Soybean Rust Update

Rust continues to be detected in Georgia, Alabama and Florida. It is still moving slowly and, as the Extension Plant Pathologist in GA stated, it is not turning out to be the fast moving epidemic that occurs in Brazil. The most recent and most northernmost detection was in Clark County, GA. Tropical Storm Katrina may bring transport of spores and favorable weather for the Southeastern states depending on its track and development into a hurricane. This past week spores that were tentatively identified as soybean rust spores were found in a spore trap in the Suffolk County vicinity in southern Virginia. The weather in this area was very unfavorable for infection. Spores have been detected before in TN, KY and no disease was seen following these detections. The presence of spores can indicate a potential for rust but you need favorable weather for infection as well. The threat of soybean rust is still low for us in DE and MD. Spraying for rust is not recommended at the present time. The longer rust stays away the less vulnerable our full season soybeans are to infection and yield losses. Our sentinel plot soybeans (mostly Group IIs) are at R6 and the Soybean Board plots range from R2- R6. Continue to check the websites and toll free number for updates:
http://www.sbrusa.net
http://www.ces.ncsu.edu/depts/pp/soybeanrust/
DE/MD Soybean Rust Hotline 1-866-234-1347

Bob Mulrooney

Vegetables

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

Cabbage
Continue to sample fall planted fields for diamondback and cabbage looper larvae. We can find both larvae feeding in the hearts of plants. If both species are present, Avaunt, a Bt, Proclaim or Spintor will provide control. If cabbage looper is the predominant species, a pyrethroid, Intrepid, or Confirm will also provide control.

Lima Beans
Continue to scout fields for lygus bugs and stinkbugs. Treatment should be considered if you find 15 adults and/or nymphs per 50 sweeps. With the recent increase in corn earworm trap catches, moths will be very attracted to blooming fields, especially as corn begins to dry down. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row. Capture (bifenthrin), Mustang MAX, Lannate and Warrior are labeled for corn earworm control in lima beans. The higher rates may be needed if population levels are high and worms are large at the time of treatment. As you approach harvest, be sure to check the label for the days from last application to harvest.

Peppers
Be sure to maintain a 5-7 day spray schedule for corn borer, corn earworm, beet armyworm and
fall armyworm control. Be sure to watch carefully for corn borers and corn earworm since we are seeing an increase in egg laying activity. Since trap catches can increase quickly at this time of year, be sure to check moth catches in your area at [http://www.udel.edu/IPM/traps/latestblt.html](http://www.udel.edu/IPM/traps/latestblt.html). Also, continue to watch for aphid explosions - sprays will be most effective if applied before populations explode.

**Snap Beans**
At this time, all fresh market and processing snap beans will need to be sprayed for corn borer and corn earworm from the bud stage through harvest. Remember, Orthene provides poor corn earworm control. In addition, the highest labeled rates may be needed if population pressure is heavy in your area. Since trap catches change quickly and we are seeing significant increases in corn borer and corn earworm moth catches, 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. ([http://www.udel.edu/IPM/traps/latestblt.html](http://www.udel.edu/IPM/traps/latestblt.html); and [http://www.udel.edu/IPM/thresh/snapbeanecbhresh.html](http://www.udel.edu/IPM/thresh/snapbeanecbhresh.html)).

**Spinach**
Since webworm and beet armyworm moths are both active, be sure to watch for both worm pests as soon as plants emerge. Controls should be applied when worms are small and before they have moved deep into the hearts of the plants. Also, remember that both insects can produce webbing on the plants. Since beet armyworms are more difficult to control, chemical selection is important. Confirm, Intrepid or Spintor will be needed for beet armyworm control.

**Sweet Corn**
In most areas, fresh market, silking sweet corn should be sprayed on a 2-day schedule. Be sure to check trap catches for the current spray schedule since trap catches and spray schedules can quickly change. Trap catches are generally updated on Monday and Thursday nights. [http://www.udel.edu/IPM/traps/latestblt.html](http://www.udel.edu/IPM/traps/latestblt.html); [http://www.udel.edu/IPM/thresh/silkspraythresh.html](http://www.udel.edu/IPM/thresh/silkspraythresh.html).

**Lima Bean Disease Update** - Bob Mulrooney; Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)
We received samples from several lima bean fields that had plants in scattered areas in the field with matted together leaves that were falling as well as pods. Microscopic inspection of the leaves revealed that the cause of the problem was Rhizoctonia. There are strains of this fungus that can cause what is commonly referred to as **aerial blight or web blight**. It is not a common disease here in DE or MD but I have seen it in flower beds were the plants are very crowded and there is little or no air movement. This disease is often seen in the wet, humid South in Louisiana and Mississippi on soybeans and often needs to be controlled with fungicides. The hot, humid weather of last week evidently produced environmental conditions that were favorable for aerial blight. The change in the weather will reduce any chance for spread and we will not likely see this disease again this season. If fungicides are needed, Quadris is labeled for web blight on succulent and dry legumes which includes lima beans.

**Agronomic Crops**

**Agronomic Crop Insects** - Joanne Whalen, Extension IPM Specialist; [jwhalen@udel.edu](mailto:jwhalen@udel.edu)

**Alfalfa**
Continue to scout fields for potato leafhopper adults and nymphs. A treatment is needed if you find 20 per 100 sweeps in alfalfa 3 inches or less in height; 50 per 100 sweeps in 4-6 inch tall alfalfa; 100 per 100 sweeps in 7-11 inch tall alfalfa; and 150 per 100 sweeps in alfalfa 12 inches or taller in height. With the recent increase in corn earworm trap catches and the presence of webworms and alfalfa caterpillars, be sure to check fields for signs of defoliators. If a field is 2 or more weeks from cutting and 25-30 percent of the terminals show signs of defoliation or webbing, a treatment is suggested.
Soybeans
We continue to find a number of defoliators in soybeans in addition to grasshoppers and green cloverworms. In the last couple of weeks, I have had a number of calls about painted lady or thistle caterpillars and silver spotted skipper larvae (see link for pictures -- http://www.entm.purdue.edu/entomology/ext/targets/P&C/P&C2003/P&C26_2003.pdf). Painted lady or thistle caterpillars are dark in color, have yellow markings on their body and their bodies are covered with numerous branching spines. Silver spotted skipper larvae have a yellowish-green body and a brownish-red head with two orange spots. In some areas, we can also find beet armyworm larvae. In most cases, beet armyworms are defoliators except when populations are extremely heavy and they can become pod feeders. If beet armyworm is the predominant pest and pressure is heavy, the pyrethroids have not provided effective beet armyworm control in the past. If Steward is used, the recommended rate is 7.2-8 oz/A. Since all of these insects are defoliators, the defoliation threshold should be used to make a treatment decision. Before bloom, the defoliation threshold is 30%. During the bloom to pod fill stage, the defoliation threshold decreases to 15% defoliation.

We are now starting to find fields that have just reached or are approaching the threshold for soybean aphid. As anticipated, the recent cooler weather has resulted in an increase in populations. In some cases, we can find plants with greater than 2000 aphids per plant. If temperatures remain cooler we could see an explosion in aphid populations. The treatment threshold is 250 aphids per plant through growth stage R5 and through the beginning of R6 (full seed). In some situations in the Midwest treatment at the R6 stage has been needed if populations are still increasing and plants are under stress. Yield losses have been documented in the Midwest and Canada at both the R5 and R6 stages. Although beneficial insects can help to crash populations, we have not seen a significant number of beneficials feeding on aphids at this time. The folks at VPI (Ames Herbert and Sean Malone) created a short (10 minute) powerpoint slide/audio presentation that describes a new speed scouting procedure for determining the need for an insecticide application (located at: http://breeze.ag.vt.edu/speedscouting). It is a much easier system to use, so check it out. Numerous products are labeled for soybean aphid including Asana, Baythroid (label states suppression), Mustang MAX, Warrior, and Lorsban. Experience from the Midwest has indicated that dimethoate has not provided adequate control. Valent released this news this season for Orthene 90S for soybean aphid: a 2(ee) label now exists that reduces the rate range of Orthene 90S for soybean aphid control in soybeans. Please see the label for use instructions (http://www.cdms.net/ldat/ld244005.pdf).

You will also need to start sampling soybean fields for earworms. In most cases, full season fields should escape damage; however, it will be important to check those fields at least one more time to be sure that you do not miss an infestation. With the increase in corn earworm trap catches, we are starting to find a few earworms in double crop soybeans in Sussex County. There are also reports that fields are being sprayed on the eastern shore of Virginia for earworms. As in most years, double crop fields will be most susceptible to attack since open canopy blooming fields will be attractive to egg laying moths. A treatment should be considered if you find 3 per 25 sweeps in narrow fields and 5 per 25 sweeps in wide row fields (20-inches or greater).

One other note, as we approach the end of August and have the potential to spray for soybean aphids, defoliators, and corn earworm, be sure to check the labels for the days between last application and harvest (PHI).
Grain Marketing Highlights - Carl German, Extension Crops Marketing Specialist; clgerman@udel.edu

Delaware Farmer Makes Crop Size Prediction
Commodity markets have continued in a narrow trading range this week as analysts and forecasters continue to decipher the size of the '05 U.S. corn and soybean crops. USDA's September crop report will be issued on September 12th. An unofficial crop forecast was given this morning by a Delaware farmer who recently participated in a private Corn Belt crop tour. The Delaware farmer's unofficial forecast was placed at 133 to 135 bushels per acre for U.S. corn and 36 bushels per acre for U.S. soybeans. This sounds encouraging, however, the Delaware farmer has some competition in making a crop size forecast. The competition comes this week from the annual Pro Farmer crop tour. The yield estimates from this group are not completed as yet. The information from the Pro Farmer crop tour has been historically price positive. However, this year the information coming in from the Pro Farmer crop tour so far has been price negative. The bottom line is that some analysts believe that USDA will lower their production estimates in the September report (including the Delaware farmer), while others are thinking (as of today) that USDA may increase the production forecast in their September report. Look for these markets to trade sideways until the September report is issued.

Weather Summary

Week of August 18 to August 24, 2005
Readings Taken from Midnight to Midnight

<table>
<thead>
<tr>
<th>Rainfall:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.10 inches: August 19</td>
</tr>
<tr>
<td>0.01 inches: August 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air Temperature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highs Ranged from 92°F on August 21 to 79°F on August 19.</td>
</tr>
<tr>
<td>Lows Ranged from 73°F on August 21 to 62°F on August 24.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soil Temperature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>83°F average.</td>
</tr>
<tr>
<td>(Soil temperature taken at a 2 inch depth, under sod)</td>
</tr>
</tbody>
</table>

Web Address for the U of D Research & Education Center: http://www.rec.udel.edu

Weekly Crop Update is Compiled and Edited By:
Emmalea Ernest
Extension Associate - Vegetable Crops
University of Delaware

Pesticide Safety Training and Testing for Pesticide Applicators Certification
September 21 & 22, 2005
Delaware Dept. of Agriculture Conference Center
Dover, DE

Sept 21 is training – 8:30 am – 4:30 pm. Training continues the morning of September 22, from 8:30 am – noon. The exam starts at 1:00 pm on September 22.