Vegetable Crops

**Vegetable Crop 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. Although pickling cucumbers have a tolerance to wilt, a treatment may still be needed for machine-harvested pickling cucumbers when 5% of plants are infested with beetles and/or plants are showing fresh feeding injury. A treatment should be applied for aphids if 10 to 20 percent of the plants are infested with aphids with 5 or more aphids per leaf.

**Melons**
Continue to sample all melons for aphids, cucumber beetles, and spider mites. The treatment threshold for aphids is 20% infested plants with at least 5 aphids per leaf. Be sure to also watch for beneficials. The threshold for mites is 20-30% infested crowns with 1-2 mites per leaf. We have seen an increase in cucumber beetle activity, especially in cantaloupe fields. Since beetles can continue to re-infest fields as well as hide under the plastic, multiple applications are often needed.

**Peppers**
Continue to sample for thrips. We are hearing reports of an increase in thrips activity in crops grown in southern states. You should also continue to sample for corn borers and watch carefully for egg masses. Before fruit is present these young corn borer larvae can infest stems and petioles. Be sure to also check local moth catches in your area by calling the Crop Pest Hotline (in state: 800-345-7544; out of state: 302-831-8851) or visiting our website at [http://ag.udel.edu/extension/IPM/traps/latestbeta.html](http://ag.udel.edu/extension/IPM/traps/latestbeta.html).

**Potatoes**
Fields should be scouted for Colorado potato beetle (CPB), corn borers (ECB) and leafhoppers. Adult CPB as well as the first small larvae can now be found. A treatment should be considered for adults when you find 25 beetles per 50 plants and defoliation has reached the 10% level. Once larvae are detected, the threshold is 4 small larvae per plant or 1.5 large larvae per plant. As a general guideline, controls should be applied for leafhoppers if you find ½ to one adult per sweep and/or one nymph per 10 leaves.

**Snap Beans**
Continue to sample all 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. In addition, we are starting to see an increase in bean leaf beetle activity. Damage appears as circular holes in leaves and significant defoliation can quickly occur. As a general guideline, a treatment should be considered if defoliation exceeds 20% prebloom. 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. Sprays will be needed at the bud and pin stages on processing beans. Once pins are present on fresh market snap beans and corn borer trap catches are above 2 per night, a 7 to 10-day schedule should be maintained for corn borer control.  
(http://ag.udel.edu/extension/IPM/traps/latestblt.html).

Sweet Corn
Continue to sample seedling stage fields for cutworms and flea beetles. You should also sample all whorl stage corn for corn borers. A treatment should be applied if 15% of the plants are infested. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check trap catches since the spray schedules can quickly change. You can call the Crop Pest Hotline for the most recent trap catches -- in state: 1-800-345-7544; out of state: 302-831-8851 or check our website at http://ag.udel.edu/extension/IPM/traps/latestblt.html.

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**Potato Disease Advisory #4 - May 27, 2010** - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

**Late blight Advisory**
We are using the E-WEATHER SERVICE from SkyBit, Inc as we have in the past. The service determines specific requested weather parameters (temperature, relative humidity and rainfall) based on calculations of data from the nearest National Weather Service stations. This weather data is used in the WISDOM software program for predicting late blight and early blight and making spray recommendations.

**Location: Art and Keith Wicks Farm, Rt 9, Little Creek, Kent County**

**Green row: May 6**

<table>
<thead>
<tr>
<th>Date</th>
<th>DSV</th>
<th>Total DSV</th>
<th>Spray Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/1 - 5/10</td>
<td>0</td>
<td>0</td>
<td>none</td>
</tr>
<tr>
<td>5/11 - 5/12</td>
<td>3</td>
<td>3</td>
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</tr>
<tr>
<td>5/12 - 5/13</td>
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</tr>
<tr>
<td>5/14 - 5/17</td>
<td>0</td>
<td>4</td>
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</tr>
<tr>
<td>5/17 - 5/19</td>
<td>7</td>
<td>11</td>
<td>none</td>
</tr>
<tr>
<td>5/20</td>
<td>0</td>
<td>11</td>
<td>none</td>
</tr>
<tr>
<td>5/21 - 5/23</td>
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<td>11</td>
<td>none</td>
</tr>
<tr>
<td>5/23 - 5/25</td>
<td>18</td>
<td>29</td>
<td>5-7 days</td>
</tr>
</tbody>
</table>

Planting was delayed due to the wet weather this spring so we are about a week behind last year when comparing greenrow on early planted potatoes. Disease severity values have been accumulating very slowly this year especially compared to last season. The threat of late blight from seed infection is low, but there was some in Maine last season. Be vigilant anyway, given this recent weather pattern. The first late blight fungicide application is recommended once 18 Disease Severity Values (DSVs) accumulate from green row. Green row occurred approximately on May 6, 2010. Please be vigilant and keep a look out for suspect infections on young plants coming from infected seed pieces! Growers opting not to use the forecast system should put the first late blight fungicide application on when the plants are 6 inches tall, and repeat every 7 days. There are numerous fungicides now labeled for late blight control; however, use of mancozeb (Manzate, Penncozeb, or Dithane), chlorothalonil or Polyram are still very effective early season protective fungicides to use.

The recent wet weather from Sunday through late Tuesday was responsible for the accumulation of 18 DSVs. This was enough to trigger the first spray recommendation of the season. Fungicide sprays should be initiated if not done so already.
**Agronomic Crops**

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

**Alfalfa**

Potato leafhoppers are now present in fields so be sure to sample on a weekly basis after the first cutting. Once plants are yellow, yield loss has already occurred. The treatment thresholds are 20 per 100 sweeps on alfalfa 3 inches or less in height, 50 per 100 sweeps in 4-6 inch tall alfalfa and 100 per 100 sweeps in 7-11 inch tall alfalfa.

**Field Corn**

As small grain dries down, be sure to watch for armyworms moving out of small grain and into adjacent corn fields. You should also scout corn for armyworms in fields that were planted into a small grain cover. Remember, worms must be less than 1 inch long to achieve effective control. The treatment threshold for armyworms in corn is 25% infested plants with larvae less than one-inch long. Large larvae feeding deep in the whorls will be difficult to control.

**Small Grain**

As small grains dry down, be sure to watch for head clipping from armyworm and sawfly. In fields that did not receive an insecticide spray, we have started to find an occasional field with armyworms. On barley, significant head clipping from armyworms can quickly occur. As a general guideline, the threshold for armyworms in barely is one per foot of row and for wheat one-two per foot of row.

We continue to find an occasional wheat fields with economic levels of cereal leaf beetle, especially later maturing fields. Research from North Carolina and Virginia indicates that the greatest amount of damage occurs between flowering and the soft dough stage of plant development. Before making an application of an insecticide, be sure to check all labels for the number of days between last application and harvest.

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**Small Grain Disease Update** - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

After checking the state small grain variety trial at the REC near Georgetown I can report that there were several cultivars that had low levels of stripe rust and several with low levels of leaf rust. The recent wet weather may cause some localized outbreaks of stripe rust but it should be too late to cause much yield loss. All these infected areas were past flowering, mostly milk to soft dough stage, so it is too late for fungicide applications. There were low levels of speckled leaf blotch caused by Septoria tritici and low levels of tan spot as well as Stagnospora leaf and glume blotch. No head infections were seen last Friday. These too may increase with the wet weather early in the week.

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

**General Commodity Market Observations**

As of Monday May 23, ninety-three percent of the U.S. corn crop was planted, as compared to eighty-nine percent for the 5-year average, with seventy-one percent emerged, 11 points ahead of the average. Seventy-one percent of the nation’s corn crop was reported to be in good to excellent condition. Fifty-three percent of the soybean crop was planted, 4 points behind the average, with twenty-four percent emerged, 1 point ahead of the average. Two-thirds of the winter wheat crop was reported to be in good to excellent condition with two-thirds headed. All other wheat varieties were reported to meet or exceed crop condition expectations.

The situation in Europe is impacting the U.S. and European economies. Europe is an important destination for high dollar U.S. manufactured goods. Stagnate or contracting economic growth is negative for U.S. grain prices. This information was not likely factored into USDA’s May average farm price projections. Additionally, the weaker Euro enhances exportability of EU wheat, resulting in competition with U.S. wheat. More U.S. wheat will have to be priced into feeding rations replacing DDGs and corn.

The next look at USDA supply/demand projections is scheduled for release on June 10.
Some analysts believe the USDA price projections given in the May report to be overly optimistic. Due to the rapid pace of planting this spring we may see an increase in U.S. planted acres from March 31 Planting Intentions. However, any acreage adjustments will not be made until the June 30 Planted Acreage report is issued. Barring any revisions made in demand projections, the production numbers are not likely to change much, if any, on June 10 for U.S. corn and soybeans unless USDA revises yield estimates.

The weekly export sales report, released this morning was viewed to be bullish for corn, neutral for soybeans, and bearish for wheat.

**Argentina Set As Major Player in International Corn Market**
Corn production in Argentina for 2010 is projected to be somewhere between 20.5 to 21.4 million metric tons depending upon the source of the estimate, sharply higher than last season’s drought reduced crop of only 12.7 MMT. Accounting for Argentine domestic use, Argentina will have roughly 13 MMT available for export. Brazil produces twice as much corn but consumes most of it domestically. Brazil is expected to have about 8 MMT available for export for the ‘10/’11 marketing year. Argentina is the world’s second largest exporter of corn. Considering their economic problems, internal political rifts, and inflation rate of nearly 30 percent, it will be interesting to see if these projections can be met?

**Marketing Strategy**
Although it is not possible to out-guess Mother Nature, commodity traders and analysts are increasingly warning farmers to prepare for sharply lower prices, based upon what could happen in the event crop growing conditions remain favorable to crop development. Dec ‘10 corn futures, trading at $3.92 per bushel, about 12 to 14 cents per bushel higher than last week are possibly making a last attempt at a seasonal rally or are we just experiencing position squaring ahead of the Memorial Day weekend? Nearby crude is currently trading at $71.51 per barrel, almost $15.00 per barrel less than the recent high set two weeks ago. The Dow is currently at 10,177, off about 900 points since the situation in Greece involving much of Europe came to bear. The U.S. Dollar Index is trading at 86.63, up about 7 points since May 3rd. Nov ‘10 soybeans are trading at $9.17 per bushel. July ‘10 SRW wheat is trading at $4.70 per bushel. Maybe the best use of one’s time in the immediate future is to try and get an idea of possible weather outlooks for the current growing season. A good place to start is at http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=3.

For technical assistance on making grain marketing decisions contact Carl L. German, Extension Crops Marketing Specialist.

### General

**Insecticide Label Updates** - Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu

**Scorpion**
Gowan recently received a registration for Scorpion 35SL (dinotefuran is the active ingredient). It is labeled for the control of sucking and chewing insects that attack cucurbits, fruiting vegetables, grapes, head and stem brassica, leafy vegetables and potatoes. Please refer to the label for the full list of labeled crops, use directions, rates and restrictions.
http://www.cdms.net/LDat/ld9I6000.pdf

**Voliam Xpress**
Syngenta recently received a supplemental label for Voliam Xpress (a combination of lambda-cyhalothrin and chlorantraniliprole) which expands it’s use to a number of new crops including alfalfa; field corn; sweet corn; grass forage, fodder and hay; legume vegetables (peas and beans) and tuberous and corm vegetables. Please refer to the supplemental label as well as the EPA registered label for the use directions, rates and restrictions. “The supplemental labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label. “ The supplemental label must be in possession of the user at the time of pesticide application.
http://www.cdms.net/LDat/ld8N5009.pdf - supplemental label
http://www.cdms.net/LDat/ld8N5004.pdf - EPA registered label
**Announcements**

**Soybean Cyst Nematode Workshop**
Tuesday, August 3, 2010

Soybean cyst nematode (SCN) is a widespread and serious pest of soybeans on Delmarva. First discovered in the fall of 1979 it has been causing increased problems for growers in recent years. This workshop will cover some basics about the biology of SCN and its management. The results of the recent DSB sponsored survey of SCN will also be addressed. The workshop will also include visiting a small research plot to see SCN first hand and discuss symptoms, diagnosing SCN from root samples, and proper soil testing procedures. Participants will also observe a demonstration on how SCN are extracted from soil samples and how eggs are extracted from cysts. The workshop is suggested for agricultural professionals on Delmarva who advise soybean growers and growers who want to know more about this important pest.

The date for the workshop is **Tuesday, August 3, 2010** at the Carvel Research and Education Center near Georgetown, DE. Hold the date if you are interested. The program will likely run from 8:30 until noon and include lunch. Pesticide recertification credits and CCA credits in pest management will be offered for attendees. More information will follow.

**Livestock Pasture Walk**
Wednesday, June 9, 2010  6:00 - 8:00 p.m.
DSU, Hickory Hill Research Farm
Route 42, West of Cheswold, DE

Come learn techniques for good pasture management for livestock!

Experts will be on hand from the University of Delaware, Delaware State University and the Natural Resource Conservation Service (NRCS) to answer your questions!

Please bring a folding chair.

NM and CCA credits will be available.

This meeting is free and everyone interested in attending is welcome.

To register, request more information or if you require special needs assistance for this meeting, please call our office in advance at (302) 831-2506. Call to register by June 7.

See you there!
Anna Stoops
NCC Extension, Agricultural Extension Agent

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**Pea Twilight Meeting**
Thursday, June 10, 2010  6:00 p.m.
Carvel Research and Education Center
16483 County Seat Highway
Georgetown, DE 19947

Meeting will include a tour of the late pea variety trial and preliminary results from the early pea trial. UD Extension specialists will be on hand to answer any questions.

There will be refreshments following the tour.

Please call Emmalea Ernest at (302)856-7303 by Monday, June 7 if you plan to attend.

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**Delaware Organic Food and Farming Association Organic Workshop and June Business Meeting**
Thursday, June 10, 2010  6:00 - 9:00 pm
New Castle County Cooperative Extension Office
461 Wyoming Rd, Newark, DE 19716

Come and listen to Dr. Joseph Heckman from Rutgers University give an interesting and enlightening talk about the history and philosophy of organic farming. We’ll also have a presentation on the organic certification process followed by a business meeting for our DOFFA membership. Anyone wishing to stay or join our organization is welcome.

This workshop is free and everyone interested in attending is welcome.

To register, request more information or if you require special needs assistance for this meeting, please call our office in advance at (302) 831-2506.

See you there!
Anna Stoops, NCC Extension
Agricultural Extension Agent
DOFFA Secretary/Treasurer
Weather Summary
Carvel Research and Education Center Georgetown, DE

Week of May 20 to May 26, 2010
Readings Taken from Midnight to Midnight

Rainfall:
No rainfall recorded

Air Temperature:
Highs ranged from 87°F on May 26 to 71°F on May 24.
Lows ranged from 61°F on May 23 to 51°F on May 20.

Soil Temperature:
71.8°F average

Additional Delaware weather data is available at http://www.deos.udel.edu/monthly_retrieval.html and http://www.rec.udel.edu/TopLevel/Weather.htm

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops

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