



UNIVERSITY OF  
FLORIDA

E X T E N S I O N

Institute of Food and Agricultural Sciences

Hendry County Extension

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# SOUTH FLORIDA VEGETABLE PEST AND DISEASE HOTLINE

November 22, 2004

**Favorable weather conditions over the past few weeks have enabled growers to take advantage of record high prices for many commodities.** In most areas daytime highs ranged in the low to mid 80's with nighttime lows in the 50's and 60's. Cold fronts crossing the peninsula brought minimal precipitation to most areas, with some East Coast locations logging just over a half-inch of rain while many locales recorded on trace amounts of rainfall for the period.

**Field preparation, planting staking spraying and other cultural activities continue across all South Florida growing areas.** Potato planting is underway in Southwest Florida.

**Harvest of fall crops is going full swing in South Florida growing areas, which escaped major hurricane damage, to meet the Thanksgiving demand.** Sweet corn harvesting has started in the Glades. Okra harvesting is winding down in Dade County. Other crops coming to market include cantaloupes, cucumbers, eggplant, okra, pepper, radishes, snap beans, squash, sweet corn, tomatoes and watermelon. Growers report high prices for corn, melons, peppers and tomatoes. Quality is moderate to good.

## 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
<b>Bradenton</b>											
11/05 -22/04	49.3	82.0	0.24	0.0	0.0	1.3	21.8	17.0	40.1	46.7	20.3
<b>Ft Lauderdale</b>											
11/05 -22/04	56.8	86.0	0.28	0.0	0.0	0.0	0.0	3.5	6.3	30.4	37.0
<b>Fort Pierce</b>											
11/05 -22/04	56.0	83.0	0.71	0.0	0.0	0.0	0.0	10.9	38.3	42.3	17.8
<b>Homestead</b>											
11/05 -22/04	55.5	84.7	0.60	0.0	0.0	0.0	0.0	7.9	10.6	50.4	21.5
<b>Immokalee</b>											
11/05 -22/04	48.8	85.3	0.12	0.0	0.0	2.5	17.6	50.3	102.6	69.3	3.8

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**The short-term forecast from the National Weather Service in Miami calls for unsettled weather over the Thanksgiving holiday as a cold front moves across South Florida and contacts tropical moisture over the peninsula bringing widely scattered showers on Wednesday, which will become more numerous on Thursday along with the possibility of thunderstorms.** Light rain might hang around on Friday before significant clearing and drying projected for the weekend.

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

## **Insects**

### **Worms**

**Worm pressure remains persistent around South Florida.**

**Growers and scouts in the Manatee Ruskin area report that although worms have been around all season but are getting worse in some fields now, especially southern armyworm in tomatoes and beet armyworms in pepper.** Pinworms are also starting to increase, light in some fields and heavier in others depending on location.

**Reports from Homestead report increase problems with melonworms and pickleworms in cukes and squash.** Squash producers report excellent melon/pickle worm control with Intrepid. Growers report that fall armyworm pressure remains high in sweet corn especially on varieties with large flag leaves.

**Around Southwest Florida, respondents indicate that worms seem to have slacked off a bit despite high trap counts.** Growers indicate that they continue to find eggs and new hatches, mostly southern and beet armyworms. Melonworms are widely present in squash.

**Reports from the Glades note fairly high pressure from fall armyworms on sweet corn.** Armyworms have also been a problem in some of the leafy vegetables as well.

**Growers in Palm Beach County indicate that worms are still bad on a variety of crops.**

### **Leafminers**

**Respondents in Homestead area report that leafminer pressure is severe in beans and heavy in eggplants and tomato.**

**Leafminer activity has increased in the Manatee Ruskin area over the past 2 weeks.** Both adults and larvae activity is up, but reports indicate that in many fields where judicious scouting and spraying occurs, excellent parasite populations are being reported.

**Growers in Palm Beach report increased leafminer damage on eggplant tomato and some of the leafy vegetables.** Reports indicate that on many of the leafy vegetables damage is largely confined to cotyledons and older leaves and has had little effect on marketable leaves.

**Around Southwest Florida, growers have been treating for leafminer in places and pressure is expected to increase as the season progresses.** Leafminers are present in a variety of crops including beans, tomato and eggplant.

**With the on-set of cooler weather across the peninsula, growers across the state can expect to see an increase in leafminer pressure.** Leafminers attack many crops but are particularly damaging on celery, crucifers, cucurbits, okra, potato and tomato. In south Florida, populations peak between October and March while in central Florida they are a problem in both spring and fall.

**The two major species of leafminer that cause problems in vegetables in Florida are the vegetable leafminer (*L. sativae*) and most commonly (*Liriomyza trifolii*) - sometimes referred to as the celery leafminer but which has no approved common name.** The adults are small yellow and black flies about the size of a gnat. The female punctures or "stipples" the leaves with her ovipositor to lay eggs in the leaf tissue or to feed on sap.

**Leafminer injury is readily visible to the grower but healthy plants can tolerate considerable damage without excessive loss of vigor and yield.** The Florida Tomato Scouting Guide sets action thresholds at 0.7 larva per plant for young plants with less than 2 true leaves and 0.7 larva per 3 terminal leaflets for larger plants. Heavily damaged leaves will often drop, due in part to entry of pathogenic organisms into old mines.

**An integrated pest management program that stresses conservation of natural enemies is the primary tactic for the successful control of leafminer.** Chemical control is difficult due to the feeding habits inside the leaf of the host plant. Insecticides that specifically target the leafminer are recommended as use of broad-spectrum materials may decimate beneficial insects including those that attack leafminer. This often results in a larger leafminer problem if the pesticide reduces field densities of leafminer parasites.

**Fortunately, populations are often prevented from reaching truly damaging levels by a number of parasites that attack leafminers.** Several parasites for this insect have been recorded in Florida, but parasitic wasps such as *Opius*, *Diglyphus* are most common. Wasp larvae develop on or in the leafminer larva or pupa. The host ceases to feed and the parasitoid egg or larva is visible through the leaf epidermis using a hand lens against strong light. In scouting fields, growers should be careful to note the number of parasitized mines before deciding to apply insecticides.

**Due to its feeding habit, this pest is resistant to many insecticides.** Cyromazine (Trigard) alternated with abamectin (Agrimek) are effective against leafminer in tomato. Both of these products have limited crop registrations and must not be used on unregistered crops. Spinosad (Spintor) has also given good results and is labeled on a wide range of crops.

**Rotate products in different classes.** Trigard, Agri-Mek and Spintor are all in chemical different classes Do not apply more than 2 consecutive applications of a single product. Use labeled rates; most experts agree that too low or too high are to be avoided. (Agri-Mek is 8oz, Trigard 1/6lb per acre) Some other materials that may be used to conserve beneficials include azadirachtin (Neemix) and insecticidal oils. Both products are approved for use by organic growers.

**Field sanitation is an important control tactic that is overlooked.** When crops are not present in the fields, leafminers can survive on a variety of broad-leaf weeds. These plants serve as reservoirs for pest. Practice good sanitation and eliminate old crop residue immediately after harvest.

## **Whiteflies**

**Growers in Palm Beach County continue to report low whitefly numbers in susceptible crops including squash and tomatoes.** Reports indicate that most counts remain below 1 adult per plant.

**Reports from Homestead increasing whitefly numbers in beans, cucumbers eggplant and squash with very heavy pressure in tomato.** Scouts indicate that silverleaf whitefly is presently the main pest of concern in squash and cucumbers and silverleaf disorder is present in squash in places.

**Respondents in the Manatee/Ruskin area report that whitefly numbers are increasing in a number of locations.** IGRs being applied for nymphal control with reported good success. Phyllis Gilreath reports that this is reminiscent of last year, with low whitefly and virus pressure in the fall season, followed by an increase late in the season and an explosive situation where they seemed to come out of the woodwork in the spring.

**Around Southwest Florida, the whitefly situation remains fairly stable with low numbers present in most locations.** Scouts report some increases in adults moving around in some of the early plantings that are starting to show their age and report finding some developing nymphs and pupae. Overall counts in younger fields have been fairly low with a few exceptions.

### **Nicotinoid Resistance Management Recommendations**

- Reduce overall whitefly populations by strictly adhering to cultural practices including:
  - Plant whitefly-free transplants
  - Delay planting new crops as long as possible and destroy old crops immediately after harvest to create or lengthen a tomato free period
  - Do not plant new crops near or adjacent to infested weeds or crops, abandoned fields awaiting destruction or areas with volunteer plants
  - Use UV-reflective (aluminum) plastic soil mulch
  - Control weeds on field edges if scouting indicates whiteflies are present and natural enemies are absent
  - Manage weeds within crops to minimize interference with spraying;
  - Avoid u-pick or pin-hooking operations unless effective control measures are continued
- Do not use a nicotinoid like Admire on transplants or apply only once 7-10 days before transplanting; use other products in other chemical classes, including Fulfill, before this time;
- Apply a nicotinoid like Admire (16 ozs/acre) or Platinum (8ozs/acre) at transplanting and use products of other chemical classes (such as the insect growth regulators Courier® or Knack® as the control with the nicotinoid diminishes. Note: Courier and Applaud are the same active: 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.
- Never follow an application (soil or foliar) of a nicotinoid with another application (soil or foliar) of the same or different nicotinoid on the same crop or in the same field within the same season (i.e. do not treat a double crop with a nicotinoid if the main crop had been treated previously);
- Save applications of nicotinoids for crops threatened by whitefly-transmitted plant viruses or whitefly-inflicted disorders (i.e. tomato, beans or squash) and consider the use of chemicals of other classes for whitefly control on other crops.

### **Pepper weevil**

**Reports out of Homestead note finding the first pepper weevil larvae of the season in pepper fruit.**

**Pepper weevils have been found in multiple locations around Immokalee over the past 7 to 10 days.**

**Scouts indicate that this is unusual in that weevils are not normally on so many locations this early in the season.** Both larvae infested fruit and adults on buds/blooms at low levels have been detected. Infested fields still have very few infested fruit at this time so early insecticide efforts should help to keep them down and delay further population buildup.

## **Broadmites**

**Growers and scouts in Palm Beach report scattered broadmite damage on peppers in some places.**

**Reports from around Southwest Florida indicate that broadmites are active in pepper and eggplant but note that occurrence is sporadic.**

**Broad mites are active in eggplant and pepper in the Homestead area.**

**A few broadmites are present on pepper in West Central Florida.**

**Broad mites are so small that they are may be hard to see even with a good hand lens.** Symptoms of broad mite feeding include distortion of plants growth causing leaves to become thickened and narrow resulting in a “strappy” appearance. Leaves curl downward and may turn coppery or purplish. Internodes shorten and lateral buds break more than normal. Mites tend to crowd into crevices and buds and feed on the growing tips. This new growth may also be stunted or killed which forces out additional shoots. Flowers are distorted and fail to open normally.

**Heavy feeding can cause flower abortion and russetting of fruit.** Unless controlled, broad mites can destroy the commercial value of infested crops. Their toxic saliva causes twisted, hardened and distorted growth in the terminal of the plant. The effects of their feeding may persist long after the mites have been eradicated.

**Chemical control is not difficult.** Kelthane or dicofol, micronized sulfur (i.e. Thiolux) and AgriMek have all given good results locally. It should be noted that none of these materials kills eggs or seems to have enough residual to kill all hatching larvae. Therefore, to achieve control it is necessary to make two applications about 5 days apart to allow time for eggs to hatch and target emerging larvae.

**A very unusual discovery made more than a decade ago revealed that broad mites are carried between or within crops on the legs of white flies.** Known as phoresy, this behavior remains an unusual and important means of dispersal mechanism in broad mites.

## **Aphids**

**Reports from around Palm Beach indicate that a few winged aphids are beginning to show up especially in leafy greens.**

**Winged aphids are present in a number of areas around Southwest Florida and colony formation has been reported in several places.** Numbers are variable and range from moderately high to low depending on location.

**Respondents in Homestead report increased aphid pressure in beans, cucumbers, squash and tomato.**

**Some increase in aphid activity has been noted in the Ruskin area.**

## **Spider Mites**

**In Palm Beach spider mites continue to cause problems in some locations and have been reported on beans, corn, eggplant, leafy vegetables and squash.** Some growers report that long PHI's – 7 days or more on Kelthane and Agrimek have made control difficult.

**Growers around Southwest Florida report a few spider mite problems in beans, eggplant and tomato especially on field margins and areas adjacent to sugar cane windbreaks.**

**Reports from Homestead indicate low populations of red spider and two spotted mites on eggplant and strawberries.** Strawberry growers report excellent control rotating Savey, sulfur, and Agrimek.

### **Thrips**

**Respondents around Homestead are reporting heavy thrips pressure on a variety of crops around including beans, cucumber, eggplant, pepper and tomato.** Thrips palmi are present especially in beans. Corn thrips is causing some problems in sweet corn.

**Reports from around Southwest Florida indicate that flower thrips are around in mostly low numbers although numbers have spiked in a few fields up to 10 per bloom.** Reports indicate that all appear to be flower thrips (*F. bispinosa*) and no damage has been reported. Predators such as Orius and pirate bugs have been seen feeding on thrips.

### **Silk Fly**

**Silk fly adults are increasing in numbers in sweet corn in Homestead and the Glades.** Silk fly maggots have been reported in ears around Homestead.

### **Diseases**

**Reports indicate that disease pressure has dropped off in recent days.**

#### **Bacterial Leaf Spot**

**Although still widely present in pepper and tomato, East Coast growers indicate that bacterial spot activity has diminished greatly in recent days mainly due to favorable weather.**

**Respondents in Homestead indicate that bacterial spot activity has slowed in pepper and tomato.** Growers report good control with Tanos/Mancocide tank mixes in rotation with other products.

**Around Immokalee, bacterial spot has slowed but continues to spread in some pepper fields.** Although on the average pepper crops remained clean much longer than tomatoes early in the season at this time infected pepper fields display more defoliation and greater damage from bacterial spot. Both race 3 and race 6 bacterial spot have been identified from local pepper fields.

**Reports from the Ruskin area indicate that bacterial spot activity seems to have stabilized, although it's still around in some fields and just refuses to go away.** Severe bacterial leaf spot pressure in a couple of pepper fields has resulted in large lesions that more resembled blight. Control has been difficult with available materials.

#### **Target Spot**

**Scouts in the Homestead area report active target spot in tomato.**

**Around Southwest Florida, target spot is increasing especially in the interior canopy on older tomato.** Reports indicate that there are scattered fields around with the inner foliage nearly consumed by target spot.

**Target spot is beginning to show up in a few fields around Manatee County.**

## **Alternaria**

**Moderate incidence of early blight has been noted in tomatoes around Homestead.** Alternaria is also present on cucumbers and beans.

**Low levels of Alternaria are also present on tomato around Immokalee.**

## **Tomato Yellow Leaf Curl Virus**

**Growers and scouts in Manatee County report an increase in TYLCV in the tops of some plants, especially in the usual “high risk” fields.** This is reminiscent of last year, which saw an increase late in the season followed by an explosive increase in whitefly numbers when they seemed to come out of the woodwork in the spring. This winter there will probably not be a crop free period, unless Mother Nature steps in. Growers may want to consider using one of the TYLCV resistant cultivars, especially for early plantings, or the use of silver mulch, which did seem to delay the onset of TYLCV last spring.

**Respondents in Southwest Florida indicate TYLCV is showing up more widely but for the most part is still confined to just a single plant here and there.** Reports note that there are few acres out there that are now over 10%.

**New TYLCV infections have been reported around Homestead with most fields now varying between 1 – 5% infection rates.** One hotspot with nearly 25% infected plants has been noted.

## **Southern Blight**

**Around Southwest Florida, respondents indicate that southern blight flared up in several locations.**

## **Gummy Stem blight**

**Incidence of gummy stem blight continues to increase on cucurbits around Southwest and West Central Florida. Pressure remains moderate in many places.**

## **Powdery Mildew**

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

**Growers and scouts operating around Homestead report a big jump in the incidence of powdery mildew in squash with low levels also present in strawberries.**

**Powdery mildew is also present on cucurbits around West Central Florida as well as East Coast growing areas.**

## **Downy Mildew**

**Reports indicate that downy mildew is present on cantaloupe, cucumber and squash in scattered locations around Southwest Florida.** Incidence and severity is high in some locations.

**Downy mildew has also been reported on cucumbers in Homestead and a variety of cucurbits in the Manatee Ruskin area.**

## **Phomopsis**

**Phomopsis is present on eggplant in a number of locations around Southwest Florida.**

## **Fusarium Crown Rot**

**Fusarium crown rot is beginning to show up on tomato in several locations around the area.**

## **Little Leaf**

**A few isolated cases of tomato little leaf have been reported around Immokalee and around the Manatee/Ruskin area.**

**Tomato little leaf is a non-parasitic disease of tomatoes that causes virus-like symptoms in tomato.** A similar disorder affects other crops and has been referred to as frenching in tobacco. Symptoms of this condition are characterized by unusual growth consisting of interveinal chlorosis in young leaves. Subsequent growth becomes severely distorted with leaflets along the mid-rib failing to expand properly resulting in a “little leaf” appearance. Leaflets are twisted and distorted. In addition, failure of blooms to set fruit and fruit distortion consisting of radial cracks extending from the calyx to the blossom scar is often seen. Overall the appearance is reminiscent of viral or phenoxy herbicide symptoms.

**The problem typically occurs on wet soils and is apparently caused by the release of chemical compounds by soil microorganisms under wet conditions.**

**The current hypothesis is that one or more amino acid analogs are synthesized by certain soil microorganisms and released into the rhizosphere.** These compounds are taken up by the plant and can cause morphological changes and stunting in susceptible plants at very low concentrations.

**Control consists largely of managing soil moisture to avoid water logging.** Maintaining soil pH below 6.3 or less can also reduce development of the problem however changing soil pH should be approached carefully to avoid problems that might accompany reduced lime utilization in tomato. Affected plants generally resume normal growth once soil moisture levels become more favorable.

## **Watermelon Vine Decline**

**At least 3 watermelon farms in the Manatee Ruskin area have plants with symptoms, which are similar to the watermelon vine decline.** Samples are being analyzed, but the current thinking is that more than one problem may be involved here. Although not as bad as last year and not spreading as rapidly, symptoms are similar, including vine wilt and death, some stem lesions, vascular discoloration and severe internal rind discoloration in fruit. It may be that our later season has put us into a little cooler weather, thus slowing spread, or we may be looking at other problems. Diagnoses have not been completed. As was typical last year, symptoms don't show up until just before first harvest.

**A few suspect fields have also been examined around Southwest Florida but no firm diagnosis has been made.**

We are still interested in getting as many suspect samples from farms as possible. Please call Phyllis Gilreath at 941-7724524 ext 237 or Gene McAvoy at 863-674-4092 if you have these symptoms.

## New You Can Use

### OxiDate vs. Hydrogen Peroxide

A few growers have been trying hydrogen peroxide for disease control thinking that it is comparable to OxiDate. Here are some facts to consider.

The basic premise behind OxiDate (hydrogen dioxide) and peroxides when used, as anti-microbials is that bacteria and fungi are comprised of proteins and proteins are highly subject to oxidation. Disruption of the protein by oxidation results in loss of protein function and ultimately cell death. When using this category of oxidizers for disease control, there are a couple of important facts to consider.

OxiDate and the other peroxides have little or no residual activity due to the fact that they are rapidly degraded in the environment and are broken down to their constituent component— water (H<sub>2</sub>O) and oxygen (O<sub>2</sub>). Since they have no residual activity, coverage is essential because if the chemical doesn't contact the organism at the time of spraying and in the right concentration there is no effect. Secondly, in order to be effective, non-residual chemistry should be able to kill not only actively growing disease organisms but also spores. Lastly the oxidizing chemical must be stable enough to exist for some time in the environment and at the same time not harm the plant material.

The first major problem with hydrogen peroxide is stability. Hydrogen peroxide is highly unstable and breaks down very quickly when exposed to organic matter, UV light pressure changes, or in fact anytime energy is added to the system. The unstable nature of hydrogen peroxide can result in one of two possible outcomes when applied to crops. One possibility is that the peroxide will degrade through UV exposure, agitation in the tank and/or the rapid pressure changes associated with passage through the spray nozzles, into its constituent parts - oxygen and water - before ever reaching the plant pathogen or soil. The second possibility is that it is sprayed at sufficient strength to actually reach the foliage and then reacts very quickly on the surface of the plant foliage liberating heat and oxygen and causing burning, phytotoxicity and crop damage. Either result is undesirable.

The second major shortcoming of hydrogen peroxide is that it has no sporicidal activity. This is why it is not used in applications where sporicidal activity is required.

The last major problem with hydrogen peroxide is that it is not registered with the US EPA as a fungicide/bactericide and therefore is illegal to use on crops for such purposes.

OxiDate is an EPA registered, stabilized and activated peroxygen/peroxyacetic acid compound. As per EPA requirements and to avoid confusion, the label refers to the active ingredient as hydrogen dioxide. Whichever way it is referred to, OxiDate is a stabilized, engineered hydrogen peroxide formulation in combination with peroxyacetic acid. This combination gives OxiDate sporicidal properties while the stabilizers allow OxiDate to be applied as a spray or drench without the rapid loss of the active ingredient or phytotoxicity. OxiDate is labeled for use on the following crops: beans, broccoli, cauliflower, cabbage, cucurbits, onions, peppers, potatoes, and tomatoes. For more information on OxiDate, go to the BioSafeSystems website at <http://www.biosafesystems.com>.

### Insect Bee-havior Benefits Florida - Pollination, Honey Key For Food, Crops

Bees may be the most hardworking insects to benefit humans.

Not only do the little insects produce about 20 million pounds of honey a year in Florida, they also are responsible for a third of our food.

Indeed, if honeybees suddenly ceased to exist in Florida, two-thirds of the citrus crop would disappear. Watermelon, squash, blueberries and other produce would be wiped out entirely, said Jerry Hayes, chief of the Apiary Section for the Florida Department of Agriculture and Consumer Services, or the keeper of the beekeepers. Some crops, such as watermelon, are solely pollinated by bees.

In fact, many farmers pay beekeepers to put hives in the fields come blossom time. There just aren't enough wild bees to presume nature will pollinate the crop.

About 95 percent of Florida's wild bees have disappeared, Hayes said. Some of the loss is from pesticide use, some from diseases that wipe out whole colonies.

Florida has the strongest apiary program in the nation with 16 inspectors. "We're the only ones who have inspectors of this number, full-time, year-round working with beekeepers," Hayes said.

Every beekeeper that has a hive in Florida must register with the state. It helps inspectors keep bee diseases in check. The varroa mite, for example, has wiped out a lot of wild honeybees. It attaches itself to a bee and sucks its blood. For comparison, if the bee were human-size, the mite would be the size of a fist.

Considering their importance to agriculture, Bennefield urges anyone who finds unwanted hives on their property to call the state with the registration number to get contact information and let the beekeeper remove them.

The Florida Apiary Section can be reached at (352) 392-3505, ext. 128.

## **CEUS Change Clarification**

Starting January 1, 2005 pesticide applicators licensed under Chapter 487 F.S. who renew their licenses with CEUs are required to have 4 Core CEUs in addition to the number of CEUs required for their category. Applicators certified in more than one category will need a total of 4 Core CEUs. Examples: an applicator with an aquatic license will need 16 aquatic CEUs plus 4 Core CEUs to renew his license. An applicator with aquatic, right-of-way, and natural areas licenses will need 16 aquatic, 8 right-of-way, 16 natural areas CEUs plus 4 Core CEUs to renew.

Contrary to information circulating, FDACS did not change the numbers of CEUs required for some commercial and public applicator categories. The CEU numbers required for those categories remain the same as they have for several years. FDACS did, however, change the total number of CEUs private applicators must earn. Starting January 1, 2005 the private applicator will need a total of 8 CEUs (4 private applicator agricultural pest control plus 4 Core) instead of a total of 12 CEUs (8 private applicator agricultural pest control and 4 Core).

## **Farmer-to-Farmer Program**

The Farmer-to-Farmer Program provides an innovative approach to agriculture, natural resources management, clean energy, and leadership development by linking individuals and communities in developing nations with new ideas, technology and expertise provided by volunteers from farms and agricultural related industries in US.

This program is an awesome opportunity for people to travel and share their expertise in agriculture. The Intertribal Agriculture Council (IAC) is currently working with Winrock International who administers the program to field volunteers under the Farmer-to-Farmer (FTF) Program, funded by the U.S. Agency for International Development.

Farmer-to-Farmer goals are to increase long-term productivity, equity, and responsible resource management to benefit the poor and disadvantaged of the world.

The Farmer-to-Farmer program has many different assignments available and is currently looking to send U.S. volunteers to Asia on short-term technical assistance assignments. They currently have a Corn Milling assignment, a Plant Quarantine and Phytosanitary Certification in Vegetable Crops Assignment, a Tissue Culture and Green House Set-up and Management assignment and two Rice Seed scopes of work involving planting and marketing.

Volunteers donate their time and expertise and the program covers the costs and makes all necessary arrangements. Covered expenses include passport, visa, airfare, lodging, daily per diem for meals and incidental expenses, and required immunizations. The U.S. based staff take care of all travel arrangements, and our field staff in the host country provide in-country logistical support and act as a liaison between the volunteer and the host organization. Interpreters are also provided when necessary.

To learn more about Winrock's volunteer programs go to [www.winrock.org/volunteer](http://www.winrock.org/volunteer). Visit [www.indianaglink.com](http://www.indianaglink.com) for information about the Intertribal Agriculture Council.

If you (or someone at your organization) would be interested in learning more about opportunities with the Farmer-to-Farmer program, please **contact** Tina Larson, Recruiter, Intertribal Agriculture Council at 406-259-3525. Recommendations for potential contacts are also welcome

## **2005 Environmental Quality Incentive Program (EQIP)**

The USDA Natural Resources Conservation Service (NRCS) is now accepting applications for the Environmental Quality Incentive Program (EQIP). This program is competitive. Farms and nurseries will be ranked and cost-share and incentive funds will be allocated based on highest to lowest ranking until available funds run out. There is no acreage minimum or maximum. Qualified projects may receive up to \$450,000.

The EQIP program could be used to assist with reorganizing an existing inefficient irrigation system or to convert from seep to drip irrigation or to install a tailwater recovery system. The program can also be used to assist with the control of invasive exotic weeds such as cogon grass or tropical soda apple. The EQIP program has certain eligibility rules and restrictions.

Applications are accepted throughout the year, however, only those applications received by December 15, 2004 will be considered for 2005 funding. For more information contact your local NRCS office or visit the USDA Farm Bill web site at: <http://www.nrcs.usda.gov/programs/farbill/2002/products.html>

## **Two remaining Vegetable and Agronomic Row Crop BMP Rule Development Workshops**

The last of a series Vegetable and Agronomic Row Crop BMP rule development workshops will be held in Manatee and Hillsborough Counties in December.

The BMP Manual For Vegetables and Agronomic Crops has been in the process of being developed for over a year and workshops have been announced to solicit grower comment and suggestions. The proposed BMP manual currently runs 167 pages and covers all aspects of crop production. It can be seen at the Florida Ag Water Policy website <http://www.floridaagwaterpolicy.com/PDFs/BMPs/vegetable&agronomicCrops.pdf>.

**Growers and agricultural interests would be well advised to familiarize themselves the proposed BMP's and to attend these meetings to make constructive comments as the adoption of Vegetables and Agronomic Crop BMP's as rule has the potential to fundamentally affect the vegetable industry does**

**business.** By definition BMPs must be: technically feasible, economically viable, socially acceptable, and based on sound science. Scientists are good at the sound science part but sometimes need your help especially on the technically feasible and economically viable aspects.

**December 7, 2004 2:00 p.m. to 4:30 p.m.**

**Hillsborough County Extension Service**

5339 County Rd 579 South

Seffner, FL 35584-3334

813-744-5519

**December 8, 2004 9:30 a.m. to noon**

**Manatee County Extension Service**

1303 17<sup>th</sup> St West

Palmetto, FL 34221-2998

941-722-4524

## **The Society of St. Andrew - Gleaning America's Fields ~ Feeding America's Hungry**

In the aftermath of the recent hurricanes, the work of the Society of St. Andrew in Florida has increased. More Floridians are unemployed and depending on food banks and assistance programs than ever before and they can use your help.

Every fruit and vegetable grower has produce that's culled out, whether for market conditions, blemishes or size. The Society of St. Andrew would like to recover that produce before it's disposed of or plowed under. They can recover small amounts through our gleaning project or large amounts through connections with feeding agencies or sending tractor-trailers to transport it.

The Society of St. Andrew does not ask for the donation of products that are commercially marketable. They seek only the excess, which is not economically or cosmetically marketable, yet is still consumable if recovered quickly.

If you would like to help the Society of St. Andrew combat hunger in Florida, or need more information or have questions, please call Dick Mead, Society of St. Andrew - Florida Regional Director, or Kathy Forth, Society of St. Andrew - Florida Program Coordinator, toll free at 1-800-806-0756, or by e-mail at: [sosaf1@endhunger.org](mailto:sosafl@endhunger.org). The Society of St. Andrew's web site is: [www.endhunger.org](http://www.endhunger.org).

## **Up Coming Meetings**

Manatee County

**December 8, 2004**

**Row Crop Draft BMP Manual Workshop**

9:30 AM

Manatee County Extension Office

1303 17<sup>th</sup> Street W

Palmetto, Florida.

Row Crop Draft BMP manual can be accessed at [www.floridaagwaterpolicy.com](http://www.floridaagwaterpolicy.com)

**December 14, 2004**                      **CORE/Private Applicator Ag License Training and Test**                      9 AM  
2 CORE CEUs offered.

Manatee County Extension Office  
1303 17<sup>th</sup> Street W  
Palmetto, Florida

Contact Phyllis Gilreath at 941-7724524 ext 237

### Miami Dade County

**December 8, 2004**                      **Private Applicator Ag Pesticide License Training and Test**                      8:30 AM

John D. Campbell Ag Center  
18710 SW 288<sup>th</sup> Street  
Homestead, Florida

Pre-registration required, contact Lize at 305-248-3311 ext 242 to register.

**December 10, 2004**                      **Spanish Private Applicator Ag Pesticide License Training**                      8:30 AM

John D. Campbell Ag Center  
18710 SW 288<sup>th</sup> Street  
Homestead,

Pre-registration required, contact Lize at 305-248-3311 ext 242 to register.

### Palm Beach County

**December 6, 2004**                      **General Standards/Core Test Review**                      8 AM - 10 AM                      2 CEUs

Clayton Hutchinson Agricultural Center  
559 North Military Trail  
West Palm Beach, Florida

Contact Laura Powell at 561-996-1655.

### Southwest Florida

**November 23, 2004**                      **Vegetable Growers Meeting**                      6:00 PM

Dr Sanjay Shukla - Effects of irrigation management on crop yield, water use and quality in SW Florida

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

Contact Gene McAvoy at 863-674-4092

**December 1, 2004**

**El Nino and You: 1:00 PM  
Climate Forecast and Decision Making in Agriculture**

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

Contact Gene McAvoy at 863-674-4092

**December 7, 2004**

**Fall Vegetable Field Day 10:00 AM**

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

Contact Gene McAvoy at 863-674-4092

## **Job Opportunity**

TIMAC USA has job opportunities for full time field representatives in Florida. Great benefits, retirement, advancement, and work opportunity. Please contact Kevin Murphy at [k\\_murphy@timacusa.com](mailto:k_murphy@timacusa.com) or cell 863-443-1852.

## **Websites**

**The USDA Agricultural Marketing Service** provides current, unbiased price and sales information to assist in the orderly marketing and distribution of farm commodities including vegetables. For vegetable prices at terminal market in major cities across the country go to <http://www.ams.usda.gov/fv/mnncs/TERMVEG.HTM>.

**FSA Disaster Programs** - FSA also has the following programs to assist producers in the hurricane-ravaged areas of Florida: Check them out at

- **Noninsured Crop Disaster Assistance Program;** <http://disaster.fsa.usda.gov/nap.htm>
- **Disaster Debt Set-Aside Program:** <http://www.fsa.usda.gov/pas/publications/facts/html/debtset02.htm>
- **Emergency Loans:** <http://disaster.fsa.usda.gov/emloan.htm>
- **Emergency Conservation Program:** <http://disaster.fsa.usda.gov/ecp.htm>

## **Quotable Quotes**

Don't dwell on what went wrong. Instead, focus on what to do next. Spend your energies on moving forward toward finding the answer. - Denis Waitley

Sometimes I lie awake at night, and I ask, "Where have I gone wrong?" Then a voice says to me, "This is going to take more than one night." -- Charlie Brown

Become a possibilitarian. No matter how dark things seem to be or actually are, raise your sights and see possibilities - always see them, for they're always there. - Dr. Norman Vincent Peale

One of life's most painful moments comes when we must admit that we didn't do our homework, that we are not prepared."- Merlin Olsen

What would men be without women? Scarce, sir, mighty scarce. - Mark Twain

## **On the Lighter Side**

A woman was leaving a convenience store with her morning coffee when she noticed a most unusual funeral procession approaching the nearby cemetery.

A long black hearse was followed by a second long black hearse about 50 feet behind the first one. Behind the second hearse was a solitary woman walking a pit bull on a leash. Behind her, a short distance back, were about 200 women walking single file.

The woman was so curious that she respectfully approached the woman walking the dog and said, "I am so sorry for your loss, and I know now is a bad time to disturb you, but I have never seen a funeral like this. Whose funeral is it?"

"My husband's." "What happened to him?" The woman replied, "My dog attacked and killed him."

She inquired further, "Well, who is in the second hearse?" The woman answered, "My mother-in-law. She was trying to help my husband when the dog turned on her."

A poignant and thoughtful moment of silence passed between the two women.

"Can I borrow the dog?"

"Get in line."

## **Hymn #365**

A southern Baptist minister was completing a temperance sermon ...with great emphasis he said, "If I had all the beer in the world, I'd take it and pour it into the river."

With even greater emphasis he said, "And If I had all the wine in the world I'd take it and pour it into the river."

And finally-shaking his fist in the air, he said, "And If I had all the whiskey in the world, I'd take it and pour it into the river."

Sermon complete-he sat down.

The song leader stood very cautiously and announced with a smile (nearly laughing) "for our closing song-let us sing hymn #365 ..."Shall We Gather At The River."

## **A Thanksgiving Prayer**

"O God, when I have food, help me to remember the hungry;  
When I have work, help me to remember the jobless;  
When I have a home, help me to remember those who have no home at all;  
When I am without pain, help me to remember those who suffer,  
And remembering, help me to destroy my complacency; bestir my compassion, and be concerned enough to help; by word and deed, those who cry out for what we take for granted.  
Amen."

Samuel F. Pugh

# Wishing all the best to all of you all for a happy and healthy Thanksgiving Holiday

**Contributors** include: Joel Allingham/AgriCare, Inc, Karen Armbruster/SWFREC, Kathy Carbiener /Agricultural Pest Management, Jim Connor/SWFREC, Bruce Corbitt/West Coast Tomato Growers, Dr. Phyllis Gilreath/Manatee County Extension, Fred Heald/Farmers Supply, Sarah Hornsby/AgCropCon, Cecil Howell/H&R Farm, Loren Horsman/Glades Crop Care, Bruce Johnson/General Crop Management, Dr. Mary Lamberts/Miami-Dade County Extension, 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, Teresa Olczyk/ Miami-Dade County Extension, Darrin Parmenter/Palm Beach County Extension, Dr. Ken Pernezny/EREC, 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/Stephen's Produce, Ed Skvarch/St Lucie County Extension, John Stanford/LNA Farm, Mike Stanford/MED Farms, Dr. Phil Stansly/SWFREC, Eugene Tolar/Red Star Farms, Dr. Charles Vavrina/SWFREC, Mark Verbeck and Donna Verbeck/GulfCoast Ag, and Alicia Whidden/Hillsborough County Extension.

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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