Vegetables

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

Lima Beans.
Continue to sample for spider mites on seedling stage lima beans. A treatment should be considered when you first notice the stippling and you find 10-20 mites per leaflet. Kelthane should provide effective control. Lygus and stinkbug populations have started to increase. Be sure to sample fields as they approach the bud stage. A treatment is needed if you find 15 lygus bugs or stinkbugs per 50 sweeps.

Peppers.
At the present time, all peppers that are ½ inch in size or larger should be sprayed on a 7-10 day schedule for corn borer control. If Orthene or Address are used, it will also control pepper maggot. If Lannate, Spintor or a pyrethroid are used, then dimethoate should be added to the mix.

Snap Beans.
Since corn borer catches still remain low, snap beans will not need to be sprayed for corn borer until trap catches reach the 2 to 5 per night range in your area. At that time, processing snap beans should be sprayed with Orthene or Address at the bud and pin stages. Fresh market snap beans should be sprayed with Lannate or Capture.

Sweet Corn.
Fresh market silking sweet corn should be sprayed on a 3-4 day schedule in the Frederica, Milford, Rising Sun and Wyoming areas. In all other areas, sprays should be applied on a 5-6 day schedule.

Late Blight Update - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

Disease Severity Value (DSV) Accumulations as of June 28, 2000 are as follows:
Remember that 18 DSV’s is the threshold to begin a spray program

<table>
<thead>
<tr>
<th>Emergence Date</th>
<th>DSV’s June 28</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 14</td>
<td>135</td>
<td>7-day, high rate</td>
</tr>
<tr>
<td>April 21</td>
<td>108</td>
<td>7-day, high rate</td>
</tr>
<tr>
<td>April 27</td>
<td>96</td>
<td>7-day, high rate</td>
</tr>
<tr>
<td>May 20</td>
<td>48</td>
<td>7-day, low rate</td>
</tr>
<tr>
<td>May 24</td>
<td>48</td>
<td>5-day, low rate</td>
</tr>
</tbody>
</table>

Accumulated 8 DSV’s since the last report.
More DSV’s will accumulate today.

Bacterial Stem Decay: There is evidence of bacterial stem decay in some fields that can be caused by a variety of bacteria mostly Pseudomonas and Xanthomonas. They are favored by wounded stems, sunburning and
splashing water that moves the bacteria from the soil to the stems. In the extreme heat, the bacteria multiply very rapidly and can turn stems to mush. There is no control for this problem.

This problem should not be confused with European corn borer (ECB) damage. ECB damage has been very light this season.

Vegetable Diseases - Kate Everts, Extension Vegetable Pathologist, University of Delaware and University of Maryland; everts@udel.edu

Melcast for Watermelons
EFI Values (Environmental Favorability Index)
Do not use MELCAST if there is a disease outbreak in your field, it is a preventative program. Any questions please call Phil Shields at (410) 742-8788 or e-mail: ps136@umail.umd.edu

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Bridgeville, DE</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Laurel, DE</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>(Collins Farms)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Galestown, MD</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Georgetown, DE</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
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<td></td>
<td></td>
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<tr>
<td>Hebron, MD</td>
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<td>0</td>
<td>3</td>
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<td>1</td>
<td>0</td>
<td>5</td>
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<tr>
<td>Salisbury, MD</td>
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<td>4</td>
<td>3</td>
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<td>6</td>
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<tr>
<td>Vienna, MD</td>
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<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Laurel, DE</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>(Vincent Farms)</td>
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</table>

The first fungicide spray should be applied when the watermelon vines meet within the row. Additional sprays should be applied using MELCAST. Accumulate EFI (environmental favorability index) values beginning the day after your first fungicide spray. Apply a fungicide spray when 30 EFI values have accumulated by the weather station nearest your fields. Add 2 points for every overhead irrigation. After a fungicide spray, reset your counter to 0 and start over. If a spray has not been applied in 14 days, apply a fungicide and reset the counter to 0 and start over. The first and last day listed above can be partial days so use the larger EFI value of this report and other reports for any specific day.

If, for some reason, a serious disease outbreak occurs in your field, return to a weekly spray schedule.

More detailed information concerning MELCAST and sample data sheets are available on the web at http://www.agnr.umd.edu/users/vegdisease/vegdisease.htm or http://www.udel.edu/IPM/

Field Crops

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

Alfalfa.

Continue to sample fields for potato leafhoppers. Economic levels can be found in all stages of plant growth. If high levels are present before cutting, a stubble spray may be needed. All fields should be sampled within a week of cutting since damage is most severe on small plants.
Field Corn.
Grasshopper populations have started to increase, especially along field edges. In corn, a treatment is justified if you find 5-8 grasshoppers per square yard. Sevin and Warrior are both labeled and have provided the most consistent control. As 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. A treatment is recommended on silking corn if you can find 4-5 beetles per plant and they are clipping silks to less than ½ inch long before 50% pollination.

Soybeans.
Continue to sample for spider mites, grasshoppers and leafhoppers in seedling stage soybeans. If all three are present, the threshold for each should be reduced by 1/3. The spider mite threshold is 20-30 mites per leaflet or 10% of plants with 1/3 or more leaf area damaged. Although the recent rain may help to slow mite populations, it will not control populations at or above threshold levels. If fields were approaching threshold levels before the rain, be sure to check them as soon as the leaves are dry. In addition, edge treatments may not be effective this year. In many cases, mites can already be found throughout fields as a result of the windy weather conditions. The grasshopper threshold is 1 per sweep and 30% defoliation. The leafhopper threshold is 8 per sweep. Asana, dimethoate or Warrior will control grasshoppers and leafhoppers. However, grasshoppers must be small for dimethoate to work. Since both insects are very mobile, be sure to re-sample fields within a week of treatment for re-infestations. At this time, the only materials available for spider mite control are dimethoate or Lorsban. We have still not heard from EPA regarding our Danitol Section 18 request.

AGRONOMIC CROPS FIELD DAY
TUESDAY, JULY 18, 2000
9:15 am - 1:30 pm
(includes lunch)

Location: Marl Pit Road (Rd. 429, approximately ½ mile east of the intersection with Del. Rt. 71/U.S. Rt. 301 (Armstrong’s Corner). Look for the University of Delaware signs on the left.

New Castle County Extension and the Delaware Soybean Board invite you to join your fellow farmers and other members of the agricultural community as our Extension Specialists lead discussions of this year’s field trials to include:

Small Grain
- variety trial results – wheat and barley
- Hessian Fly study
- disease update

Corn
- Bt corn hybrid trials
- plant population study
- four corn weed management studies

Soybeans
- both full-season and double-crop Roundup Ready and non-Roundup Ready varieties
- Northern Uniform soybean variety evaluation
- two weed management studies
- Roundup Ready soybean insect management study
- both full-season and double-crop seeding rate and row spacing studies

Nutrient Management
- discussion of 2000 field studies
- update

We expect to have the 1999-2000 wheat and barley variety trial results for distribution and discussion. There will be time to discuss your current cropping issues.
Lunch (hot dogs, hamburgers, sweet corn, dessert, and beverage) will be provided.

CREDIT toward Delaware pesticide license recertification (Ag Plant category) and CCA (Certified Crop Advisor) CEUs will be awarded.

For More Information: Contact Carl Davis at 302-831-2506 or cpdavis@udel.edu

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

Favorable Weather Soaks Commodity Markets

The arrival of timely rains in some of the driest areas of the corn belt have kept a bearish tone on commodity prices again this past week. On June 28th, corn, soybean, and wheat prices were bid up in overnight Project A trade due to reports of a high pressure ridge settling into the Midwest over the July 4th week, and too position squaring ahead of the June 30 USDA Acreage and Stocks Report. The next crop report will be released on July 12th. The possibility of hot weather occurring during the pollination period in the corn belt could lend some support to commodity prices. However, it appears that recent rainfall events have not only been timely, they have also been ample in key portions of the corn belt. This phenomena is likely to limit potential rallies. The window of opportunity for any significant rally in commodity prices is narrowing. Any gains that may occur due to hot weather should be considered closely for potentially advancing sales, providing price offerings exceed the loan rates.

Upcoming Events…

Irrigation Tour
Date: August 22, 2000
More Information To Follow.

Weather Summary

<table>
<thead>
<tr>
<th>Rainfall:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.41 inches: June 22, 2000</td>
</tr>
<tr>
<td>0.57 inches: June 27, 2000</td>
</tr>
<tr>
<td>0.20 inches: June 28, 2000</td>
</tr>
<tr>
<td>0.61 inch: June 29, 2000</td>
</tr>
</tbody>
</table>

Readings taken for the previous 24 hours at 8 a.m.

Air Temperature:

Highs Ranged from 90°F on June 27 to 75°F on June 28.

Lows Ranged from 73°F on June 26 to 62°F on June 24.

Soil Temperature:

83°F average for the week.

(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

Compiled and Edited By:

Tracy Wootten
Extension Associate - Vegetable Crops

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