RUTGERS
New Jersey Agricultural Experiment Station

The Blueberry Bulletin

A Weekly Update to Growers

July 27, 2018 Vol. 34, No. 10

Visit the Blueberry Bulletin webpage at
njaes.rutgers.edu/blueberry-bulletin

2018 Commercial Blueberry Pest Control Recommendations for New Jersey
njaes.rutgers.edu/pubs/publication.php?pid=E265

BLUEBERRY CULTURE

Gary C. Pavlis, Ph. D.
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, 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.

When to Sample: Sample healthy leaves during late July or early August.

How to Sample: Collect 30-50 leaves per sample. Leaves should be from the middle shoot, not old ones/not new ones. Sample different varieties separately, if possible. 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
www.midwestlabs.com

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

Note: Growers are advised that the IPM Program is now taking leaf samples for nutritional analysis. Any growers wishing to request this service should submit a list of chosen fields to be sampled and can forward to any IPM Personnel.

BLUEBERRY INSECT

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

Spotted Wing Drosophila (SWD): This is still the insect of concern. Trap counts have increased since last week. In Atlantic County our average trap count was 10.42 with a high of 55. In Burlington County our average trap count was 15.5 per trap with a high of 96. Trap captures have increased each week since mid June. As the season has progressed, adult flies were first found in just a few sites to now being found on virtually all monitored farms, as seen in the percent of traps with SWD adults. Trap counts are only an indication of relative population pressure, but this does show that as the population increases and becomes more widespread, control becomes more important for the later season harvests.

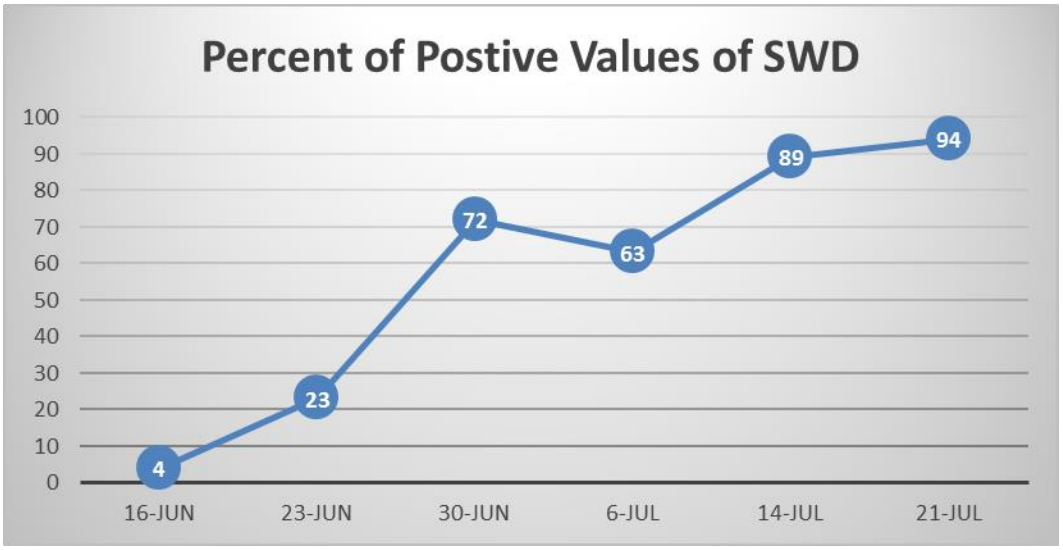

Figure 1. Graph showing the percent of SWD traps with one or more males in a given week.

Blueberry Maggot (BBM): During the past week we had no BBM captures in Burlington County. However we did have an average trap count of 0.1 with a high of 6 BBM in Atlantic County. This is still a pest of concern, but will be controlled by most of the treatments being used for SWD.

Oriental Beetle (OB): This week's traps have decreased. The Atlantic County maximum per trap was 8,000 and the Burlington maximum was 10,175 per trap. As the weeks progress OB numbers will

decrease. We are now past the timing where imidacloprid treatments will be effective. Any treatments applied during August or later are a waste of money.

Putnam Scale: Crawlers can still be found on sticky tape traps, but at very low numbers. We are now between generations. If you had scale-infested fruit, note the fields which were infested and plan on a treatment in a few weeks. The average trap count in Atlantic County was .71 crawlers per trap with a high of 2, and in Burlington County the average was .3 with a high of 1.

Sharpnosed Leafhopper (SNLH): We are also between 1st and 2nd generations for this pest. No treatments are needed until we get close to peak activity during the second generation of adults, usually in late September to early October.

Aphids: These are no longer an issue, although Elliott plantings will continue to have higher populations than other varieties. Growers will need to concentrate on SWD for the remainder of the season.

Table 1: Summary of insect counts seen during the week of July 16th – July 20th

	Leafroller % Inj. Shoots	Aphids % Inf. Shoots	CBFW % Inf. Fruit	Leafrollers % Fruit injury	PC % Fruit Injury	Scale % Fruit Injury
Average	0.151	4.5	0.003	0.014	0	0.012
High	4	24	0.1	0.4	0	.3

Blueberry Trap Captures – Atlantic County

Week Ending	PC	CBFW	OB	SWD	BBM	SNLH	Putnam Scale
5/26	0.43	0.0					
6/2	0.43	0.0					
6/9	0.09	0.43	5.4				
6/16	0	0.015	31.75	0.02	0	0.072	
6/23	0.285	0.015	1436	0.176	0.024	0.104	
6/30	0.28	0	2583	2.78	0.012	0.1333	
7/7	0.428	0.016	3469	3.16	0.09	0.09	24.5
7/14	0.142	0.02	2827	8.235	0.011	0.253	1
7/21	0.142	0	827	10.42	0.101	0	0.714

Blueberry Trap Captures – Burlington County

Week Ending	PC	CBFW	OB	SWD	BBM	SNLH	Putnam Scale
5/26	1.67	0.18					
6/2	0.67	0.16					
6/9	0.0	0.1	0.6				
6/16	0	0.5	38.52	0.15	0	0	
6/23	0	0	1016	0.5	0	0	
6/30	0	0.25	2463	4.63	0	0.5517	
7/7	0	0.105	3741	4.8	0.25	0.143	0
7/14	0	0	1980	26.45	0	0.071	0.5
7/21	0	0	1002	15.5	0	0	0.333

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

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.