Soybean Rust Update

On August 21 rust was found on one leaf in a soybean sentinel plot in South Carolina, which is the northernmost detection so far (see map below). This find has alerted everyone to increase scouting efforts in SC.

The latest soybean rust find was reported on soybeans in Concordia Parish in eastern Louisiana (8-23). Currently rust has been found infecting this year's soybeans in 16 different counties in six states: AL, FL, GA, LA, MS, and SC. Including reports on kudzu, there are 36 counties in seven states with rust this year including five in Alabama, 13 in Florida, eight in Louisiana, six in Georgia, one in Mississippi and South Carolina, and two in Texas. Spore trapping continues throughout the U.S. using both active and passive traps.

We are scouting weekly and disease progress has slowed in the sentinel plots and the Soybean Board plots. The risk of rust for Delaware soybeans is very low. No rust has been seen and once soybeans reach growth stage 6 the threat of damage from soybean rust is past. Double crop soybeans could still be affected if soybean rust should begin to move within the next two weeks. Irrigated soybeans look very good while dryland beans are suffering. We did diagnose Phomopsis stem canker in a field in Sussex County this week. Brown lesions that girdled the stems were evident. The fungus grows down the leaf stalk (petiole) and into the stem causing the girdling lesion. The tops of the plants were dying and turning brown.

Bob Mulrooney

Vegetables

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

Cabbage
We continue to find economic levels of beet armyworm, fall armyworm, diamondback and cabbage looper larvae. Be sure to apply treatments before larvae move deep into the hearts of plants.

Lima Beans
Continue to scout all fields for lygus bugs, stinkbugs, corn earworm, fall armyworm and beet armyworm. All three can be found in fields at this time. The higher labeled rates of
insecticides will be needed for stinkbug control. For the worm pests, higher rates will also be needed if population levels are high and worms are large at the time of treatment. As you approach harvest, be sure to check all labels for days from last application to harvest as well as other restrictions.

Peppers
Be sure to maintain a 5 to 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, Georgetown, Greenwood, Laurel and Williamsville areas (above 30 per night in a number of locations), be sure to maintain a tight schedule for corn borer control. Since trap catches can increase quickly at this time of year, be sure to check local moth catches in your area at http://ag.udel.edu/extension/IPM/traps/latestblt.html. We are also starting to see an increase in aphid populations. Treatments should be applied before populations explode.

Snap Beans
Sprays are needed at the bud and pin stages on processing beans for corn borer control. An earworm spray will also be needed at the pin stage. With the significant increase in corn borer moth pressure and the continued heavy corn earworm moth populations, you will need to treat for both insect pests from the pin stage until harvest. In addition, the highest labeled rates may be needed if population pressure is heavy in your area. Remember, Orthene will not provide effective earworm control. In general, after the pin spray, treatments are needed on a 4-day schedule in Sussex County and on a 5-day schedule in Kent County until harvest. However, be sure to scout fields at least twice a week for corn earworm to be sure that a tighter schedule is not needed between the pin spray and harvest. Also, since trap catches can change quickly, be sure to check our website for the most recent trap catches to decide on the spray interval between the pin stage and harvest for processing snap beans (http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/snapbeanthresh.html). Once pins are present on fresh market snap beans, a 5-day schedule will be needed for corn borer and corn earworm control. 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. 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.

Sweet Corn
With the continued heavy corn earworm trap catches, the increase in corn borer moth catches and the presence of fall armyworm in whorl stage fields, all 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 quickly change. 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). You can also call the Crop Pest Hotline for current trap catches (in state: (800) 345-7544; out of state: (302) 831-8851). Continue to watch for fall armyworm feeding in whorl stage corn. We continue to find heavy levels (greater than 30% infested plants) in all late planted fields. 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 will need to combine a fall armyworm material with a pyrethroid for fall armyworm control in all silking corn.

Agronomic Crops

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

Alfalfa
Continue to sample fields on a weekly basis for leafhopper adults and nymphs. You will also
need to continue to watch for defoliators, especially webworms which can now be found in fields. Webworms may be destructive in last cuttings during drought conditions. When this pest is present, early harvest will often eliminate the problem. However, if the crop is more than 2 weeks from cutting and 25 to 30 percent of the terminals are damaged, treatment is suggested.

**Soybeans**

Continue to scout full season and double crop soybeans for defoliators including grasshoppers, bean leaf beetles and green cloverworm. The pre-bloom threshold is 30% defoliation and once fields reach the bloom to pod-fill stage the threshold drops to 15% defoliation.

You should also continue sampling fields for soybean aphids. Remember that this aphid is favored by cooler temperatures. Since low levels have been present in the state since late June, cooler weather could trigger an increase in populations. The action threshold - developed in the Midwest - is an average of 250 aphids per plant, on plants sampled throughout the field. In the Midwest, spraying at or beyond R6 has not been documented to increase yield.

Be sure to continue to sample all fields that are in the pod development and pod fill stages for stinkbugs. We are currently following the same treatment guidelines that are being used in Virginia: 1 large nymph/adult (either brown or green stinkbug) per row foot if using a beat sheet, or, 2.5 per 15 sweeps in narrow-row beans, or 3.5 per 15 sweeps in wide-row beans.

As a result of the continued high corn earworm moth pressure, economic levels of corn earworm larvae can now be found in double crop soybeans. Economic levels can be found in both irrigated and dry land fields. In some areas, consultants are finding high levels (well above threshold) in Sussex and southern Kent Counties. However, in other fields populations are moderate. We have also had reports of pod feeding. Remember, corn earworms will feed on the foliage and the pods. The only way to know if you have an economic level will be to scout. Therefore - be sure to scout all fields for podworms, especially double crop fields. A treatment should be considered if you find 3 corn earworm larvae per 25 sweeps in narrow fields or 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, Proaxis, 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 will provide effective control. In grower demonstration trials in 2002, Lorsban also provided good control. Be sure to check all labels for the days from last application to harvest as well as other restrictions.

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

**Market News Brief**

Renewed noncommercial speculative buying in corn pushed the market higher at mid-week though activity was light. Long liquidation has halted for the moment, stabilizing prices until seasonal pressure tied to bearish underlying fundamentals begins to kick in as we enter September and early harvest. Although pricing opportunities for ’06 corn, and soybeans have dried up at the present time it is important to note that pricing opportunities remain for booking sales of ’07 corn, soybean, and wheat production, with Dec ’06 corn at $2.90; Nov ’07 soybeans at $6.27; and Jul ’07 wheat at $4.20 per bushel.
The Pro Farmer Crop Tour will be winding down this week. Thus far, tour results concerning '06 corn and soybean yields are somewhat of a mixed bag. The tour historically, over the past several years, has underestimated U.S. row crop yields by 6 or 7%. It really depends upon who one talks to as to whether we should expect yields to rise or fall in the September Crop Report. It will be interesting to see which direction USDA takes in their September yield estimates. Remember the old adage ‘Big crops get bigger’.

Exciting Times Ahead
Thanks to strong demand for U.S. corn both at home and abroad, strong usage is a given for the remainder of the '06/'07 marketing year. Additionally, world corn stocks are currently extremely tight, with a stocks-to-use ratio of just 12.8%, the lowest since the 1973/74 marketing year. The corn market must do two things in late '06 into '07 and both things require higher prices: (1) bring additional acreage into corn production in '07 and (2) get prices high enough to keep a lid on usage so supplies don’t become critically tight.

Due to competing uses for row crop acres, these tasks are not likely to be easy for the corn market. Among those competing uses mentioned by commodity analysts are high wheat prices making '07 wheat production attractive, the large disparity between the cost of growing corn vs. soybeans, and the fact that, right now, ethanol margins are extremely profitable. That will raise the question as to how high corn prices have to bid this winter in order to restrain usage.

Commodity traders will also be keeping an eye on the September production estimate for U.S. soybeans. We are beginning to hear more about soy diesel and bio-diesel fuels. We are also expecting an acreage reduction for soybeans in the Southern Hemisphere for the '07 cropping season.

Market Strategy
Expectations are for commodity prices to weaken as we get further into the U.S. harvest. Depending upon storage availability now is not the time to be advancing new crop ‘06 corn and soybean sales. Dec corn is currently trading at $2.41; Nov beans at $5.67 per bushel.

Announcements
Severe Deer Damage Assistance Program (SDDAP)
Permits obtained through the Severe Deer Damage Assistance Program will allow antlerless deer to be harvested from August 15, 2006 through May 15, 2007 on enrolled farms.

For more information on enrolling in the SDDAP, contact Joe Rogerson with the Division of Fish and Wildlife at (302) 653-2882.

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

Week of August 17 to August 23, 2006
Readings Taken from Midnight to Midnight

Rainfall:
0.22 inch on August 21, 2006

Air Temperature:
Highs ranged from 90°F on August 20 to 83°F on August 18.
Lows ranged from 74°F on August 20 to 61°F on August 18.

Soil Temperature:
79°F average.
(Soil temperature taken at a 2" 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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