

The Blueberry Bulletin

A Weekly Update to Growers

May 5, 2021

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BLUEBERRY Virtual Twilight Meeting
Thursday- May 27, 2021
6pm Zoom Information to Follow

Check your emails

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www.njaes.rutgers.edu/blueberry-bulletin

BLUEBERRY CULTURE

Dr. Gary C. Pavlis, Ph.D.

Atlantic County Agricultural Agent

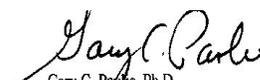
Fertigation Guidelines:

Growers have asked me for some guidelines for fertigating blueberries. As you may be aware, our research in New Jersey has shown that fertilizing blueberries a little at a time through the trickle system has shown to be very beneficial. Increases in yield have been seen each year of the research. In addition, increases in fruit firmness have often been seen.

Over the years the following guidelines have been developed:

1. Determine the amount of Nitrogen required/acre/year for each field. Total N should be based on leaf analysis the year before however 60# of Nitrogen/A is a good base recommendation for mature plants if a leaf analysis has not been conducted.
2. Multiply total acres to be fertigated by #/A and convert to total gallons for the season.
3. Fertigation period is 6-8 weeks, starting at $\frac{3}{4}$ bloom. Fertigate once a week for 1-2 hours during the normal irrigation schedule. Run irrigation a minimum of $\frac{1}{2}$ hour before and $\frac{1}{2}$ hour after fertigation. If travel time from the injection point to the final application point is longer, allow for one hour before and after fertigation time of travel. This will ensure application uniformity to the furthest emitter within the zone. As a rule of thumb, for a scheduled irrigation, irrigate at least 3-4 hour during a 1-2 hour fertigation. Using a 1gph emitter, irrigate 4-6 hours every 3 days, with a .5 gph emitter, irrigate 8-12 hours every 3 days. This is based on no rainfall and ET rates of .2"- .26"/day.
4. Install tensiometers to monitor soil moisture within the 12"-18" root zone depth. For loamy sands and sandy loams irrigate when readings are 20-30 CB on the tensiometers. This will supply needed water and fertilizer to the root zones.

5. Injection pump should be sized for maximum acreage/zone that you plan to irrigate/fertigate at one time (2 hour injection time, for a 4 hour irrigation per zone). Example- a 10 acre drip system at 60# N requirement/acre will need 600 gallons of liquid 10-10-10. If injection is scheduled for once a week for 8 weeks, 75 gph injection pump is recommended for a one hour injection period. If you inject for 2 hours, the rate is lower (37.5 gph injection rate). If zones are over 10 acres, plan for between 50-100 gph injection rate. A lower injection rate can be used with a longer fertigation/irrigation period.



Gary C. Parks, Ph.D.
Atlantic County Agricultural Agent

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

Leps (leafrollers, spanworm, green fruitworm and gypsy moth): this past week scouting, Leps average per push was 0.008 with a High of 0.1. LEPS found were greenfruit and spanworm. Early this week we started to see small gypsy moth larvae blow in from the surrounding woods on some farms. This is more pronounced in Burlington County than in the Hammonton area of Atlantic County. The highest count seen so far is close to .7 larvae per bush. The treatment threshold for combined larvae is 1 larva per bush. The gypsy moth hatch is done and some larvae are molting into the 2nd instar stage.

Cautionary note – With the addition of gypsy moth in the mix, we expect that treatment levels will be reached in a number of fields. Dry weather patterns as we have been having, tend to favor larval survival and thus help increase the population pressure. The main 2 choices for worm control during bloom have been Bt materials and Intrepid, an insect growth regulator. Delegate and Entrust have also been used, but are known bee toxicants when freshly applied. While we continue to classify Intrepid as a relatively safe material for bees, some recent research has raised questions regarding bee safety and forager mortality. Given the current issues with honey bee health during blueberry pollination, it may be best to focus on Bt materials for any Lep control. To this end, Bt's work better on very young larvae. Therefore, growers who are contemplating a treatment may wish to be a little conservative and use Bt treatments that are targeted against young larvae at just under the traditional treatment threshold of 1 larva per bush .

Plum Curculio: this past week scouting we started to find PC, average per bush was 0.017 with a high of 0.4.

Cranberry Fruitworm Traps: this past week 19 CBFW traps were set.

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

DISEASES

*By Peter V. Oudemans, Ph.D.
Professor and Extension Specialist
Plant Pathology*

Timing	Leaf Drop	Mummy berry	Anthraco
Week of May 10	N/A	declining	Continue (7-10 day interval)
Material	N/A	Quash or Switch	Ziram/Abound
Week of May 17	Applications should start this week	N/A	Assess bloom progression. Dukes may be out of danger
Material	Quadris Top, Quash	N/A	Check PHI for all sprays
Week of May 24	Spray affected fields	N/A	Assess bloom progression. Dukes may be out of danger
Material	Quadris Top, Quash	N/A	Check PHI for all sprays

Disease management choices: Leaf drop sprays should begin next week in fields where the pathogen is present. QuadrisTop or Quash are good choices (save Proline for post-harvest Black Shadow). We are guesstimating Duke harvest to begin around June 13 so please calculate all PHIs based on this date.

Understanding the target: With the leaf drop fungus spores are coming from the leaves on the ground and are being launched from there to the undersurface of leaves. Therefore, fungicide applications should target the undersurface.

Other diseases: this is the time to scout for Scorch, stem blight, phomopsis twig blight, and botrytis.

We are seeing reports of Botrytis this year. Please scout for the disease and if necessary a botrytis application may be warranted. Fungicides like Elevate or Switch are excellent for this disease.



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