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THE BLUEBERRY BULLETIN *A Weekly Update to Growers*



Visit the Blueberry Bulletin webpage: <u>njaes.rutgers.edu/blueberry-bulletin</u> 2024 Commercial Blueberry Pest Control Recommendations for New Jersey: <u>njaes.rutgers.edu/pubs</u>

Blueberry Culture

Dr. Gary C. Pavlis, Atlantic County Agricultural Agent

Last minute checks: It is mid- May, and the reality is that we are only about 3 weeks away from the beginning of the 2025 harvest. We haven't had an extremely cold winter, pollination went relatively well, we have had adequate rain, and the crop load looks to be very good. Once harvest begins, I realize that getting berries off the bush, getting them packed and shipped out is the top priority. Until then I would like to suggest that there are numerous things that growers should be looking for in their fields and taken care of before the big push of harvest. Insect and disease scouting is of course important now as discussed by the other articles in this newsletter, however I would like to point out a few other things that a proactive grower should be doing. For example, now is a good time to spot any nutrition deficiency symptoms including iron which would be an indication that the pH is not what it should be. There is still time to give the fields a shot of sulfur if the pH is too high. My office can do a

quick pH test for any grower that suspects his/her level has climbed too high. In addition, now is the best time for fertilizer applications as the plant is actively growing and also trying to size up the berries. Please remember that applications of any micro-nutrients should only be made if leaf analysis has indicated a deficiency. Adequate boron levels will indeed increase fruit set and fruit enlargement, but excessive levels will damage the plant. It is also a good time to spot stunt in the field, especially on the young canes which have come up this year. If you are not sure of what stunt looks like, please call me. There is no treatment for stunt so these plants should be taken out of the planting. Plants with no leaves or very small leaves at this time of the year are an indication of some kind of root problem. Usually, it is due to grubs or root rot and the timing to control these problems is critical as is an accurate diagnosis.



If you suspect either of these problems, give me a call and we can diagnose the situation and the remedy Lastly, if growers notice any abnormal leaf coloration in the field now is the time to tag the plant and get it looked at. It could be a virus, herbicide damage etc. And understanding what the problem is can prevent further problems in the future.

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 55 fields in Burlington and Atlantic Counties. Due to the weather conditions, most pest activity was observed directly on the fruit rather than in the monitoring trays. This shift may be attributed to wet conditions during the scouting period, which can reduce insect movement and affect trap captures.

Plum Curculio. On average, scouts found 0.95 fruit with Plum Curculio scars per 10 bushes, with some fields reaching as high as 4.8 infested fruit per 10 bushes.

Leafrollers and Aphids. This week, monitoring for Leafrollers and Aphids on lower shoots also began. Aphid scouting revealed an average of 4.6% of terminal shoots infested, with a maximum of 22% infested terminal shoots observed in some fields.

Aphids are expected to be the next key target for control measures in the coming two weeks.

<u>Biology and Life Cycle</u>. Aphids (Figure 1) are soft-bodied, slow-moving insects. Adults are typically about 2 mm long and range in color from light to dark green. They possess piercing-sucking mouthparts and two siphunculi (cornicles) that extend rearward from the sixth abdominal segment. Nymphs resemble adults but are smaller and wingless. Four main aphid species attack highbush

Figure 1. Young aphid colony on leaf. Photo by Carrie Mansue.

blueberries: Blueberry aphid (*Illinoia pepperi*) – Present in Michigan; Azalea aphid (*Illinoia azaleae*) – Present in New Jersey; (Western) blueberry aphid (*Ericaphis fimbriata*); Green peach aphid (*Myzus persicae*).

Aphids overwinter as eggs laid on stems and small shoots. These eggs hatch in the spring, and immature aphids begin feeding on tender new growth, usually on the undersides of leaves at the top or bottom of blueberry bushes. Males and egg-laying females are produced in the fall, and several generations can occur each growing season.





Aphids feed by sucking sap from new shoots and developing terminal foliage. In high populations, their honeydew excretions can lead to the development of sooty mold. However, this is typically of minor concern in blueberries, as aphid populations are rarely allowed to reach damaging levels. More importantly, aphids are known vectors of plant diseases. In blueberries, they can transmit Blueberry Scorch Virus and its various strains, posing a significant risk to crop health and productivity.

<u>Monitoring and Control</u>. Since disease transmission is the primary concern in commercial blueberry production, especially where Blueberry Scorch Virus (BIScV) is present, only very low aphid populations are tolerated. While aphids may be present during bloom, populations typically begin to increase after bloom, which is the current period of concern. Monitoring should begin as soon as bees are removed and continue through at least the first harvest.

Sampling should focus on new terminal growth, and infestation levels should be recorded as the percentage of terminals with aphid colonies. In situations where disease transmission is a concern, a colony should be defined as few as 1–2 aphids (nymphs or adults).

Treatment is recommended when more than 10% of terminal shoots are infested with live aphids. Neonicotinoid insecticides such as Assail, Actara, and Imidacloprid (e.g., Admire Pro) provide effective aphid control. For insecticide resistance management, consider rotating with products that have different modes of action, such as Sivanto, Movento, or Senstar.

Biological control agents—including lady beetles, lacewings, syrphid flies, and other natural enemies, are often present in blueberry fields at this time of year and may help suppress aphid populations below damaging thresholds.

Week Ending	Leafroller		Spongy Moth		Plum Curculio		Thrips	
	AVG	HIGH	AVG	HIGH	AVG	HIGH	AVG	HIGH
4/26/25	0.009	0.2	0.005	0.1	0.08	0.2	0	0
5/2/25	0.08	0.5	0.002	0.1	0.04	0.4	7.18	141
5/10/25	0.07	0.7	0	0	0.05	0.2	3.22	25
5/17/25	0.011	0.2	0.15	8	0.03	0.4	1.03	0.4

Infested Fruit

Week Ending	Leafroller		Plum Curculio	
	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

% Infested Lower Shoots

Week Ending	Leafrolle	er	Aphids		
	AVG	HIGH	AVG	HIGH	
5/17/25	0.11	4	4.6	22	



Terrapin Scale. Scale traps were checked this week, and crawler activity has begun, although levels remain minimal at this time. Traps will continue to be checked weekly moving forward to monitor population development.

Week Ending	Scale			
	AVG	HIGH		
5/2/25	0	0		
5/17/25	5.5	32		

Cranberry Fruitworm and Cherry Fruitworm. At this time, activity has decreased in both Cherry Fruitworm and Cranberry Fruitworm traps.

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

Organic Practice Sprays: Second Post-Pollination

If Plum Curculio is still being detected, repeated applications of Venerate may be necessary for effective management. Pyrethrins and neem oil (Aza-Direct) can provide some suppression of aphid populations.