Soybean Rust Update

There has been no new activity since the last report. The continued hot, dry weather in Florida and Georgia has limited infections and spread. Many of the Southern states are experiencing hotter and drier than normal conditions reducing the likelihood of viable spore dispersal. A report regarding Mexico indicated that rust had occurred earlier in the year (winter season seed production) before any commercial soybeans were planted in Mexico or the U.S.

Bob Mulrooney

Vegetables

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

NOTE - Trap catches are generally being updated twice a week on our IPM website at http://ag.udel.edu/extension/IPM/traps/latestlt.html. However, we are still working on the website so if trap catches do not appear recent be sure to call the Crop Pest Hotline (generally updated Monday and Thursday PM) for the most recent trap catches at (800) 345-7544 (in-state) or (302) 831-8851 (out of state).

Cucumbers
Continue to scout all fields for cucumber beetles and aphids. Fresh market cucumbers are susceptible to bacterial wilt, so treatments should be applied before beetles feed extensively on cotyledons and first true leaves. Pickling cucumbers have more tolerance to wilt, but a treatment may be needed on machine harvested pickles if 5% of plants are infested with beetles and/or showing fresh feeding injury. A treatment should be applied for aphids if 10 to 20 percent of the plants are infested with aphids with 5 or more aphids per leaf.

Melons
Continue to scout all melons for aphids, cucumber beetles, and spider mites. As soon as warmer weather returns, we could see an increase in insect populations.

Peppers
We continue to find corn borer egg masses on pepper leaves. Be sure to check local moth catches in your area at http://ag.udel.edu/extension/IPM/traps/latestlt.html. 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 7-10 day schedule once pepper fruit is ¼ - ½ inch in diameter. You should also continue to check fields for aphids. A treatment may be needed prior to fruit set, if you find 1-2 aphids per leaf for at least 2 consecutive weeks and beneficial activity is low.
Potatoes
Continue to scout fields for Colorado potato beetle (CPB), corn borers (ECB) and leafhoppers. Small and large CPB larvae can now be found in fields. Be sure to check our website at http://ag.udel.edu/extension/IPM/traps/latestblt.html for the most recent moth catches in your area. We can find low levels of leafhopper adults and nymphs. As a general guideline, controls should be applied if you find ½ to one adult per sweep and/or one nymph per every 10 leaves.

Snap Beans
Continue to scout all seedling stage fields for leafhopper and thrips activity. 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. Once pins are present on fresh market snap beans and corn borer trap catches are above 2 per night, a 7-10 day schedule should be maintained for corn borer control. Since trap catches can change quickly, be sure to check our website for the most recent trap catches and information on how to make a treatment decision in processing snap beans using trap catches (http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/snapbeancbthresh.html).

Sweet Corn
Continue to sample seedling stage fields for cutworms and flea beetles. You should also sample all whorl stage corn for corn borers. A treatment should be applied if 15% of the plants are infested. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check trap catches for the current spray schedule since trap catches change quickly. Trap catches are generally updated on Tuesday and Friday mornings (http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/silkspraythresh.html).

Vegetable Crop Diseases - Bob Mulrooney; Extension Plant Pathologist; bobmul@udel.edu

Stewart’s wilt is beginning to be seen on susceptible sweet corn hybrids. The high winter temperatures permitted over-wintering of high numbers of corn flea beetles which vector the bacteria that causes Stewart’s wilt in corn. Since the infection has already occurred there is nothing to be done now, but if corn is planted in succession be sure to control the flea beetles as the new plantings emerge if the hybrids are susceptible to Stewart’s wilt. Severity will depend on the susceptibility of the hybrid.

Notice the leaf stripping typical of Stewart’s wilt on sweet corn.

B. Mulrooney

Notice the leaf stripping typical of Stewart’s wilt on sweet corn.
Sinbar Receives Section 18 Label for Watermelons - Ed Kee, Extension Vegetable Specialist; kee@udel.edu

The EPA has approved Sinbar for preemergence use on watermelons at the rate of 3 to 4 ounces per acre. Sinbar has become an important weed control tool since it received its first Section 18 approval several years ago.

Pickling Cucumber Weed Control - Ed Kee, Extension Vegetable Specialist; kee@udel.edu

Planting for pickling cucumbers began last month on the Eastern Shore of Maryland and in Delaware. Curbit and Command can be considered as an effective standard treatment for preemergence use. On the earliest plantings, we recommend 1.5 pints/acre of Curbit and 4 ounces/acre of Command. When the soil is warmer, there is merit in increasing the rate of Curbit to 2 ounces per acre to improve broadleaf weed control when there is less risk of crop stunting as the weather warms.

Strategy is a jug-mix of Curbit and Command. 1.5 pints of Strategy delivers 1 pint of Curbit and 4 ounces of Command. We would recommend adding ½ pint of Curbit to the mix, if Strategy is used. One pint should be added as the weather warms to reflect the same recommendation stated above.

Sandea is also available for preemergence and post emergence treatments. It is especially useful for nutseedge and other broadleaf weeds. The rate in either case is 0.5 to 0.66 ounces per acre. Read the label and the Commercial Vegetable Recommendation Guide for further details on timing, use of surfactants and other important information. Do not use if organophosphate insecticides have been applied to the crop. Check the label for plant back or carry-over restrictions for subsequent plantings.

Select 2EC and Poast 1.5 EC are also labeled for post-emergence grass control. Again read the label for complete directions.

Mechanical cultivation is still an important component of a pickle weed control program. If the tractor-mounted harvesters will be used, it is important to minimize soil ridging from the cultivator operation. The ridges prevent the harvester pick-up reel from getting low enough to gather all pickles.

Bacterial Leaf Spot on Pepper - Kate Everts; Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu

Bacterial leaf spot (BLS) is a common problem in peppers. Initial lesions are small brown or black spots that have a yellow “halo”. Lesions will expand and be irregular and infected leaves often will fall off the plant. There are several pre-plant practices that will minimize damage from this disease. For information on cultivar resistance, seed disinfection, minimum rotation and transplant production see Delaware Extension Bulletin 137 or Maryland Extension Bulletin 236.

Once the plants are in the field, scout weekly for BLS symptoms. If possible, where disease is not widespread, rouge infected plants. Protect pepper plants and reduce the spread of BLS with applications of fixed copper at 1 lb. active ingredient/acre plus maneb 80WP at 1.5 lb/acre. Begin applications shortly after planting and apply on a 7 to 10 day schedule.

Two practices also may minimize losses to BLS during the growing season. First, avoid field operations when the foliage is wet because the bacterium is easily spread in water. Second, maintain a high level of fertility to help the plants replace leaves lost due to disease. However, do not over-fertilize, because fruit set and yield may be reduced.
Potato Disease Advisory #9 – June 8, 2006, Bob Mulrooney, Extension Plant Pathologist

Late blight Advisory
Disease Severity Value (DSV) Accumulation as of June 7, 2006 is as follows:
Location: Byfield Farms field east of Magnolia, DE. Greenrow: April 23, flower buds present May 24.

Remember that 18 DSV's is the threshold to begin a spray program for late blight

<table>
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<th>Date</th>
<th>Daily DSV</th>
<th>Total DSV</th>
<th>Spray Recs</th>
<th>Accumulated P days*</th>
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<td>7</td>
<td>None</td>
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<td>16</td>
<td>7-day</td>
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</table>

* P days - We use the predictive model WISDOM to determine the first fungicide application for prevention of early blight as well. The model predicts the first seasonal rise in the number of spores of the early blight fungus based on the accumulation of 300 physiological days (a type of degree-day unit, referred to as P-days) from green row. To date, 342 P-days have accumulated at the site near Magnolia. Once 300 P-days have accumulated, the first fungicide for early blight control should be applied, if fungicides have not been applied within the last 7 days.

If pink rot or leak is a concern and no pink rot fungicide was applied at planting consider applying one of the following when potatoes are nickel-sized and repeating 14 days later. Apply in as much water as possible (20-30 gal/A): Mefanoxam/chlorothalonil (Ridomil/Bravo or Flouranil) 2 lb/A, or Ridomil Gold/Copper 2 lb/A, or Ridomil Gold/MZ 2.5 lb/A.

Early blight and black dot. Many fields are flowering or approaching flowering and this is a good time to consider switching to an application or two of Gem, Headline or Quadris (Amistar) for early blight susceptible varieties. This can also be helpful for late season varieties including russets if stress makes plants susceptible to black dot. Make one or two applications at the end of flowering and repeat 14 days later. Apply mancozeb or chlorothalonil 7-days later between the two applications.

Agronomic Crops

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

Alfalfa
We can now find both potato leafhopper nymphs and adults in fields. Although both stages can cause damage, once nymphs are detected damage can occur rapidly. 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
We have found cereal leaf beetle adults feeding on corn. In most cases, feeding is confined to field edges; however, it may also be seen throughout the field. No controls should be needed unless you find 10 beetles per plant throughout the field and 50 percent of the plants are damaged.
Soybeans
We continue to find bean leaf beetle feeding in the earliest planted fields. A treatment for bean leaf beetle may be needed from plant emergence to the second trifoliate when you find 2 beetles per foot of row and a 25% stand reduction. You should also watch for grasshoppers, especially in no-till fields. We continue to see an increase in activity of small nymphs. In general, the treatment threshold for grasshoppers is 1 per sweep and 30% defoliation. Multiple applications are often needed for grasshopper control.

Soybeans
Septoria leafspot is usually the first foliar disease that is seen. With the return of moisture and cooler temperatures it will be found on the first true leaves (unifoliate) on beans that are emerging now. It can cause some early leaf spotting and dropping of those first leaves but the plants rapidly grow out of it until later in the season. If wet weather occurs later in August and September it is often seen again. In our area it is the one common disease that can look like soybean rust when the spots are small.

Wheat
The crop is maturing in many areas now, but in fields that were late-planted, or where long season varieties were planted that are still green, you may want to be on the lookout for tan spot. This leaf disease was seen in the Middletown vicinity this week on wheat that was not sprayed with a fungicide. The warm, wet weather of last week provided the necessary conditions for infection. Where this occurs plowing down the old plant debris will help reduce the disease for next year. Tan spot looks like Septoria leafspot but there are no small pimple-shaped fruiting bodies of the fungus present that are present in the lesions if Septoria is the pathogen.

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

Where Are Prices Headed from Here?
Nothing has changed in the grain markets this week from last week, aside from the fact that the highs and lows being bid into the corn, soybean, and wheat futures contracts have gotten lower on the daily price charts. USDA will release the June Supply/Demand Revisions tomorrow. No changes are expected on the supply side for new crop corn and soybeans since acreage estimates won't be confirmed until the end of the month. There could be some adjustments to the demand side of the equation for U.S. corn and soybeans, with traders somewhat split on the speculation regarding whether we are likely to end up with a price bullish or price bearish report. With U.S. wheat harvest underway we could see some adjustment
Supplies are adequate for corn, soybeans, and wheat for the '05/'06 marketing year. In looking ahead to the '06/'07 marketing year, which we turned on June 1 for U.S. wheat and will turn on September 1 for corn and soybeans, supplies begin to tighten for corn and wheat, assuming that future production estimates do not change the balance sheet(s). It may be rather 'iffy' to suggest, however, we could see a reduction in the estimates made previously for soybean stocks since the Brazilians have indicated an acreage reduction for next year's Southern Hemisphere crop, which would be a first in a long while. U.S. ending stock estimates for the '05/'06 marketing year, taken from the May report, are as follows: corn (2.26 billion bushels), soybeans (565 million bushels), and wheat (547 million bushels). For the '06/'07 marketing year ending stock estimates from May were: corn (1.141 billion bushels), soybeans (650 million bushels), and wheat (447 million bushels).

Marketing Strategy
We are continuing in a holding pattern for advancing new crop corn and soybean sales. The reasoning is that there remains good volatility in these markets likely to offer additional sales opportunities at or above resistance levels at some point over the summer. Exports are strong, grain and oilseed use for fuel is increasing, and we have a 'potential weather market' to get through for the '06 growing season over the next 75 days. In the event that crop yields turn out to be at trend line or better there should be ample opportunity remaining to profit on stored grains for that portion of the corn and soybean crops that remain unpriced going into harvest.

Weather Summary
http://www.rec.udel.edu/TopLevel/Weather.htm

Week of June 1 to June 7, 2006
Readings Taken from Midnight to Midnight

Rainfall:
3.96 inches on June 2
0.02 inch on June 3
0.10 inch on June 5

Air Temperature:
Highs Ranged from 90°F on June 1 to 71°F on June 6.
Lows Ranged from 68°F on June 1 to 56°F on June 4.

Soil Temperature:
72°F average.
(Soil temperature taken at a 2 inch depth, under sod)

The Weekly Crop Update is available online at http://www.rec.udel.edu/TopLevel/Publicat.htm

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops
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