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

Cucumbers.
All fields should be scouted for cucumber beetles and aphids. Fresh market cucumbers are susceptible to bacterial wilt, so treatments should be applied before beetles feed extensively on cotyledons and first true leaves. Pickling cucumbers have more tolerance to wilt but a treatment may be needed if you find 2 or more beetles per plant and significant damage can be found on the cotyledons. A treatment should be applied for aphids if 10 to 20 percent of the plants are infested with aphids. Actara, Fulfill, Thiodan or Lannate will provide aphid control. Be sure to watch for bees foraging in the area and avoid insecticide applications on blooming crops.

Melons.
Continue to scout all melons for aphids, cucumber beetles, thrips and spider mites. The treatment threshold for aphids is 20% of the plants infested with at least 5 aphids per leaf. Actara, Fulfill, Lannate and Thiodan are labeled on melons and will provide melon aphid control. Be sure to watch for bees foraging in the area and avoid insecticide applications on blooming crops.

Cucumber beetle populations have exploded in many fields and multiple applications may be needed to control infestations. The treatment threshold for cucumber beetles in watermelons is 2 per plant. Carefully check field margins, under plastic, and cracks in ground around the base of plants for beetles. Since cucumber beetle vector bacterial wilt in cantaloupes, treatments should be applied before adult beetles feed extensively on cotyledons and first true leaves. Actara, dimethoate or a pyrethroid will provide cucumber beetle control. Again, be sure to watch for bees foraging in the area and avoid insecticide applications on blooming crops. Also, you should avoid repeated use of pyrethroids to avoid flare ups with mites later in the season.

Peppers.
In areas where corn borer trap catches are above 2 per night and pepper fruit is ½ inch in size or larger, fields should be sprayed on a 7-10 day schedule for corn borer control.

Potatoes.
Continue to sample fields for Colorado potato beetle adults and larvae. We are starting to see an increase in egg laying and hatch. The treatment threshold for adults is 25 beetles per 50 plants and 10 % defoliation. Once larvae are detected, the threshold is 4 small larvae per plant or 1.5 large larvae per plant. If multiple life stages are present, reduce these thresholds by one-half. Remember Actara or Provado should not be used in fields where Admire, Platinum or Tops MZ-Gaucho were used at planting to avoid the development of resistance. You will need to use Spintor, cryolite, or Avaunt plus PBO. A corn borer spray will be needed when we reach 700-degree days (base 50).
Currently we have accumulated 650 degree-days. The first corn borer spray will be needed by the end of this week or by early next week. Be sure to check our website (http://www.udel.edu/IPM/traps/latestblt.html) for the most recent moth catches in your area. Ambush, Baythroid, Furadan, Penncap, Pounce or Spintor will provide control. If you are scouting for infested terminals, the first treatment should be applied when 20-25% of the terminals are infested. Furadan or Monitor will provide the best control if you are waiting until you see infested terminals. Potato leafhoppers populations have started to increase. Controls should be applied if you find ½ to one adult per sweep and/or one nymph per every 10 leaves. Dimethoate, a pyrethroid, Actara or Provado will provide control.

We have also found our first green peach aphids in fields where Admire, Platinum or Tops MZ Gaucho were not used at planting. Before bloom, the treatment threshold is 2 aphids per leaf. From bloom until 2 weeks from harvest, the threshold is 4 aphids per leaf. Actara, Fulfill or Provado will provide control.

Snap Beans.
Continue to scout seedling stage fields for leafhopper and thrips activity. The thrips threshold is 5-6 per leaflet and the leafhopper threshold is 5 per sweep. If both insects are present, the threshold for each should be reduced by 1/3. Dimethoate, Lannate, Asana, Capture, or Warrior will provide control of both insect pests. If plants are approaching the bud stage, Orthene will control thrips, leafhoppers and corn borers. Once corn borer catches reach 2 per night, fresh market and processing snap beans in the bud to pin stages should be sprayed for corn borer. Orthene or Address (acephate) should be used at the bud and pin stages on processing beans. Once pins are present on fresh market snap beans and trap catches are above 2 per night, a 7-10 day schedule should be maintained for corn borer. Lannate, Asana, Capture or Mustang are labeled. Acephate has a 14-day wait until harvest.

Sweet Corn.
Corn borer whorl infestations range from 5 to 25% infested plants. A treatment should be applied if 15% of the plants are infested. The best timing for a treatment is just as the tassels are emerging from the whorls. In recent years, Baythroid, Mustang, Penncap or Warrior have provided effective control. The first silk sprays will be needed as soon as ear shanks are visible. Treatment will be needed on a 4-day schedule in Sussex County and a 5-day schedule in Kent County. Be sure to check our website (http://www.udel.edu/IPM/traps/latestblt.html) for the most recent moth catches in your area.

Field Crops

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

New Registration.
On May 30, 2003, EPA approved the registration for Poncho™ 600 seed-applied insecticide for corn. The new insecticide will be marketed to corn growers by participating seed companies under the names of Poncho 250 and Poncho 1250 to indicate different application rates and protection levels. Many seed companies are expected to offer corn hybrids protected with Poncho 250 and Poncho 1250 for planting in 2004. Poncho 250 will provide the early season seed and seedling protection against early season damage and stand loss caused by cutworms, wireworms, seed corn maggots, white grubs, and flea beetles. In addition to the above insects, Poncho 1250 will be used for rootworm and billbug control.

Field Corn.
Continue to sample no-till corn fields for true armyworm. We continue to find fields with above threshold levels. The treatment threshold for armyworms in corn is 25% infested plants with larvae less than one-inch long. A pyrethroid or
Lorsban will provide effective control, but only if worms are less than one-inch long.

There have also been reports of grasshoppers feeding on small plants. A grasshopper treatment should be considered if you find 5-8 grasshoppers per square yard. Asana, Dimethoate, Lorsban, Furadan and Warrior will provide control, but multiple applications may be needed.

**Small Grains.**
In most cases, aphid populations have been reduced by beneficial insects, especially syrphid fly larvae. We have had numerous questions about a "tear-shaped structure" attached to wheat heads. At this time, many of the syrphid fly larvae have begun to pupate so what you are finding are syrphid fly pupae.

We can find grass sawfly and armyworm larvae in numerous fields throughout the state. In general, most sawfly larvae are large and have already done their damage. However, we have had reports of small larvae and head clipping in New Castle County. In comparison, armyworm larvae are variable in size and small worms are still present in fields. Since barley is rapidly changing and is most susceptible to damage from armyworms, be sure to scout all fields before harvest. Remember that armyworms can clip heads right up to harvest. The treatment threshold is one per foot of row in barley and 2 per foot of row in wheat. At this point, the material of choice in barley will be Lannate. In wheat, the choices are Lannate, Mustang or Warrior.

**Soybeans.**
You should continue using a seed treatment for seed corn maggot control. We have also seen slugs feeding extensively on early-planted no-till fields. The only available options in soybeans are the metaldehyde baits-- TrailsEnd LG and Deadline M-Ps.

Watch all emerged fields for bean leaf beetles and grasshoppers. A treatment for bean leaf beetle will be needed from plant emergence to the second trifoliate when you find 2 beetles per ft. row and a 25% stand reduction. A pyrethroid, dimethoate or Lorsban will provide control. The treatment...
threshold for grasshoppers is 1 per sweep and 30% defoliation. Asana, Furadan, Lorsban, or Warrior will provide grasshopper control.

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

**Situation and Outlook for U.S. Corn, Soybeans, and Wheat**

**U.S. Corn.**
USDA is projecting U.S. corn production for the 2003/04 marketing year at 10.06 billion bushels, leaving production and use unchanged from last month. However, carry in stocks were increased by 25 million bushels resulting in a higher ending stock estimate of 1.329 billion bushels as compared to 1.304 a month ago. The increase in the carry in stocks estimate is likely due to an expected cut in exports due to increased competition from Argentina and Brazil. The average farm price estimate for the new crop year remains at $1.90 to $2.30 per bushel, as compared to $2.25 to $2.35 for '02/'03.

Global coarse grain supplies are reported to be reduced this month as a result of smaller prospective crops and expanding use. China's corn production was reduced by 4 million tons.

The initial calls for the release of the June 11th crop report were bearish. It is important to note that the U.S. corn crop, now mostly planted, is a long way from maturity. The critical growing month for the U.S. corn crop is July.

**U.S. Soybeans.**
U.S. soybean production is now projected at 2.855 billion bushels, unchanged from the May estimate. In fact the only change in the U.S. supply and demand balance sheet forecast for the 2003/04 marketing year is an increase in carry in stocks of 5 million bushels resulting in a 5 million increase in projected ending stocks, now placed at 250 million bushels. That increase stems from adjustments to the '02/03 supply and demand balance sheet reducing crush by 5 million bushels, domestic soybean meal consumption by 3%, and reducing domestic soybean meal disappearance by 150,000 tons.

Global oilseed production for the '03/04 marketing year is projected at a record 344 million tons, an increase of 17 million tons from '02/03. Foreign production is projected to increase 13 million tons from the '02/03 marketing year and is now forecast at 257 million tons. Global trade estimates were also increased for soybeans this month as compared to the May estimate.

The projected season average soybean price for '03/04 is unchanged from the May estimate of $4.45 to $5.45 per bushel, as compared to $5.50 per bushel last year. Soybean meal prices for '03/04 are projected at $150 to $180 per short ton and soybean oil prices at 18 to 21 cents per pound, both unchanged from last month.

**U.S. Wheat.**
The wheat situation and outlook in the June report is being viewed most negative by commodity traders with the production estimate for '03/04 now placed at 2.176 billion bushels for all wheat, a 63 million bushel increase. Carry in stocks from the '02/03 marketing year were also increased by 20 million bushels, imports were increased by 10 million bushels raising total supply projections by 93 million bushels from May to June.

With no change in use projections, USDA raised the carry out projection for the '03/04 marketing year by 93 million bushels, now placed at 604 million bushels.

World wheat stocks tightened further this month, with projected production dropping below year earlier levels. World wheat output for '03/04 was cut by 8 MT, but ending stocks were increased by 2 MT.

The season average farm price for all U.S. wheat was decreased from last month and is now projected at $2.90 to $3.50 per bushel,
representing a 15 cent decline on both the high and low end of the price estimate.

**Marketing Strategy.**

Although this report was viewed as negative on today's open, corn is trading very strong as we near today's close. Dec '03 corn futures are trading at $2.43 per bushel, Nov '03 soybeans are trading at $5.81 per bushel, with July '03 wheat trading at $3.30 per bushel. This market will continue to stay focused on new crop development.

Old crop soybean basis is currently bidding at 15 over into Salisbury and 10 under for the Nov '03 new crop. For those that have not done so already, it is a good time to sell or lock in the basis for old crop beans and to advance new crop forward cash soybean sales to the 30% to 40% level of intended production. For new crop beans that are to be delivered at harvest, it is also a good time to lock in the basis for soybean sales that one is going to make between now and harvest. At $5.71 per bushel for forward priced soybeans, the preferred sales method appears to be the forward cash contract at this point in time.

**Field Crop Diseases** – Bob Mulrooney Extension Plant Pathologist; bobmul@udel.edu

**Wheat.**

**Head Scab** or Fusarium head blight is being seen now in wheat. Infected heads are straw-colored and often have the pink discoloration on the glumes during wet weather. Infected seed is white and moldy appearing. Occurrence will depend more on weather conditions during the flowering period. Check when you see whole heads that are white to straw-colored. Some white heads are due to insect clipping at the base of the plant. It looks like 2003 will be a scab year which we have not had for some time. It is too early to guess how much we will see, but it will vary.

**Septoria glume blotch** is now evident as well. Glume blotch will cause discolored heads and reduced test weights. Septoria leafspots have really moved up susceptible plants during the week with the rise in temperatures and steady rainfall.

**Be Sure to Scout Corn** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

It is important to start to get over the corn ground to check if there are weed breaks, particularly since we have had so much rain, and that we have not had much shading due to the slow growing corn. Crabgrass is also one that worries me since it is very difficult to control with a postemergence spray. Most of the postemergence grass herbicides (Basis Gold, Steadfast, or Option) will not control crabgrass over 1 to 2 inches tall. Herbicide-resistant corn (Liberty Link or Roundup Ready) gives you a wider window for crabgrass control. However, other weeds are likely to start emerging as well so be sure to check your fields soon.
### Weather Summary

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

**Weeks of June 5 to June 12, 2003**

<table>
<thead>
<tr>
<th><strong>Rainfall:</strong></th>
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<tbody>
<tr>
<td>0.01 inches: June 5</td>
<td></td>
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<tr>
<td>2.54 inches: June 7</td>
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</tr>
<tr>
<td>0.01 inches: June 9</td>
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<tr>
<td>0.20 inches: June 11</td>
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<tr>
<td>0.03 inches June 12</td>
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Readings taken for the previous 24 hours at 8 a.m.

<table>
<thead>
<tr>
<th><strong>Air Temperature:</strong></th>
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<tbody>
<tr>
<td>Highs Ranged from 88°F on June 12 to 68°F on June 8</td>
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</tr>
<tr>
<td>Lows Ranged from 68°F on June 12 to 54°F on June 6</td>
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<tr>
<th><strong>Soil Temperature:</strong></th>
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<tr>
<td>72°F average for the week.</td>
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<tr>
<td>(Soil temperature taken at a 2 inch depth, under sod)</td>
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Web Address for the U of D Research & Education Center: **http://www.rec.udel.edu**

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**Compiled and Edited By:**  
**Tracy Wootten**  
**Extension Associate - Vegetable Crops**

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