

# The Blueberry Bulletin A Weekly Update to Growers

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- Visit the Blueberry Bulletin webpage at <u>njaes.rutgers.edu/blueberry-bulletin</u>
- The 2022 Commercial Blueberry Pest Control Recommendations for New Jersey is available on <u>njaes.rutgers.edu</u>

## **BLUEBERRY CULTURE**

## Dr. Gary C. Pavlis, PhD. Atlantic County Agricultural Agent

During visits to farms this week I was struck by the fact that a few fields that had been looking very weak a couple of years ago due to grub damage had come back very well due to the application of proper control. It brought home the need to observe problems in the field, get them diagnosed, and apply the recommended treatment as early as possible. Without early diagnosis the field slowly goes down, yield decreases, and money is lost. In the end a once productive field has to be replanted at considerable expense. I always feel good when a field that was on the brink of decline is brought back to be productive. It must be also mentioned that I saw a few fields with plants that have set fruit but no leaves. Sometimes it is just a few canes on the plant, sometimes it is the entire plant. Either way, it spells trouble. I have written many columns in this newsletter about plants with no leaves. This is usually due to a root problem, most of the time due to grubs and sometimes due to root rot. Both can be reversed but it takes an observant eye in the field to notice the problem before it gets too advanced. This is the time of the year when we are most likely to see this problem and growers are advised to stay observant. If a plant has a full crop but does not have any leaves, the first thing that should be done is to strip the fruit off the plant. In this way, once the problem is solved the plant is able to recover. With a full crop load, it will probably die.

## **PEST MANAGEMENT**

#### **Blueberry Insects**

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

Leps (Lepidoptera larva – green fruitworms, leafrollers, spanworms, spongy (= gypsy moth): During the past week Lep averages stayed the same as last week at 0.05 larvae per bush (or 100 blossom clusters), with a high of 0.2. These were primarily green fruitworm. This still reflects low numbers. Spongy (= gypsy moth) numbers decreased over the past week averaging 0.05 larvae per bush, with a high of 0.4.

**Plum Curculio (PC):** PC (Figure 1) numbers were still low, averaging 0.04 PC per bush, with a high of 0.4. With the warmer weather next week PC numbers should increase. Treatment must be on hold until bees are removed.

*Scouting and Control*. To monitor for PC, look for the semi-circular scars on the fruit (Figure 1). 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. Best post-bloom control options are Avaunt and Imidan.



Figure 1. Plum curculio adult and oviposition scar. Photo – Dean Polk.

**Cranberry Fruitworm (CBFW) and Cherry Fruitworm (CFW) Traps:** Trap counts for CBFW in both Atlantic and Burlington County have been very minimal for the past few weeks. However, CFW trap counts have increased over the past few weeks, averaging 9.1 per trap with a high of 22 for CFW in AC and averaging 10.25 per trap with a high of 17 for CFW in BC. Treatment should be considered when bees are removed. If trap counts are high, then an early application of an insect growth regulator (Intrepid or Esteem) may be used when the first eggs are laid and start to hatch. In New Jersey, this may be just prior to the peak flight. This would be followed by a second application soon after bloom is done. Post-bloom applications with broad spectrum materials (such as Danitol, Asana, or Imidan), or with softer materials such as Assail, Avaunt, Altacor, Exirel, or Delegate can be done 7-10 days following the first application and after bees are

removed. If trap counts indicate a lower population, then a single insecticide application may be made post-bloom.

Insect plant samples												
	Leafroller/Tray		Spongy Moth/Tray		Plum Curculio (PC)		Thrips					
Week Ending	Avg	Max	Avg	Max	Avg	Max	Avg	Max				
4/30	0.03	0.2	0	0	0	0	0	0				
5/7	0.05	0.4	0.44	5	0.06	0.3	0	0				
5/13	0.05	0.2	0.05	0.4	0.04	0.4	0	0				

## By the Numbers Summary:

Insect trap counts												
	CBFW AC		CBFW BC		CFW AC		CFW BC					
Week Ending	Avg	Max	Avg	Max	Avg	Max	Avg	Max				
4/8	0	0	0	0	0.1	1	0.25	1				
4/14	0	0	0	0	0	0	0	0				
4/20	0	0	0	0	0.2	1	0	0				
4/29	0.1	1	0	0	0.9	3	0.25	1				
5/7	0	0	0	0	7.1	15	4.5	15				
5/13	0.1	1	0	0	9.1	22	10.25	17				

Key: CBFW=cranberry fruitworm, CFW=cherry fruitworm, PC=plum curculio, Spongy Moth=gypsy moth larvae

**Scorch Disease and Aphids:** Several sites were recently seen with suspected Scorch Disease. When present, it is common to see this during late bloom and as the bees are coming out. Bushes should be marked as soon as possible when the disease is most easily recognized, and then rogued out as soon as you can. The virus is transmitted by aphids as they feed and move from bush to bush. Aphid populations should start to increase over the next couple of weeks. When aphid population density increases, then winged forms are often seen. Since winged forms are more motile, and aphids can vector the virus, every effort should be made to keep populations as low as possible. Infected bushes should be removed prior to the onset of high aphid populations. The photos below were recently taken in a known scorch disease area.



Suspected Blueberry Scorch virus symptoms on single cane and whole bush, seen on 5/17/22 near Hammonton