

The Blueberry Bulletin

A Weekly Update to Growers

July 28, 2021

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- * Visit the Blueberry Bulletin webpage at www.njaes.rutgers.edu/blueberry-bulletin
- * The 2021 Commercial Blueberry Pest Control Recommendations for New Jersey is available on njaes.rutgers.edu

As we anticipate the arrival of our seasonal blueberry workers we want to share the most up-to-date information with you. The New Jersey Department of Health anticipates that about 50% of the incoming workers will not be vaccinated prior to their arrival in New Jersey. Workers who are in need of a COVID vaccine may have questions about the safety of the J&J vaccine, the most common vaccine available to farm workers in NJ. The CDC has released updated information [What do I need to know about Johnson & Johnson's Janssen COVID-19 Vaccine \(J&J/Janssen\) now? \(cdc.gov\)](https://www.cdc.gov/media/releases/2021/s0727-covid-19-vaccine-janssen.html)

If you would like to determine if on-farm vaccinations are possible for your farm please email njfarmvax@njaes.rutgers.edu and a member of the Rutgers farmworker vaccination education program will connect you with your local Federally Qualified Health Center representative. For information on our states mega centers visit [COVID-19 Vaccine \(nj.gov\)](https://nj.gov/health/eid/ocdc/covid19/vaccine/)

Updated information on COVID-19 and the vaccine can be found online at [Vaccine Information Resources for Farmers - Rutgers On-Farm Food Safety](https://njaes.rutgers.edu/extension/COVID-19/Vaccine-Information-Resources-for-Farmers-Rutgers-On-Farm-Food-Safety/)

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.

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.

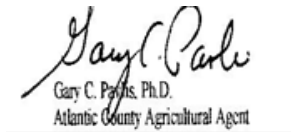
The following laboratories can be considered:

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



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

BLUEBERRY PEST MANAGEMENT

Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University

Mr. Dean Polk, IPM Agent – Fruit

Ms. Carrie Mansue Denson, IPM Program Associate – Fruit

Blueberries:

Blueberry Maggot (BBM): No blueberry maggot adults were found over the past week. SWD remains the main insect of concern.

Spotted Wing Drosophila (SWD): We are now left with only the latest varieties. Given that adult populations continue to provide significant pressure, a tight control program is still needed on anything that has yet to be picked. Average trap captures have continued to increase, and maximum captures of male flies are over 250/trap. Make sure to rotate insecticide types, or use different products with different IRAC mode of action classifications. As the adults continue to mate and lay eggs, higher populations of larvae will be present in dropped fruit and ultimately ripening fruit if not adequately covered. Make sure to target the bottom half of the bush as well

as berries dropped on the ground, in addition to the tops of the plants. Adult flies are the most active during the early morning hours and at dusk. Therefore, applications of insecticide during the very early morning hours and twilight will be more effective than if applied during late morning to mid-day.

Aphids: Aphids are still being found but are much lower than seen in previous weeks. However, some farms still have issues with aphid control, with a high of 10% of new terminals infested.

By the Numbers Summary:

% Leafroller/Surface Lep. Injury and Plum Curculio Injured Fruit				
Week Ending	% Leps injury to Berries		% PC injury to Berries	
	Avg	Max	Avg	Max
5/14	0.13	2	0.68	7.8
5/21	0.13	1.8	0.80	9.8
5/28	0.013	0.5	0.13	3.7
6/4	0.002	0.2	0.008	0.3
6/11	0.002	0.3	0.005	0.4
6/18	0.001	0.2	0	0
6/25	0.001	0.1	0	0
7/2	0.006	0.2	0.001	0.1
7/9	0.007	0.1	0	0
7/16	0.005	0.2	0.002	0.3
7/23	0.004	0.2	0	0

Spotted Wing Drosophila Males per Red Sticky Card				
Week Ending	SWD(AC)		SWD(BC)	
	Avg	Max	Avg	Max
6/4	1.5	8	0.375	3
6/11	1.84	9	1.77	1
6/18	3.4	25	2.86	6
6/25	5.3	42	2.87	9
7/2	7.03	98	7.36	22
7/9	22.58	105	29.73	77
7/16	16.32	115	26.0	80
7/23	18.14	123	55.8	263

Oriental Beetle Trap Counts				
Week Ending	OB(AC)		OB(BC)	
	Avg	Max	Avg	Max
6/4	3.9	32	0.25	1
6/11	185.72	2025	15.8	60

6/18	292	1350	285	2025
6/25	1767	11000	974	6075
7/2	2813	13000	1326	6075
7/9	2214	11000	1806	10125
7/16	2255	15000	1288	11135
7/23	762.24	6000	412	4050

Blueberry Maggot Adult Captures				
Week Ending	BBM(AC)		BBM(BC)	
	Avg	Max	Avg	Max
6/4	0	0	0	0
6/11	0	0	0	0
6/18	0	0	0	0
6/25	0	0	0	0
7/2	0	0	0	0
7/9	0.05	3	0	0
7/16	0	0	0	0
7/23	0	0	0	0

% Diseased Fruit						
Week Ending	% Mummy Berries		% Anthracnose Berries		% Alternaria Berries	
	Avg	Max	Avg	Max	Avg	Max
6/18	0.002	0.2	0.05	1.4	0.06	1
6/25	0.002	0.1	0.090	2.2	0.072	1.2
7/2	0.002	0.1	0.07	1.8	0.03	0.5
7/9	0	0	0.1	1.6	0.241	2.7
7/16	0	0	0.99	30.8	0.34	22.1
7/23	0	0	0.72	18.5	0.82	26.6