



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 13, Issue 21

August 12, 2005

Soybean Rust Update

There have been some new finds this past week in Georgia, Alabama and Florida. Georgia had a new sentinel plot detection and a research plot detection near Tifton. GA is recommending fungicides for growers in the Coastal Plain with beans in the susceptible R1-R6 growth stages.

Florida just announced three new counties with confirmed Asian soybean rust found in soybean sentinel plots. That brings the total number of Florida counties positive for rust in 2005 to 15 -- with seven of those confirmed in the past eight days. All of these new finds were in the Panhandle counties.

Alabama had new detections of soybean rust in four commercial soybean fields in Baldwin County (near Mobile) on August 9. One of these finds had a moderate level of infection; the rest had low levels of rust. This brings the number of commercial fields with rust to five in Baldwin County. They also detected it in a kudzu patch in Baldwin County on August 10. This is the first report of rust on kudzu in Alabama this year.

These finds are significant for the South, but the level of spore production is still low. Most of the infection sites are small sentinel plots. This means that if winds are moving spores north the chance of Delaware receiving enough spores to start infection is still very low at the present time. The weather this week has provided

plenty of high humidity and, in some areas, rainfall. These conditions would be helpful for rust spore germination if spores are present, and that is a big "if". DE and MD continue to have a low risk for soybean rust at the present time and spraying for rust is not recommended.

It is too early to predict how a new tropical storm, Irene, may affect the soybean rust picture, so the situation can always change. You can check the current status by visiting the websites: <http://www.sbrusa.net> and/or <http://www.ces.ncsu.edu/depts/pp/soybeanrust/>. The Soybean Rust Hotline number is 1-866-234-1347.

Some early maturing, early planted soybeans are at R6 in our sentinel plots and in grower fields. The susceptible growth stages are R1 through R6. Remember that once soybeans reach R7, soybean rust is no longer a threat to production and fungicides would not be beneficial. This stage (R7) begins when one normal pod on the main stem obtains the mature color (brown or tan). During this stage, dry matter begins to peak in individual seeds. This is visually seen when all green color is lost from both the seeds and pods (they appear yellow). Seeds contain about 60% moisture at physiological maturity.



Bob Mulrooney

Vegetables

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

Cabbage

Be sure to sample fall planted fields for diamondback and cabbage looper larvae. Larvae can now be found 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.

Cucumbers

We are starting to see an increase in aphid population levels so be sure to check plants carefully since populations can explode quickly. Once populations explode, control is often difficult and multiple treatments are often necessary.

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. Capture, Mustang or Warrior are labeled for both species. The higher labeled rates will be needed if stinkbugs are the predominant insect present. You should also start scouting fields as soon as pin pods are present for corn earworm. Low levels of corn earworm have been found in the earliest planted fields. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row.

Snap Beans

Sprays are needed at the bud and pin stages on processing beans for corn borer control. After the pin spray, sprays are needed on a 5 to 6 day schedule until harvest. However, be sure to check our website for the most recent trap catches to help decide on the spray interval between the pin stage and harvest for processing snap beans

(<http://www.udel.edu/IPM/traps/latestblt.html> and <http://www.udel.edu/IPM/thresh/snapbeanecbthresh.html>). Once pins are present on fresh market snap beans and corn borers are being caught in local traps, a 7- day schedule should be maintained for corn borer control.

Melons

Continue to scout all fields on a weekly basis for aphids, cucumber beetles and spider mites. All three insects can still be found in fields. In many cases, multiple applications will be needed to prevent damage from these pests. We have also had our first report of beet armyworms being found in fields. Unfortunately, this insect can also feed on melon rinds. The only material labeled on melons that will provide beet armyworm control is Spintor. The highest labeled rate should be used if larvae are large at the time of treatment.

Peppers

Maintain a 7-day spray schedule for corn borer control. In areas with high trap catches (> 10 per night), a 5-7 day schedule may be needed. Since trap catches can increase quickly at this time of year, be sure to check local moth catches in your area at <http://www.udel.edu/IPM/traps/latestblt.html>. You will still need to consider a treatment for pepper maggot. Beet armyworm larvae and feeding damage can still be found in fields. You will need to use a product like Spintor, Avaunt, or Intrepid for BAW control. In addition, favorable weather has resulted in an increase in aphid populations.

Sweet Corn

In most cases, fresh market, silking sweet corn should be sprayed on a 3-day schedule, except in the Harrington and Milford areas where sprays are needed on a 2-day schedule. However, 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>. Continue to watch for fall armyworm feeding in the whorls. We are seeing a significant increase in the number of fields with damage and the percent infested plants. A treatment is needed if you find 12-15% of the plants infested. Multiple whorl applications are generally needed for fall armyworm control. In addition, you may need to combine a fall armyworm material with a pyrethroid for the first 2-3 silk sprays if fall armyworm pressure was heavy in whorls.

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

The good news is that Asian soybean rust is staying down South, so far at least, and lima beans have not been at risk for infection by rust. With the return of cooler night temperatures, dew, and wet weather, comes the threat of **downy mildew** again in the fall crop. Last season some downy mildew was seen, but it was not widespread as in past years. All the fields that we checked for downy mildew last year turned out to be race F. Preventative applications of 2 lbs fixed copper, 2 lbs Ridomil Gold/Copper, or 4 pts Phostrol have provided control of downy in the past. The best controls continue to be Ridomil/Gold Copper or Phostrol, especially when disease pressure is high like last year. Application at flowering or when pods are first forming is recommended if weather is favorable for disease. If disease is present Ridomil/Gold copper and Phostrol have shown to provide some curative activity if applied when downy mildew is first seen. Be sure to have a copy of the label on hand since Ridomil/Gold Copper and Phostrol have 24c labeling in DE.

The Ridomil/Gold Copper 24c label is available online at <http://www.rec.udel.edu/update05/LimaRidomilGoldCopper.pdf>

Agronomic Crops

Agronomic Crop Insects - *Joanne Whalen*,
Extension IPM Specialist; 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.

Soybeans

Grasshopper populations remain high, especially in double cropped soybeans. The prebloom threshold is 30% defoliation and once fields

reach the bloom to pod-fill stage the threshold drops to 15% defoliation. Multiple applications are often needed to achieve grasshopper control.

You will need to start sampling soybean fields for earworms by mid-August. Although full season fields should generally escape damage, it will be important to check those fields at least 2 times to be sure that you do not miss an infestation. As in most years, double crop fields will be most susceptible to attack. 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).

Each year I receive questions about stinkbugs in soybeans. So far, we have not seen significant damage from stinkbugs. Ames Herbert from VA has started to conduct research to look at this insect in soybeans. The following is information from Ames in his last Virginia AG Pest Advisory: "We are finding both green and brown stink bug in some soybean fields. Thresholds are very low for these pests. Treatment is recommended if pods are in the seed fill stage and the following stink bug numbers are found: 1 per row foot if using a drop cloth, or 2.4 (7 to 21-inch row spacing) to 3.6 (21-inch row spacing or greater) in 15 sweeps with a 15-inch diameter sweep net. Stink bugs will be attracted to fields with pods that are closer to the full seed stage. The Pest Management Guide lists several options for stink bug control in soybean. A new option has been labeled, Orthene 97 at 0.56 to 1.0 lb/acre. Orthene should provide effective control of green stink bugs and should be a bit better against brown stink bugs than pyrethroids in general." (<http://www.sripmc.org/Virginia/>)

Announcements

Pesticide Safety Training and Testing for Pesticide Applicators Certification

September 21 & 22, 2005

Delaware Dept. of Agriculture Conference Center
Dover, DE

Weather Summary

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

<http://www.rec.udel.edu/TopLevel/Weather.htm>

Week of August 4 to August 10, 2005

Readings Taken from Midnight to Midnight

Rainfall:

0.01 inches: August 6
0.03 inches: August 7
0.84 inches: August 9
0.22 inches: August 10

Air Temperature:

Highs Ranged from 94°F on August 4 to 76°F on August 9.

Lows Ranged from 73°F on August 5 to 68°F on August 4.

Soil Temperature:

88°F average.

(Soil temperature taken at a 2 inch depth, under sod)

Weekly Crop Update is Compiled and Edited By:

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Potato Disease Advisory #26 - August 11, 2005, Bob Mulrooney, Extension Plant Pathologist

Late Blight Advisory (18 DSV's Exceeded)

Disease Severity Value (DSV) Accumulation as of August 10, 2005 is as follows:

Location: Joe Jackewicz Farm, Magnolia, DE. Greenrow: May 4, 2005

Date	Daily DSV	Total DSV	Spray Recommendation
7/20- 7/25	0	98	10-day
7/25- 7/26	1	99	10-day
7/26- 7/27	1	100	10-day
7/27- 7/28	1	101	10- day
7/28- 7/29	1	102	10- day
7/29-7/30	2	104	7- day
7/30- 7/31	2	106	7- day
7/31- 8/1	2	108	7- day
8/1 -8/3	1	109	7- day
8/3-8/5	0	109	10-day
8/6-8/7	2	111	10-day
8/7- 8/8	2	113	10-day
8/8 - 8/10	10	123	7- day

P-day value is now 712, which is used to predict early blight and the need for protective fungicides. Early blight sprays are recommended.

The humid air flow from the South, Tuesday through Thursday, provided a long (38 hours) window of late blight favorable weather. Maintain fungicide sprays for early blight and late blight if you have vulnerable potatoes at this time. No late blight has reappeared in potatoes or tomatoes locally.