



# WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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## Soybean Rust Update

There have been several new reports of soybean rust in the South. New detections in research and sentinel plots on soybeans were made in Alabama and Georgia, as well as several in Florida on kudzu. The number of finds is increasing but the size of the finds is small. Soybean rust is not spreading rapidly to commercial soybeans at the present time down South. The only disturbing news was that one of the new Georgia finds was on the border between Georgia and South Carolina, which is closer to us. This detection was also very limited with few pustules and it has been designated a weak source of spores. There is not much spore production yet to spread north at the present time. Weather predictions for rust for the coming few days are not favorable for spore movement our way. It will probably be several weeks before rust could appear here depending on developments in the South, where spread has been slow. Weekly scouting of soybeans from flowering to full seed is recommended at the present time. The crop looks very good state-wide.

You can check the current status by visiting the websites: [www.sbrusa.net](http://www.sbrusa.net) and/or <http://www.ces.ncsu.edu/depts/pp/soybeanrust/>. The Soybean Rust Hotline number is 1-866-234-1347.

*Bob Mulrooney*

## Vegetables

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

### Cucurbits

As a result of the recent hot weather, aphid populations have significantly increased in many cucurbits. Be sure to check carefully for aphids in all cucurbits including cucumbers, melons, pumpkins and squash. The best control is achieved before populations explode and leaf curling occurs. Be sure to check all labels for maximum application amounts and days to harvest.

### 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. As soon as pin pods are present, you should also start scouting fields for corn earworm. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row.

### Melons

Continue to scout all fields on a weekly basis for aphids, cucumber beetles and spider mites. Aphids and cucumber beetles have exploded in a number of fields so keep a close watch on populations. The hot weather has been very favorable for melon aphid explosions. With a

significant increase in cucumber beetle populations, be sure to apply treatments before beetles begin feeding on the rinds. In many cases, multiple applications may be needed to prevent damage. Beetles are very mobile and new adults can invade fields every few days at this time of year.

### 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. The first beet armyworm larvae and feeding damage has been detected in peppers. You will need to use a product like Spintor, Avaunt, or Intrepid for BAW control. We are also starting to see an increase in aphid pressure. Assail, Actara, Fulfill, Lannate and Provado are labeled for aphid control in peppers. Be sure to check the label for rates and days to harvest.

### Snap Beans

Sprays are needed at the bud and pin stages on processing beans for corn borer control. After the pin spray, 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.

### Sweet Corn

Fresh market, silking sweet corn should be sprayed on a 3-day schedule. Be sure to check trap catches for the current spray schedule since trap catches 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. A treatment is needed if you find 12-15% of the plants infested.

## Agronomic Crops

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

### Soybeans

Grasshopper populations remain high in double cropped soybeans. The prebloom threshold is 30% defoliation. Once fields reach the bloom to pod-fill stage the threshold drops to 15% defoliation. Multiple applications are often needed to achieve grasshopper control.

Although soybean aphids were detected at the end of June, populations still remain low. The warmer temperatures have helped to keep populations low. Remember, unlike aphids in vegetables, soybean aphids generally prefer cooler weather. Additional factors favoring outbreaks include plant stress and a lack of aphid predators. If weather patterns change, we could still see an increase in populations so be sure to continue to sample for aphids on a weekly basis. Remember, aphid populations can increase rapidly under ideal conditions. In past years, we have generally started to see an increase in populations in mid-August. The treatment threshold is 250 aphids per plant throughout a field through R-5 stage. In general, spraying at or beyond R6 has not been documented to increase yield. However, 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 R-5 and R-6 stages under certain circumstances. A 10-minute on-line "Breeze" presentation about speed scouting for soybean aphids was developed by Ames Herbert et al. You may view the presentation at: <http://breeze.ag.vt.edu/speedscouting>.

Although corn earworm populations have been lighter than last year, you will also 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 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).

As we enter August and the potential for insecticide applications could increase later in the month, be sure to read all labels for the pre-harvest interval (PHI), the time required between application and harvest.



**Stripe Rust Resistant Wheat Varieties** - *Bob Mulrooney; Extension Plant Pathologist;*  
[bobmul@udel.edu](mailto:bobmul@udel.edu)

Growers have, or will soon be deciding on wheat varieties to purchase for fall planting. Selecting high yielding disease resistant varieties is the most effective disease control strategy. Last season we saw **stripe rust** for the first time here in DE in recent memory. Fortunately there are varieties with resistance to stripe rust. This year I rated each of the varieties in the wheat trial, which Bob Uniatowski plants every year, for stripe rust resistance. The results present the variety reactions to stripe rust from three locations in DE: Georgetown at the REC, near Felton, and near Middletown, and are available on the web at <http://www.rec.udel.edu/update05/StripeRusting.pdf>



**Grain Marketing Highlights** - *Carl German, Extension Crops Marketing Specialist;*  
[clgerman@udel.edu](mailto:clgerman@udel.edu)

**'05 Crop Size Uncertain**

The primary question on grain marketers' minds at the present time is, "How big will the '05 U.S. corn and soybean crops turn out to be?" Part of the answer to the question will come in the August 12th crop report. However, actual crop size for both crops is not likely to be known until the combines roll. The reason is that pre-report crop estimates and USDA's August report will all be based upon prevailing crop conditions prior to July 31st. Those yield estimates will not account for the crop conditions and the resulting impact on yield, that occur over the course of the time period between July 31st and August

12th. Current crop conditions across the Corn Belt continue to be a mixed bag, making it extremely difficult to get a handle on '05 U.S. corn and soybean crop production estimates.

**Pre-Report Estimates**

On Tuesday of this week, a private forecaster placed U.S. corn production at 138.7 bushels per acre for a crop size of 10.31 billion bushels. USDA's July projection was placed at 10.79 billion bushels at a trend line yield of 145 bushels per acre. Thus far, pre-report corn production estimates have ranged from 137 to 143 bushels per acre. If the national corn yield drops to the high 130's we will see a further draw down on carry over stocks, yet supplies will remain quite large. Therefore, it is likely to take something less than a 137 bushel yield estimate prior to harvest to get prices to rally back to recent highs.

The soybean production estimate was placed at 2.81 billion bushels at a national average yield of 38.9 bushels per acre. USDA's July projection was placed at 2.890 billion bushels at a yield estimate of 39.9 bushels per acre. It is important to note that the soybean market is extremely price sensitive to the actual yield outcome this year. National soybean yields can easily fluctuate 2 to 4 bushels per acre over the next two weeks. Each 1 bushel drop in soybean yield, from that previously forecasted, results in about a 70 million bushel decrease in production nationally. That kind of a reduction begins to move an adequate soybean supply situation into a tighter scenario. Recent developments concerning soybean rust won't impact the market, if at all, until next week's trading.

**Summary Statement**

A reduction in the size of the U.S. corn crop from the July production estimate, and now very possibly the size of the U.S. soybean crop, is likely to occur in the August 12th production estimates. Providing yield reduction(s) do occur, the size of the reduction(s) remains uncertain. U.S. crop conditions since the end of July have deteriorated in many parts of the country. Considering the prevailing uncertainty, grain marketers should take a "wait n' see" attitude toward advancing new crop sales.

## Announcements

### **Blendt Farm Tomato Trial**

Wednesday, August 10, 2005 6:00 – 8:00 p.m.  
Delaware State University Research Farm  
(located just south of Smyrna on Smyrna Liespic Rd)

This trial compares yields of six commercial tomato varieties. For more information contact John Clendaniel at (302) 857-6425.



### **Sussex Conservation District's 2005 Cost-Share Sign-Up**

August 8<sup>th</sup> through 12<sup>th</sup>, 2005  
8:00 a.m. – 4:30 p.m.

Applications will be accepted for the following practices:

**Cover Crops**  
**Manure Structures**  
**Composters**  
**Ag Waste Facilities**  
**Heavy Use Area Protections**  
**Rentar Fuel Catalysts**  
**Other Best Management Practices**

All applications received will be ranked based on need, and statewide nutrient management requirements. All applications received during the sign-up will be serviced based on their ranking and available funding.

For more information about the cost-share sign-up, call (302) 856-3990 ext 3.

### **Pesticide Safety Training and Testing for Pesticide Applicators Certification**

September 21 & 22, 2005  
Delaware Dept. of Agriculture Conference Center  
Dover, DE

## Weather Summary

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

Week of July 28 to August 3, 2005

Readings Taken from Midnight to Midnight

#### **Rainfall:**

0.17 inches: July 29

0.03 inches: July 30

#### **Air Temperature:**

Highs Ranged from 91°F on August 2 and August 3 to 79°F on July 29 and July 30.

Lows Ranged from 73°F on August 3 to 67°F on August 2.

#### **Soil Temperature:**

84°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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Potato Disease Advisory #24 - August 4, 2005, Bob Mulrooney, Extension Plant Pathologist

**Late Blight Advisory (18 DSV's Exceeded)**

Disease Severity Value (DSV) Accumulation as of August 3, 2005 is as follows:

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

Date	Daily DSV	Total DSV	Spray Recommendation
7/5-7/5	2	60	7-day
7/5-7/6	3	63	7-day
7/6- 7/9	17	80	5- day
7/12- 7/13	2	82	10- day
7/13-7/14	3	85	7-day
7/14- 7/15	5	90	7-day
7/15- 7/16	5	95	7-day
7/16- 7/17	2	97	7- day
7/17- 7/18	1	98	7- day
7/18- 7/20	0	98	7-day
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

**P-day value is now 664**, which is used to predict early blight and the need for protective fungicides. Early blight sprays are recommended.

Maintain fungicide sprays for early blight. No late blight has reappeared in potatoes or tomatoes locally. Some leak and pink rot have been diagnosed in wet areas of fields.