



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Soybean Rust Update

There were several new finds in sentinel plots and commercial fields in GA and FL before Hurricane Katrina hit the Gulf Coast. The hurricane, now tropical depression, had the potential to move spores from the South throughout the Northeast and Mid-Atlantic area. It is too early to know if spores actually made it here because many would have washed out in the heavy rain or been diluted to a great extent before reaching here. The sources of spores in the South are weak and the number of spores moving is relatively unknown. Remember that it would take two weeks to see symptoms on soybeans from this transport event. **It is premature to spray soybeans for rust and it is not recommended at this time.** As time progresses more soybeans are getting to the point (late R6 and R7) when soybean rust will no longer have any effect on yield. Considering the slow movement of rust from infected fields that has been observed in the South, we should have time to react if rust appears later. I thought you might be interested in a report from Louisiana on 9-1-05: "Due to Hurricane Katrina one sentinel plot was lost due to flooding. It was the Plaquemines Parish site (south of New Orleans) at the LSU AgCenter Citrus Station. Estimates are that it is under six to eight feet of water. The growth stage of the soybeans in that sentinel plot was at R8 so its usefulness was near the end". Let us keep those folks in our thoughts and prayers.

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. We can also find fall armyworm and beet armyworms feeding on plants. A treatment should be considered if you find 5% of the plants infested and before larvae move into the hearts of the plants.

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 increase in corn earworm trap catches, moths are very attracted to blooming fields. In some cases, multiple sprays may be needed for corn earworm. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row. The higher labeled rates will 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. With the significant increase in corn borer catches in the Harrington, Bridgeville, Greenwood, Laurel and Seaford areas, be sure to maintain a tight schedule for corn borer control. Be sure to watch carefully in all areas 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>.

Snap Beans

All fresh market and processing snap beans will need to be sprayed from the bud stage through harvest for corn borer and corn earworm control. In addition, the highest labeled rates may be needed if population pressure is heavy in your area. Since a significant increase occurred in corn borer catches in the Harrington, Bridgeville, Greenwood, Laurel and Seaford areas, a 4-day schedule will be needed between the pin spray and harvest on processing snap beans. At this time, a 5-day schedule is needed between the pin spray and harvest in most other areas. However, since trap catches are changing quickly and we continue to see significant increases in corn borer and corn earworm moth catches, be sure to scout fields carefully as well as 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> and

<http://www.udel.edu/IPM/thresh/snapbeanecbtfresh.html>). As you make a chemical selection, be sure to check the label for rates, and days from last application to harvest (PHI), as well as any other restrictions.

Spinach

Since webworm and beet armyworm moths are both active, be sure to watch for both worm pests as soon as plants emerge. The first small

larvae can be found in the earliest planted fields. 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

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/thresh/silkspraythresh.html>.



Lima Bean Disease Update - *Bob Mulrooney*,
Extension Plant Pathologist; bobmul@udel.edu

Downy mildew was diagnosed last week in a field of susceptible 'Jackson Wonder' that was close to harvest. Be on the lookout for downy mildew, and if favorable weather occurs apply preventative fungicide applications of copper; 2.0 lbs/A Ridomil Gold/Copper; or 4 pts/A Phostrol.



Fungicides for Control of Cucurbit Downy Mildew - *Ed Kee*, *Extension Vegetable Specialist*; kee@udel.edu

Delaware producers have successfully managed cucurbit downy mildew infections this year. Commercial experience consistently indicates that treatments of Previcur Flex + Bravo have been instrumental in achieving control. Periods of hot weather (above 90°F) have also helped with control. However, based on experience in commercial fields, and with our research plots, the downy mildew infection readily occurred if fungicide treatments were not applied, despite periods of hot weather.

This summer we established five plantings through the summer to evaluate different fungicide treatments for downy mildew control in the mechanical harvest setting. Two applications were made in each study; the first at the 3 to 5 leaf stage, the second 7 to 10 days later. The first two plantings were harvested before downy mildew occurred. However, significant amounts of downy mildew occurred naturally in the final three plantings. The untreated plots were seriously injured from downy. Again, in general, Previcur Flex + Bravo was the most effective treatment. In the fourth planting, for example, the three best treatments were as follows: (1) Previcur Flex + Bravo, followed ten days later with Tanos + Manzate; (2) two applications Bravo + Curzate applied ten days apart; and (3) two applications of Previcur Flex + Bravo applied ten days apart.

In all three studies where downy mildew was present, Ridomil Gold Bravo was ineffective.

Our results are very similar to those of Dr. Gerald Holmes from North Carolina State from last fall. Many of you know Michigan has experienced serious problems this year from downy mildew. As of today, the experience in Michigan ranges from disking fields up to plantings with over 300 bushels/acre. Field research results from Michigan State regarding fungicide treatments to control the disease are very similar to those from Delaware and North Carolina.

Agronomic Crops

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

Soybeans

We are continuing to find fields above threshold for soybean aphid. As anticipated, the recent cooler weather has resulted in an increase in populations. Remember, aphid populations can double every 2 days under the current weather pattern. *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. Continue to watch for beneficial insects as well as parasitized aphids. Although beneficial insects can help to crash populations, we are seeing varying levels of beneficial activity. 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. With the significant increase in corn earworm trap catches, we are starting to find double cropped fields with economics levels in Sussex County. There continue to be 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).

The following materials are labeled for corn earworm control in soybeans: Asana, Baythroid, Mustang MAX, Warrior (all pyrethroids), Larvin, Lorsban or Steward. Larvin and Steward act by ingestion on both small and large larvae. *Remember that if you are using a pyrethroid, the primary mode of action on large larvae will be ingestion.* Earworms will need to feed to cause death so you will not see immediate activity from the contact action. Once they ingest the product, they immediately stop feeding. Therefore, fields should not be evaluated for control until 4 days after application. *Small larvae are generally killed by contact as well as ingestion.* It is important that you do not look at fields 1-2 days after spraying and assume control failure if large

worms are present. This could result in unnecessary re-sprays. We are also finding a few beet armyworms in fields. If the predominant pest is beet armyworm, the pyrethroids will not provide control. Steward would be the preferred material. However, in 2002 grower demonstration trials, Lorsban also provided good control.

Reminder -- 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

Largest U.S. Grain Exporting Terminal Temporarily Closed

About 40% of U.S. grains and oilseeds are exported. The majority of that export business flows down the Mississippi River through the port of New Orleans, LA. The port is currently without electrical power; therefore, it is not possible to load out ships for export this week. The situation is being looked into with the objective being to get the port operational as soon as possible. Until the Port of New Orleans opens, grain and oilseed prices are going to keep bantering around support, drifting sideways to lower.

USDA's next crop report will be issued on September 12th; at which time we will get a better handle on U.S. corn and soybean crop size. Although it is also likely that production levels will not be known until these crops are harvested. Anyone getting into or near corn harvest needs to be aware that Loan Deficiency Payments (LDPs) are currently being offered.



Announcements

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.

Weather Summary

http://www.rec.udel.edu/TopLevel/Weather.htm
Week of August 25 to August 31, 2005
Readings Taken from Midnight to Midnight
Rainfall:
0.09 inches: August 27
0.01 inches: August 28
0.01 inches: August 30
Air Temperature:
Highs Ranged from 88°F on August 28 and August 31 to 79°F on August 26 and August 27.
Lows Ranged from 73°F on August 30 and August 31 to 56°F on August 25.
Soil Temperature:
81°F average.
(Soil temperature taken at a 2 inch depth, under sod)

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

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