

The Blueberry Bulletin

A Weekly Update to Growers

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

BLUEBERRY CULTURE

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

I have often spoken to growers about the importance of a leaf analysis to determine the need for fertilization applications and to keep all the essential nutrients in balance. It must be understood that each of the essential nutrients, nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, manganese, iron, copper, boron and zinc do not act independently within the plant. Higher than optimum levels of one of these can adversely affect the uptake of another. This interaction is quite extensive. Just as an FYI, I thought it would be beneficial to post a chart outlining the nutrients and their effect on other nutrients. This will be useful to growers when looking at their leaf analysis results. For example, if your results show a very high level of potassium and a low level of magnesium, one approach to remedy the situation is to lower applications of potassium AND increase the application levels of magnesium. In reality, just lowering the potassium application levels will most likely fix the magnesium problem. Late July and August are the optimum times to conduct a leaf analysis.

Nutrient - Relationships	
	<i>Depresses</i>
Phosphorus (P)	Aluminum Zinc Calcium Manganese Magnesium
Potassium (K)	Sodium Iron Manganese Magnesium
Sulfur (S)	Calcium Copper
Calcium (Ca)	Manganese Magnesium Phosphorus Zinc
Magnesium (Mg)	Phosphorus Calcium
Zinc (Zn)	Iron Copper Phosphorus Sulfur
Manganese (Mn)	Iron Phosphorus Potassium Magnesium
Copper (Cu)	Sulfur Iron Zinc Phosphorus
Iron (Fe)	Potassium Phosphorus Copper
Aluminum (AL)	Iron Phosphorus

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): Elliott and other late varieties are finishing up in southern counties, so treatments for this insect are completed in most cases. Farms with direct markets in northern counties will need to continue treatments on the latest varieties until completely harvested.

Putnam Scale: We are still seeing positive crawler counts on 7 out of 10 traps. However, the number of crawlers being found on the traps **has increased from 3 to 10 fold during the past week.** This indicates that the second generation crawler stage is well underway. If you have not yet done so, and you had 1st generation scale, then it is time to treat. Options for control include: Esteem 35W @ 5oz/A, or Diazinon @ 1-2 lb/A (50W). The diazinon label specifies that there is a maximum of 2 lb of formulated product allowed per season, and a maximum of only 1 in-season foliar application per year. In most cases this will be a post-harvest application, but there is 7

day PHI for diazinon. The application volume is just, if not more important that the rate. The insecticide must contact the insect as it crawls up the cane and onto the branches. Make sure to use as much water as possible, or close to 50 gal/A or more. Use of a non-ionic spreader will help slightly to increase coverage. Scale applications **Will Not Work** if done by air. Good pruning that eliminates the old canes that harbor the highest populations is another management tactic that should always be practiced.

Sharpnosed Leafhopper (SNLH): Adult populations remain very low, indicating that 2nd generation adults have not yet matured or started to move about. It is too early for any insecticides directed against SNLH.

Blueberry Trap Counts

Week Ending	CBFW-AC		CBFW-BC		SWD-AC		SWD-BC		OB-BC		OB-AC	
	Avg	Max	Avg	Max	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				
6/13	5.6	22	3.5	8	4	14	7.7	20	3.2	11	18	340
6/19	7.2	48	6.5	18	4.64	30	4.9	16	71.75	675	21.4	68
6/27	0	0	3.5	8	2.8	12	4.3	25	1834	13750	462	2025
7/4	0.22	1	1	3	4.17	16	11.3	46	2421	8775	976	5062
7/11	0.11	1	0.25	1	5.8	27	6.6	22	1093	5000	1997	6075
7/18	0.11	1	0.5	2	5.3	19	4.6	14	769	5000	1575	6750
7/25	0.11	1	0.25	1	12.2	41	5.5	20	443	3500	920	4050
8/1	0	0	0	0	8	42	11	37	179	2025	520	4025
8/8	8.9	62	5.6	23	31.5	340	231	4025
8/15	13	46	3.5	17	2.5	15	25	675

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Week Ending	SNLH – AC		SNLH-BC		BBM-AC		BBM-BC		Scale-AC		Scale-BC	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
6/27	0.14	3	0.8	4	0	0	0	0				
7/4	0.08	1	0.8	5	0.009	1	0	0				
7/11	0.12	1	1.82	6	0	0	0	0				
7/18	0.11	2	1.16	5	0	0	0	0				
7/25	0	0	0	0	0.02	1	0	0				
8/1	0.04	1	0.3	2	0	0	0	0				
8/8	0.152	3	0.14	2	0.03	2	0	0	9.25	57	0.5	1
8/15	0.37	3	0	0	0	0	0	0	27	89	9	18

Key: PC=plum curculio, Scale=Putnam scale, CBFW=cranberry fruitworm, SWD=spotted wing drosophila, OB=oriental beetle, SNLH-sharpnosed leafhopper, BBM=blueberry maggot, BC=Burlington County, AC=Atlantic County