October 6, 1999

**Conditions** in SW Florida have turned decidedly **soggy** over the past few weeks. **Tropical Storm Harvey** started things off by dumping between **5 and 14 inches** of rain across the area. Rainfall totals were highest around Naples, while lesser amounts were seen as one moved north and east across southwest Florida.

The **FAWN** weather station in Immokalee recorded 5.34 inches of rain from Harvey, with a total precipitation of 10.44 inches over the period from September 16 through October 5. Some sites in the region are reporting nearly twice this amount of rainfall for the period. The **FAWN** weather station recorded rain on 16 of the last 20 days in Immokalee. Day-time temperatures have been ranging between the high 80’s to low 90’s, with night-time lows in the mid to lower 70’s.

A number of respondents are reported **delays in planting schedules** of between 7 – 10 days and even more due to the excessive rainfall interfering with land preparation and plastic laying operations. Many growers are experiencing some amount of stand reduction due to damping off and/or physical damage caused by excessive soil moisture. This has been most severe on direct seeded crops. Several sites have reported an increase in **crop damage due to wildlife**, including deer and wild hogs, feeding in plantings. Flooded conditions in normal refuge areas have driven wildlife to higher, well-drained sites in search of food.

**Some heat-related problems** also continue to be reported. This has been especially true where plants experienced several days of intense sunlight and high temperatures following a couple of overcast days. Despite adverse weather conditions, most reports indicate less disease pressure than might otherwise be expected.

**Worms** of all sorts continue to be the **major** category of **insect pests** troubling growers across southwest Florida. **Beet armyworms** have been the **most common** lepidopterous pest by most reports. Growers and scouts are also reporting **southern armyworms**, **tomato fruitworm**, **cabbage loopers**, **hornworms**, and **melon worms** in a wide range of crops. Numbers are ranging from moderate to low depending on the site and the crop. In general, armyworms are most numerous worm-pest at present.

A number of growers are reporting that frequent light showers seem to be reducing the efficacy of BT applications. As noted in the September 16th issue of the **SW Florida Pest and Disease Hotline**, the new Rohm and Haas product **CONFIRM 2F** is **now labeled** for use in Florida on **fruiting vegetables** as well as **cole crops and leafy vegetables**. **CONFIRM** is a highly selective, reduced risk pesticide with specific action against a
broad spectrum of lepidopterous pests. Initial reports from growers in the field who have tried CONFIRM indicate good worm control and general satisfaction with the product.

**Broad mites** are showing up widely on pepper in a number of locations across the area. Infestations are sporadic but seem to be earlier than usual. Pepper and eggplant producers are advised to be on the lookout for this pest.

**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.

Phil Stansly indicates that **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.

**Low whitefly** numbers continue to be reported across the area at this time. Despite this growers are advised to continue to use Admire both in the greenhouse and in the transplant water, and follow up with alternative chemistries later in the season.

A few **winged aphids** are starting to show up on sticky traps but no problems are being reported to date.

One report of **cucumber beetles** causing problems on eggplant has come in from the Devil’s Garden area.

The first report of a **tomato yellow leaf curl** in southwest has been received from a reliable source. Research by Jane Polston indicates that early infection can reduce tomato yields by up to 90% whereas late infections reduced yields 40% or less. Proximity to a source of TYLCV was critical in determining incidence of the virus in the field. Growers are advised to make sure that transplants are obtained from areas away from sources of TYLCV infection. Roguing infected plants upon identification is also helpful in eliminating sources of inoculum.

As expected given the weather conditions over the past few weeks, **bacterial leaf spot** on tomatoes and peppers is on the increase. Many locations that previously indicated they were bacteria free a few weeks ago are now reporting outbreaks of bacterial leaf spot to varying degrees. For the most part, incidence is low to medium, although there have been a few reports of patchy defoliation of peppers in severely affected fields.

In addition to bacterial leaf spot, there has been one isolated report of **bacterial speck** on tomato.

**Gummy stem blight** is widely present in fall watermelon. Incidence is low to medium at most locations. In one location where the field was quite advanced, incidence has been rated at medium to high.

There have been a quite a few reports of **pythium** causing problems with damping-off on young pepper.

A few isolated reports of **early blight** have been noted on tomato.
Several reports of *phytophthora* have been received from a number of widely scattered sites. Affected crops include pepper, squash and variety of minor crops. Incidence has been low for the most part, although one grower is reporting substantial losses on some direct seeded herbs.

Tim Krueger of Novartis Crop Protection reports that **PROCLAIM** has received EPA approval and is **now labeled** for use in *Florida* on all brassicas, lettuce and celery. **PROCLAIM** is a semi-synthetic avermectin insecticide that is said to be effective against a broad range of lepidopteran larvae and certain other insects. Proclaim is a restricted use pesticide with a 48-hour REI and a 7-day PHI. Rates are 2.4 – 4.8 oz./acre, with a total maximum application of 28.8 oz./acre per crop per season.

**Up-Coming Meetings**

**October 14, 1999**  
*Vegetable Disease Control with Kocide 2000 and Mancocide* – 11AM – 1 PM  
Southwest Florida Research and Education Center  
SR 29, Immokalee, FL  
1 CEU – Lunch courtesy of Larry McCauley, Griffin LLC

**October 20 1999**  
*Best Management Practices for Agrichemical Handling and Farm Equipment Maintenance* – **Note two times**: 11:00 AM - 1:00 PM and 5:00 PM - 7:00 PM  
Southwest Florida Research and Education Center  
SR 29, Immokalee, FL  
1 CEU – Lunch courtesy of Burt McKee, United Agri-Products

Contact Sheila Griffith at the Hendry County Extension Office to RSVP.  
Phone 941-674-4092

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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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