

# The Blueberry Bulletin

*A Weekly Update to Growers*

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

## Blueberry Culture

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

**Fertilizing Newly Planted Fields:** Growers putting in a new field have requested information on fertilization. First, no fertilizer should be placed in the planting hole. When the plants are set out in the fields, usually in April or early May, the fruit buds should be rubbed or pruned off. With no crop present and only a small area of soil requiring fertilizer, about 125 lbs/A of 10-10-10 is sufficient (1 1/2 oz./bush). Sidedressing with a fertilizing spreader will require higher rates to compensate for open areas between plants. Special caution should be observed as to the time of fertilizing after planting. Fertilizer should not be applied until a second growth starts. For example, if plants are set out while dormant, do not fertilize while the first crop of leaves is unfolding and changing

from light green to dark green, wait for new growth. Making the first field application too soon has frequently caused reddened foliage and a delay of several weeks in the starting of new growth. Keep the fertilizer at least 2 inches away from the crowns of the young plants. In late-June, the application of fertilizer is usually made.

**Note:** Never put leaves, chips, sawdust and etc. in the planting hole unless it has been composted for at least 2 years. Fresh organic matter ties up all nutrients and starves the blueberry plants.

  
Gary C. Pavlis, 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 Mansue Denson, IPM Program Associate – Fruit*

**Cranberry Weevil (CBW):** Adult counts decreased over the previous week and are no longer a concern.

**Honey Bees and Other Pollinators:** Now that bees are in the fields, no insecticides should be used, except in extreme circumstances with very high ‘worm’ problems. Even at high levels, growers would only use non-bee toxic products like Bts and Intrepid.

**Leps (Lepidoptera larva – green fruitworms, leafrollers, spanworms, gypsy moth):** During this past week scouting, Leps averaged 0.014 larvae per bush, with a high of 0.1. These were primarily green fruitworm and spanworm. These reflect low numbers, and no treatments are needed.

**Plum Curculio (PC):** During the early part of this week a few PC adults have started to show up. These are not a concern at this time, but would be the first insect targeted when bees are removed from the fields.

*Life Cycle.* In New Jersey, PC completes a single generation a year in blueberries. This insect overwinters as an adult in leaf litter. Adults (Figure 1) become active during bloom and feed on young fruit just after bloom, causing feeding scars. We have observed that in the absence of fruit (i.e., this time of year), adults feed on blueberry flowers (petals). Females lay eggs in the fruit causing crescent-shaped oviposition scars.



Figure 1. Plum curculio

White maggot-like larvae develop inside the fruit (one larva per fruit). Feeding by the larvae causes fruit to develop prematurely and fall off the bush. Mature larvae exit the fruit to pupate in the ground, and become an adult in July and August. If berries are picked before they drop, larvae can contaminate harvested fruit.

*Scouting and Control.* Two methods can be used to monitor PC populations at this time of year. Adults can be monitored using beating tray samples to calculate the number of adults per bush. Alternatively, black pyramid traps baited with the PC aggregation pheromone (grandisoic acid) and the fruit volatile benzaldehyde can be placed in blueberry fields. For information and to purchase these traps and lures please visit <http://www.agbio-inc.com/plum-curculio.html>. 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 damage to fruit. No treatment is recommended for this insect at this time of year.

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

Week Ending	Adults/Bush (Beating Tray)			Leps./Bush (Beating Tray)		PC/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

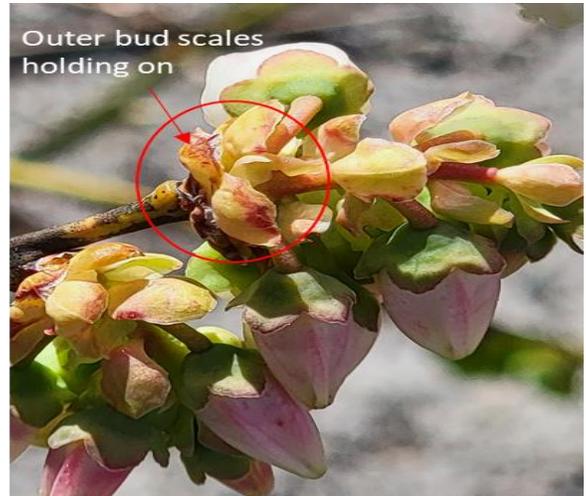
## **Diseases**

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

Timing	Leaf Drop	Mummy berry	Anthracnose
Week of May 3	N/A	declining	Continue (7-10 day interval)
Material	N/A	Quash or Switch	Ziram/Abound
Week of May 3	N/A	N/A	Continue (7-10 day interval)
Material	N/A	N/A	Ziram/Abound
Week of May 10	Spray preventative	N/A	Continue (7-10 day interval)
Material	Quadris Top, Quash	N/A	Ziram/Abound

**Disease management choices:** A few notes on abound (and the generic materials). Always read the label. For Abound use we are limited to 42 fl.oz./acre/year. Therefore reducing to 14 fl.oz. per application will give you a third possible spray.

**Understanding the target:** The fungus causing anthracnose overwinters to a large extent in the scales surrounding the flower clusters. As the clusters open the fungus grows out of the scales, down the pedicel and penetrates the ovary of the developing flower. In the photos below you can see the position of the bud scales and ovaries from earlier this week. Bud scales on Duke are beginning to drop and disease pressure is declining. Bluecrop are still hanging on.



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## **Communicating the Value of COVID-19 Vaccines With Your Farm Employees**

***Rick VanVranken***

In an effort to increase participation in the COVID-19 vaccination program among farm workers, the Centers for Disease Control (CDC), through the national Extension Foundation, is working with Cooperative Extension across the country to help spread the word about the importance of getting vaccinated. Rutgers Cooperative Extension Director Brian Schilling has enlisted a team of County Agents and Specialists to answer the call from the CDC to participate in this EXCITE program. Through a variety of communications channels we will be providing informational posters and other educational materials in several appropriate languages that you can hand out or post in locations where your workers can easily read them (like on or near your Worker Protections Standards bulletin boards or in your labor camps).

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**“Vaccines (shots) are one of the tools we have to fight the COVID-19 pandemic”**  
posters from the CDC are now available on the COVID-19 page of the Rutgers NJAES On-Farm Food Safety website

<https://onfarmfoodsafety.rutgers.edu/covid-19-information/> with the direct links to these multiple language editions:

- English
- Spanish
- Simplified Chinese
- Traditional Chinese
- Haitian Creole French
- Korean

You can also share this Spanish language video- <https://wecandothis.hhs.gov/un-rayode-esperanza> from the US Dept. of Health and Human Services with your workers to help explain where they can get more information about COVID-19 vaccines. There are several other informational videos available at <https://wecandothis.hhs.gov/filter/format/Video,aswellasposters/fliers> from [Wecandothis.hhs.gov/filter/format/poster](https://wecandothis.hhs.gov/filter/format/poster) (mostly English), and factsheets at <https://wecandothis.hhs.gov/filter/format/Fact%20Sheet>.

*This article is from the Plant and Pest Advisory website*