



UNIVERSITY OF
FLORIDA

E X T E N S I O N

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SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

April 6, 2005

A series of wet fronts every week or so over the past few weeks continued to bring rain to all South Florida growing areas sustaining the pattern reported in the last hotline and raising seasonal rainfall totals well above average in many areas. Temperature-wise March did go out like a lamb with delightful balmy spring-like conditions with highs in the mid to upper 80's and even a few 90's prevailing for much of the past few weeks between cold fronts. Night temperatures have remained fairly cool despite warm days with many nights in the 40's and 50's.

Rainfall totals have been widely variable by location with all areas reporting significant precipitation. Once again Homestead reported the lowest accumulation at 1.19 inches with Bradenton reporting the highest amount at nearly 5.5 inches.

In some areas, rainstorms were accompanied by heavy winds tearing up plants and causing sandblasting. Some growers particularly those growing on open ground have experienced problems with fertilizer leaching and weeds. Cool weather throughout much of the season has slowed maturity and affected some crops like.

FAWN Weather Summary

Date	Air Temp (°F)		Rainfall (Inches)	Hours Below Certain Temperature (hours)							
	Min	Max		40°F	45°F	50°F	55°F	60°F	65°F	70°F	75°F
Bradenton											
3/15 – 4/5/05	44.6	85.7	5.46	0.0	0.8	12.6	3.9	15.8	8.8	42.9	19.0
Ft Lauderdale											
3/15 – 4/5/05	52.4	90.9	2.13	0.0	0.0	0.0	20.4	16.9	22.4	11.2	10.3
Fort Pierce											
3/15 – 4/5/05	45.8	87.2	3.33	0.0	0.0	26.2	11.4	5.2	1.7	15.1	6.8
Homestead											
3/15 – 4/5/05	45.9	86.3	1.19	0.0	0.0	4.4	6.3	7.0	13.1	27.5	25.2
Immokalee											
3/15 – 4/5/05	43.4	89.8	3.57	0.0	4.0	39.6	7.7	29.3	17.5	18.4	14.5

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melons. Growers and scouts report that warmer temperatures and rain has increased pest and disease pressure in many crops. Weather related issues have also affected pollination in cucurbits and reduced fruit set in other vegetables lowering yield projections.

Crops coming to market include cabbage, celery, cucumbers, green beans, lettuce, pepper, potatoes, radishes, squash, sweet corn, tomatoes, and specialty items. Lighter quantities of eggplant, endive, escarole and lettuce were also available and the first few watermelons have been seen coming into Immokalee. , Quality is mostly good but reports indicate that market conditions have been somewhat mixed with some items suffering from post-Easter hangover.

The short-term forecast from the National Weather Service in Miami indicates that winds will increase and veer a little more to the south by Thursday and Friday as another low-pressure system enters the Deep South. Moisture will increase enough to support a chance of rain late Thursday over areas near the lake and on the Gulf Coast. Moisture and upper level instability will increase into Friday bringing a little more instability and the possibility of thunderstorms for Friday. The system will move through south Florida late Friday, with skies scattering through the evening. Nighttime temps will remain in the upper 50's to low 60's with daytime highs in the low to mid 80's.

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

Insects

Whiteflies

Reports from the Manatee/Ruskin area indicate that whitefly numbers have been fairly low but are increasing as the weather warms.

Phyllis Gilreath writes that growers who hold old fields and do not continue whitefly control measures are hurting their neighbors and themselves as well. If a crop must be picked longer than usual for economic reasons, growers should at least use oils and soaps to control adults if other materials have inappropriate REIs. She notes that there is some discussion and investigations underway to find a possible regulatory avenue that could be taken to mandate a crop free period in the West Central Florida and possibly other production areas. While no one wants more regulation, in this case the voluntary methods do not seem to be working.

Growers are reminded that up to 4 applications of Fulfill that can be used and the IGRs have shown good activity but applications should only be made when immatures reach threshold levels. Note the IGR's Courier and Applaud contain the same active ingredient: buprofezin. Courier is labeled for whitefly on tomato and snap bean. The mode of action is chitinase inhibitor. Dimilin and Knack are juvenile hormone mimics labeled for whitefly control on fruiting vegetables.

Reports from Palm Beach County indicate that whitefly numbers are increasing with some problems being reported on tomato and squash.

Growers and scouts around southwest Florida report that whitefly pressure is variable with a general increase in whitefly adults, eggs and nymphs being reported in most places. Reports indicate that there are some hotspots where old crops are being destroyed in proximity to crops nearing termination. In such places, numbers as high as 50-200 adults/plant with heavy nymphs have been reported.

Whiteflies are reported to be sporadic on tomatoes around Homestead. Crops are nearing completion so there has been reduced interest in control.

End of Season recommendations for whitefly management at crop termination:

- 1 Two-month crop free period from mid-June to mid-August
- 2 Correct crop destruction technique means control of existing whitefly populations in addition to the physical destruction of the crop.
 - Prompt and efficient crop destruction between fall and spring crops to maximally decrease whitefly numbers and TYLCV sources available to infect subsequent crops.
 - Use a burn down herbicide such as Paraquat or Diquat in conjunction with a heavy application of oil (2-4 % solution) to quickly kill whiteflies.
 - Time burn down sprays to avoid crop destruction during windy periods, especially when prevailing winds are blowing whiteflies toward adjacent plantings.
- 3 Destroy crops block by block as harvest is completed rather than waiting and destroying an entire field.

With news of the biotype Q whitefly which was recently found on poinsettia in Arizona and its resistance to many of our commonly used materials, growers would be well advised start paying more attention to resistance management guidelines.

According to Dr. Dave Schuster, Entomologist at the UF/IFAS GulfCoast Research and Education Center, Biotype Q is the biotype that has plagued the southern Spain greenhouse production area for years. It has demonstrated high levels of resistance to everything we use here. The main threat, though, is that the resistance is highly stable, even without continued selection, for a long period, perhaps years.

This is contrasted with biotype B, where tolerance dissipates in just a few generations. The level of resistance in the biotype Q in Arizona will depend upon the origin of the invasion and the history of previous exposure. If it isn't already resistant, future resistance may be avoidable or manageable with strong adherence to resistance management recommendations. Therefore, the pressure will be even greater for growers to follow the recommendations on a regional basis.

Because biotype B was moved around the world on poinsettia and because poinsettia is a good host for biotype Q, it is likely that this latter biotype may also move on poinsettia.

Pinworms

Growers around Immokalee report that they are beginning to find significant numbers of tomato pinworm in both tomatoes and eggplants in some places.

Respondents indicate pinworms are present in the Manatee/Ruskin area. Reports note that pinworms are being found in all stages from eggs to larvae to moths.

Tomato pinworm (*Keiferia lycopersicella*) is a warm season pest that occurs throughout the tomato producing areas of Florida. The damage they inflict includes blotch mining and folding of leaves and small pin size holes in fruit.

Pinworm adults are small gray/brown microlepidopteran moths that are active at dusk. They are often confused with closely related species with similar habits. Eggs are usually found singly or in groups of 2 or 3's on the lower surface of foliage. The small (1/64 in) pale yellow to orange eggs hatch in 4-9 days. Early stage

larvae are orange and turn purplish-gray as they mature. The larvae grow to 3/8 in. in length at maturity. To complete their life cycle, larvae drop to the ground and form a pupal cell near soil surface. Generation time is 28 - 67 days depending on temperature.

The caterpillar feeds on leaves and creates blotch-type mines, but causes most of its damage when it attacks the fruit. When abundant, the tomato pinworm may seriously damage foliage and infest nearly 100% of the fruit. Larvae normally enter fruit through the calyx, but may enter at any point on the fruit's surface. They make dry burrows in the core, and do not penetrate very far into the fruit. When infested fruit is picked, caterpillars may be difficult to detect unless they have been feeding long enough to deposit frass at the edge of the calyx. Because the pinworm can have many generations per season, they often become more serious as the season advances. The greatest damage occurs where tomatoes are grown adjacent to early planted, infested fields.

Since tomato, potato, eggplant, and tropical soda apple (*S. bahamense* L), a solanaceous weed, are the only recorded hosts in Florida, a host-free period can be effective in reducing populations to low levels, except possibly where soda apple is prevalent. The longer the crop-free period the better. Destroy residues by burning or plowing-under to help reduce summering populations of pinworm. If substantial tomato pinworm populations are present in an earlier planting and a second crop has been planted in an adjacent field, consider a combination of mowing and discing crop debris.

Transplants have been indicated as a potential source of infestation. Check transplants for pinworm larvae and avoid infested plants.

As with all pests early detection is important. Pheromone traps help provide an early warning. At planting, place a minimum of one trap per 10 acres at least 25 paces inside of field. Growers should begin use of pheromones early, when 3 to 5 moths are caught per trap per night, then mating disruption should be initiated. If pinworms are present, increase trap numbers to ensure an accurate estimate of the population. Pinworms can be controlled with mating disruption techniques and pesticides. Mating disruption is most successful where fields are isolated or whole areas are treated.

If using insecticides, treatment must begin when populations reach economic thresholds. The UF/IFAS Florida Tomato Scouting Guide Tomato has recommends season-long action thresholds of 5 adults/trap/night to initiate the application of mating disruptants and an action threshold of 0.7 larva per plant for the initiation of control measures.

Once begun, treatments may be required until harvest. Treat again when populations return to damaging levels. If nearby infested tomato fields are terminated or abandoned, adults can immigrate into later planted fields in large numbers

Growers should carefully monitor for this pest, especially near woods and around field borders, if scouting detects a significant movement, consider border treatments.

Pheromone-based mating disruptants, such as No Mate TPW spirals or Checkmate TPW dispensers provide a very effective means of combating pinworm. These should be applied according to label instructions with good distribution throughout field.

Chemical controls include Agri-Mek (Abemectin) and Spintor which both have the advantage of being effective against leafminers as well as the additional benefit of being soft on beneficials. Lannate (Methomyl) and a variety of synthetic pyrethroids are also effective materials for the control of pinworm. Development of resistance to Lannate has been documented in pinworms in some parts of the country and excessive use of these broad-spectrum insecticides may result in outbreaks of leafminers and mites if they are present.

Organically acceptable biological and cultural control methods include the use of mating disruptants, field sanitation, and pyrethrin. Parasites can also be important in aiding in pinworm control.

Worms

Respondents in Glades indicate that fall armyworm pressure remains low on sweet corn in most areas. Scouts note that pressure is the lowest in the last 25 years, so growers are saving a lot of money on insecticide.

Elsewhere in Palm Beach County worm numbers remain fairly light with a few hotspots here and there. Growers report that they are finding a mixed bag of armyworms along with some loopers.

Silk fly populations are on the rise, but under control. Growers report good control using organophosphates are rotated with pyrethroids.

Around Southwest Florida, worm pressure remains fairly light but respondents note that pressure is beginning to increase seasonally with the occasional southern and a few beet armyworms beginning to show up with several eggs and new hatches being reported. Loopers are also present as are melonworms.

Reports from Manatee County indicate that worm pressure remains fairly light.

Reports from Homestead indicate that worm pressure is high in sweet corn with the biggest worm hatch out of the season coinciding with last month's full moon and near record heat. Reports indicate that fall armyworm remains the dominant species but that growers are now finding beet armyworms and along with the dreaded corn earworm which is also showing up in significant numbers.

Respondents indicate that worms are also building seasonally in tomatoes but remain low in peppers. Melonworms and pickleworms are active in squash and other cucurbits.

Thrips

Respondents on the East Coast report that flower thrips are building in melon, pepper and tomato blooms. Reports also indicate that *Thrips palmi* are present in few locations and are building in pepper and eggplant.

Reports from Homestead report horrendous *Thrips palmi* pressure in beans, eggplant and pepper with increases also noted in cucurbits.

Around Belle Glade reports indicate that snap beans are under constant attack by thrips now. In some areas, populations as high as ten thrips per bloom have been reported. Reports indicate that Lannate at a rate of 1/3-1/2 lb/A is providing excellent control, taking populations down to zero or close to zero just one day after application.

Growers and scouts in Manatee County note that flower thrips are getting bad in fields near orange groves. Peak bloom is past for citrus and blooms are dropping and growers report that they are very annoying in some fields.

Around Southwest Florida, flower thrips are up across most of the area with counts anywhere from 5-20 per bloom, and are becoming more widespread as the citrus bloom begins to decline. Reports indicate nearly all have been flower thrips.

Dr Phil Stansly, Entomologist at SWFREC reports that with regards to thrips, most if not all that one will commonly find in vegetable blooms in SW Florida are Florida flower thrips, *Frankliniella bispinosa*. This species thrives on citrus, and while it can damage vegetable crops in high enough numbers, the damage potential is much lower than for melon thrips (*Thrips palmi*) or western flower thrips (*F. occidentalis*), both of which are uncommon in SW Florida, particularly the latter. Actually, the presence of Florida flower thrips can help in preventing more damaging species from proliferating by crowding them out of the bloom and by providing food for predators such as minute pirate bugs (*Orius* spp.). The presence of these predators in a reasonable portion of the blooms is a sure sign that thrips will not become a problem. Unfortunately, no thresholds have been documented for Florida flower thrips, but it is not uncommon to see large numbers and not experience significant damage. Growers or consultants wanting an analysis of thrips populations in their crops are encouraged to submit samples to the diagnostic service at SWFREC, preferably blooms collected in 70% alcohol.

Leafminers

Respondents in Homestead are reporting a late season spike in leafminer numbers in beans and tomato.

Around Southwest Florida leafminers have been sporadic on tomato, beans and melons with populations going up and down depending on location. Some hotspots have been reported but growers indicate the situation is pretty much under control.

In the Manatee/Ruskin area reports indicate that leafminers are increasing in some fields with warmer temperatures and drier weather.

Pepper weevil

Growers and scouts in Pam Beach indicate that weevils are present in pepper with some hotspots being reported in older plantings.

Reports from Southwest Florida indicate that pepper weevils are mostly low with some older plantings showing moderate levels of infested fruit. Some areas around LaBelle and in Devils Garden are reporting persistent pressure.

Around Homestead, reports indicate that weevils are at seasonal highs as the season draws to a close.

Aphids

Respondents in Palm Beach indicate that aphid have been increasing on leafy crops in recent weeks. Aphids are also present at moderate levels in tomato, pepper and eggplant.

Around Southwest Florida, respondents indicate aphid numbers have been decreasing over the past two weeks in peppers, but report some hot spots where colony formation continues to occur.

Reports indicate that aphids remain fairly low on squash and other cucurbits in the Homestead area.

Spider Mites

Respondents in Homestead report that red and two spotted mites are increasing in eggplant. Growers report excellent mite control with Acramite, but note that unfortunately the label allows only one application per season on eggplant.

Reports from Palm Beach County indicate that spider mites are still active on basil, eggplant, pepper and tomato.

Around Southwest Florida spidermites are picking up in several fields and have been targeted for control, mostly in cucurbits and eggplant but also in tomatoes in some places.

Broadmites

Respondents in Southwest Florida indicate that broadmites are becoming more active in pepper and are flaring up in a number of pepper fields.

Growers and scouts in Palm Beach indicate that broadmites are present here and there, mostly in pepper.

Diseases

Continued rainy weather combined with foggy mornings and heavy dews and warmer temperatures have helped keep diseases active.

Late blight

Late blight remains active around southwest Florida and won't seem to go away although some respondents note that pressure has begun to abate in some places. In other places, growers and scouts are continuing to find new lesion and report that some new plantings that had been clean have begun to show symptoms in recent days.

Most observers agree that the incidence and severity is as bad or worse as it has been in many years. Late blight has caused some major yield loss in some fields this season while remaining fairly low in others. Some growers have also reported packing problems from late blight. Incidence and severity remains low to moderate in many places with a few lesions widely scattered across infected fields. But reports indicate that in an increasing number of fields incidence and severity is high with plants displaying multiple stem and fruit lesions and in some hotspots plants have been decimated in fairly large areas of the worst affected fields.

Respondents in Homestead indicate that late blight has been almost completely stopped by hot dry weather in that area and is active only where growers have stopped spraying.

Growers in Palm Beach report that late blight is present in a number of locations.

Around the Manatee/Ruskin area indications are that late blight seems to have slowed down, but in some cases it has taken almost daily spraying to manage it. Reports indicate that some active lesions are still being found but most lesions appear dry. Although the strain has not been identified, past experience has shown that late blight strains have been quite active even as temperatures approached 90 degrees, so growers in Central Florida should not let their guard down just yet.

Downy Mildew

Reports from Palm Beach County note the occurrence of some nasty epidemics of downy mildew on cucumber. Disaster seems to be the best description for some of these outbreaks with a couple of entire fields exhibiting almost 100% infection. These fields are showing major decreases in yield and will probably be abandoned.

Downy mildew is also present on the Chinese cabbages.

Dr. Ken Pernezny, Pathologist at UF/IFAS EREC notes that growers and others should not be misled by the angular nature of these lesions on cukes and misdiagnose the problem as angular leaf spot (bacterial). He continues that if one looks closely, the sporulation of the downy mildew fungus can be seen with a hand lens on the underside of the lesions. When in doubt, interested parties should try to get samples to a clinic for confirmation that downy mildew is present in cucurbits and has reached very high levels.

Growers and scouts report that downy mildew is widely present and remains a major problem on cucumber, cantaloupe and squash around Southwest Florida and note that it has become a very aggressive and hard to control disease this season. Incidence and occurrence is moderate to high in a number of locations.

This past season downy mildew resistant cucumbers have been attacked in Florida as well as up and down the East Coast signaling a possible race shift overcoming varietal resistance.

Downy mildew is also present on lettuce and brassicas in Devil's Garden, around Belle Glade and in other parts of Palm Beach County.

Downy mildew has been reported on melons in few locations around Manatee County.

Bacterial Leaf Spot

Reports from Manatee County indicate that bacterial leaf spot is increasing in tomato and in some cases control has been very difficult. While it can be found in virtually every field, severity seems to vary, partly based on the amount of wind damage received from recent weather events. Bacterial spot is a major problem in pepper as well.

Phyllis Gilreath reports that some tests have reportedly come back showing this bacterial spot is a strain that is resistant to copper. Copper was never a silver bullet for bacterial leaf spot, but has been the backbone of the arsenal. There is some question as to the use and interpretation of the terms resistant and tolerant. Certainly, resistance is increasing in many pests due to increased use of some chemicals, which is why as many methods as possible should be used. Sometimes the key to bacterial control may be keeping that plant growing and healthy in other aspects and keep new growth protected with fungicides.

Respondents in Southwest Florida note that bacterial spot has increased significantly on tomato and pepper over the past few weeks. Some pepper fields are in rough shape and growers are reporting bacterial spot lesions present clear to the top of the plants in some of the hardest hit tomato plantings.

Growers and scouts in Palm Beach report that bacterial spot pressure is high in a number of places, manageable in others but is just about everywhere.

Powdery Mildew

Respondents in Palm Beach report that powdery mildew is widely present on squash, tomato and pepper where it is said to be "bad" in some areas.

Powdery mildew is wide spread on squash around Southwest Florida. Incidence and severity is moderate to high in some places.

Target Spot

Target spot is present on tomato in Palm Beach; pressure is reported to be moderate to high in some locations with some fruit quality problems being reported.

Reports from around Immokalee indicate that target spot has flared up in some tomato plantings, especially in front of first pick when the canopy is dense and spray coverage weak.

Early Blight

Growers across the area report low to moderate incidence of early blight on tomato with some increases noted in recent weeks.

Tomato Yellow Leaf Curl Virus

Growers and scouts in Manatee County report tomato yellow leaf curl is increasing around the area but quite variable from 1% to close to 100% in some blocks in some locations. Major problems are mostly around old fall fields that were not destroyed in a timely manner and grape tomato crops, which were carried into the spring, and in some cases, are still being picked.

Reports from around southwest Florida indicate that TYLCV pressure has increased dramatically in a number of places and is posing a threat to young tomatoes in some places. Some scattered hotspots have been reported west of Immokalee area where incidence runs as high as 15 –20%.

Respondents in Palm Beach indicate that TYLCV incidence is mostly below what has been seen in previous seasons but some hotspots with over 10% incidence have been noted.

New tomato yellow leaf curl infections continue to show up around Homestead, but the situation is not critical as most fields have made a crop and are nearing termination.

Growers are urged to take precautions to rouge plants where feasible and practice a complete program of IPM and whitefly management including attention to sanitation and crop destruction.

Gummy Stem Blight

Growers and scouts around Southwest Florida report some new gummy stem blight on watermelon but overall incidence remains low.

Rust

Respondents indicate that Common bean rust is appearing at low levels throughout most bean-growing areas of the Glades now.

Corn Rust

Reports indicate that common rust is at nightmare levels in sweet corn throughout the Glades area. Best control is noted where Headline/Quadris is rotated with Tilt, so that three locally systemic fungicide applications go out over a period of eight days. It has proven curative on some very high levels of rust infestation, to the point that some plantings have been saved from what would have been significant yield loss or the death of the crop.

Areas that were the worst affected by standing water have shown the highest increases in rust levels. This is not surprising. The plants are already badly stressed, making them more susceptible to infection. The standing water also leads to high humidity levels in the morning hours that favors germination of rust spores. Making matters worse, temperatures have been in the ideal range for establishment and increase of common rust.

Some rust is also present in the Homestead area, but most crops are past the stage where disease will cause much damage.

Fusarium

Around Southwest Florida, fusarium crown continues to take its toll in a number of tomato fields around the area.

Respondents in Palm Beach report that fusarium crown rot incidence is high in tomato in some locations. Scouts also report some problems with fusarium crown rot on pepper.

Mosaic

Reports indicate that mosaic is widely present on squash around South Florida.

Alternaria Leaf and Pod Spot

Alternaria leaf and pod spot of beans is widely present in beans growing areas of South Florida. Infection on the pods has been reported as moderate to high in some areas.

Lesions on pods usually appear as very small, dark-brown to black flecks. When examined with a hand lens, these flecks are somewhat raised and cone-like. When only a few flecks occur on a pod, the damage may be insufficient to result in rejection at the packinghouse. Large numbers of unsightly flecks, however, can result in rejection of the entire lot, especially at lower market prices.

Leaf symptoms first appear as small, water-soaked flecks that rapidly develop into circular to irregular spots with pale-brown centers and reddish-brown borders.

Faint, concentric rings may occasionally be visible in older lesions. As the disease progresses, leaf lesions may merge together leading to large, blighted areas and premature leaf drop.

Several species of *Alternaria* have been reported as attacking beans but the consensus is that *Alternaria alternata* is probably responsible for most outbreaks in Florida. Normally this species is a weak pathogen and not as aggressive as *Alternaria solani*, which, causes the devastating early blight of potato and tomato. Ideal conditions for the development of Alternaria leaf spot include high relative humidity, rainfall, and cool temperatures (60 -75 degrees F for daytime highs). Under these conditions, Alternaria leaf spot can result in major losses in snap bean. Severe outbreaks of the disease can be expected from January through March in Homestead, Belle Glade and Devil's Garden growing areas of southern Florida.

For scouts and others with access to a microscope, the multi-celled, pigmented spores that have both transverse and longitudinal septa (cell walls) and a short "tail" or "beak" are diagnostic of the disease.

Beans that are nutritionally deficient in nitrogen and/or potassium are most susceptible as are those planted at high densities with can result in more frequent disease incidence and greater disease severity.

Management of Alternaria leaf and pod spot consists of maintaining adequate crop nutrition and avoidance of close between-row and within-row plant spacing. Fungicides also play a major role in the integrated management of this disease.

It is particularly important that effective fungicides be applied when pods are small (pin pod stage) in order to avoid infections that will be evident later as pods mature. Strobilurin fungicides have given good

results but should be applied according to the label and rotated with materials with other modes of action to avoid potential problems with resistance. Reports indicate that best control seen in areas that received two applications of Quadris/Amistar at the 2-3 inch bean stage.

Pythium

A number of growers continue to report problems with pythium following recent rains.

Phytophthora

Growers in Palm Beach are reporting some scattered problems with Phytophthora on pepper and cucumber.

News You Can Use

Soybean Rust Update

By now most folks are aware that the Australasian (Asian soybean rust) soybean rust (*Phakopsora pachyrhizi*) has been found actively sporulating this spring on kudzu in Pasco and Hernando Counties. Pathologists believe that kudzu will be a source of inoculum for soybean rust.

One of the most common questions in relation to soybean rust is related to whether it will be a problem on vegetable legumes (beans, southern peas, iron clay peas). They are listed as hosts of this rust, but discussions among pathologists about this in Florida and elsewhere, lead to the consensus that they are unable to document that *Phakopsora pachyrhizi* will be a field problem for our vegetable legumes.

This is supported by the fact that surveying of multiple bean plantings this winter and early spring have failed to disclose the presence of soybean rust on these plantings in Florida. The common bean rust, *Uromyces appendiculatus* has been present. While we have not seen the soybean rust on beans in the United States, so far, selection pressure and multiple variations in environmental conditions coupled with numerous genotypes of the beans may reveal some new situations.

However, Dr Tom Kucharek advises growers to keep an eye out for changes. He notes one of his mentors stated “Plant Diseases are Shifty Enemies”, and adds that should soybean rust on common bean rust become a problem, we have several fungicides that will be quite helpful if used early in relation to the progress of an epidemic and continued as needed. See Plant Protection Pointer No. 6. For soybeans, there is an arsenal of fungicides have become available for legal use on soybeans. See Plant Protection Pointer No. 16.

Lastly Tom notes that insurance companies are beginning to parry and establish early positions in relation to coverage through the Risk Management Agency of the USDA. We can expect their positions to change depending upon various situations and we can expect opinions to vary considerably about specific situations if rust occurs and a claim is made. As of now, the buzzwords for payoff are: 1) Use of good farming practices. 2) Follow recommendations of “agricultural experts”. 3) ”Failure to purchase and apply adequate control measures due to economic reasons is not an insurable cause of loss.” 4) Document your preventative actions for soybean rust. 5) The producer should stay informed on updates about soybean rust with information from “local chemical dealers, crop consultants, and plant pathologists in agriculture departments of State governments, universities, and USDA’s Cooperative State Research Education and Extension Service” You can start by using this web site: http://spdn.ifas.ufl.edu/soybean_rust.htm.

Information supplied by Dr. Tom Kucharek, Plant Pathologist UF/IFAS, Gainesville.

Up Coming Meetings

Hillsborough County

April 13, 2005

Value Added Workshop 1:00 pm – 5:00 pm
Hillsborough County Cooperative Extension Service Office
5339 County Road 579
Seffner

For more information contact Laura M. Miller at 813-744-5519 x 147

Manatee County

April 6, 2005

BioSafe Systems Update 12 Noon - 1:30 PM
Oxidate, Terraclean, Storox

Popi's IV
Ellerton, Florida

For more information, contact Phyllis Gilreath at 941-722-4524 or
prgilreath@ifas.ufl.edu.

Miami Dade County

April 27, 2005

Methyl Bromide Compliance Meeting 6 PM - 8 PM

Dade County Extension Auditorium
18710 SW 288th Street
Homestead, Florida

Contact the Florida Fruit and Vegetable Association at 321-214-5200

Palm Beach County

April 13, 2005

General Standards/Core Test Review	8 AM – 10 AM	4 CEUs
Ag Row Crop Test Review	1 PM – 3 PM	2 CEU's

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

Contact Laura Powell at 561-996-1655.

April 27, 2005

Methyl Bromide Compliance Meeting 11 AM – 2 PM

Richards Steakhouse
Boynton Beach, Florida

Contact the Florida Fruit and Vegetable Association at 321-214-5200

Opportunity

Long and Scott Farms is seeking a grower in SW Florida to produce 300 acres of pickles or 300 acres to lease for the December 2005 – April 2006 time slot. Contact Dominique DePaz at 352-383-6900 for details.

Websites

SafePesticideUse.com – The mission of this Florida Department of Agriculture website is to promote safe pesticide use and compliance with state and federal pesticide laws and regulations in the State of Florida. Here you can check on earned CEU's, upcoming CEU opportunities, pesticide laws and regulations, proposed changes and much more. Go to <http://www.safepesticideuse.com>

Greenbook announces the launch of its new Web site. The site, www.greenbook.net, contains a database of crop protection and turf and ornamental pesticides.

The Quick Search function allows users to search for the product they want by company name, brand name or active ingredient. The Advanced Search function includes the added flexibility to find the needed product by searching by crop and pest, in addition to the functions in the Quick Search.

The Web site is updated daily with new pesticide registrations, updated product labels and changes to material safety data sheets. Users can formulate the display to show new registrations from the past seven days, 15 days or 30 days. Additionally, users can register to receive e-mail information updates – "email alerts" – on the products they choose.

Quotable Quotes

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

A boy can learn a lot from a dog: obedience, loyalty, and the importance of turning around three times before lying down. -- Robert Benchley

Search others for their virtues, thyself for thy vices. -- Benjamin Franklin

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

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

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

On the Lighter Side

Word Play

DORMITORY: When you rearrange the letters: DIRTY ROOM

DESPERATION: When you rearrange the letters: A ROPE ENDS IT

THE EYES: When you rearrange the letters: THEY SEE

THE MORSE CODE: When you rearrange the letters: HERE COME DOTS

ELECTION RESULTS: When you rearrange the letters: LIES - LET'S RECOUNT

MOTHER-IN-LAW: When you rearrange the letters: WOMAN HITLER

SNOOZE ALARMS: When you rearrange the letters: ALAS! NO MORE Z 'S

A DECIMAL POINT: When you rearrange the letters: IM A DOT IN PLACE

ELEVEN PLUS TWO: When you rearrange the letters: TWELVE PLUS ONE

Can't Top That

A Georgia State Trooper pulled a car over on I-95 about 2 miles south of the Georgia/South Carolina state line. When the Trooper asked the driver why he was speeding, the driver answered that he was a magician and a juggler and he was on his way to Savannah to do a show that night at the Shrine Circus and didn't want to be late.

The Trooper told the driver he was fascinated by juggling, and if the driver would do a little juggling for him that he wouldn't give him a ticket.

The driver told the Trooper that he had sent all of his equipment on ahead and didn't have anything to juggle.

The Trooper told him that he had some flares in the trunk of his patrol car and asked if he could juggle them.

The juggler stated that he could, so the Trooper got three flares, lit them and handed them to the juggler.

While the man was doing his juggling act, a car pulled in behind the patrol car. A drunken good old boy, from S.C., got out and watched the performance briefly; he then went over to the patrol car, opened the rear door and got in.

The Trooper observed him doing this and went over to the patrol car, opened the door and asked the man what he thought he was doing.

The drunk replied, "You might as well take me straight to jail, cause there's no way in hell I'm gonna pass that test."

Bubba applied for an engineering position at a Lake Charles refinery.

A Yankee applied for the same job and both applicants having the same qualifications were asked to take a test by the manager.

Upon completion of the test, both men only missed one of the questions.

The manager went to Bubba and said: "Thank you for your interest, but we've decided to give the Yankee the job."

Bubba asked: "And why are you giving him the job? We both got nine questions correct. This being Louisiana, and me being a Southern boy I should get the job!"

The manager said: "We have made our decision not on the correct answers, but rather on the one question that you both missed."

Bubba then asked: "And just how would one incorrect answer be better than the other?"

The manager replied: "Bubba, its like this. On question #4 the Yankee put down; "I don't know." You put down, "Neither do I."

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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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