

**RUTGERS**

New Jersey Agricultural  
Experiment Station

***The BLUEBERRY BULLETIN***

*A Weekly Update to Growers*

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*At a glance. Insect and disease problems that should be considered this week.*

<b>PEST/DISEASE</b>	<b>WEEK OF JUNE 7</b>	<b>WEEK OF JUNE 14</b>
<b>Anthracnose</b> Abound or Ziram	Continue anthracnose schedule on susceptible cultivars.	Continue anthracnose schedule on susceptible cultivars.
<b>Aphids</b> Imidacloprid (Provado etc.), Assail, Actara, or Lannate for suppression of low populations	Monitor and treat if over 10% of terminals infested.	Monitor and treat if needed.
<b>Oriental Beetle</b> Imidacloprid (AdmirePro and generics)	Place traps and start monitoring fields.	Monitor with traps. Start treatments, depending on pest pressure and variety.
<b>Putnam Scale</b> Esteem or Diazinon	If crawlers are present, then treat with Esteem	If crawlers are present, then treat with Esteem or Diazinon
<b>Blueberry Maggot</b> No control treatment is required at this time	Place traps if not already in the field. Monitor traps 2X/week	Monitor traps 2X/week
<b>Plum Curculio</b> Imidan, Diazinon, or high rates of Danitol	Continue scouting to identify hot spots. Treat if fresh egg scars present.	Scout and treat hot spots if needed.

**Culture:**

*Dr. Gary C. Pavlis*

*County Agricultural Agent*

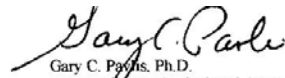
**The No Leaves Syndrome**

A new phrase coined by Denny Doyle of Atlantic Blueberry Company. Denny and I spent some time this week looking at canes showing a lack of leaves and diagnosed the problems on many of these canes. As readers of newsletter know, I have often wrote that a lack of leaves is usually a below ground problem. On lighter soils, it is

often due to grubs feeding on the roots. On heavier ground, it is often due to a root rot problem. But I find after investigations this week that the problem may not be as black and white as this. A few of the canes that lacked leaves showed cane damage that was obviously harvester damage. A few of the canes had stem blight. A few canes were in low areas and

appeared to be cold damaged. We even found a few plants that had a combination of ants, termites and root rot. Which came first is a topic for future research. The take home message however is that the lack of leaves on a blueberry cane can be due to numerous problems and it will take a bit of diagnosing. Give me a call if you see this problem in your field

.Sincerely,



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

Editor – Blueberry Bulletin  
Blueberry Bulletin – Editor  
GP/sp

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## INSECTS

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

**Aphids:** About 86% of samples have been positive with 41% over the 10% infestation level. This is a sharp increase since last week, but many of the positive samples consist of single and/or small colonies. Overall, aphid populations are the principal target for insect control at this time. The neonicotinoid materials (e.g. Assail, Provado, Actara) offer the best control.

**Oriental Beetle (OB):** Traps were placed in fields last week. The first adults are present, so emergence has begun. Adult emergence will continue through June and July, but tail off at the end of the month. All fields should be surveyed for either OB damage from recent years, or the presence of adults. If high numbers of adults are present, then it is likely that feeding damage by grubs has or will occur. Various formulations of imidacloprid (Admire Pro and generics) are the only labeled control. See below for a more detailed explanation.

**Admire Use Information:** Admire Pro (imidacloprid) (4.6 lb ai/gal) is recommended to manage Oriental beetle grubs infesting blueberries in New Jersey. Other formulations are also available in generic brands. Most of these are 2 lb ai/gal. These include Alias, Nuprid, Couraze, and others. Imidacloprid is most effective if targeted against early instar grubs. It should be applied in June to mid-July, at least 7 days before the first picking, or

applied as a post harvest material. Grubs should be targeted at their youngest stage or as they hatch and are at the 1<sup>st</sup> and 2<sup>nd</sup> instars, and while still close to the soil surface. Imidacloprid has little effect on 3<sup>rd</sup> instars and older larvae. Older 3<sup>rd</sup> instars start to appear by early to mid August. Therefore, applications should be made well in advance of that date. Because the first oriental beetle eggs are not expected to hatch before late June, you should try to delay application as late as possible. For example, applications made in May simply degrade if exposed to the sun. However, Imidacloprid has a long residual activity (>100 days) as long as the insecticide is not exposed directly to the sun. Applications for early varieties like Weymouth can be made immediately after the last picking. If Duke picks by the 3<sup>rd</sup> week of June, then application should be conducted during the 2<sup>nd</sup> week of June or after harvest, between mid to the end of July. Applications for Bluecrop are recommended 7 days before the first picking, in late June or early July. Similarly, applications for late season varieties like Elliott should be conducted no later than end of July. Imidacloprid is most effective when applied before most eggs have hatched and grubs are still near the soil surface. Please read and follow all the conditions and restrictions on the container label for these insecticides. Remember to irrigate the field with at least .5 to 1” of water immediately after application. If the

soil is dry, then also water just previous to application. Begin applications late in the evening hours because this insecticide is sensitive to breakdown by UV radiation. No more than one application of Admire Pro can be used per season. However, Admire Pro and Provado (and other generics) may be used in the same field as long as the total a.i. applied does not exceed 0.5 lb/A.

**Plum Curculio(PC):** Only 4% of tray samples have been positive with an overall catch of 0.04 PC per sample. This is a decrease since last week and may reflect the cool wet conditions of last week and the overall tailing off of PC activity. About 56% of fruit samples were positive for injury, but 3% of samples showed levels over 1 damage. No fresh injury was seen. The distribution of injury indicates that, while levels are low, this is a widespread issue demanding particular attention when picking and processing early varieties.

**Putnam Scale:** Tape traps have been placed and show that crawlers are emerging and

active. The first crawlers were seen on May 29. Crawlers will continue to emerge over the next several weeks. If growers had a scale problem last year, then you should check those areas of the farm for scale activity this year. Wrap a piece of black electrical tape over a cane near overwintered scale and over wrap with double-sided Scotch tape. Look at the edges of the Scotch tape a couple of times per week for small yellow crawlers. Be aware that all Diazinon formulations only permit 1lb/A per application and only 1 post-bloom application may be used. If Esteem is used, it can be used early in the crawler emergence.

**Cranberry Fruitworm (CBFW):** All treatments should have been applied by last week. Although trap counts increased last week, numbers were low, indicating some late emergence.

**Leafrollers:** Some larvae are present, but only at low levels in 2% of beating tray samples. No larvae have been seen in fruit clusters.

**Anthracoese:** Some disease symptoms are starting to show up on fruit that have other primary injuries.

## INSECT TRAP COUNTS

### *Blueberry Trap Counts – Atlantic County*

Week Ending	CBFW	RBLR	OBLR	SNLH	Or. Beetle	BBM
4/5		19.9				
4/12		55.1				
4/19		72.0				
4/25		69.4				
5/2		71.6				
5/9	.009	43.6				
5/16	0.07	7.86	0.00			
5/23	0.15	1.61	0.02			
5/30	0.08	0.27	9.63			
6/6	0.24	5.80	19.48	0.37		

### *Blueberry Trap Counts – Burlington County*

Week Ending	CBFW	RBLR	OBLR	SNLH	Or. Beetle	BBM
4/5		9.3				
4/12		22.6				
4/19		19.2				
4/25		25.1				

5/2		38.0				
5/9	.09	16.2				
5/16	0.1	3.4	0.0			
5/23	0.15	0.40	1.25			
5/30	0.71	0.00	6.50			
6/6	1.91	0.50	20.36	2.74		

