

The Blueberry Bulletin

A Weekly Update to Growers

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- ❖ Visit the Blueberry Bulletin webpage at njaes.rutgers.edu/blueberry-bulletin
- ❖ The 2022 Commercial Blueberry Pest Control Recommendations for New Jersey is available on njaes.rutgers.edu

BLUEBERRY CULTURE

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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.

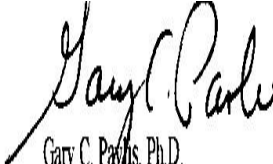
Texture	Water-Holding Capacity (inches of water per inch of soil)
Sand	0.05
Fine sand	0.08
Sandy loam	0.11
Loam	0.16
Silt loam	0.18
Clay loam	0.19
Silty clay	0.20
Clay	0.22

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.*



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PEST MANAGEMENT

Blueberry Insects

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

Aphids: This week scouting Aphids, on average was 6.58% of infested terminals with a high of 72%. Average populations have decreased some since last week, mostly due to treatments being applied. If you have already treated and your aphid populations are very low, or well less than 10% of terminals infested, then you can move on and concentrate on SWD treatments. If you still have aphid populations then you will need to treat both pests – Aphids and SWD.

	% Shoot Infestation Leafroller		% Terminals Infested Aphids	
	Avg	Max	Avg	Max
5/28	0.16	2	8.3	40
6/2	0.048	4	10.75	64
6/10	0	0	6.58	72

SWD Traps: Numbers for SWD have been increasing for Atlantic and Burlington County. At this point the main target spray is for SWD. This is the second week in a row when SWD is being found in both Atlantic and Burlington Counties. Trap numbers have also started to increase in some areas. Make sure you are on a weekly schedule from this point forward.

	SWD AC		SWD BC	
	Avg	Max	Avg	Max
5/25	6	9	0	0
6/2	4.6	6	2	3

6/10	2	3	4.3	8
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Leps (Lepidoptera larva – green fruitworms, leafrollers, spanworms, spongy (= gypsy moth) and Plum Curculio (PC): During this past week scouting, Lep and PC averages have decreased.

	Leafroller/Tray		Gypsy Moth/Tray		Plum Curculio		Thrips	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
4/30	0.03	0.2	0	0	0	0	0	0
5/7	0.05	0.4	0.44	5	0.06	0.3	0	0
5/13	0.05	0.2	0.05	0.4	0.04	0.4	0	0
5/21	0.009	0.1	0.01	0.5	3.6	0.4	0	0
5/28	0.01	0.2	0.01	0.3	0.04	0.5	0	0
6/2	0.001	0.1	0.004	0.2	0	0	0	0
6/10	0.001	0.1	0.001	0.1	0	0	0	0

	% Leafroller fruit Injury		% PC fruit Injury	
	Avg	Max	Avg	Max
5/21	0.03	0.2	0.34	3.2
5/28	0.02	0.7	0.39	2.5
6/2	0.001	0.2	0.022	0.9
6/10	0.001	0.2	0.004	0.3

Cranberry Fruitworm and Cherry Fruit Traps: Trap count number have been decreasing. Cherry Fruitworm Traps average at 2.3 per trap with a high of 8 for AC and averaging 2.33 per trap with a high of 4 for BC. Cranberry Fruitworm traps in AC average cranberry fruitworm is at 1 per trap with a high of 3 and averaging of 1 per trap with a high of 2 for BC.

	CBFW AC		CBFW BC		CFW AC		CFW BC	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
4/8	0	0	0	0	0.1	1	0.25	1
4/14	0	0	0	0	0	0	0	0
4/20	0	0	0	0	0.2	1	0	0
4/29	0.1	1	0	0	0.9	3	0.25	1
5/7	0	0	0	0	7.1	15	4.5	15
5/13	0.1	1	0	0	9.1	22	10.25	17
5/21	2.3	14	0	0	19.1	40	14.5	20
5/28	2.6	24	3.25	13	12.1	27	13.5	35
6/2	0.70	7	0	0	5.12	15	7.5	17
6/10	1	3	1	2	2.3	8	2.33	4

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