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THE BLUEBERRY BULLETIN

A Weekly Update to Growers



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 2024 Commercial Blueberry Pest Control Recommendations for New Jersey: njaes.rutgers.edu/pubs

Blueberry Culture

Dr. Gary C. Pavlis, Atlantic County Agricultural Agent

Water Management:

Blueberries have shallow root systems that cannot use water stored deep in the soil. As a result, blueberries grow best where the soil has a high water-holding capacity. Information about soil water-holding capacity is generally available in soil surveys. Soil texture is another clue to water-holding capacity (Table 1). In general, sandy soils hold the least amount of water. These soils must be irrigated more frequently and with less water per application than soils with a high percentage of silt and clay.

Crop rooting depth and the soil water-holding capacity are used together to determine the total water-holding capacity of the rooting volume. The capacity of the rooting volume is important in scheduling irrigation.

Table 1. Typical Water-holding capacity for various soils.

Texture	Water-Holding Capacity (inches of water per inch of soil)
Sand	0.05
Fine sand	0.08
Sandy loam	0.11
Loam	0.16
Silt loam	0.18
Clay loam	0.19
Silty clay	0.20
Clay	0.22

The following example shows how to determine the water-holding capacity of the rooting volume and how to use this information to schedule irrigations. In this example, assume that blueberries are planted on a sandy loam soil. Using a rooting depth of 1.5 feet, the total water-holding capacity of the rooting volume is 18 inches of soil times 0.11 inch of available water per inch of soil depth, which equals 2 inches of total water-holding capacity. The total water available in the rooting volume should not drop below 50% of the total water-holding capacity.



This assures easy access to water by the roots and prevents drought stress. Using this limit in the example, the total water available should not fall below 1 inch, which is half of the 2-inch total water-holding capacity. A blueberry plant growing vigorously in summer can evapotranspire more than 0.25 inch per day. With 1 inch of water available in the rooting volume and approximately 0.25 inch being used per day, it takes 4 days for the blueberry plant to use this stored soil water. Since the average time between rains is 5 days, irrigation is highly desirable for this soil and site under peak use conditions. In general, blueberries grown on light soils with low water-holding capacities will benefit from irrigation most years, even in the humid regions. *Reprinted: Highbush Blueberry Production Guide.*


 Gary C. Pappas, 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

Ms. Carrie Mansue, IPM Sr. Program Coordinator – Fruit

IPM scouting was conducted last week across 170 fields in Burlington and Atlantic Counties, with a focus on berries and lower shoots.

Infested Fruit. During scouting this past week, scale was observed on berries, with numbers increasing compared to the previous week. In addition, early signs of cherry fruitworm damage were detected. Although numbers remain low, the damage is evident.

Week Ending	Leafroller		Plum Curculio		Cranberry Fruitworm		Cherry Fruitworm		Scale	
	AVG	HIGH	AVG	HIGH	AVG	High	Avg	High	AVG	HIGH
5/10/25	0.13	0.07	0.97	4.3						
5/17/25	0.15	0.8	0.95	4.8						
5/22/25	0	0	0	0						
5/31/25	0	0	0	0						
6/6/25	0.001	0.2	0	0					0.010	0.2
6/13/25	0	0	0	0	0	0	0.007	0.1	0.118	2.6

% of Infestation on Lower Shoots for Leafrollers and Aphids. Aphid populations are still being monitored and have decreased slightly; however, the primary focus of treatment remains on spotted-wing drosophila (SWD).

Week Ending	Leafrollers		Aphids	
	AVG	HIGH	AVG	HIGH
5/17/25	0.11	4	4.6	22
5/22/25	0.09	2	26	66
5/31/25	0.02	2	23	84
6/6/25	0.013	2	16	72
6/13/25	0.01	2	14.18	62



Terrapin Scale. Crawler counts in scale traps have increased across all traps. However, the current treatment focus should remain on SWD. If a treatment for scale was missed, it may be necessary to apply control measures when the second generation of crawlers emerges later in the season.

Week Ending	Scale	
	AVG	HIGH
5/2/25	0	0
5/17/25	5.5	32
5/22/25	29.6	58
5/31/25	89	250
6/6/25	163	300
6/13/25	154	300

Cranberry Fruitworm (CBFW) and Cherry Fruitworm (CFW). Cherry fruitworm trap activity has declined; however, cranberry fruitworm traps continue to show low levels of activity in both counties.

Week Ending	CBFW AC		CBFW BC		CFW AC		CFW BC	
	AVG	HIGH	AVG	HIGH	AVG	HIGH	AVG	HIGH
4/3/25	0	0	0	0	0	0	0	0
4/11/25	0	0	0	0	0	0	0	0
4/19/25	0	0	0	0	0	0	0	0
4/25/25	0	0	0	0	3.85	6	0.75	3
5/2/25	0	0	0	0	19.42	34	3.86	6
5/10/25	5.42	0	0	0	19.85	28	19.75	43
5/17/25	0	0	0	0	2.14	4	11.75	27
5/22/25	0	0	1	2	1.14	4	2	3
5/31/25	0	0	2.5	6	2.14	12	3	5
6/6/25	0.28	1	0.25	1	1.85	6	2	1
6/13/25	0.167	1	0	0	1.67	6	0.25	1

CBFW = Cranberry Fruitworm, CFW = Cherry Fruitworm; AC = Atlantic County, BC = Burlington County

Spotted-Wing Drosophila (SWD) and Oriental Beetle (OB). Spotted-wing drosophila (SWD) trap captures have increased in both Atlantic and Burlington Counties. Oriental beetle trap counts have also risen this week and are expected to continue increasing as the season progresses.

Week Ending	SWD AC Traps		SWD BC Traps		OB AC Traps		OB BC Traps	
	AVG	HIGH	AVG	HIGH	AVG	HIGH	AVG	HIGH
6/6/25	8.5	29	3	9	7.8	29	0	0
6/13/25	21.51	45	32.6	86	240	1350	34	170

SWD = Spotted-Wing Drosophila, OB = Oriental Beetle; AC = Atlantic County, BC = Burlington County



Blueberry Maggot (BBM). The first catch of BBM fly (Figure 1) was recorded on Thursday, June 12.



Figure 1. Blueberry maggot fly on a baited yellow sticky trap. Picture capture by: Carrie Mansue

Week Ending	BBM AC Traps		BBM BC Traps		SNLH AC Traps		SNLH BC Traps	
	AVG	HIGH	AVG	HIGH	AVG	HIGH	AVG	HIGH
6/6/25	0	0	0	0	1	6	0.85	3
6/13/25	0.29	7	0.16	4	1.26	8	3.27	17
BBM = Blueberry Maggot, SNLH = Sharp-nosed Leafhopper; AC = Atlantic County, BC = Burlington County								

Organic Practice Sprays. Continue spraying for SWD. See the previous bulletin article for recommended products.

Dr. Peter Oudemans, Professor, Center Director, P.E. Marucci Center, Rutgers University

Anthracnose: We are seeing a different species of *Colletotrichum* causing anthracnose. It has slightly different biology than the original one and we are working on modifying the control methods to address this. In addition, the recent wet weather is conducive for anthracnose development on berries. Fungicide applications may be merited in fields where anthracnose has been reported although our experience is that this species is most severe during the first pick of Duke and should diminish after that. Switch and Phosphite materials are effective and have a 0-day PHI. See the [2024 Commercial Blueberry Pest Control Recommendations](#) for additional products.

