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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

An overwhelming number of farms have deficiencies in Copper and Iron. The best time to remedy this situation is in the spring when leaf expansion has occurred since foliar applications of these micro-nutrients are the most efficient way to get the nutrient into the plant. The chart below is a guide to micro-nutrient application.

UTGERS New Jersey Agricultural Experiment Station	Micro-nutrients sources and rate					
Nutrient	Product	Method	Rate			
Boron	Solubor20	Foliar	1.5lb./A			
Boron	Solubor20	Ground	5lb./A			
Boron	Borax11	Ground	10lb./A			
Copper	Cu chelate	Foliar	Label Rate			
Iron	Fe chelate	Foliar	Label Rate			
Mn	Mn chelate	Foliar	Label Rate			
Mn	Mn sulfate	Foliar	2 lb./A			
Zn	Zn chelate	Foliar	Label Rate			

Dary Carle

Cooperative Extension of Atlantic County Gar

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#### 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 77 fields in Burlington and Atlantic Counties. Overall, pest pressure was low, with minimal observations of leafrollers, spongy moths, plum curculio, and thrips. This week's scouting also included assessments for insect-damaged fruit. Most pest activity was found directly on the fruit, rather than in monitoring trays—likely due to cooler weather during the scouting period, which may have reduced insect movement and trap captures. On average, we observed 0.97 plum curculio–scarred fruit per 10 bushes, with some fields reaching up to 4.3 scarred fruit per 10 bushes.

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

#### **Infested Fruit**

Week Ending	Leafroller		Plum Curculio		
	AVG	HIGH	AVG	HIGH	
5/10/25	0.13	0.07	0.97	4.3	

**Terrapin Scale.** Scale traps were not checked this week due to a lack of activity observed last week; they will be monitored again in the upcoming week.

Week Ending	Scale			
	AVG	HIGH		
5/2/25	0	0		

**Cranberry Fruitworm and Cherry Fruitworm.** At this time, activity has increased in both cherry fruitworm and cranberry fruitworm traps. With rising trap counts and bee removal underway, treatment is recommended to protect the fruit.

*Life Cycle:* The cranberry fruitworm has one generation per year. It overwinters as a fully-grown larva within a cocoon made of silk and soil particles, known as a hibernaculum. Pupation occurs in early spring, and moths begin to emerge during the second to third weeks of May.



Male moths emerge 3-4 days earlier than females. The adult moths are brownish-gray with a pair of white markings on each forewing (see Picture 1). The eggs are pale green, flat, and are laid singly along the inside rim of the calyx cup. Eggs hatch in 5-7 days, and the newly emerged larvae are pale yellowish-green. Upon hatching, larvae bore into the fruit, usually near the junction of the stem and berry. The larvae remain inside the fruit until it is consumed, then move to another fruit. A single larva may feed on 5-8 berries. Cranberry fruitworm infestations can be identified by the presence of webbing filled with excrement inside the berries (see Picture 2). Infested fruit may prematurely drop.



Picture 1. Adult cranberry fruitworm (Photo by Z. Szendrei)

Scouting and Control: The timing of treatment can be determined using data from pheromone traps. The number of males caught in these traps helps assess the presence and distribution of cranberry fruitworm within a field. Traps are typically placed along wooded borders, where pest pressure tends to be highest. Growers with a history of high fruitworm populations should pay close attention to monitoring. Additionally, eggs can be scouted for after early fruit set. While larval infestations are difficult to detect early in the season, the growing number of affected fruits and the presence of frass provide clear signs of infestation as larvae develop.



Picture 2. Cranberry fruitworm damage to developing fruit (Photo by Z. Szendrei)

Cranberry fruitworm can be controlled using registered insecticides. Depending on the population level, one or two applications may be necessary. If trap counts are high, an early application of an insect growth regulator (such as Intrepid, Confirm, or Esteem) can be made when the first eggs start to hatch, typically just before the peak flight in New Jersey. This would be followed by a second application shortly after bloom. Post-bloom applications can include broad-spectrum insecticides (such as Danitol, Asana, Mustang Maxx, or Imidan) or newer, softer options like Assail, Altacor, Avaunt, or Delegate, applied 7-10 days after the first treatment and after bees are removed. If trap counts suggest a lower population, a single post-bloom insecticide application may be sufficient. Since broad-spectrum insecticides can harm beneficial insects, they should only be applied once honeybee hives have been removed.



Week	CBFW AC		CBFW BC		CFW AC		CFW BC	
Ending								
	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	38	0	0	19.85	28	19.75	43
CBFW = Cranberry Fruitworm, CFW = Cherry Fruitworm; AC = Atlantic County, BC = Burlington County								

### **Organic Options for First Post-Pollination Spray**

For managing cranberry/cherry fruitworm, recommended insecticidal treatments include *Bacillus thuringiensis*based products like Dipel or botanical insecticides such as Pyganic (pyrethrin-based). However, these products are not effective against plum curculio. To control plum curculio, applications of Venerate are recommended. Due to the potential for ongoing pest activity, repeated applications may be necessary, depending on monitoring results from field scouting.