

# RUTGERS

New Jersey Agricultural  
Experiment Station

## *The BLUEBERRY BULLETIN*

*A Weekly Update to Growers*

*Dr. Gary C. Pavlis, County Agricultural Agent*

*6260 Old Harding Highway, NJ 08330*

*Phone: 609/625-0056 Fax: 609/625-3646 Email: [pavlis@njaes.rutgers.edu](mailto:pavlis@njaes.rutgers.edu)*

**June 2, 2017**

**Vol. XXXIII, No. 5**

### **CULTURE**

**Dr. Gary C. Pavlis, Ph. D.**

**Atlantic County Agricultural Agent**

Grower visits this week throughout Hammonton did not reveal any major problems. I saw my first blue 'Duke' on June 2<sup>nd</sup> but I still think that harvest is at least a week away, maybe 10 days. Overall crop size looks good but not extremely large. We experienced a mild winter in NJ and that usually translates into a big crop however I do not feel that is the case this year. The 'Bluecrop' does look a little heavier than the 'Duke' so the total may be larger than I think. As usual at this time of the year, I am seeing plants throughout NJ with new growth which is very light green and or reddish green. This is a nutrient deficiency, usually nitrogen, but it is normal. The plants are rapidly growing and doing so faster than the nutrients can be taken up. This will clear up in a few weeks as growth slows down.

Last applications of N-P-K should be going on over the next two or three weeks. After July 1 I do not recommend applying nitrogen. Our research at Rutgers shows that late applications of nitrogen increase stem blight, increase aphid numbers, and decrease winter bud hardiness.

Lastly, this is an excellent time to scout your fields for any problems that may exist. After harvest begins most growers are too busy to look for problems so now is the time to ID problems and address them. If you need any help do not hesitate to call me.

### **INSECTS**

**Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University**

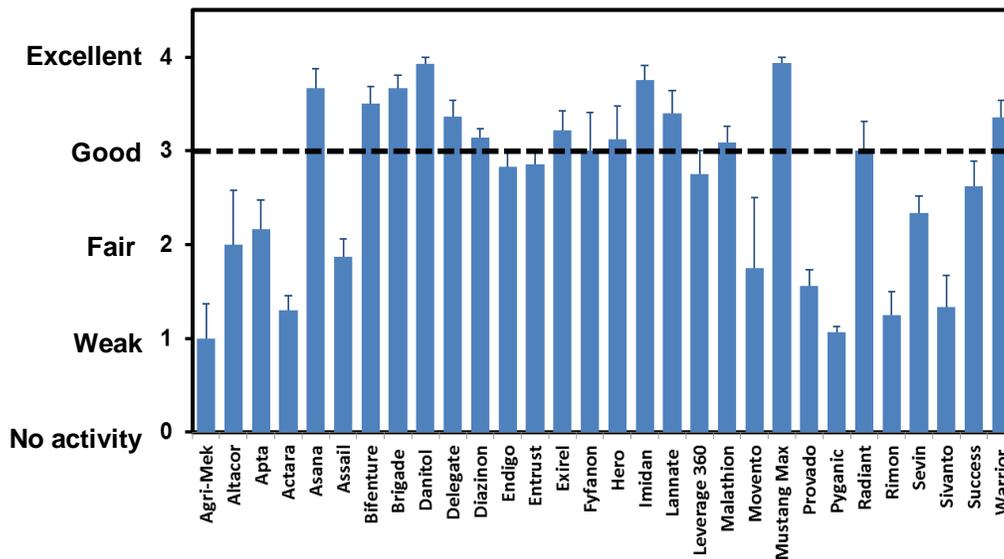
**Mr. Dean Polk, IPM Agent – Fruit**

**Ms. Carrie Denson, IPM Program Associate – Fruit**

We are now entering the time to control SWD as our primary pest, so hopefully aphids and PC have been 'mopped up.'

**Spotted Wing Drosophila (SWD):** SWD adults are being captured in scattered traps that we place during the week of 5/22-26. Populations are low, and are being found in the single digits. Nevertheless, this is 5 weeks earlier than when the first adults were found last year, and in some locations SWD adults have been found throughout the winter. The mild winter may have helped give SWD survive and produce and early start to our in-season population. As 'Duke' starts to gain some blue color, the berries will be susceptible to SWD egg laying. Therefore, SWD now becomes the primary insect pest of concern. Other later varieties may not be susceptible yet, but as the SWD population grows, the infestation pressure will become more intense.

**Ranking of insecticides based on efficacy against SWD (data provided by Dr. Rufus Isaacs, Michigan State University)**



Information provided by Michigan State University, North Carolina State University, Washington State University, University of Maine, University of California Berkeley, Rutgers University, Oregon State University, University of Georgia, Cornell University, and University of Florida.

**Plum curculio (PC):** Very little PC injury is being seen, and very few PC adults are being found in beating tray samples. However, PC adults are still being found in PC traps. This means that the insect is still active and has the potential to cause damage where significant populations are still present. When choosing a material to control SWD, it would be wise if that material were also effective against PC. Unfortunately this limits you to Imidan and high rates of pyrethroids, neither of which are aphid materials.

**Aphids:** Aphid populations average about 2.1% infested shoots, with a maximum of 24% infested shoots. This means that overall populations are low, or below our action threshold of 10% infested shoots. However some growers still need to ‘mop up’ the higher populations before concentrating on SWD. For these growers Assail would be the product of choice, since it will also control low populations of SWD. If your market does not

permit the use of Assail, then Lannate is also a choice. Both of these products will also control the last of the cranberry fruitworm (CBFW), if you already targeted CBFW earlier.

**Cranberry Fruitworm (CBFW):** Trap counts have increased over the past week, and indicate that CBFW is still a primary insect target on some farms. Eggs are being laid on the calyx end of the fruit (for about the past 10 days). Insecticides applied during this time will kill young larvae as they hatch, but before they establish themselves in the fruit. If you already applied a material targeted for CBFW, then additional sprays can be targeted for SWD and other pests. Materials that control SWD and CBFW include: Imidan, Delegate, Assail (low SWD populations), Lannate, the pyrethroids (Bifenture, Brigade, Danitol, Hero, Mustang), and Exirel.

## Blueberry Trap Counts

### Atlantic County

Week Ending	Cranberry Fruitworm	Plum Curculio	Oriental Beetle	Spotted Wing Drosophila ♂
5/6				
5/13	.083			
5/20	.28	2.4		
5/27	.56	2.8		

### Burlington County

Week Ending	Cranberry Fruitworm	Plum Curculio	Oriental Beetle	Spotted Wing Drosophila ♂
5/6				
5/13	.33			
5/20	.14	7		
5/27	.43	12		