



The Blueberry Bulletin

A Weekly Update to Growers

July 23, 2024

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- ❖ Visit the Blueberry Bulletin webpage at njaes.rutgers.edu/blueberry-bulletin
- ❖ The 2024 Commercial Blueberry Pest Control Recommendations for New Jersey is available on <https://njaes.rutgers.edu/pubs/>

BLUEBERRY CULTURE

Dr. Gary C. Pavlis, Ph.D., Atlantic County Agriculture 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.

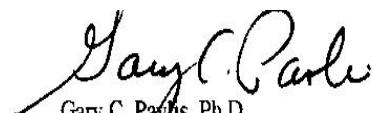
The following laboratories can be considered:

Midwest Laboratories Inc
13611 B Street
Omaha, NE 68144
Phone # (402) 334-7770
www.midwestlabs.com

A & L Eastern Agricultural Labs, Inc.
 7621 Whitepine Rd.
 Richmond, VA 23237
 (804) 743-9401
www.aleastern.com

Agricultural Analytical Services Lab
 The Pennsylvania State University
 University Park, PA 16802
 Phone # (814) 863-0841
www.aasl.psu.edu

Agri-check Inc.
 Reg. Mail: P.O. Box 1350
 UPS: 323 6th Street
 Umatilla, OR 97882-1350
 Phone # (541) 922-4894
www.agri-check.com



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

PEST MANAGEMENT

Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University
Dr. Janine Spies, IPM Agent – Fruit
Carrie Mansue, Senior Program Coordinator – Fruit

During the week of July 15th -19th, 170 fields were scouted throughout Burlington and Atlantic Counties. Injury to berries from lepidopteran larvae and plum curculio is insignificant.

Week End- ing	% Injury of Fruit by LR		% Injury of Fruit by PC		% Injury of fruit to CBFW		% Injury of fruit to CFW	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
5/11	0.17	3.9	0.80	12.7				
5/17	0.23	3.0	1.25	13.20				
5/24	0.10	1.40	0.45	11.30				
6/1	0.02	1.10	0.06	2.90				
6/7	0.001	0.10	0.01	0.70	0.02	0.70		
6/15	0.002	0.20	0.00	0.00	0.003	0.20	0.004	0.10
6/21	0.004	0.30	0.01	0.20	0.003	0.30	0	0
6/29	0.01	0.30	0.004	0.20	0.001	0.10	0	0
7/6	0.004	0.40	0.0	0.0	0.0	0.0	0.0	0.0
7/13	0.002	0.20	0.0	0.0	0.0	0.0	0.0	0.0
7/19	0.002	0.10	0.0	0.0	0.0	0.0	0.0	0.0

LR = Leafroller, PC = Plum Curculio, CBFW = Cranberry Fruitworm, CFW = Cherry Fruitworm

Scale Traps and Infested fruit. The percentage of infested fruit due to scale is very low, at just 0.07%. Scale activity in traps averaged 14 scale per trap, with a maximum of 50.

Week Ending	% Injury of Fruit by Scale	
	Average	Maximum
6/7	0.04	0.60
6/15	0.05	2.10

6/21	0.03	1.00
6/29	0.05	1.20
7/6	0.03	0.80
7/13	0.04	1.30
7/19	0.07	1.1

Aphid Infestation on Lower Shoots. Aphid populations have decreased to an average shoot infestation of 1%, with a maximum of 18% of shoots infested. As the plant tissue matures, this pest is expected to pose minimal issues for the remainder of the season.

Week Ending	% Lower Shoots Leafroller		% Lower Shoots Aphids	
	Avg	Max	Avg	Max
5/24	0.02	2.00	11.03	52
6/1	0.066	4.0	15.37	72
6/7	0.06	4.00	14.66	96
6/15	0.00	0.00	15.42	88
6/21	0.06	2.0	10.31	88
6/29	0.04	2.0	4.06	78
7/6	0.0	0.0	1.49	18
7/13	0.0	0.0	0.89	22
7/19	0.0	0.0	1.49	18

Insect traps. This week, spotted-wing drosophila trap counts have increased. Late-season varieties still require management for SWD due to persistent high populations. In contrast, average oriental beetle trap counts continue to decrease. Trap counts for blueberry maggot and sharp-nosed leafhopper remain very low.

Week Ending	SWD		OB		BBM		SNLH	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
6/7	19.75	64	300.81	2025	0.037	2	0.0173	0.2
6/15	28.31	100	707	4050	0.20	15	0.18	3.00
6/21	33	164	2986	15525	0.04	4	0.18	4
6/29	71.72	300	5800	16875	0.05	6	0.10	3.00
7/6	38.82	405	3239	16000	0.02	2	0.02	1.00
7/13	23.36	117	2654	16000	0.08	2	0.04	1.00
7/19	54.46	390	688	8100	0.02	2	0	0

SWD = Spotted-Wing Drosophila, OB = Oriental Beetle, BBM = Blueberry Maggot Fly, SNLH = Sharp-nosed Leafhopper

DISEASES

The Blueberry IPM program collected 35 Bluecrop pints from farms across Atlantic and Burlington Counties to assess the presence of anthracnose. Of the 35 pints, 70% were found to contain anthracnose. The percentage of berries showing anthracnose symptoms ranged from 0.4% to 14% per pint. During the winter months, we will review spray records and provide recommendations for managing anthracnose before the next season.

