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

Lima Beans.
As soon as pin pods are present, scout fields for lygus bugs and stinkbugs. Treatment should be considered if you find 15 adults and/or nymphs per 50 sweeps. Lannate, Capture or Warrior can be used if both species are present. A higher rate of Capture (4 oz/A), Mustang (4.3 oz/A) or Warrior (3.84 oz) will be needed if stinkbugs are the predominant insect present.

Melons.
Continue to scout all melons for aphids, cucumber beetles, and spider mites. A treatment will be needed for spider mites if you find 20-30% of the plants infested with 1-2 mites per leaf. If populations of mites have exploded and adult mites are the predominant life stage, Capture or Danitol should be used. If the population is a mixture of eggs, immature mites and lower levels of adult mites, Agri-Mek should be used at 8 oz/acre. A second miticide application may be needed in 3-7 days depending on the population level at treatment time.

Peppers.
Even though corn borer catches are low, a spray should be applied as soon as 1/2-inch fruit is present. As soon as 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. Pepper maggot sprays are needed as soon as fruit are present. If you are using acephate (Orthene or Address), it will provide pepper maggot control. Otherwise, dimethoate is the best control option.

Potatoes.
Continue to sample fields for Colorado potato beetle adults and larvae. 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. We are still finding threshold levels of green peach aphids in fields where Admire, Platinum or Tops MZ Gaucho were not used at planting. The threshold at this time is 4 aphids per leaf. Once we are 2 weeks from harvest, the threshold increases to 10 per leaf. Provado, Fulfill, Monitor orVydate will provide green peach aphid control. Vydate CLV formulation is now labeled on potatoes and should be used at 1.5-2 pts/acre. Provado is only labeled for ground application for aphid control. A penetrating surfactant (e.g. LI-700 or AD-100) should be used with Fulfill.

Snap Beans.
Seedling beans should still be watched carefully for thrips and leafhopper activity. If both insects are present, the threshold for each should be reduced by 1/3. The thrips threshold is 5-6 per leaflet and the leafhopper threshold is 5 per sweep. Even though corn borer counts remain low, a treatment should be applied if
Defoliators are feeding on pin pods. Lannate, Asana, Warrior or Capture will provide the best control of defoliators. Corn borer sprays should be applied at the bud and pin stages on processing snap beans.

**Sweet Corn.**
When you look at the corn earworm trap catches for the last seven days, fresh market silking sweet corn should be sprayed on a 3-4 day schedule throughout the state. Be sure to check the IPM website for the most recent BLT catches in your area (http://www.udel.edu/IPM/traps/latestblt.html).

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

**Update on Disease Control on Pickles.**
Last week in my attempt to provide disease control recommendations I made a few omissions. In addition to the other strobilurin fungicides available for powdery mildew control add Flint 50WDG. For the control of downy mildew and Phytophthora fruit rot where Ridomil Gold/Bravo (mefanoxam plus chlorothalonil) is recommended an alternative is Flouranil (mefanoxam plus chlorothalonil).

**Snapbeans.**
If this wet, humid weather pattern continues, look for **Rhizoctonia tip rot** to become a problem on snapbeans where the pods touch the soil. Growers now have an option for control with Quadris which was labeled after the Vegetable Recommendations Book was published. Quadris is labeled on snapbeans, including foliar Rhizoctonia with zero days to harvest. Apply 6.2-15.4 fl. oz./A before the pods touch the soil. A small test conducted here several years ago in addition to a test in North Carolina showed no advantage to applying Nova for this use. Quadris was not tested.

**Dual Magnum Receives Special Local Need Label (Section 24c) for Use on Transplanted Cabbage and Peppers** - Ed Kee, Extension Vegetable Crops Specialist; kee@udel.edu

Dual Magnum has received a renewal of the Special Local Need Label (Section 24c) for use on Transplanted Cabbage and Bell Peppers in Delaware. This is a “third-party” label in cooperation with the Vegetable Growers Association of Delaware. Users of Dual Magnum in Delaware must be a member of the VGAD and obtain the label and complete the liability waiver form. These are available from the Association through Ed Kee or Tracy Wootten.

Language from the Waiver of Liability form includes, “Neither the Vegetable Growers Association of Delaware (VGAD) nor Syngenta Crop Protection Inc. recommends the use of Dual Magnum on transplanted cabbage and transplanted bell peppers. The decision to use or not to use this herbicide must be made by each individual user and/or grower on the basis of possible crop injury from Dual Magnum, the severity of weed infestations, the cost of alternative weed controls, and other factors.”

On cabbage, Dual Magnum may be applied with ground application equipment prior to transplanting or a broadcast application within 48 hours after transplanting cabbage. Use 0.5 to 1.33 pints per acre, according to soil type in a minimum of 10 gallons of water. Do not incorporate, do not use on direct-seeded cabbage, and do not use in combination with Goal. Crop maturity may be delayed.

On Bell Peppers, apply as a broadcast application with ground application equipment within 48 hours after transplanting bell peppers. Use 0.5 to 1 pint per acre according to soil type in a minimum of 10 gallons of water per acre.

Read the restrictions and further instructions for use on the label.
Weekly Crop Update

While I Was Away… - Ed Kee, Extension Vegetable Crops Specialist; kee@udel.edu

As many of you know, I was in the Ukraine from May 18 to June 22, working with vegetable growers and processors. I was able to email home and the office while away, and the reports of the rain and bad weather here on Delmarva were extraordinary.

As a result, most vegetable crops are ten to fourteen days later than normal. Many of you have dealt with weed control problems or fertility problems as a direct result of the weather conditions.

The first several plantings of crops such as pickling cucumbers and sweet corn, even if the cultural practices were able to be followed are experiencing relatively low yields, quality problems, and in the case of sweet corn, small ears. This is a result of stress from cool temperatures, excess moisture, compaction, and extended periods of poor sunlight. Fortunately, as we move into the next group of plantings, yields and quality are improving.

All of us probably tire of blaming the weather on everything, but its impact cannot be underestimated.

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Field Crops

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

Field Corn.
Although European corn borer larvae can be found feeding in whorl stage corn, in many cases third instar larvae are the predominant stage and have already begun to borer into the midribs. Once 1/3 of the plants have larvae boring into the midribs of leaves and stalks, rescue treatments will not be very effective.

As the earliest planted corn begins to silk, watch for Japanese beetles and corn rootworm adult beetles feeding on silking corn. The decision to treat should be based on the number of beetles per silk as well as how far you are in the pollination period. In recent years, large numbers of rootworm beetles feeding on silks before 50% pollination have resulted in yield losses, especially along field edges. Under normal conditions only late planted corn fields are at risk of poor ear fill because of silk clipping by corn rootworm and Japanese beetles. However, since plant growth and development is behind this year, more fields may be at risk. A treatment is recommended on silking corn if you can find 4-5 rootworm beetles per plant or 3 or more Japanese beetles per plant and they are clipping silks to less than ½ inch long before 50% pollination. Once brown silk is present, silk clipping will not affect ear fill.

Soybeans.
Continue to scout for grasshoppers and spider mites in seedling stage beans. We are starting to see an increase in grasshopper activity. Grasshoppers can be controlled with Asana, Baythroid, Dimethoate, Furadan, Lorsban or Warrior. Spider mites can be managed with Dimethoate, Lorsban or Parathion. With both pests, multiple applications may be needed. In addition to grasshoppers and spider mites, Japanese beetles and green cloverworm populations are starting to increase in the earliest planted soybeans. Although we rarely see economic losses from Japanese beetle feeding, losses have occurred in recent years from green cloverworm, especially on double-cropped soybeans. Small cloverworm larvae produce "window-pane" feeding holes in the leaves. As larvae increase in size, the damage will appear as large holes between the veins. In general, no controls are needed prebloom unless you find 15 larvae per foot of row and 30% defoliation. No controls will be needed prebloom for Japanese beetle unless you find 7 beetles per foot of row and 30% defoliation. If a combination of insects are present, the threshold for each pest should be reduced by 1/3. A pyrethroid or Lorsban will...
provide effective control of cloverworms and Japanese beetles.

**UPCOMING EVENTS:**

**Farm and Home Field Day Set for August 13**

Take a day to enjoy summertime in the country at the University of Delaware's Farm and Home Field Day, Wednesday, August 13. Held from 8:30 a.m. until 1:30 p.m. on the grounds of the Research and Education Center, on 16684 County Seat Highway (U.S. R.t. 9) west of Georgetown, this annual event offers many fun-filled, educational activities, tours, interactive exhibits and demonstrations for homeowners and farmers alike.

Field tours by wagon will highlight agronomic and vegetable crops. Farmers can consult with Extension specialists about the latest research and pest control strategies.

Visitors to Field Day can drop by the Master Gardener demonstration garden to view the wide array of plantings. What began several years ago as a yearly one-day display for Farm and Home Field Day has blossomed into a large permanent exhibit for plants, including herbs, shade-loving plants, annual flowers, perennial ground covers, decorative grasses, a problem garden, a bog garden, a children's garden, and a container garden.

Children, parents, and caregivers will learn about keeping their young children safe during the summer months. This portion of the program will include many interactive exhibits and demonstrations plus costumed characters, children's aerobics, face painting, finger printing, a petting zoo, and car seat check. Local 4-H clubs will set up a petting zoo and food booths. Consumer, environmental and commodity groups will staff informational booths in the Grove. Carriage and pony rides will round out the morning’s activities.

Farm and Home Field Day is free and open to the public, and plenty of free parking is available. Tickets for a traditional barbecued chicken luncheon at 12 noon can be purchased at the registration table for $6.00.

For more information, call Mark Isaacs at 302-856-1997 or Jay Windsor at 302-856-7303.

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**Weather Summary**

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

**Weeks of July 3 to July 10, 2003**

<table>
<thead>
<tr>
<th>Rainfall:</th>
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<tbody>
<tr>
<td>0.61 inches: July 3</td>
</tr>
<tr>
<td>0.17 inches: July 6</td>
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<tr>
<td>0.02 inches: July 7</td>
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<tr>
<td>0.93 inches: July 9</td>
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Readings taken for the previous 24 hours at 8 a.m.

<table>
<thead>
<tr>
<th>Air Temperature:</th>
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<tbody>
<tr>
<td>Highs Ranged from 93°F on July 6 &amp; 9 to 75°F on July 10.</td>
</tr>
<tr>
<td>Lows Ranged from 75°F on July 5 to 67°F on July 3.</td>
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</tbody>
</table>

<table>
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<tr>
<th>Soil Temperature:</th>
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<tbody>
<tr>
<td>79°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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</table>

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

**Compiled and Edited By:**

Tracy Wootten
Sussex County Extension Educator - Horticulture

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