March 19, 2003

Unseasonably hot weather, which set several consecutive daily records, has reigned over South Florida over the past few weeks. Temperatures have been as much as 9 – 10 degrees above normal in many areas with daytime highs in the mid to upper 80’s, with some areas reaching into the low 90’s. Nighttime lows have been mostly in the mid 60’s with a few nights reaching the low 70’s in some areas.

The combination of afternoon convection and a series of stalled frontal systems has resulted in showers and thunderstorms over most south Florida production areas. Total accumulations have varied widely from around an inch and a half in some areas to more than three inches in others. Reports indicate that some storms have been accompanied by hail and heavy winds in places. Thick morning fog and heavy morning dews have also been widespread across the region.

Vegetables coming to market include beans, cabbage, celery, cilantro, cucumbers, eggplants, endive, escarole, lettuce, parsley, peppers, potatoes, radishes, specialty crops, squash, strawberries, sweet corn, and tomatoes. Quality is mostly good but volumes are light on many items. Potato harvest is commencing in the Homestead area.

FAWN Weather Summary

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<th>Air Temp (°F)</th>
<th>Rainfall</th>
<th>Hours Below Certain Temperature</th>
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The short-term forecast from the National Weather Service in Miami calls continued chance of thunderstorms and scattered showers over the next seven days. Temperatures are expected to moderate somewhat as the week progresses.

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

Hotline expands Coverage

The South Florida Vegetable Pest and Disease Hotline has expanded coverage to include the Manatee/Ruskin area, thanks to efforts and cooperation of Dr Phyllis Gilreath, Vegetable Extension Agent with the Manatee County Extension Office. The hotline now covers over 120,000 acres representing all major South Florida vegetable production areas.

Insects

Growers and scouts are reporting that insect pressure continues to build as the season progresses and temperatures climb.

Whiteflies

Reports from Manatee County indicate that whitefly numbers are increasing, but numbers are generally low in most areas with a few hot spots. There are also reports of some banded wing whitefly, mostly on weeds but showing up in tomato as well.

Banded wing whitefly does not transmit gemini viruses, but have been shown to transmit closteroviruses. Tomato chlorosis virus (ToCV) has not been reported as causing any yield losses - although it has a fairly wide geographic distribution and is the only closterovirus known in tomato in Florida. Dr. Jane Polston, GCREC, has seen plants in commercial and experimental fields infected with the virus and yields do not appear to be affected - but that approach will only tell you if the effects are large like TYLCV or ToMoV. More subtle losses cannot be established without a good size multi-season study. Because populations of vectors can change, infections established earlier or inoculation pressure increase, the situation warrants monitoring; however, control measures for banded wing are not warranted at this time.

Reports from Palm Beach indicate that whitefly pressure is increasing. Reports indicate that the situation is variable with low numbers being reported in most areas with some scattered hotspots with high whitefly counts in tomato, pepper and squash. Heavy whitefly infestations on squash have resulted in the appearance of silverleaf symptoms in some locations.

Around Southwest Florida, whiteflies appear to be increasing in tomato, pepper and cucurbits according to most reports. Counts vary greatly with many respondents reporting low levels. Reports indicate populations building in older fields and note movement into younger fields when surrounding old fields are destroyed. Whiteflies pressure is particularly high in cucurbits including cantaloupe and squash.

Respondents in Homestead indicate that whiteflies are increasing in a variety of crops including beans, cucurbits, eggplants, potato and tomato.

Rob Phillips UAP location manager in Delray Beach notes, “your S. Florida Vegetable Pest and Disease Hotline dated Feb. 14, 2003 contained insecticide recommendations for whitefly control in a nicotinoid resistance management program. In these recommendations you … left out Courier (buprofezin). Courier has provided excellent whitefly control for many growers on the east coast of FL and other parts of the
State. In addition, it has a label that allows for application on cucurbit crops, as opposed to Knack.” Thanks to Rob for pointing out this omission and providing readers with another excellent rotation partner for whitefly control.

For more information on whiteflies, be sure to check out the UF/IFAS Whitefly Knowledgebase at http://whiteflies.ifas.ufl.edu/ as well as the UF/IFAS Featured Creatures website at http://creatures.ifas.ufl.edu/veg/leaf/silverleaf_whitefly.htm.

Leafminers

Reports from Homestead indicate that although leafminers remain widely present in tomato many growers have curtailed spraying as harvest picks up.

Leafminer pressure continues to increase in several crops around Southwest Florida including cantaloupe, tomato, potato and watermelons and many growers are actively applying controls every 7–10 days. Pressure is variable with some hotspots being reported. Scouts also note detecting increasing levels of leafminer parasites in some locations.

Respondents in Palm Beach increased numbers of leafminer adults and larva a variety of crops. Control programs are being employed with good effect.

Reports from Manatee County indicate that leafminers are showing up in increasing numbers with the warmer, drier weather, in some cases very soon after transplanting. Adults and active mines have been noted.

Thrips

Reports from Homestead indicate that thrips are out with a vengeance. Thrips are widespread in beans, pepper, eggplant, potato, cucurbit, and tomato. Respondents note that Thrips palmi are widely present.

Growers and scouts in Palm Beach are increased thrips activity. Reports indicate these are mostly Florida flower thrips although a few scattered pockets of Thrips palmi have been noted in pepper and eggplant.

Respondents around Southwest Florida also note increased thrips pressure. These are primarily Florida flower thrips Frankliniella bispinosa, although some scattered damage consistent with melon thrips has been reported. Scouts report finding 5–10 thrips per bloom in several crops over the past week with even higher numbers being seen in some hot spots. They also note that they are starting to find some minute pirate bugs, beneficial insects that eat thrips. Melon thrips (T. palmi) remain low in a few isolated locations.

Thrips activity has been noted in peppers in the Manatee area. These are primarily flower thrips.

Citrus is at or past full bloom in most of the area and may be a likely source (or destination) for thrips which are more than likely Florida Flower thrips (Frankliniella bispinosa). In most situations, Florida flower thrips are usually just a nuisance problem but at high numbers heavy feeding inside the bloom may cause flower abortion or fruit damage. Chemical control is difficult and often increases populations by killing off natural enemies.

Melon thrips have a broad host range and are a primary foliage pest on watermelon, eggplant, pepper, and cucumber. Heavy infestations cause silveryed or bronzed leaves, stunted leaves and terminals, and scarred and deformed fruit. On peppers, fruit scaring emanates from the stem end following crevices between locule lobes. Foliar damage may also be severe. Melon thrips also damages eggplant.
Many conventional insecticides seem to stimulate melon thrips populations, possibly by eliminating predators that otherwise control them. Therefore, broad-spectrum insecticides should be avoided as much as possible in preference to selective materials when available. Growers have reported good results with soft materials such as Spintor. Reflective mulches have as demonstrated positive results in reducing western flowers thrips pressure in trials in Florida and may offer some benefits with *Thrips palmi*.

For more information on thrips, visit the Glades Crop Care Thrips Database at [http://www.gladescropcare.com/tech-thrips.html](http://www.gladescropcare.com/tech-thrips.html)

Mites

Reports from around the Manatee area indicate some two-spotted spider mites are showing up in melons.

Respondents in Palm Beach report increases in mite pressure in a number of areas and note that mites appear to be in present in higher numbers this season. These include broad mites in eggplant, pepper and specialty crops and spider mites on tomato and eggplant.

Around Immokalee, broad mites are widely present on pepper in a number of sites. Spider mites are being reported in several locations on cantaloupe, watermelon, squash, eggplant and tomato.

Growers and scouts in Homestead report that spider mite pressure is high in some fields.

Growers should be sure to pay particular attention to ditch banks and field margins and be sure to scout stands of nightshade adjoining plantings, as these areas may signal early infestations and may help growers recognize potential problems.

Because mites can grow from egg to adult in five days during hot, dry weather, populations build rapidly. The rate at which mite populations can increase is amazing. An average female spider mite lays about 100 eggs during her lifetime. Studies indicate that mites have the potential to expand their population seventy-fold in one generation. Miticides often have little effect on eggs, so they require multiple applications for effective suppression. Because a generation can mature and reproduce in as little as five days, repeat applications should be made every five days to target hatching eggs and break the reproductive cycle. Thorough coverage is also extremely important in mite control.

For further information on two-spotted spider mites, visit the UF/IFAS Featured Creatures website at [http://creatures.ifas.ufl.edu/orn/twospotted_mite.htm](http://creatures.ifas.ufl.edu/orn/twospotted_mite.htm).

Worms

Around Southwest Florida, growers and scouts report finding a few more worms but overall pressure is still low. Southern armyworms are most common but growers are also seeing a few loppers, fruitworms, and beet armyworms. Respondents are also reporting pinworms on eggplant and tomato. Trap counts in some field have been as high as 90 or more per night. Melonworms have increased in some cucumber and squash fields.

In the Palm Beach area, worm pressure remains low with a mix of beet and mostly southern armyworms. Diamondback moths are active in brassicas.

Around the Ruskin area, armyworm activity is low at this time, though some have been noted in tomato and pepper fields. Phyllis Gilreath reports that some concerns arose last season regarding efficacy of certain pest control products targeting armyworms in tomatoes. She notes that according to Dr. Dave Schuster, GCREC, armyworm samples were collected during trials this last year and identified and it was found that many of the armyworms present were *Spodoptera latifascia* or *S. dolichos* and not *S. eridania* (southern
armyworm). Additional studies need to be conducted on field populations before any conclusions can be drawn, but this may be something to keep in the back of your mind when evaluating your pesticide efficacy. It may be that the species in your field is not the one you are used to dealing with.

Higher than expected levels of pinworm adults have been noted on pheromone traps in a few fields in the Manatee area. The presence of eggs and larvae has also been detected on plants in some fields. Growers are urged to carefully consider their choice of control materials early in the crop season, considering both the efficacy as well as detrimental effects of some materials to beneficial populations. Dr. Gilreath notes: “questions have come up about the benefits of spraying near dusk, as adults are known to be more active then, I am not aware of research to support this, but growers may want to test this themselves.”

Reports from Homestead indicate that heavy worm and silk fly pressure in corn. A variety of worms can also present in beans, eggplant, peppers, strawberry and tomato. Melon worms are also widely present in cucurbit crops.

Aphids

Reports from Homestead indicate that aphid populations present in a number of crops including potato, strawberry and tomato.

Winged aphids are fairly widespread around Manatee County.

Respondents in Palm Beach report that winged aphids are present in a wide variety of various aged crops.

Around Southwest Florida, aphids are sporadic with populations ranging from low to moderate depending on the location.

Pepper Weevil

Respondents in from Palm Beach indicate that pepper weevil numbers remain low with a few being caught in traps.

Around Immokalee, pepper weevil populations remain below normal for this time of the season and most fields are free of problems.

Reports from Homestead note the presence of pepper weevils in some older fields.

Diseases

Disease pressure remains relatively low to moderate in most crops but foggy mornings and scattered showers have increased incidence over the past few weeks.

Bacterial diseases

Around Immokalee, growers and scouts indicate some new bacterial spot has been detected in both tomato and pepper. Bacterial leaf spot (Pseudomonas sp.) has also been diagnosed in scattered locations on cantaloupe and watermelon.

In the Ruskin area, bacterial leaf spot is being reported in both tomatoes and peppers. Incidence and occurrence remains low.
Reports from Homestead indicate warm weather and foggy conditions have resulted in some increased bacteria spot activity on tomatoes and pepper with specialty peppers most affected. Scouts in the Homestead area also note an increase in the incidence of bacterial blight in beans.

Potatoes growers in Homestead and Southwest Florida are experiencing some problems with blackleg, caused by the bacterium *Erwinia carotovora*. This is a common bacterial disease of potatoes and is typically associated with wet soils.

Angular leaf spot has been reported on cucumbers in the Homestead area.

Respondents in Palm Beach note that incidence of bacterial spot remains low in most locations but continues to spread slowly within pepper and tomato plantings in areas where infections are present.

**Early Blight**

Reports from the East coast indicate that early blight is present on tomato but the incidence remains relatively low.

Growers and scouts around Immokalee have noted some increase in early blight activity in tomato and potatoes.

Some early blight is also beginning to show up in Manatee County at low levels.

Around Homestead, early blight is present on potato and tomato.

Alternaria (leaf mold) is also present on beans in Homestead and Southwest Florida.

**Gummy Stem Blight**

Gummy stem blight is widely present on watermelon around Southwest Florida. Incidence and occurrence varies from low to moderate and appears to be increasing in recent days. Strobilurin fungicides such as Cabrio and Quadris provide good control, but growers are reminded of the need to practice resistance management as resistance to these materials has appeared in a number of places. Strobilurins should be rotated with the white (chlorothalilin) and yellow (manzate/mancozeb) fungicides and applications should not exceed labeled amounts.

Gummy stem blight is also beginning to be reported at low levels on watermelon in scattered locations around Manatee County.

**Target spot**

Respondents in Southwest Florida indicate that target spot continues to creep around within the canopy of infected tomato plantings. Incidence seems to be greatest in the Naples area where heavy fogs have occurred a number of mornings.

Target spot is also present on tomato in the Homestead area.

Around Palm Beach County, there are scattered reports of target spot on tomato. In a few cases, post harvest problems have been noted.

Dr Ken Pernezny notes that in addition to target spot of tomato, the disease, caused by the fungus, *Corynespora cassiicola* is also potentially damaging on cucumber.
On cucumber, the symptoms first noted are small, yellow to off-white spots on leaves that can enlarge to about 1 cm across. They may be angular in shape and can easily be confused with angular of spot and downy mildew. Samples should be examined under the microscope to make a definitive diagnosis. The spores of *C. cassicola* are fairly easy to identify. They are nearly clear to a pale olive to, sometimes, a medium brown. They have “pseudosepta”; i.e., cross-walls in the spores do not quite extend from outer wall to outer wall.

A number of fungicides provide fairly good control of target spot, including chlorothalonil. Ken notes that although, Quadris does not have target spot on its label, it is cleared for cucumber and that he has seen good control of target spot on tomato with Quadris.

**Tomato Yellow Leaf Curl Virus**

Around Southwest Florida, Tomato Yellow Leaf Curl virus incidence continues to increase slowly and growers and scouts report seeing more infected plants as the season progresses. Incidence in most fields remains in the 1 – 3% range with a few fields approaching harvest in the 10 – 20% range.

Reports from around Palm Beach indicate that the incidence of Tomato Yellow Leaf Curl is slowly increasing in a number of areas. Overall incidence remains low but a few hotspots have been noted.

Respondents in Homestead continue to report new TYLCV activity. Incidence remains relatively low with most fields in the 1 – 5% infection range.

Even though numbers have not been that high, there are reports of some virus showing up in early planted fields in the Manatee area. Incidence varies widely from field to field, worse in older plantings but generally low and as is often seen, correlated with “bad neighbors” who were slow to clean up old fields. Growers are urged to rogue young infected plants to limit secondary spread.

**Phytophthora**

Around Palm Beach County, a few scattered cases of *Phytophthora capsici* continue to be reported on pepper with slow spread within plantings occurring.

Around Southwest Florida, *Phytophthora capsici* has been reported on eggplant, pepper and squash from several widely scattered sites. Some increase has been noted in pepper and eggplant in recent days.

**Powdery Mildew**

Respondents around Southwest Florida note that powdery mildew remains active on a squash. Incidence and severity is high in some fields.

Grower and scouts in Palm Beach report the occurrence of powdery mildew on a variety of crops including pepper, strawberries and squash.

Reports from Homestead also indicate widespread occurrence of powdery mildew in squash. Powdery mildew is also present in strawberries.

**Downy Mildew**

Downy mildew continues to be reported on squash around Palm Beach.

Downy mildew is also present on squash and cantaloupe in scattered locations around Southwest Florida.
Scouts in Homestead also note the occurrence of downy mildew in squash.

**Mosaic**

Growers and scouts continue to report finding mostly low levels of virus in squash in scattered locations across South Florida. Some locally heavy hotspots with a higher incidence of the disease have been reported. A few isolated cases of mosaic have also been detected in watermelon.

Reports from Homestead indicate that mosaic is increasing in older picked squash.

Virus surveys conducted by Dr Susan Webb indicate that papaya ring spot virus (> 85 %) followed by zucchini mosaic is the predominant mosaic virus found on cucurbits in SW Florida. The situation has been somewhat different in Homestead and Palm Beach where the two viruses occur in nearly equal amounts.

**Fusarium**

Growers and scouts around Southwest Florida report that fusarium crown rot is continuing to cause problems in tomato but indicate that pressure is less than in past seasons.

Reports from Palm Beach indicate that fusarium crown rot has increased in tomato in recent weeks. A few reports note that the situation has progressed from bad to worse in the most severely affected fields.

**Rust**

Growers and scouts report detecting rust on snap beans in the eastern Palm Beach, as well as Belle Glade, Clewiston and Devils Garden areas. Incidence and occurrence appears to be related to variety.

Respondents from Homestead also note the presence of rust on beans. Nova is said to provide control but growers must begin applications when rust first appears. Rust is also increasing on corn.

**Sclerotinia**

Respondents in Homestead are reporting white mold activity on potato and tomato.

Growers in some areas of Palm Beach County are experiencing severe problems with white mold on tomatoes and pepper to the extent that FFVA has been asked to seek a crisis exemption for the use of Topsin for control.

Ken Pernezny writes that white mold, caused by the fungus Sclerotinia sclerotiorum, continues to be an increasingly serious problem on pepper. Sclerotinia traditionally hasn’t hammered pepper as hard as it has tomato, snap bean, and some other crops. But this year, pepper seems to be having a lot of white mold damage. On some plants, the major symptom is a die-back of portions of the shoot, sometimes, with the appearance of a white moldy growth of the fungus. If one splits open the stem with a knife, sclerotia (black, hard resistant structures of the fungus) may be evident.

At present, no specific fungicides are labeled for white mold control on pepper. Thick, lush pepper canopies definitely favor white mold development.

**Rhizoctonia**

Respondents in Homestead indicate that rhizoctonia is widespread on beans.
Rhizoctonia is also causing scattered problems in potato around Southwest Florida.

**Southern Blight**

Reports from Ruskin indicate that growers are beginning to detect low levels of southern blight in some places.

Southern blight is also present in tomato in scattered places around Southwest Florida.

**Bean Golden Mosaic**

Growers and scouts around Homestead are reporting low levels of Bean Golden Mosaic Virus. Incidence is being kept low by planting beans with Admire in the furrow.

**Update on Ralstonia solanacearum race 3, biovar 2**

New detections of *Ralstonia solanacearum* race 3 biovar 2 continue with additional states having positive testing facilities. The totals now stand as follows, with the number of nurseries in each state in parenthesis: Delaware (1), Georgia (2), Illinois (1), Indiana (3), Iowa (1), Kansas (2), Maryland (2), Michigan (3), Missouri (2), North Carolina (2), Tennessee (1), Virginia (3) and Wisconsin (2). Details are available at: [http://www.aphis.usda.gov/ bppq/ep/ralstonia/](http://www.aphis.usda.gov/ bppq/ep/ralstonia/).

Diseases caused by *Ralstonia* (previously named *Pseudomonas* solanacearum) continue to be among the most serious bacterial diseases worldwide and causes great economic losses. The species is very complex and highly variable. Strains of *R. solanacearum* are grouped into five races according to the host or hosts primarily affected and five biovars according to the use of selected biochemical properties.

Bacterial wilt on tomato caused by *Ralstonia solanacearum* (race 1, biovar 1) causes wilt by infecting plants through roots and colonizing stem vascular tissue. Although diseased plants can be found scattered in the field, bacterial wilt usually occurs in foci associated with water accumulation in lower areas. Under natural conditions, the initial symptom in mature plants is wilting of upper leaves in hot days followed by recovery throughout the evening and early hours of the morning. Under hot humid conditions favorable for disease, complete wilting occurs and the plant will die. The vascular tissues in the lower stem of the wilted plants usually show a brown discoloration. *R. solanacearum* (race 1, biovar 1) is endemic in Southeastern U.S. Race 1 has a wide host range (solanaceous and other plants). The endemic strain of *R. solanacearum* (race 1, biovar 1) was detected in 2001 in geraniums in Florida.

*Ralstonia solanacearum* race 3 biovar 2 is a bacterial pathogen that causes a wilt disease in several important agricultural crops. Also known as Southern wilt, bacterial wilt, and brown rot of potato, this pathogen was recently detected in US greenhouses that received geranium plants imported from Kenya.

USDA, APHIS Plant Protection and Quarantine, in cooperation with State plant health regulatory authorities is holding plant material at various nurseries around the country suspected of harboring the pest until confirmatory testing can determine which plants are infected. An action plan has been distributed to our field offices to provide guidance to federal and state regulatory officials taking actions necessary to stop this pest from moving and eradicate it from infected facilities.

Races and biovars of *Ralstonia solanacearum* cause bacterial wilt diseases. The pathogen can be transmitted through soil, contaminated irrigation water, equipment, or personnel. It also spreads very easily by transplanting infected plants and propagative materials. Taking cuttings without disinfecting grafting knives between plants, pinching buds of plants, and other cultural practices may facilitate the spread of the pathogen.
within production facilities. However, the pathogen does not readily spread from plant to plant or by the splashing of water. The bacterium is not spread aerially. Spread can be controlled in greenhouses by the application of sound sanitation practices. The bacterium is not spread aerially.

**Other races and biovars of Ralstonia solanacearum are present in the United States, however Ralstonia solanacearum race 3 biovar 2, a newly detected, serious pathogen that could affect other important agricultural crops, it is not known to occur in the United States.** In addition to a threat to other important crops, the wilting disease it causes in geraniums is lethal. Some of the other crops that are hosts of this race 3 and biovar 2 are tomato, peppers, potato, tobacco, and eggplant. There are also several common weed hosts.

**Ralstonia solanacearum** is thought to have originated in the temperate highland regions of Peru. Ralstonia solanacearum race 3 biovar 2 is present in Europe, Asia, South and Central America, and Australia. Races are defined by host range and biovars by biochemical reaction tests.

The primary symptom of *Ralstonia solanacearum* race 3 biovar 2, is wilting of leaves and/or abnormal yellowing leaves. Wilting symptoms caused by Ralstonia species are similar to, and can be confused with, wilting symptoms caused by other pathogens on geraniums such as *Xanthomonas pelargonii* (the agent of bacterial blight).

**Determination to the genus and species level can be made with specific, tested serological based kits.** Confirmation to the race and biovar level requires DNA molecular confirmation.

**Ralstonia solanacearum** race 3 biovar 2 is listed on the Agriculture Bioterrorism Act of 2002 as a select agent with special requirements for US laboratory research and accountability. The current introduction is not thought to be intentional, but the result of unsanitary greenhouse practices in the foreign source facility that caused latent infections on plant material imported through normal channels.

Sources; USDA, APHIS, PPQ "March 12, 2003 and Tim Momol, Jeff Jones, and Steve Olson, University of Florida, IFAS, NFREC, Quincy, and Plant Pathology Department, Gainesville, Florida

Contact person: tmmomol@ufl.edu

**Opportunity –** Exhibitors wanted for the National Association of County Agricultural Agents Annual Meeting to be held in Orlando in July 2004. This is a great opportunity to present your products to the more than 2500 County Extension Agents from all over the United States that are expected to attend this meeting.

To reserve a place contact Ed Jennings at 352-793-6376.

**Websites**

**USDA's Keeping America's Food and Agriculture Safe Web site** – learn what you can do and what the USDA is doing to keep America’s food and agriculture safe. Go to [http://www.usda.gov/homelandsecurity/homeland.html](http://www.usda.gov/homelandsecurity/homeland.html)

**Vegetable Transplant web page** – Dr Charles Vavrina indicates that UF/IFAS Southwest Florida Research and Education Center vegetable transplant web page has been updated. Check it out at [http://www.imok.ufl.edu/veghort/trans/index.htm](http://www.imok.ufl.edu/veghort/trans/index.htm)

**National Ag Safety Database** – this National Centers for Disease Control National Ag Safety website is a national central repository of agricultural health, safety, and injury prevention materials for the agricultural community and especially for agricultural safety specialists. Set your browser to [http://www.cdc.gov/nasd/](http://www.cdc.gov/nasd/)
Up Coming Meetings

St Lucie County

March 21, 2003  
Satellite Downlink on the National Organic Standards  1-3 PM
What is Certified Organic?
USDA Agricultural Research Station
Rock Road
Fort Pierce, Florida
Contact Dr. Elizabeth Lamb at 772-468-3922 ext. 138.

May 9, 2003  
Vapam/K-Pam Certification Program  12 Noon
USDA Agricultural Research Station
Rock Road
Fort Pierce, Florida
Contact Ed Skavarch 772-462-1660.

Manatee County

April 10, 2003  
Vegetable Field Day
Gulfcoast Research and Education Center
5007 60th Street E
Bradenton, Florida
Contact 941-751-7636 for more information

May 7, 2003  
Vapam/K-Pam Certification Program  6 PM
Gulfcoast Research and Education Center
5007 60th Street E
Bradenton, Florida
Contact 941-722-452 for more information

Palm Beach County

May 8, 2003  
Vapam/K-Pam Certification Program  6 PM
Delray Fire Station
Boynton Beach, Florida
Contact 561-233-1725 for more information.
May 14, 2003

**General Standards/Core Test Review**
8 AM - 10 AM

**Private Applicator Test Review**
1 PM - 3 PM

**Testing - Any Category**
8 AM - 4 PM

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

Contact Laura Powell at 561-996-1655.

Southwest Florida

March 25, 26, 2003

**Pesticide Applicator Training and Testing**

Hendry County Extension Office
1085 Pratt Boulevard
LaBelle, Florida 33935

March 25 – CORE, Private, Row Crop
March 26 – Tree Crop, Aquatic

Contact 863-674-4092 for details

March 26, 2003

**WPS Handler Training**

Spanish 9 AM – Noon
English 1 – 3 PM

Hendry County Extension Office
1085 Pratt Boulevard
LaBelle, Florida 33935

Contact 863-674-4092 for details

May 8, 2003

**Vapam/K-Pam Certification Program**

6 PM

UF/IFAS SW Florida Research and Education Center
SR 29 N
Immokalee, Florida

Contact Gene McAvoy at 674-4092

Other Meetings

April 29-30, 2003

**FACTs - Florida Agricultural Conference and Trade Show**

Lakeland Center, Lakeland, Florida

Quotable Quotes

Man's mind, once stretched by a new idea, never regains its original dimensions. -- Oliver Wendell Holmes

There are $10^{11}$ stars in the galaxy. That used to be a huge number. But it's only a hundred billion. It's less than the national deficit! We used to call them astronomical numbers. Now we should call them economical numbers. -- Richard Feynman
If all economists were laid end to end, they would not reach a conclusion. -- George Bernard Shaw

A man cannot be too careful in the choice of his enemies. -- Oscar Wilde

Too much of a good thing is wonderful. -- Mae West

It isn't the farmer that lives on the fat of the land; it's the fat of the land that lives on the farmers. -- Anon

**On the Lighter Side**

**Spending Sometime With The Lord**

A young soldier was in his bunkhouse all alone one Sunday morning over in Afghanistan. It was quiet that day, the guns and the mortars, and land mines for some reason hadn't made a noise.

The young soldier knew it was Sunday, the holiest day of the week. As he was sitting there, he got out an old deck of cards and laid them out across his bunk. Just then an army sergeant came in and said, "Why aren't you with the rest of the platoon?"

The soldier replied, "I thought I would stay behind and spend some time with the Lord."

The sergeant said, "Looks like you're going to play cards."

The soldier said, "No sir, you see, since we are not allowed to have Bibles or other spiritual books in this country, I've decided to talk to the Lord by studying this deck of cards."

The sergeant asked in disbelief, "How will you do that?"

"You see the Ace, Sergeant, it reminds me that there is only one God. The Two represents the two parts of the Bible, Old and New Testaments. The Three represents the Father, the Son, and the Holy Ghost. The Four stands for the Four Apostles: Matthew, Mark, Luke and John. The Five is for the five virgins that were ten but only five of them were glorified. The Six is for the six days it took God to create the Heavens and Earth. The Seven is for the day God rested after working the six days. The Eight is for the family of Noah and his wife, their three sons and their wives, the eight people God saved from the flood that destroyed the earth for the first time. The Nine is for the lepers that Jesus cleansed of leprosy. He cleansed ten but nine never thanked Him. The Ten represents the Ten Commandments that God handed down to Moses on tablets made of stone. The Jack is a reminder of Satan. One of God's first angels, but he got kicked out of heaven for his sly and wicked ways and is now the joker of eternal hell. The Queen stands for the Virgin Mary. The King stands for Jesus, for he is the King of all kings."

When I count the dots on all the cards, I come up with 365 total, one for every day of the year. There are a total of 52 cards in a deck; each represents a week, 52 weeks in a year.

The four suits represent the four seasons: Spring, Summer, Fall and Winter. Each suit has thirteen cards; there are exactly thirteen weeks in a quarter.

So when I want to talk to God and thank Him, I just pull out this old deck of cards and they remind me of all that I have to be thankful for."
The sergeant just stood there and after a minute, with tears in his eyes and pain in his heart, he said, "Soldier, can I borrow that deck of cards?"

God Bless America!

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