At A Glance....Insect and Disease Problems That Should Be Considered This Week.

<table>
<thead>
<tr>
<th>PEST/DISEASE/CULTURE</th>
<th>MAY 13- –MAY 20 BLOOM</th>
<th>MAY 20- –MAY 27 BLOOM</th>
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<tr>
<td>Moth Larvae – Leaf rollers,</td>
<td>Scout flower clusters</td>
<td>Scout flower clusters</td>
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<td>spanworms</td>
<td>for “worm” activity.</td>
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<td>Treat w/ Bt products or</td>
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<td>Intrepid/Confirm if over 1 larva per 100 flower clusters.</td>
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<td>Thrips</td>
<td>Monitor using white sticky traps and by sampling thrips on flowers (beating tray samples).</td>
<td>Continue to monitor</td>
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<td>Delegate (Dusk), Entrust (Dusk).</td>
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<td>These insecticides are highly toxic to bees. Thus, use them when bees are not activity (dusk) to minimize exposure.</td>
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BLUEBERRY TWILIGHT MEETING

THURSDAY, MAY 30, 2013 @ 5:30
ATLANTIC BLUEBERRY COMPANY
7201 WEYMOUTH RD.
HAMMONTON, NJ
FOR DIRECTIONS, CALL 609-561-8600

CULTURE
Dr. Gary C. Pavlis, Ph.D.
Atlantic County Agricultural Agent

No leaves: Growers visits this week have revealed fields with plants that have canes with fruit but no leaves. This is not Scorch. The lack of leaves usually points to a root problem. It could be grubs, it could be root rot. In non-irrigated fields, the lack of leaves is due to root damage due to lack of water during the drought last summer. This fruit probably will not ripen and the plant may not survive. Late summer/fall water applications are critical. In irrigated fields, I have seen many plants damaged by grubs. Admire is the control of choice in this case. Plants that have been damaged by grubs will pull out of the ground readily.

Lastly, toxic levels of Boron can also result in no leaves. Do not apply Boron unless leaf analysis indicates a deficiency.

Sincerely,

Gary C. Pavlis, Ph.D.
Atlantic County Agricultural Agent

Editor, Blueberry Bulletin GP/sp
INSECTS
Dr. Cesar Rodriguez-Saona, Extension Specialist
in Blueberry Entomology, Rutgers University
Mr. Dean Polk, IPM Agent – Fruit
Mr. Gene Rizio, IPM Program Associate – Fruit

Aphids: About 32% of shoot samples are positive for aphid infestation. As was the case last week, these are single aphids. They have not started to multiply into colonies. At this early stage searches should be done on the lowest shoot terminals. This is also where worm larvae are more likely to show up.

Biology and Life Cycle. Aphids are soft bodied, slow moving insects (see picture). The adults are on average about 2 mm long, light to dark green. They have piercing-sucking mouthparts, and two siphunculi (cornicles) that protrude to the rear from the 6th abdominal segment. Nymphs resemble the adults, but are smaller and wingless.

There are four principal species of aphids that attack blueberries. These include: the blueberry aphid, Illinoia pepperi (present in Michigan), I. azaleae (present in New Jersey), the (western) blueberry aphid, Ericaphis fimbriata, and the green peach aphid, Myzus persicae. Aphids overwinter as eggs, which are deposited on stems and small shoots. Eggs hatch in the spring. At this time of the year, immatures feed on tender new growth, usually on the undersides of leaves at the top or bottom of blueberry bushes. Males and egg-laying females are produced in the fall.

There are several generations per growing season.

Damage. Aphids suck sap from tender growth and new shoots, especially from developing terminal foliage. Under heavy populations, a sooty mold can develop on the honey dew secreted by the aphids. This is usually of minor importance in blueberries, since growers seldom allow aphid populations to build up to high densities. Of more importance is the fact that many aphids function as disease vectors. In blueberries aphids can transmit blueberry scorch virus (BlScV) and its several strains.

Monitoring and Control. Since disease transmission is a main concern in commercial blueberry farms, only very low aphid populations is tolerated, especially if BlScV is a known problem. Aphids may be present while bushes are in bloom, but populations don’t start to build up until after bloom. Monitoring should begin as soon as bees are removed and continue through at least the first picking. Sampling should be biased in new terminal growth, and data recorded as the percent of terminals infested with aphid colonies. Where disease transmission is an issue, a colony should be defined as a minimum of 1-2 aphids, either nymphs or adults. Treatment is justified if greater than 10% of terminals are infested with live aphids. The neonicotinoids Assail, Actara, and Imidacloprid (e.g. Admire Pro) provide good aphid control. Lady beetles, lacewings, syrphid flies, and other biological controls are often abundant in blueberry farms at this time of the year and may help maintain aphid populations at low levels.

Plum Curculio (PC): About 7% of beating tray samples have been positive for PC adults. This is an increase since last week. As soon as pollination is complete, growers should have bees removed and treatments should be applied.
PC should not be ignored since it can result in larval infested fruit. All farm locations have at least low levels of this critical pest.

**Leps. and Leafroller Larvae:** No larvae have been seen in beating tray samples. However, 12% of shoot samples have been positive. None of these have been over the 5% shoots infested treatment level. The first generation Redbanded leafroller adult flight is now just beyond the peak in Atlantic Co. This pest is rarely a problem in most areas. If you have concerns, then look for small green larvae that may be visible in the tips of rolled up leaves in the lower developing shoots. You DO NOT NEED TO TREAT unless young larvae are present.

**Thrips:** Thrips have recently been seen in sticky traps at low numbers, however sampling of flowers has only shown 1 insect across many farms. Thrips are not a target unless present in significant numbers in the flowers. In previous seasons we have seen very high trap levels without any significant flower infestation.

Based on our “Thrips Activity Predictions” (http://benedick.rutgers.edu/Blueberryweather/ddcalc2.php), so far thrips have accumulated a total of 304.85 degree-days. Based on our multi-year experiments, thrips require approx. 690 degree-days to reach 10% activity. Thus, no treatment for thrips is recommended at this time.

### INSECT TRAP COUNTS

#### Blueberry Insect Trap Counts - Atlantic County

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<th>Week Ending</th>
<th>RBLR</th>
<th>CBFW</th>
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BLUEBERRY BULLETIN

May 13, 2013

If you have any comments about this newsletter, please make them in the space below and mail to:
Dr. Gary C. Pavlis, County Agricultural Agent
Rutgers Cooperative Extension of Atlantic County
6260 Old Harding Highway, Mays Landing, NJ 08330

I would like to see an article on the following subjects:__________________________________________________________

I would like to comment on the following articles:

Title: ___________________________ Date: ___________________________

Comment: ________________________________________________________________________________________________

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