

# The Blueberry Bulletin

## *A Weekly Update to Growers*

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- ❖ Visit the Blueberry Bulletin webpage at [njaes.rutgers.edu/blueberry-bulletin](http://njaes.rutgers.edu/blueberry-bulletin)
- ❖ The 2020 Commercial Blueberry Pest Control Recommendations for New Jersey is available on [njaes.rutgers.edu](http://njaes.rutgers.edu)

### **BLUEBERRY CULTURE**

**Dr. Gary C. Pavlis, Ph.D.**

**Atlantic County Agricultural Agent**

Harvest is just around the corner now. I know growers have an awful lot to think about this year between the regular farming duties and dealing with the worker protection regulations due to Covid-19. I did just want to mention one note of caution. I visited a field that had been sprayed with a tank mix of Captan and Assana. The Assana label states that “each gallon of Asana® XL is formulated with approximately 2 quarts of cottonseed oil and that research on this formulation has demonstrated that the addition of cottonseed oil extends residual activity and makes Asana® XL more resistant to wash off”. But we all know that a spreader sticker or oil can cause phytotoxicity when tank mixed with Captan. This is what I saw in the field. I would be careful mixing these two pesticides.

**Yellow Leaves:** Numerous fields in the Hammonton area showed yellow leaves on the new growth. This has occurred almost entirely on ‘Duke’. Yellow leaves at this time of year are normal because the plant is growing so fast that it causes Nitrogen deficiency in the new growth. When the growth slows during fruit maturation, the problem will fix itself. This is not the problem I am seeing this week. These leaves are light green/yellow but the veins are green. They are found only on the new growth. This is definitely iron deficiency. Years ago I would always say that this means the pH has climbed up past 5.5. For most varieties this is true, but for ‘Duke’, it may not be true.

It appears that the iron requirement for ‘Duke’ is higher than ‘Bluecrop’ and ‘Elliott’. As a result it is possible to get iron deficiency when the pH is in the optimum range of 4.5 to 4.8. If you see this problem it is critical to fix it now. A simple foliar application of an iron chelate will green these plants up in a few days. If left unchecked, growth will be decreased and next year’s flower bud development will also be decreased. This will have an effect on next year’s yield.

### **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):** Levels are low, but positive traps are getting more common. Dukes are coloring, which makes them very susceptible to SWD infestation. Insecticides applied this week need to

target SWD first. The choices include any pyrethroid (Asana, Brigade/Bifenture, Danitol, Mustang, Hero), Imidan, Delegate, Assail but not other neonics, Lannate, Malathion, Exirel, and Verdepryn.

**Aphids:** Aphid infestation levels have increased over the past week. Our averages were 5.1% of the lower growing terminals (mostly new canes) infested, with a high of 40% on the lower shoots.

**Blueberry Scorch Virus and Aphids:** During the middle of May scorch like symptoms were common in many fields. On May 25, we collected 14 tissue samples from different fields where bushes were showing symptoms. These were sent to the Agdia Labs on May 26 for a screening of virus possibilities. The reports received on June 8 stated that all submitted samples were positive for Blueberry Scorch Virus (BIScV). While this does not represent all blueberry farms, it does represent all the samples we took over a wide area. Since aphids are the BIScV vector, we have to pay more attention to how they are controlled and, if possible, tolerate fewer aphids that we have in the past. For now, if you can still recognize and rogue out the infected bushes, then do so. This disease is more widely spread than we previously thought, and additional aphid controls will have to be looked at. The best materials for controlling aphids include the neonicotinoids (Class 4A): Assail, Actara, Admire; and also the related (Class 4D) Sivanto, and a Class 23 – Movento. Any other materials, for all practical purposes, are only suppressive, and not controlling. Using the correct material, in enough volume, directed at the most critical target are all important. Aphids are found in the highest numbers on the bottoms of the bushes on the tender newly developing suckers that later become the new canes. These are near the ground at the center of the bush around the crown, making them very difficult to cover. More on aphid control later.

**Plum Curculio (PC):** PC injured fruit are coloring prematurely and starting to drop. This is a sign of maturing larvae in the fruit. Fields with the highest PC populations have numerous dropped blue fruit, which is a good thing. While most infested fruit should be on the ground before the first Duke harvest, make sure to set your firmness sorters to kick out any soft and possibly infested fruit as an extra insurance.

**By the Numbers:**

Insect Incidence							
Week Ending	% Bud Feeding		CBW/Bush (Beating Tray)		Leps./Bush (Beating Tray)	PC/Bush (Beating Tray)	Gypsy Moth/Bush (Beating Tray)
	Avg	Max	Avg	Max	Avg	Avg	Avg
5/4	-	-	-	-	0.013	0.022	0.001
5/11	-	-	-	-	0.03	0.004	0.022
5/18	-	-	-	-	0.03	0.03	0.00
5/25	-	-	-	-	0.02	0.01	0.002
5/30	-	-	-	-	0.005	0.02	0.004
6/6	-	-	-	-	0.001	0.001	0.00

CBW = cranberry weevil; PC = plum curculio; CBFW = cranberry fruitworm; SWD = spotted-wing drosophila

% Fruit Injury				
Week Ending	% Lep Injured Fruit		% PC Injured Fruit	
	Avg	Max	Avg	Max
5/11	0.05	0.1	0.2	0.3
5/18	0.06	0.8	0.13	1.4
5/25	0.122	1.1	0.43	3.8
5/30	0.17	1.4	0.70	5.6
6/6	0.122	1.1	0.43	3.8

Trap Captures: CBFW-Cranberry Fruitworm, SWD=Spotted Wing Drosophila								
Week Ending	CBFW-Atlantic County		CBFW-Burlington County		SWD-Atlantic County		SWD-Burlington County	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
5/11	0.1	1	0	0				
5/18	0	0	0	0				
5/25	0.1	1	0.25	1	0.8	7	0	0
5/30	0	0	0.25	1	.75	5	.55	1
6/6	5.5	34	0.75	3	2	8	2.1	5