

The BLUEBERRY BULLETIN A Weekly Update to Growers Dr. Gary C. Pavlis, County Agricultural Agent 6260 Old Harding Highway, NJ 08330 Phone: 609/625-0056 Fax: 609/625-3646 Email: pavlis@njaes.rutgers.edu



July 30, 2014

At a	Glance

PEST/DISEASE/CULTURE	JULY 27 – AUGUST 2 Cover Sprays	
SPOTTED WING DROSOPHILA Lannate, Imidan, Malathion, Delegate/Entrust, Asana, Brigade, Danitol, Mustang-Max	Treat on a seven day schedule. Use materials effective for SWD.	
BLUEBERRY MAGGOT See list or use the same products as for SWD.	Monitor traps and treat if catching 1 or more flies per trap in any production area.	
ORIENTAL BEETLE Admire or imidacloprid generic. Mating disruption.	Too late for treatments.	
APHIDS Assail, Admire, or Actara	Treat if over 10% of terminals are infested.	
PUTNAM SCALE Esteem or Diazinon	Monitor for 2 nd generation crawler activity.	
NUTRITION	Take leaf samples for analysis.	

Culture

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

Leaf Tissue Analysis: Readers of this newsletter are aware that fertilizer recommendations for blueberries are based on leaf analysis. We have found that there is no correlation between the soil analysis and the amount of nutrients that actually enter the blueberry plant. Soil analysis is useful to determine pH, and maintain pH in the proper range, 4.5 - 4.8. Thus leaf analysis is critical to maintain the blueberry plant in a healthy, efficient, productive condition. Now is the time to take leaf samples for analysis. Leaf tissue analysis is a way of determining the actual nutritional status of plants. It is an excellent and inexpensive way of finding out if your fertilization program is

working or if changes need to be made. The analysis provides information on foliar N, P, K,



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Ca, Mg, Mn, Fe, Cu, B and Zn levels for the leaves sampled, a fact sheet on what the levels should be for these plant nutrients, and recommendations for corrective measures if needed. Leaf tissue analysis can help pinpoint the source of problems and determine what measures may be needed to ensure proper nutrition of the crop. Interpretation of leaf tissue analysis is most accurate when the soil pH is within the proper range for blueberries, 4.5 - 4.8.

<u>When to Sample</u>: Sample healthy leaves during late July or early August.

<u>How to Sample</u>: Collect 30-50 leaves per sample. Leaves should be from the middle shoot, not old ones/not new ones. If possible, sample different varieties separately. Collect leaves from as many bushes as possible in the sample area. Gently wash the leaves in tap water to rinse off soil or spray residue. Allow the leaves to air dry until they are brittle before placing into a paper bag. The following laboratories can be considered:

Agricultural Analytical Services Lab The Pennsylvania State University University Park, PA 16802 Phone # 814-863-0841 (Cost \$24.00)

Agri-check Inc. P.O. Box 1350 Umatilla, OR 97882 Call Joe, Lab Manager at 541-922-4894 for Plant Analysis Fee Schedule

Midwest Laboratories Inc (formerly A&L) 13611 B Street Omaha, NE 68144 Phone # 402-334-7770, or go on the internet at www.midwestlabs.com

MDS Harris 621 Rose St Lincoln, NE 68502 Phone # 402-437-4765

Insects

Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University Mr. Dean Polk, IPM Agent – Fruit

(Submitted on July 24, 2014)

Spotted Wing Drosophila (SWD): Most traps are at very low levels (0-1) with an occasional 2 flies per trap being seen in some locations. Trap levels are about the same as the previous week (see graph below). Salt float tests have yielded no larvae in sprayed fields. One sample was collected today from a field where spraying had stopped, and berries did have a low level of larvae. **Aphids:** Almost no aphids are present except in a few Elliott locations. One Elliott field was seen with about 40% of lower terminals infested with small colonies.

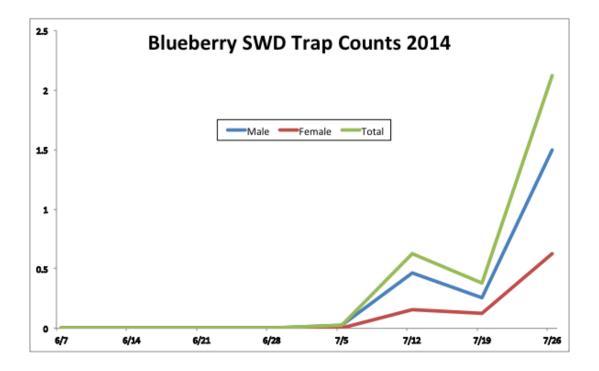
Leafrollers and Other Lep. Larvae: No leafroller larvae were seen at any of our monitoring sites. One sample was seen with bagworms. This was isolated and was spot treated. Teepee makers continue to be present, but are not an issue.

(Submitted on July 30, 2014)

Spotted Wing Drosophila (SWD): We have 30 trap locations throughout blueberries in Atlantic and Burlington Counties. In 24 of these locations we have comparison tests set up to look at the trap captures between the new Trecé duel lure trap, Suzukii[®] bait, and the standard apple cider vinegar (ACV). The remaining 6 locations have Trecé traps alone. As of 7/25 13 of 30 traps were positive for SWD adults. Most were single captures with some doubles. At one location a trap was found with 22 adults. Since we are collecting traps twice a week, this was a 3 day capture. This was the first day that any trap besides the Trecé units had captures. At that site the Suzukii trap had 2 flies and the ACV trap had 0. There was about a 2X increase in the number of traps that caught SWD in the later part of the week compared to the earlier part of the week. Fly

populations are starting to increase just at the time when all Bluecrop are off. This means the Elliott are going to be more exposed to SWD populations than the earlier varieties. Growers with Elliott fields should take extra caution in keeping to a 7 day insecticide schedule as long as berries remain to be harvested. The graph of the most recent trap captures is below:

Larval infestations: Salt water tests for SWD larvae in fruit have all been negative except for 1 sample last week in fruit where spraying had stopped. This sample had 5 larvae per qt. of fruit. Therefore this indicates that even though trap counts have been low in even the best of traps, fruit infestation happens in the absence of a protective spray program or when spray intervals are stretched.



Sharpnosed Leafhopper: Leafhoppers adults have started to mature. The first adult trap captures were noted this past week in Burlington County. Remember that this is the insect that transmits Stunt disease, and since it's the adults that can fly from infected wild hosts to cultivated plants that stage is responsible for most disease transmission. Since this is a disease vector SNLH populations should not be tolerated. One or 2 post harvest treatments will be required as more adults mature. Future newsletters will outline the SNLH flight and insecticide timing.

Putnam Scale: Second generation crawlers have not yet emerged, but should be visible in the very near future. Therefor it is still too early to apply insecticides that target second generation scales.

Blueberry Maggot (BBM): BBM fly captures increased slightly this past week in Atlantic county. Populations are still very low on most farms. Most treatments being applied should cover BBM in unpicked fields.

Blueberry Trap Captures

Week Ending 7/26	BBM	SNLH
Burlington Co.	0.06	0.06
Atlantic Co.	0.33	0.0

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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:_____

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