



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 17, Issue 15

June 26, 2009

Vegetable Crops

Vegetable Crop Insects - *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

Cucumbers

Continue to scout all fields for cucumber beetles and aphids.

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. With the predicted recent hot weather, be sure to watch for an increase in spider mite activity. The threshold for mites is 20-30% infested crowns with 1-2 mites per leaf. Acramite, Agri-Mek, bifenthrin, Danitol, and Oberon are labeled on melons for mite control. Zeal is also labeled (ground application only). Be sure to check all labels for rates, precautions and restrictions, especially as they apply to pollinators.

Peppers

As soon as the first flowers can be found, be sure to consider a corn borer treatment. Depending on local corn borer trap catches, sprays should be applied on a 7 to 10-day schedule once pepper fruit is ¼ - ½ inch in diameter. Be sure to check local moth catches in your area by calling the Crop Pest Hotline (instate: 800-345-7544; out of state: 302-831-8851) or visiting our website at

<http://ag.udel.edu/extension/IPM/traps/latestblt.html>. You will also need to consider a treatment for pepper maggot. Be sure to watch for beet armyworm since the first moths have

been detected in pheromone traps and this insect can quickly cause defoliation.

Potatoes

Continue to scout fields for Colorado potato beetle (CPB), corn borers (ECB) and leafhoppers. We are starting to see an increase in leafhopper populations and low levels of aphids have also been found. Controls will be needed for green peach aphids if you find 2 aphids per leaf during bloom and 4 aphids per leaf post bloom. This threshold increases to 10 per leaf at 2 weeks from vine death/kill. If melon aphids are found, the threshold should be reduced by ½.

Snap Beans

Continue to sample all seedling stage fields for leafhopper and thrips activity. As a general guideline, once corn borer catches reach 2 per night, fresh market and processing snap beans in the bud to pin stages should be sprayed for corn borer. Sprays will be needed at the bud and pin stages on processing beans. Acephate can be used at the bud and pin stages on processing beans but remember it has a 14 day wait until harvest. Additional sprays may be needed after the pin spray on processing beans. Since trap catches can change quickly, be sure to check our website for the most recent trap catches and information on how to use this information to make a treatment decision in processing snap beans after bloom

<http://ag.udel.edu/extension/IPM/traps/latestblt.html> and

<http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html>). Once pins are present on fresh market snap beans and corn borer trap

catches are above 2 per night, a 7 to 10-day schedule should be maintained for corn borer control.

Sweet Corn

Continue to sample seedling stage fields for cutworms and flea beetles. You should also sample all fields from the whorl through pre-tassel stage for corn borers and corn earworms. Both species can be found feeding in whorls and tassels of sweet corn. A treatment should be applied if 15% of the plants are infested with larvae. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check both blacklight and pheromone trap catches since the spray schedules can quickly change. Trap catches are generally updated on Tuesday and Friday mornings (<http://ag.udel.edu/extension/IPM/traps/latest/blt.html> and <http://ag.udel.edu/extension/IPM/thresh/silksp raythresh.html>). You can also call the Crop Pest Hotline (in state: 1-800-345-7544; out of state: 302-831-8851). Be sure to watch for the first fall armyworm larvae in whorl stage sweet corn. A treatment should be considered when 12-15% of the plants are infested. Since fall armyworm feeds deep in the whorls, sprays should be directed into the whorls and multiple applications are often needed to achieve control.

Wet Weather Woes - Gordon Johnson, Extension Ag Agent, Kent Co.; gcjohn@udel.edu

Vegetable and fruit growers would rather have a dry year than a wet one. Keeping irrigation going might be a problem in the dry year, but vegetable and fruit crops have better quality and disease control is much less challenging. The following are some observations from this season.

- Disease pressure is very high with wet weather diseases being a major problem. Pythium rots in seeded and transplanted crops, Aphanomyces root rot in peas, late blight in potatoes and tomatoes, downy mildew of cucurbits, downy mildew of grapes, Phytophthora blight in cucurbits, gummy stem blight in melons, blossom blights and Botrytis on fruits, and numerous

other diseases favored by wet weather are active in the region this year.

- Scheduling processing crops has been a challenge in 2009 and plantings have had to be juggled and moved around to account for fields too wet to plant.
- Peas have been hurt badly by the wet weather. Root rot is a major problem along with drowned out areas, extra weed pressure, and rutted up fields at harvest.
- Early plantings of snap beans and sweet corn have variable and reduced stands due to seedling blights, crusting over with heavy rains, and standing water in fields.
- Hail and severe winds have affected several vegetable fields with significant damage.
- Quality of vegetable transplants this year has often be substandard due to having to hold plants too long in greenhouses, overcast and cloudy weather causing stretch, and diseases such as gummy stem blight attacking plants in humid greenhouses.
- Not only are plants in the field being subjected to extra disease pressure, but wet soils will have low levels of oxygen, causing deleterious physiological changes to vegetable and fruit plants. The following are excerpts from an article we posted in the WCU during the last wet season we had in 2003:

“When soils are water-saturated, plants roots can be in an oxygen-deficient condition and thus respiration and metabolic activities can be markedly impacted due to low oxygen and high levels of carbon dioxide and other chemicals. Therefore, most of the functions normally performed by the root system are in potential jeopardy of performing poorly or in altered manners. The temperature at the time of the saturation and the duration of the events greatly impact the severity and symptom pattern.

“Saturated soils result in loss or reduction in normal root functions. Nutrient and water adsorption and their translocation are often impacted; consequently, wilting, yellowing, stunting, and nutrient deficiencies are the

most common symptoms associated with flooded soils with most vegetables.

“During periods of high evaporation or high temperatures, the aboveground symptoms of saturated soils usually involve wilting and severe stunting, but the cool temperatures have limited such development this year. As temperatures start to increase, expect to see much more of the sudden wilting and yellowing of plants.

“Hormonal imbalances often occur when roots are in saturated soils, especially at cool temperatures, as production declines in the root-made hormones while stress/aging hormone production increases in other parts of the plant. These shifts create serious imbalances in the levels, ratios, and timing of hormones which results in abnormal plant development. Some plants are showing strong leaf epinasty (bending and twisting of the leaf petioles) resulting from increased ethylene production, while adventitious roots proliferate from the stem due to auxin imbalance. Timing of flower production and development can also be greatly impacted, which can significantly impact timing of fruit for critical market windows.”

(Taken from “Wet Soils Impacting Vegetable Crops” Written by William Nesmith, University of Kentucky and edited for Delaware)

- Extra watermelon acreage was planted this year (more watermelons are often planted the year after a good season such as 2008). Unfortunately, some of this acreage has gone into marginal ground that has remained overly wet. This sets up problems with water damage and increased disease risk.
- We are seeing heavy gummy stem blight pressure this year. In particular, one of the pollenizer varieties is being heavy hit. Plants have come out of greenhouses with gummy stem blight setting up the problem. Once in the field, the disease has spread to other plants with the wet weather.

- Crown sets in early plantings of melons are reduced due to poor weather (rain and cold) during pollination, affecting bee flights.

- Many vegetable crops are behind and harvest will start later than normal. Watermelons and cantaloupes are 10-20 days behind. Tomatoes and peppers are also behind by 10 days or more. Sweet corn will see smaller delays in harvest.

Phytophthora Fruit Rot on Cucurbits - *Bob Mulrooney, Extension Plant Pathologist;* bobmul@udel.edu

As harvest approaches for some cucurbit crops and other plantings are beginning to flower this is the time to be planning controls if the crop is at risk from Phytophthora fruit blight. Although Gavel and Revus are not effective on cucumber downy mildew they do suppress Phytophthora fruit rot. To help suppress development, apply mefenoxam or metalaxyl at planting. The following materials will help provide suppression of the fruit rot phase only:

- Forum (dimethomorph, 40) at 6.0 fl oz 4.18SC/A — must be tank mixed with another fungicide active against Phytophthora blight on muskmelon, such as fixed copper
- Gavel (zoxamide + mancozeb, 22 + 3) at 1.5 to 2.0 lb 75DF/A (Note: some muskmelon cultivars are sensitive to Gavel)
- Tanos (famoxodone + cymoxanil, 11 + 27) at 8.0-10.0 oz 50DF/A
- Ranman (cyazofamid, 21) at 2.75 fl oz 400 SC/A *plus* an adjuvant, see label for details
- Presidio (fluopicolide, 43) 4.0 fl oz/A — *plant back or rotation restrictions of 180 days for all crops other than cucurbits and fruiting vegetables.* See label for details.
- Revus (was inadvertently omitted last week) (mandipropamid, 40) 8.0 fl oz/A — must be mixed with a fixed-copper fungicide.



Phytophthora fruit rot on pickling cucumber



Phytophthora fruit rot of watermelon

Cucurbit Downy Mildew Update - *Bob Mulrooney, Extension Plant Pathologist;*
bobmul@udel.edu

Downy mildew was diagnosed on cucumbers in both Suffolk County and Northampton County on Delmarva this week. The Suffolk County find was in a small sentinel plot, and the Northampton find was a commercial cucumber field. The commercial field had been sprayed but the infected plants were up against a woods line and the aerial coverage might not have been sufficient to control the disease. If growers have the capability to make ground applications for downy mildew control it would be a good idea to get good coverage of any areas that might not have been covered by aerial applications. Again the recommended fungicides for downy mildew control on cucumbers are Previcur Flex,

Ranman, Presidio and Tanos. All need a protectant tank mix partner. Ranman needs a surfactant such as Silwet. Be sure to read the labels for the details and rates. I do not recommend any Ridomil product because the fungus is resistant to that chemistry and Gavel and the phosphoric acid fungicides such as Prophyt and Phostrol are not effective on downy mildew on cucumbers. Fortunately the forecast for Thursday is low risk, be sure to check the forecast at the CDM ipmPIPE website <http://cdm.ipmpipe.org> for Friday and the weekend. It look like we will get a break in the weather for a short time but it will be important to keep a protectant fungicide on the crop at least.

New Resource for Cucurbit Growers

A laminated 8½ x 11 sheet of the FRAC Guidelines for Downy and Powdery Mildew on cucurbits is now available. These two diseases require frequent fungicide applications and both fungi have developed resistance to fungicides in the past. This quick reference should be helpful for those making fungicide choices in cucurbits, such as cucumbers, cantaloupes, watermelons, squash and pumpkins. These laminated sheets are available in the county offices or we can send you one. To print out your own copy check it out here

<http://www.rec.udel.edu/Update09/CucurbitDMPMfrac.pdf>.

Pepper Disease Control - *Bob Mulrooney, Extension Plant Pathologist;*
bobmul@udel.edu

Delaware does not have the acres of peppers we once had but it is still an important crop. The following are several disease control suggestions from Andy Wyenandt from Rutgers University that are timely.

Bacterial leaf spot

Bacterial leaf spot has been found. Symptoms of bacterial spot on pepper leaves include small, brown water-soaked lesions that turn brown and necrotic in the centers. Spots may coalesce and form large blighted areas on leaves and premature defoliation can occur. On fruit, brown lesions can form which have a roughened, cracked, wart-like appearance. High

temperatures, high relative humidity and rainfall favor bacterial spot development. Losses from bacterial spot can be reduced somewhat by maintaining high levels of fertility, which will stimulate new growth. Applying a fixed copper (M1) at labeled rates *plus* maneb (M3) at 1.5 lbs 75DF/A or 8.0 to 10.0 oz Tanos (famoxodone + cymoxanil, 11 + 27) may help suppress spread. For more information on control of bacterial leaf spot of pepper please see the [Delaware Commercial Vegetable Production Recommendations](#).

Phytophthora Blight on Pepper

For control of the crown rot phase of blight, broadcast prior to planting or in a 12 to 16-inch band over the row before or after transplanting: 1.0 pt Ridomil Gold 4E/A, or 1.0 qt Ultra Flourish 2E/A (mefenoxam, 4), or MetaStar (metalaxyl, 4) at 4.0 to 8.0 pt 2E/A.

Make two additional post planting directed applications with 1 pint Ridomil Gold 4E or 1 qt Ultra Flourish 2E per acre to 6 to 10 inches of soil on either side of the plants at 30-day intervals. Use the formula "Calibration for Changing from Broadcast to Band Application" on page E6 in the [Pest Management Section](#) of the [Delaware Commercial Vegetable Production Recommendations](#) to determine amount of Ridomil Gold needed per acre when band applications are made. When using polyethylene mulch, apply Ridomil Gold 4E at the above rates and timing by injection through the trickle irrigation system. Dilute Ridomil Gold 4E prior to injecting to prevent damage to injector pump.

Anthracoze on Pepper

Symptoms of fruit infection include sunken, circular spots which develop blackish-tan to orange concentric rings as lesions develop. Lesions on stems and leaves appear as grayish brown spots with dark margins and can easily be overlooked. Control of anthracnose begins with scouting on a regular basis and applying preventative fungicide applications before symptoms appear, especially in fields or areas of your farm where you have had anthracnose problems in the past. Beginning at flowering and as small fruit begin to set, alternate maneb (M3) at 1.5 to 3 lb/A 75DF with one of the

following FRAC code 11 fungicides: azoxystrobin (Quadris at 6.0 to 15.5 fl oz 2.08F/A), or Flint (trifloxystrobin) 50WDG at 3.0 to 4.0 oz/A, or Cabrio (pyraclostrobin) 20EG at 8.0 to 12.0 oz/A, or Tanos (famoxodone + cymoxanil, 11 + 27) at 8 to 10 50WDG/A.

After harvesting, pepper fields should be disked and plowed under thoroughly to bury crop debris.



Anthracoze on pepper fruit.

Gummy Stem Blight on Watermelon - *Kate Everts, Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu*

Gummy stem blight on watermelon is widespread on Delmarva now in fields that have been repeatedly cropped to watermelons and where the disease has been introduced on plant material. Those of you who have followed MELCAST (the gummy stem blight disease forecaster for watermelon) know that there have been many days where weather was excellent for disease spread. If you want to sign up to receive MELCAST forecasts please call Mrs. Jeri Cook and request to get on the list (410) 742-8788. MELCAST is delivered by email, fax or online <http://mdvegdisease.umd.edu/forecasting/index.cfm>. The following are guidelines that can be

used to manage gummy stem blight in watermelons.

Application Timing

Apply the first fungicide spray when the vines meet in the row (when the longest runner is about 1 ½ ft long). If disease was observed on transplants prior to planting, you may need to apply the first fungicide earlier. Subsequent applications should be scheduled according to MELCAST or on a weekly basis. Using MELCAST should reduce sprays but also insure that the fungicide gets applied when it is necessary.

Application Guidelines

The fungus that causes gummy stem blight needs moisture to infect. Therefore, apply fungicides before a rain. If the fungicide application has a reasonable chance of drying it should be applied before rainfall so there is a protective barrier on the plant when the pathogen germinates. Modern fungicides are formulated to stick to leaves during rain, so reapplication immediately after a rain is not usually necessary.

Apply an Effective Fungicide

Don't waste money and time on fungicides applied to treat diseases for which they are not effective. Know if a fungicide is effective before you apply it. The cause of gummy stem blight, *Didymella bryoniae*, has developed resistance to the strobilurin fungicides (eg. Quadris) and to benzimidazoles (eg. Topsin M). Resistance to Pristine has been reported in Georgia. Because of the prevalence of southern grown transplants on the Delmarva, growers should watch for possible resistance to Pristine here.

Recommended Fungicides

Under low to moderate disease pressure apply chlorothalonil (Bravo at 2-3 pt 6F/A) every 7 days. Under high disease pressure, apply chlorothalonil alternated with Pristine plus chlorothalonil. Other fungicide programs that performed well on gummy stem blight in 2008 are Folicur applied weeks 1, 2, 4, 5, and 7, alternated with chlorothalonil applied weeks 3 and 6; and Switch applied weeks 1, 2, 4, 5, and 7, alternated with chlorothalonil applied weeks 3 and 6.

Potato Disease Advisory #13 - June 25, 2009 - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

Disease Severity Value (DSV) Accumulation as of June 24, 2009 is as follows:

Location: Shadybrook Farms, Little Creek, DE in Kent County.
Greenrow: May 1

Date	LATE BLIGHT			EARLY BLIGHT
	Daily DSV	Total DSV	Spray Recs	Accumulated P-days*
6/4-6/6	19	78	5-day interval	304
6/7-6/8	4	82	7-day interval	313
6/9	2	84	7-day interval	323
6/10	0	84	7-day interval	332
6/10-6/12	10	94	7-day interval	350
6/13-6/14	0	94	7-day interval	360
6/15-6/16	2	96	7-day interval	396
6/17-6/18	10	106	7-day interval	406
6/19	4	110	7-day interval	410
6/20-6/21	1	111	5-day interval	434
6/22-6/23	0	111	7-day interval	462

Late blight was reported in south-central PA, and Long Island, NY in addition to the discovery here in DE early this week. Late blight on tomato has been reported from NJ, MD, PA, VA and Long Island, NY.

It looks like we are going to get a break in the weather in that it will not be favorable for late blight for the next few days, but will continue to be favorable for early blight. The next forecasted period of rain is for June 30 for several days. If several sprays of a late blight targeted fungicide have been made, the next spray could be a preventative spray of Bravo or mancozeb at the highest labeled rate. None of the targeted late blight fungicides such as Previcur Flex, Curzate, Ranman and others should ever be used more than twice in a row to prevent resistance development in the fungus. If they are used read the label for mixing partners with a protectant fungicide and possible need for adjuvants.

Remember, if you sprayed Curzate it has a short residual activity period, especially when the temperatures are above 80°F so you will need to make another fungicide application 5 days later at the maximum labeled rate.

If the fields are dry enough and you have the ability to ground-apply fungicides, now would be a good time to get good coverage of any areas that an aerial application may not have covered well or at all (under power lines, next to buildings, fence rows, etc.)

The following is a good review of the fungicides labeled for late blight control in potato and tomato by Meg McGrath (Cornell Univ.) and Steve Johnston (University of Maine):

“Begin a fungicide program with products specifically for late blight in infected fields and other fields nearby. These products have translaminar activity and thus provide better coverage than contact, protectant fungicides. A 5 to 7-day spray interval is recommended when weather conditions are wet and cool. It can be extended to 10 days under hot, dry conditions. Alternate among fungicides in different chemical groups (as indicated by FRAC Code) to manage

resistance. The late blight pathogen has demonstrated ability to develop resistance; Ridomil fungicides are no longer recommended because of resistance. Include in each application a protectant fungicide like maneb, mancozeb or chlorothalonil, or triphenyltin hydroxide for potatoes.

“This is important for resistance management and ensuring effective control, and is specified on the label and thus is a requirement. A spray program with just protectant fungicides applied regularly starting before late blight begins to develop can provide adequate control, but this is challenging to achieve when plants are actively growing and conditions are very favorable for disease development, as has been occurring this spring. Curzate (FRAC Group 27 fungicide) at 3.2-5 oz/A (3.2 oz for potatoes) or Tanos (also contains cymoxanil, active ingredient in Curzate) at 8 oz is a good choice for the first application because these fungicides have some kickback activity, thus they can suppress some established lesions. The maximum kickback is about 2 days when it is cool, declining with increasing temperatures to about zero above 80°F. Cymoxanil has little residual activity, therefore, 5 days later apply another fungicide. Revus Top (Group 40 + 3) is a new fungicide that has excellent activity for late blight. It gets into plants fast, in about 30 minutes, then slowly moves in the plant providing good residual. It is labeled for use at 5.5-7 fl oz. It does not need to be applied with a protectant fungicide. Note that the fungicide Revus is not labeled for use on tomatoes and potatoes. Previcur Flex (Group 28) has some systemic activity, which is an important attribute even though it is not as systemic as Ridomil. It was the only fungicide rated good for symptoms on stems and also for protecting new growth in a bulletin from the University of Maine; it is not known how effective many of the other products are on new growth that develops after the application. It was not rated as highly as other late blight fungicides for leaf symptoms (good vs. excellent). It is considered a good choice for an application made right before rain. It is labeled for use at 0.7-1.5 pt (1.2 pt max for potatoes).

“Other fungicides to consider including in the fungicide program are Gavel (Group 22) at 1.5-2

lb, Forum (Group 40) at 6 fl oz, and Ranman (Group 21) at 1.4-2.75 fl oz. Gavel is the only late blight fungicide formulated with a protectant. Group 11 fungicides (Headline, Quadris, etc) and Group 33 (phosphorous acid) fungicides are not considered as effective for late blight as the other products. **Good fungicide coverage is critical.** Pathogen spores can be moved on equipment and workers, therefore spray and work in affected fields last and clean equipment between fields."

For specific fungicide recommendations, see the [Delaware Commercial Vegetable Production Recommendations](#).

Mocap EC Receives a 24c Label for Nematode Control on Snap and Lima Beans in Maryland - *Kate Everts, Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu*

Notice! Mocap EC received a 24c Label for nematode control on snap and lima beans in Maryland today (Friday, June 26, 2009). For more information about Mocap see the [article in Weekly Crop Update 17:13](#).

Agronomic Crops

Agronomic Crop Insects - *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

Alfalfa

Continue to sample for potato leafhoppers on a weekly basis. Once plants are yellow, yield loss has already occurred. The treatment thresholds are 20 per 100 sweeps on alfalfa 3 inches or less in height, 50 per 100 sweeps in 4-6 inch tall alfalfa and 100 per 100 sweeps in 7-11 inch tall alfalfa.

Field Corn

In areas where cereal leaf beetles were a problem in small grains, we are receiving reports of adults moving from small grains and feeding on corn. Although we do not have any firm thresholds for this insect on corn, as a general

guideline controls may be needed on corn for feeding damage if you find an average of 10 beetles per plant and 50% of the plants exhibit feeding damage. I recently was asked about the potential for cereal leaf beetles to vector disease. In the Midwest, it has been reported that the adult beetle is a vector of maize chlorotic mottle virus (MCMV) that causes corn lethal necrosis disease. Thresholds would be much lower if this disease is an issue. To date, I am not aware of this occurring in Delaware; however, be sure to let us know if you find potential problems.

During the last 2 seasons, we have seen what we feel is stinkbug damage to developing corn ears; however, we are still not sure of the extent of this problem in our area. We are currently seeing a few whorl stage no-till fields planted into burned down small grain covers exhibiting typical stinkbug damage — that is stunted and distorted plants. Reports from states to our south are indicating that stinkbug populations are higher in corn again this season. Information from the University of Georgia from 2008, where they have experienced problems, indicates that:

"(a) Corn is most susceptible to stink bug injury during ear formation before tasseling.

(b) Bugs will feed through the sheath, causing a dead spot on the ear. As the ear expands it becomes distorted and curves, usually outward.

(c) Feeding during silking and pollen shed also will kill kernels on the ear. Once the ear has elongated, stink bug feeding during the blister and milk stages blasts individual kernels usually causing them to abort.

(d) Although we have not developed thresholds for our area, the following thresholds are used in the South: 25% infested plants (1 bug per 4 plants) as a threshold during ear elongation to pollen shed and 50% infested plants (1 bug per 2 plants) during the later part of pollen shed and blister/milk stage.

(e) Initially stink bugs tend to be more prevalent on the field edge, so only a perimeter spray may be needed."

Soybeans

Be sure to sample fields in the seedling stage for bean leaf beetles, grasshoppers and thrips. We are also seeing an increase in green cloverworm activity so be sure to scout soybeans for all of these defoliators. Grasshopper populations are starting to increase and with the predicted hot weather, we could see an explosion in populations, especially in no-till fields. As barley and wheat are harvested and soybeans are planted, these fields will be susceptible to attack and grasshopper feeding can often cause stand loss. If stand reductions are occurring from plant emergence to the second trifoliolate, a treatment should be applied. Although no precise thresholds are available, a treatment maybe needed if you find one grasshopper per sweep and 30% defoliation from plant emergence through the pre-bloom stage. Numerous products are labeled for grasshopper control including a number of pyrethroids, dimethoate, Lorsban, Orthene 97 and Sevin XLR. ***Be sure to check all labels carefully before combining insecticides and herbicides since there are a number of restrictions on the labels.***

Continue to watch carefully for spider mites. Early detection and control is needed to achieve spider mite suppression. With the predicted warm weather, we could see an increase in populations. In addition to dimethoate and Lorsban, we now have Hero (zeta-cypermethrin + bifenthrin) as well as a number of stand alone bifenthrin products (***not all are labeled so be sure to check the label***) available for spider mite control in soybeans. All of these products need to be applied before mites explode. Be sure to read the labels for use rates and restrictions - there is a limit on the number of applications as well as the time between applications on all of the materials labeled for spider mite control.

Wheat Disease Update - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

Wheat harvest has begun. I saw a few combines in the field on Wednesday, June 24. Grain quality may be an issue in some areas, especially if no fungicides were applied. Some sooty mold can be found on weather damaged wheat and

barley. They are superficial dark fungi that discolor the heads but do little to reduce test weight or yield. That has already occurred before they infect the heads. Heading applications of fungicides, especially the strobilurins, will eliminate them or greatly reduce them – which also translates into good straw quality as well.



Sooty mold on wheat heads

Soybean Disease Update - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

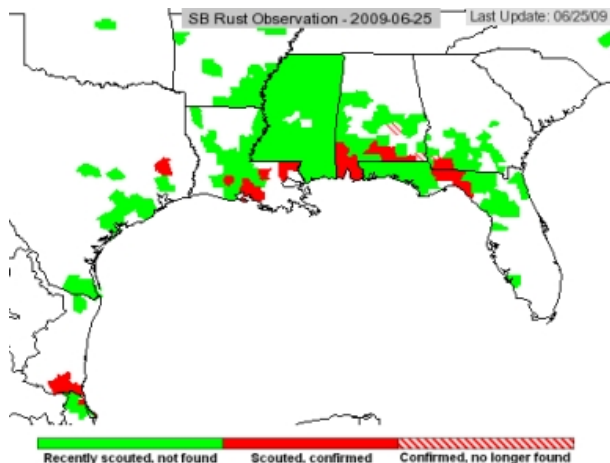
Septoria brown spot has been favored by all this wet weather and is easily found on the unifoliolate leaves and the lower trifoliolate leaves in most areas. These will usually fall from the plant and if it dries out we will not see this disease again until the soybeans canopy and conditions again would be favorable for infection. Most seasons this disease is not yield limiting. Spots seen this week were small but very numerous in one variety trial that I checked.



Septoria brown spot on unifoliolate leaves of soybean

Soybean Rust Update

Soybean rust was reported in Geneva, Covington and Conecuh counties in south-central Alabama on kudzu on June 24. The disease was found at very low levels at each site which included two separate kudzu patches in Covington County. On June 22, soybean rust was reported in a soybean sentinel plot in Acadia Parish in Louisiana. Soybean rust scouting continues in the U.S. and Mexico. The current conditions in the South are not going to be very favorable for rust development due to high temperatures.



Grain Marketing Highlights - Carl German, Extension Crops Marketing Specialist; clgerman@udel.edu

Markets Awaiting Next Event

Commodity markets appear to be driven by three primary forces this week. First, commodity speculators (non-commercial traders) have been taking profits and stepping to the sidelines before deciding whether or not to re-enter the market. It is likely to take an extended forecast for hot and dry weather before we'd see that occur. Second, the markets appear to be following the general economy, slacking off as the Dow has weakened. Third, the steady rise in crude oil prices slackened this week bearing further pressure on corn and soybean prices.

Next week USDA will release the June 30 Actual Plantings report. We expect to see a reduction in corn and an increase in soybean planted acres from the March 30 planting intentions report. Unless the numbers come in different than

anticipated that report is likely to be considered already factored into commodity prices.

This morning's export sales report was bullish for corn with sales reported at 27 million bushel, well above the 7.4 mb needed to stay on pace with USDA's 1.75 billion bushel projection for the '08/'09 marketing year. Shipments for the year are running slightly behind the pace needed, so the jury is still out on whether the U.S. will achieve the 1.75 bb export projection. Corn sales and shipments need to continue this week's pace or better in order to meet the projection.

Export sales for U.S. soybeans at only 1 mb were on pace for meeting USDA's 1.24 bb projection for the '08/'09 marketing year. With 10 weeks left in the marketing year, only 6 mb is needed to meet the projection. Shipments were slightly better than needed to stay on pace. This week's report for soybeans is bullish.

Wheat exports, reported at 13.5 mb, were behind the pace needed to meet USDA's 900 mb projection. Shipments of 11.9 mb were also behind the 17.7 mb needed to meet the projection. The wheat report was bearish.

Market Strategy

Harvest pressure has hit the wheat market. Uncertainty remains concerning crop development for '09 row crops (corn and soybeans). Bottom line, the recent sell-off in commodity prices does not bode well for advancing new crop sales at this time. Currently, Dec '09 corn futures are trading at \$4.03; Nov '09 soybean futures at \$9.97; and July '09 SRW wheat at \$5.31 per bushel.

Report: Excessive Speculation in Wheat Subcommittee Calls for CFTC to Crack Down on Contract Positions

Source: DTN

The Commodity Futures Trading Commission should impose tighter position limits on commodity index traders to stop excessive speculation in the wheat markets, a U.S. Senate subcommittee report recommends.

The 247-page report by the Senate Permanent Subcommittee on Investigations examined how

commodity index traders "in the aggregate" have made large contract buys on the wheat futures market that "pushed up futures prices, disrupted the normal relationship between futures prices and cash prices for wheat, and caused farmers, grain elevators, grain processors, consumers and others to experience significant unwarranted costs and price risks."

The subcommittee is chaired by Sen. Carl Levin, D-Mich., and ranking member Sen. Tom Coburn, R-Okla.

The subcommittee staff spent a year examining millions of trading records on the Chicago, Kansas City and Minneapolis exchanges, as well as the CFTC. Noncommercial (speculative) traders such as index funds dramatically increased their contract holdings from about 30,000 wheat contracts in 2004 to 220,000 contracts in 2008.

As DTN has highlighted since last year, the markets have consistently suffered from a lack of convergence in the futures contracts and cash markets. The subcommittee report states there has been an "unprecedented, large and persistent gap between futures and cash wheat prices" in the Chicago market. Basis grew from 13 cents per bushel in 2005 to \$1.53 a bushel in 2008.

The subcommittee cites that part of the problem with commodity index money flowing into the wheat market stems from lax restrictions on contract limits that were loosened in 2005. The subcommittee states the CFTC did not restrict wheat traders to the standard 6,500-contract position limit. Instead, some commodity index traders held positions as high as 53,000 contracts at a time, the report states.

The Levin-Coburn report recommends the CFTC begin enforcing the 6,500-contract limit and potentially consider going back to the 2005 limit of 5,000 contracts. The report also recommends the CFTC analyze the impact commodity index trading is having on other commodities, including crude oil, to see if excessive speculation is distorting prices.

The CFTC spearheaded an interagency task force on crude oil prices a year ago that issued a report stating that noncommercial trading in the energy markets did not lead to excess speculation. The interagency report, issued at the height of last year's crude oil prices, stated that "changes in the positions of swap dealers and noncommercial traders most often followed price changes. This result does not support the hypothesis that the activity of these groups is driving prices higher." The CFTC has not conducted a similar analysis of wheat.

The Levin-Coburn report also stated that inflated futures prices also affected areas such as crop insurance. Because crop insurance guarantees are pegged to futures contracts, the inflated prices led to higher premiums for farmers and taxpayer subsidies.

The report also noted that market margin calls led to cash flow and credit problems at grain elevators across the country, which translated into affecting farmers served by those elevators as well.

Since 2006, the Senate Permanent Subcommittee on Investigations has issued five reports looking at various aspects of speculation in futures markets, mostly in areas involving energy.

For technical assistance on making grain marketing decisions contact Carl L. German, Extension Crops Marketing Specialist.

Announcements

MEETING CANCELED

On Farm Delaware Food Safety Training – Level I Certification

Tuesday, June 30, 2009

Due to lack of registrations, we are going to cancel the On-Farm Food Safety Workshop (Level 1 certification) and the Level 2 Food Safety Workshop scheduled on June 30 and July 7, respectively.

We plan to reschedule for sometime in the fall/winter. We hope the weather stays dry and this will allow you all to get out in the field and do some work!

If you have any questions or would like to schedule a mock food safety audit on your farm, please feel free to call me. My contact information is below.

Best regards,
Anna Stoops
New Castle County Agriculture Extension Agent

University of Delaware Cooperative Extension New
Castle County Extension Office
461 Wyoming Rd, Rm 139
Newark, DE 19716

Phone: 302-831-8860
E-Mail: stoops@udel.edu
Fax: 302-831-8934

Cooperative Extension Education in Agriculture and Home Economics, University of Delaware, Delaware State University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Delaware Cooperative Extension, University of Delaware. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age or national origin.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of June 18 to June 24, 2009

Readings Taken from Midnight to Midnight

Rainfall:

2.34 inch: June 18
0.01 inch: June 19
0.36 inch: June 20
0.21 inch: June 22
0.08 inch: June 24

Air Temperature:

Highs ranged from 86°F on June 20 to 75°F on June 18.

Lows ranged from 69°F on June 21 to 64°F on June 18.

Additional Delaware weather data is available at
http://www.deos.udel.edu/aqirriqation_retrieval.html
and
<http://www.rec.udel.edu/TopLevel/Weather.htm>

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops. For subscription information, contact her at emmalea@udel.edu or (302) 856-2585 x 587.