

The Blueberry Bulletin

A Weekly Update to Growers

June 9, 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/s0608-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://www.nj.gov/health/our-states-mega-centers/)

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/)

BLUEBERRY CULTURE

Dr. Gary C. Pavlis, Ph.D
Atlantic County Agricultural Agent

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.



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

Blueberries:

Aphids: In most cases, aphid colonies have already been treated. Growers have used various products with varying results. Where aphids either have not been treated, or treated with ineffective materials, then populations are higher this week than compared to last week. Growers with significant aphid populations will have to “sandwich” an aphid spray between control for SWD, since SWD is now the main insect to be concerned with at this time. If still treating for aphids, remember to use an aphid-effective material. A number of growers have used Brigade/Bifenture and other pyrethroid materials. To reiterate from last week, **THESE ARE NOT EFFECTIVE TO CONTROL APHIDS**, the vector of Blueberry Scorch Virus. Aphid effective materials include any of the neonicotinoids like Assail, Actara and Admire, the related 4D and 4C materials – Sivanto and Transform, the group 28 material Movento. The premix Senstar, contains the same active ingredients as in Movento and Esteem. Cormoran contains the same ingredients as is in Assail and Rimon. Exirel is also an option, is effective for aphids, excellent for SWD, but not systemic.

A few field observations (not replicated plots) from this past week on aphid control show the following for Sivanto, Movento and Bifenture applications and aphid populations in “high count” fields:

Grower, Insecticide, Application Date	Count Date & % Infested Terminals	Count Date & % Infested Terminals	Count Date & % Infested Terminals	% Aphid Control
A - Bifenture, 5/25	5/20 – 20% B	5/28 – 26%B	6/2 – 46%C	-230% (gain) @ 8 days
B – Sivanto, 5/25	5/24 – 58% B	5/31 – 10% A	6/7 – 0%	100% @ 13 days
C – Movento, 6/1	5/24 – 22% A	5/31 – 44% B	6/7 – 4% A	82% @ 6 days

Key: Numbers are the % new shoots infested with aphid colonies. Colonies are rated for size: A=1 aphid, B=2-5 aphids, C=5-10+ aphids. Sivanto and Movento are slow acting but cause rapid cessation of feeding.

Spotted Wing Drosophila (SWD): SWD adults were captured during the last week of May in the Hammonton area, and continue to be active in both Burlington and Atlantic County fields. This will be the main pest of concern through the ripening phase. SWD populations will increase as the season progresses, and become more of a challenge to control in later varieties. The

strongest insecticides for SWD control are the pyrethroids (Grp 3A), Imidan & malathion (Grp 1B), Lannate (Grp 1A), Delegate & Entrust (Grp 5), Exirel and Verdepryn (Grp 28), and the premix Cormoran (acetamiprid + novaluron)(Grp 4A+15). Please see last week's article on SWD insecticide rankings.

Plum Curculio: During this past week PC berry damage (infested fruit) averaged .008 berries per bush with a high of .3 per bush. This is down significantly from the previous week, and shows a steady drop of infested fruit. Never the less, any grub infested fruit that makes it through the picking, will be soft. Make sure to set your firmness sorter to remove any soft fruit.

Blueberry Trap Counts and Data Summary									
Week Ending	CBW Adults/Bush (Beating Tray)		Leps./Bush (Beating Tray)		PC/Bush (Beating Tray)		Gypsy Moth/Bush (Beating Tray)		
	Avg	Max	Avg	Max	Avg	Max			
4/9	2.1	21	-	-	-	-			
4/16	1.5	6.6	-	-	-	-			
4/23	-	-	0.014	0.1	0	0			
4/30	-	-	0.008	0.1	0.017	0.4	0.014	0.4	
5/7	-	-	0.023	0.2	0.061	0.7	0.049	1.5	
5/14	-	-	0.04	0.5	0.03	0.6	0.05	1.7	
5/21	-	-	0.02	0.3	0.04	0.6	0.026	1.2	
5/28	-	-	0.002	0.1	0.002	0.1	0.002	0.2	

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

Week Ending	% CBFW injury to Berries		% CFW injury to Berries	
	Avg	Max	Avg	Max
6/4	0.009	0.1	0.005	0.1

SWD, OB and BBM Trap Counts												
Week Ending	SWD - AC		SWD - BC		OB - AC		OB - BC		BBM - AC		BBM - BC	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
6/4	1.5	8	0.375	3	3.9	32	0.25	1.0	0	0	0	0

Key: CBW = cranberry weevil, Leps = Lepidoptera larvae/bush and % injured berries, PC = plum curculio adults per bush & % injured berries, CBFW = cranberry fruitworm adults per trap, CFW = cherry fruitworm adults per trap, SWD = Spotted Wing Drosophila, OB = Oriental Beetle, BBM = Blueberry Maggot Fly, AC = Atlantic County, BC = Burlington County

Week Ending	CBFW/Trap (AC)		CFW/Trap (AC)		CBFW/Trap (BC)	
	Avg	Max	Avg	Max	Avg	Max
5/7	0.076	1				
5/14	0.12	4				

5/21	0.14	3	10	42	0.66	1
5/28	0.08	3	5.4	32	0.41	0.2
6/4	0.06	2	1.65	15	0	0
Key: CBW = cranberry weevil, Leps = Lepidoptera larvae/bush and % injured berries, PC = plum curculio adults per bush & % injured berries, CBFW = cranberry fruitworm adults per trap, CFW = cherry fruitworm adults per trap.						