

# The Blueberry Bulletin

*A Weekly Update to Growers*

May 8, 2019

Vol. 35, No. 4

## **AT A GLANCE...**

### BLUEBERRY GROWER TWILIGHT MEETING

Thursday, May 30, 2019 @ 5:30 p.m.  
Atlantic Blueberry Company  
7201 Weymouth Rd.  
Mays Landing, NJ 08330  
For directions call 609-561-0612

Visit the Blueberry Bulletin webpage at  
[www.njaes.rutgers.edu/blueberry-bulletin](http://www.njaes.rutgers.edu/blueberry-bulletin)

## **CULTURE**

*Dr. Gary Pavlis, County Agricultural Agent,  
Rutgers University*

**Fertilization:** Fertilizer recommendations which are based on soil analysis are nearly worthless. Leaf and soil samples which had been taken from the same plant never agreed, and the leaf analysis shows what is actually getting into the plant. So, what do we do about this? I believe the only important thing that we learn from soil analysis is pH. Yes, pH is critical. Many growers have heard me say that the three most important things you must know to grow blueberries is pH, pH, and pH. This is especially true for growers who have plantings that are not on soils that are naturally 4.5 to 4.8. The pH of the soil must be known because leaf analysis results assume that the pH is within the correct range. If it is not within that range, I would not rely on the leaf analysis recommendations. So, what should growers do about fertilizing their blueberries? First, every blueberry grower should have their blueberry soils tested for pH. If soil pH is not within the 4.5-4.8 range, this should be adjusted immediately. If the pH is higher, sulfur is added. If the pH is lower, lime is

added. The amount of sulfur or lime depends on your pH and I would have the pH tested in the spring and fall until the proper range is attained. Thereafter, fall pH tests are best because adjustments can be made then and the pH will be correct by bud break in the spring. Second, this year's N-P-K application should be made at bud break. But realize that the amount, 600 lbs/Acre of 10-10-10 on a mature planting is largely a guess until we take leaf samples in July. After that we can make recommendations based upon the leaf analysis. Note: this can only happen if the soil pH is correct or we must continue to guess on the recommendations. Lastly, these changes are needed because even though the samples we took last year were from growers who are some of the best blueberry growers in the world, 70% of the plants were deficient in Nitrogen, and 97% were deficient in one of the micro-nutrients. Nutrient deficiencies cause decreased yield, lower fruit quality, increased disease problems and plant mortality. We need to make these changes as soon as possible.

## INSECTS

*Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University*  
*Mr. Dean Polk, IPM Agent – Fruit*  
*Ms. Carrie Denson, IPM Program Associate – Fruit*

**Plum Curculio (PC):** Our numbers of PC adults were still high. PC adults are being found in both Burlington and Atlantic County fields. This week's average for PC was 0.06 per bush, with a max of 1 per bush. Adults are now laying eggs on developing fruit. Therefore, this remains the primary insect to control as soon as bees are safely removed.

*Scouting and Control.* To monitor for PC, look for the semi-circular scars on the fruit. Sampling should be biased towards field edges or infields that border woods and hedgerows. PC infestations are more common in weedy fields and those with sod middles. This pest is more of a problem on early maturing varieties. No threshold has been established, so treatment is mainly based on past history and an estimate of injury to fruit. Chemical controls targeting the adults should be applied soon after bees are removed. Post-bloom control options include Avaunt, Danitol, Brigade, Mustang Max, and Imidan.

**Leafroller (LR) and Other Leps:** The principal larvae being found are green fruitworm. This week's average for LR was 0.04 per bush, with a max of 0.6 per bush. The treatment threshold is 1 larva per bush, so in most cases these do not pose a problem. However, some **gypsy moth larvae** are also being found. These were first found on April 22, with only sparse numbers. During the past week they became present in both Burlington and Atlantic County fields, but

at very low numbers, averaging only .001 per bush. In rare cases, up to .1 larva per bush is being seen. Even with the addition of gypsy moth larvae, **no treatments are needed** for this pest complex.

**Lecanium / Terrapin Scale:** One field was seen today (May 7) with overwintering Lecanium scale on the canes (see Picture). This field also had Putnam scale during the season last year.

There are thus at least 2 species of scale present on this farm. The life cycles for Lecanium and Terrapin scales are different from that of **Putnam** scale, so controls need to be done at different times. Putnam scale is a hard scale and has 2 generations per year, while Lecanium and Terrapin scales are soft scales and have 1



**Scales on blueberry cane**

generation per year. The soft scales overwinter as fertilized females which, in this case, will produce young crawlers by mid to late May. The visible females are now feeding. Therefore, since many growers will only be able to do a ground spray for the 1<sup>st</sup> 1-2 post pollination applications, soft scale control is suggested in the first or second sprays in order to target the first crawlers from the ground. Esteem 35WP @5oz/A is suggested for control if scales are present. Timing would be as late as possible during May, but applied with a ground sprayer with at least a 50 gal spray volume.

**Phomopsis:** We are still seeing low levels of Phomopsis canker formation. Numbers are very low, with an average of .01% of terminals infected per bush.

## Pesticide Container Recycling

### Helena Chemical

440 N. Main Street  
Woodstown, New Jersey

### Friday, May 10, 2019

NJDA Staffed  
9:00 A.M. to 12:00 P.M.

#### Future Dates at this location:

June 14  
July 12—NJDA Staffed  
August 9  
September 13  
October 11— NJDA Staffed

### Helena Chemical

66 Route 206  
(North of the Route 30/206 Intersection)  
Hammononton, New Jersey

### Friday, May 3, 2019

9:00 A.M. to 12:00 P.M.

#### Future Dates at this location:

June 7  
July 5—NJDA Staffed  
August 2  
September 6  
October 4—NJDA Staffed

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One core credit will be given to pesticide license holders who follow the few simple processing steps below and bring their license with them at time of collection when the NJDA are staffed at the collection site.

Helena Chemical will accept non-refillable, high-density polyethylene #2 (HDPE) containers that are no larger than 55 gallons and that have been triple rinsed. You must make sure containers are dry inside after they are rinsed out and either cut a 6-inch slit in the bottom or drill a quarter-inch hold in the bottom of the container to insure it will not hold liquids. Lids must be removed. Foil seal also must be removed. Containers that are 30 gallon size must be cut up into 4 pieces using a sawzall, chainsaw, circular saw, etc. 55 gallon containers must be cut up into 8 pieces accordingly.

Non-waxy cardboard also will be accepted during this collection program, since most of these products are sold in cardboard boxes. The cardboard must be flattened and must be tied. Collection of cardboard will take place every Friday from 1 to 3 p.m. from April through October.

Helena Chemical will not accept containers if they have held any type of petroleum oil product or antifreeze. Pesticide containers with any liquid or dried residue will not be accepted. No mini-bulk, saddle tanks or nurse tanks will be accepted, as they may be made of fiberglass.

For questions please contact Roberta Lang, NJDA, 609-292-2242.

Do not drop off containers unless it is during the scheduled collection times.



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