Cooler, drier weather accompanied by bright sunny skies moved into SW Florida on the heels of Hurricane Irene. The cool front, which helped steer the storm away from SW Florida, signaled the onset of a more seasonable fall weather pattern that has been a great help in alleviating the damage caused by Irene. At the FAWN weather station in Immokalee, daytime temperatures have mainly fluctuated between the upper 70’s to low 80’s, while nighttime readings have varied between the lower to mid 50’s to the mid to upper 60’s. The second major cool front of the season moved through the region on November 2 and 3 dropping overnight temperatures into the high 40’s. The five day forecast calls for continued cool dry weather with highs in the upper 70’s to low 80’s, with over night lows in the upper 50’s to low 60’s.

While most areas saw only limited precipitation over the two weeks, a freak storm proceeding the cool front on November 2 dropped up to 7 inches of rain in east Naples. This amount of rain fell in a rather short time reportedly putting several fields under water for brief period of time before the water could be pumped off. Other areas in coastal SW Florida reported from 3 to 4 inches of rain, while most of the interior sections received around an inch of precipitation. The FAWN weather station in Immokalee reported only 1.23 inches for this event.

Harvest of early pepper, tomato and other crops has begun. Pack out is reportedly below normal, as a result of a high proportion of scarred and storm damaged fruit. Overall, crops are looking fair to good and the cooler drier weather seems to have contributed to a general reduction in insect and disease pressure.

Bacterial leaf spot in tomato and pepper really took off following Hurricane Irene and has been the major challenge facing most growers. The incidence of this disease has been generally widespread with moderate to high levels of damage being reported by a number of respondents. In a number of instances, bacteria leaf spot has moved high into the canopy and is reportedly affecting fruit in some cases. On the positive side, the overall consensus is that favorable weather has helped slow the spread of the disease and allow growers to gain control. Many reports are indicating that old lesions are drying up and new growth is relatively clean.

Wet field conditions have contributed to a number of reports of disease problems generally associated with wet soils. There have been a number of scattered reports of pythium root and crown rot, causing wilting in cucumber, peppers, and tomatoes in wetter fields and wetter sections of fields. A few scattered reports of fusarium crown rot in tomato and cucumber have also been received. Low levels of Phytophthora in pepper...
has been reported in a few isolated cases, but in general, phytophthora has been much less of a problem than might have been expected given the extremely wet conditions over the past weeks. A single report of bacterial wilt on squash has also been received.

Several respondents are reporting scattered low incidence of target spot in older plantings of tomato. Target spot requires long periods (16 – 44 hours) of high moisture for optimum development. These conditions typically occur in mature plantings, which have developed dense canopy of foliage. Integrated Pest Management for this disease includes chemical and cultural recommendations. Control is assisted by prompt destruction of crop residues after final harvest.

Early blight has been identified from widely scattered sites across the area. Incidence is low and damage has been minimal.

Incidence of tomato yellow leaf curl remains low. Most respondents are seeing only isolated occurrences of single infected plants here and there, which should be destroyed upon identification.

Isolated reports of downy mildew on yellow squash and cantaloupe have been received from two widely separate sites. Incidence is low at both sites. Reports from Ruskin indicate considerably more downy mildew present in older plantings of cantaloupes.

Scattered reports of low levels of gummy stem blight on cucumbers have been received. Older plantings of watermelon that had previously been reported to have high levels of gummy stem blight and problems with phytophthora fruit rot have been harvested and destroyed.

Bean and potato growers are reporting few problems with insects and disease at this time. Although there have been a few scattered reports of problems with seed and seed pieces rotting in wet spots.

Worm pressure has declined greatly over the past few weeks. A number of respondents are reporting low worm populations. Sightings include beet armyworms, southern armyworms, tomato fruitworms, and loopers. Several respondents have indicated a slight increase in beet and southern armyworm egg masses over the past few days. A few melonworms have been noted in cantaloupe in one location. At this site, counts are reportedly declining.

Scattered populations of broad mites continue to be present in pepper. Most growers report satisfactory control but indicate scattered minor pockets of infestation continue to develop.

All reports indicate that leafminer populations are slowly increasing. With few exceptions, most reports indicate that numbers remain below actionable thresholds.

Whiteflies remain at generally low levels across the region. A few respondents have noted a slow but steady increase in populations in older plantings where Admire is losing its effectiveness, but report that applications of IGR’s and poisons are holding numbers in check.

A few winged aphids have been spotted in pepper and squash at widely scattered sites. No problems are being reported to date.

A condition, currently being called “little leaf” (?) is being observed on tomato on widely scattered sites around Immokalee. The condition may be similar to tomato “little leaf” previously reported by Steve Olson in the Quincy area of North Florida. “Little leaf” is a non-parasitic disease caused by soil microorganisms that produce amino acid analogs in the soil under wet conditions. These analogs are taken up by plants, causing morphological changes and the expression of symptoms. Early 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. In addition, leaflets are twisted and distorted. Overall the appearance is reminiscent of viral or phenoxy herbicide symptoms. Prevention of water logged conditions may prevent or alleviate the condition.

Reports have increased substantially over the past few weeks and are showing up in a number of widely scattered locations. Dr Roberts at SWFREC has taken samples from affected plants to determine if there is a viral or other pathogen involved. We will keep you posted on developments.

DOES THE WORKER PROTECTION STANDARD APPLY TO YOU?

Do not forget that workers and pesticide handlers must be trained under WPS every five years. It has been about five years since WPS was passed. It has been announced that you can expect greater enforcement of WPS. Failure to comply with WPS could mean substantial liability (law suits) for your operation.

You must comply with the Worker Protection Standard if:

1. You own or manage a farm, forest, nursery, or greenhouse where pesticides are used in the production of agricultural plants. Even if you are the owner of the farm, forest, nursery, or greenhouse and you or members of your family do all the work there; you are a "WPS employer." You must comply with SOME of the WPS requirements, such as restricted-entry intervals and personal protective equipment, and ALL the specific requirements listed in the pesticide labeling.

2. You hire or contract for the services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This includes labor contractors and others who contract with growers to supply agricultural laborers.

3. You operate a business in which you (or people you employ) apply pesticides that are used for the production of agricultural plants on any farm, forest, nursery, or greenhouse. Commercial pesticide handlers and their employees are included with respect to such pesticides even if the pesticide handling task (mixing, loading, disposal, etc.) takes place somewhere other than the farm, forest, nursery, or greenhouse -- at the commercial handling establishment or an airport hangar, for example.

4. You operate a business in which you (or people you employ) perform tasks as a crop advisor on any farm, forest, nursery, or greenhouse. "Crop advisor" means any person who is assessing pest numbers or damage, pesticide distribution, or the status, condition, or requirements of agricultural plants. Examples include crop consultants and scouts. WPS provisions for crop advisors are different than those for agricultural workers and pesticide handlers.

Who Must Be Trained?

Each worker and handler must be trained. This requirement is met if the worker or handler:

1. has been trained within the last 5 years as a WPS handler or WPS worker, even if he or she has changed employers, OR

2. is currently a certified applicator of restricted-use pesticides, OR

3. is currently trained (as specified in EPA's certification and training regulations) as a handler who works under the supervision of a certified pesticide applicator.
For more information on this subject, feel free to contact the Hendry County Extension Office. If you have Internet access you may want to check out the web site listed below. Note also the upcoming WPS meeting below.

Up-Coming Meetings

Nov 20, 1999  Complying with the Worker Protection Standard - 10 AM - Noon  
Dale Dubberly: Bureau of Compliance  
SW Florida Research and Education Center  
Hwy 29 N, Immokalee, Florida  
Contact: Sheila Griffith @ 941-674-4092

Dec 9, 1999* Vegetable Field Day and Growers Meeting – 10 AM - 3 PM  
SW Florida Research and Education Center  
Hwy 29 N, Immokalee, Florida  
Contact: Sheila Griffith @ 941-674-4092  
*Note – This meeting was erroneously reported as being scheduled for Dec 10, in the Sept – Oct SW Florida Vegetable Newsletter.

Dec 15, 1999  FARM-A-SYST – 1 PM – 3PM  
SW Florida Research and Education Center  
Hwy 29 N, Immokalee, Florida  
Contact: Patrick Ludgate @ 941-338-3232

Web sites  
Florida Corn Insect Identification Guide  
http://www.ifas.ufl.edu/fciigweb  
UF/IFAS Cooperative Extension Service web site designed to help identify and give information on Florida corn insects. Great images and lots of good information.

The Worker Protection Standard for Agricultural Pesticides: How to Comply  
http://www.cdc.gov/niosh/nasd/docs/epawps.html  
Part of the National Ag Safety Database – this site contains everything you need to know about the federal Worker Protection Standard.

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

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