that they have been checking around some cull piles and also looking at some pastures where culls have been dumped and can find tomato volunteers right now and have found some with late blight and TYLCV. Although Leon did not indicate, I am sure that
whiteflies and other insects are also present on these volunteers. Leon’s observations underscore the importance of sanitation in pest management. Disease and insects do not magically materialize to plague growers. Many require a living host to carry them from one season to another.

**Field sanitation is one of the most important tactics in vegetable pest and disease management.** One of the best things 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 over looked 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 disking 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.

**Soil tillage can destroy insects and expose them to birds and other predators. It can also speed the breakdown of plant residues that harbor insects and plant pathogens.** By either allowing the organic matter in a field to decompose completely before you plant the next crop and /or allowing a fallow period between crops, you can enhance the control of a number of insects and diseases.

**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.

A little extra effort spent in cleaning up old fields at the end of the season may well prevent or reduce a number of potential problems next fall!

**Pesticide Up Date**

*Arvesta Corporation announced that Iodomethane the active ingredient in its new product formulations to be marketed as Midas soil fumigant has been submitted to EPA for registration review.* Midas is expected to receive Section 3 registration in early 2003.

*Strategy, a new selective herbicide for the control of annual grasses and broadleaf weeds, has been registered by the EPA for use in cucumbers, melons, pumpkins, squash and watermelons.* Strategy is a pre-emergent herbicide applied to the soil surface at planting or as a banded spray between rows after crop emergence or transplanting. For more information contact your UAP dealer or other agri-chemical representative.

**Operation Cleansweep**

*There are still 3 remaining Cleansweep collection events planned for May 2002.* Remaining collection sites and times around south Florida are indicated below.
Operation Cleansweep wants all commercial pesticide users to participate. If your operations are located in any of the 18 South Florida counties scheduled for Cleansweep pesticide collections this year, you may bring cancelled, suspended and unusable pesticides to any of the 5 planned collection events.

Operation Cleansweep is free for agricultural, nursery, golf course and pest control operations.

It is not free for pesticide manufactures and distributors, universities, or government institutions, including state, county and local government pesticide end users. However, such organizations will be able to utilize Operation Cleansweep collections if they pay the costs of disposing of their cancelled, suspended and unusable pesticides.

Operation Cleansweep is also not for homeowners who have pesticides for disposal. Homeowners will be turned away and referred to their local county solid waste department. In nearly every county in Florida, other programs, such as Household Hazardous Waste collections, provide pesticide disposal for homeowners.

For more information about Florida’s Operation Cleansweep, you may contact Jack Price at (850) 488-0300.

This is a great opportunity – don’t miss it, as it may be several years before it comes around again.

Up Coming Meetings

Palm Beach

May 2, 2002 We Have the Answers: Dept. of Environmental Protection - 1:30 - 3:00PM
Jeff Smith, Hazardous Waste Manager
Craig Stevens and Leslie Smith, Waste Clean-Up Section
EREC Conference Center, 3200 East Palm Beach Rd, Belle Glade
Contact Laura Andrews, 561-996-1657
**May 9, 2002**  
Workshop for Producer Comments on a Risk Management Strategy for Broccoli, Carrots, Cauliflower, Celery, Head Lettuce, Leaf Lettuce, and Spinach. – 12 Noon  
Drawbridge Restaurant, 3300 Westlake Road, Belle Glade, FL  
Contact Ken Shuler, 561-233-1718, or Martha Tucker, FFVA, 407-894-1351

**May 16, 2002**  
Vapam and KPAM Certification Training  
Pro Source One, 8245 SR 7  
Boynton Beach, FL  
* 2.0 CEU’s  
Contact Maria Kelly or Ken Shuler, 561-233-1725 or 1718

**June 13, 2002**  
We Have the Answers: FL DACs - Bureau of Compliance Monitoring - 1:30 - 3:00PM  
Dale Dubberly, Chief, Bureau of Compliance Monitoring  
EREC Conference Center  
3200 East Palm Beach Rd, Belle Glade  
* 2 CEU’s  
Contact Laura Andrews, 561-996-1657

**Southwest Florida**

**May 14, 2002**  
Spring Vegetable Field Day - 10 AM - Noon  
Southwest Florida Research and Education Center  
SR 29 N  
Immokalee, FL  
* 2.0 CEU’s  
Contact Sheila Griffith or Gene McAvoy at 863-674-4092

**May 15, 2002**  
Vapam and KPAM Certification Training  
4:00 - 6:00 PM  
Southwest Florida Research and Education Center  
SR 29 N  
Immokalee, FL  
* 2.5 CEU’s  
Contact Sheila Griffith or Gene McAvoy at 863-674-4092

**May 23, 2002**  
Farming in the New Millennium – Risk Management Seminar  
Southwest Florida Research and Education Center  
SR 29 N  
Immokalee, FL  
To register contact Carolee Howe at 352-378-8100 ext. 1091 or e mail chowe@sfbiec.com  
See details below.

**June 1, 2002**  
2002 Southwest Florida Farm Safety Day  
Southwest Florida Research and Education Center  
SR 29 N  
Immokalee, FL  
* 4 CEU’s  
Contact Barbara Hyman at 941-658-3415

This is a great opportunity to provide your employees with quality training that emphasizes the importance of farm and equipment safety. This years topics include:  
- Tractor and Heavy Equipment Safety  
- Sprayer calibration  
- Personal Protective Equipment and Sun Safety  
- Safe Lifting, Pushing and Pulling
ATTENTION FARMERS!!!

Have You Had Difficulty Getting Paid? Are You Looking for Ways to Protect your Crop? Are You Looking for Ways to Manage your Risk?

Then… Florida Farm Bureau has a Seminar that you must attend: “Farming in the New Millennium”

Topics to be covered:

- Production Management Strategies
- PACA
- Dispute Resolution
- License & Bond
- Crop Insurance

Three seminars are scheduled

May 23, 2002
Southwest Florida Research & Education Center
Immokalee
Register by May 9

June 25, 2002
North Florida Research & Education Center
Quincy
Register by June 10

July 16, 2002
Florida Farm Bureau
Gainesville
Register by July 1

http://FloridaFarmBureau.org/risk

FREE AND OPEN TO THE PUBLIC: All Seminars are from 8:30 am – 1:00 pm and Includes Lunch

PLAN TO ATTEND: Contact Carolee Howe to register (352) 378-8100 ext. 1091 or e-mail: chowe@sfbcic.com

Websites

Sustainable Farming Connection Cover Crops Menu – Use covers to build soil, reduce fertilizer and smother weeds Links to a wide range of information on cover crops including seed sources. Go to http://helios.oit.unc.edu/farming-connection/covercro/home.htm

Quotable Quotes

The game of life is not so much in holding a good hand as playing a poor hand well. -- H.T. Leslie

Start every day off with a smile and get it over with. -- W. C. Fields

Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing ever happened. -- Sir Winston Churchill

Don’t find fault. Find a remedy. – Henry Ford.

The end of the human race will be that it will eventually die of civilization. -- Ralph Waldo Emerson
The Lighter Side

Older Than Dirt Test

How Many Do You Remember?? Count all the ones that you remember- not the ones you were told about!
Rate yourself below.

1. Head lights dimmer switches on the floor
2. Pant leg clips for bicycles without chain guards.
3. Soldering irons you heat on a gas burner
4. Using hand signals for cars without turn signals
5. Wax Coke-shaped bottles with colored sugar water.
6. Candy cigarettes
7. Soda pop machines that dispensed bottles
8. Restaurants with tableside jukeboxes
9. Home milk delivery in glass bottles with cardboard stoppers
10. Party telephone lines
11. Newsreels before the movie
12. Butch wax
13. Peashooters
14. Howdy Doody
15. 45 RPM records
16. S&H Green Stamps
17. Hi-fi's
18. Metal ice trays with lever
19. Mimeograph paper
20. Blue flashbulb
21. Roller skate keys
22. Cork popguns
23. Drive-ins
24. Studebakers

And You Are....................

* 0-5 = You're still young
* 6-10 = You are getting older
* 11-15 = Don't tell your age, Darlene....
* 16 or more = You're older than dirt!

Administratium

A major research institution has recently announced the discovery of the heaviest element yet known to science. This new element has been tentatively named "Administratium".

Administratium has 1 neutron, 12 assistant neutrons, 75 deputy neutrons, and 111 assistant deputy neutrons, giving it an atomic mass of 312. These 312 particles are held together by a force called morons, which are surrounded by vast quantities of lepton-like particles called peons.

Since Administratium has no electrons, it is inert. However, it can be detected as it impedes every reaction with which it comes into contact. A minute amount of Administratium causes one reaction to take over 4 days to
complete when it would normally take less than a second.

Administratium has a normal half-life of 3 years; it does not decay but instead undergoes a reorganization, in which a portion of the assistant neutrons and deputy neutrons and assistant deputy neutrons exchange places.

In fact, Administratium's mass will actually increase over time, since each reorganization causes some morons to become neutrons forming isodopes. This characteristic of moron-promotion leads some scientists to speculate that Administratium is formed whenever morons reach a certain quantity in concentration. This hypothetical quantity is referred to as "Critical Morass."

You will know it when you see it.

**Contributors** include: Joel Allingham/AgriCare, Inc, Karen Armbrester/SWFREC, Jim Connor/SWFREC, Bruce Corbitt/West Coast Tomato Growers, Fred Heald/Farmers Supply, Sarah Hornsby/AgCropCon, Cecil Howell/H&R Farm, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, 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, Dr Ken Pernezny/EREIC, 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/Palm Beach County Extension, John Stanford/LNA Farm, Mike Stanford/MED Farms, Dr. Phil Stansly/SWFREC, Eugene Tolar/Red Star Farms, Dr.Charlie Vavra/SWFREC, Donna Verbeck/GulfCoast Ag. and Mark Verbeck/Bayer Crop Protection.

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

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

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Tommy Smith: President  
Scott Smith: Vice President  
We Grow Plants for the Pros  
LaBelle, Florida  
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