New Jersey Agricultural Experiment Station

## The Blueberry Bulletin

A Weekly Update to Growers

### July 18, 2019

Vol. 35, No. 13

## <u>CULTURE</u>

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

Harvest is progressing well with final pickings of 'Bluecrop' and the first round of 'Elliott'. Growers reported very little in the way of problems this week and fruit quality is quite good.

One problem I did encounter reinforced to me how important a leaf analysis is to the health of a growers blueberry plants. I was called out to a farm and brought to a 'Bluecrop' block. 100% of the ripe fruit was not marketable because of chocolate-like blotchy spots on the fruit. When this fruit was cut open, there was a browning of the interior under the blotchy sections. The fruit was a total loss. In addition, the growing point on every cane was black. This is a very good indication that there is a Boron deficiency. Growers who have attended the Blueberry Open House have seen me show slides of this deficiency symptom. To confirm my diagnosis I collected leaves and sent them to Penn State for analysis. The analysis came back with very low Boron levels, far below optimum range. In addition, Iron, Copper,

Magnesium and Nitrogen levels were also low, though not to the extent of the Boron. FYI, Boron deficiency can be alleviated very easily with a foliar application of Boron. This application is also quite inexpensive.

Growers that are in the Rutgers IPM program know that soil and leaf analysis are monitored every year. As a result, a disaster in which an entire crop is lost due to a nutrient deficiency is much less likely to occur. Growers who are not in the program should realize that in extreme cases, nutrient deficiencies can be devastating. Most growers are probably not aware of the impact that a nutrient deficiency can have. It is understood that diseases and insects can be devastating but nutrition should be added to that list and realize that it is probably the easiest to prevent with an annual leaf analysis. Watch this newsletter for timing of the leaf analysis, how it is done and where to send your samples. This is a very cost effective method to prevent major problems.

## **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

Spotted Wing Drosophila (SWD): For the past 2-3 weeks our traps have shown a

marked increase in adult activity. SWD pressure is very high. At this time of the



Cooperating Agencies: Rutgers, The State University of New Jersey; U.S. Department of Agriculture; and County Boards of Chosen Freeholders. The U.S. Department of Agriculture (USDA) prohibits discrimination in all programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Rutgers Cooperative Research & Extension is an Equal Opportunity Program Provider and Employer. year several generations overlap, and the adult target represents only a small portion of the population, comprising only 8-10% of the total population. Since it is the principle target for insecticide sprays, it helps illustrate why repeated applications at close intervals are required for maggot free fruit. Make sure to stay on a 6-7 day program for ANY field that is yet to be picked, including machine picking for processing fruit. Elliott and other late varieties need to stay on a strict schedule. Some growers are border spraying next to fields that have already been picked, which is not a bad idea. An Elliott field which is surrounded by Bluecrop fields with fruit left on the ground from the

picking machines, will be under A LOT of SWD pressure.

**Oriental Beetle (OB):** Adult populations have started to drop, indicating that most egg laying is also slowing down. By this time of year the first emerged larvae will soon start to molt into 3<sup>rd</sup> instars, which are not susceptible to imidacloprid/Admire. Therefore if you haven't yet treated for this pest, and still intend to do that, the window for effective control closes this week.

**Aphids:** Aphid infestations have increased some since last week, mainly in Elliott plantings. Colony size average 5-10 aphids per infested shoot.

| Atlantic County Traps |      |      |      |      |  |
|-----------------------|------|------|------|------|--|
| Week Ending           | SWD  | OB   | BBM  | SNLH |  |
| 6/8                   | 1.05 | 8.2  | 0    | ==   |  |
| 6/15                  | 1.2  | 97   | 0    | ==   |  |
| 6/22                  | 0.71 | 1381 | 0.21 | 0.21 |  |
| 6/29                  | 4    | 2385 | 0.03 | 0.11 |  |
| 7/6                   | 64   | 1856 | 0.06 | 0.15 |  |
| 7/13                  | 87   | 1822 | 0.19 | 0.21 |  |

# Blueberry Traps

#### **Burlington County Traps**

| Week Ending | SWD  | OB   | BBM   | SNLH  |
|-------------|------|------|-------|-------|
| 6/8         | 0.07 | 2.91 | 0     | ==    |
| 6/15        | 0.83 | 69   | 0     | ==    |
| 6/22        | 0.7  | 750  | 0.33  | 0.33  |
| 6/29        | 0.64 | 1113 | 0.125 | 0.8   |
| 7/6         | 100  | 2048 | 0.2   | 0.625 |
| 7/13        | 18   | 874  | 0.64  | 0.72  |

Visit the Blueberry Bulletin webpage at www.njaes.rutgers.edu/blueberry-bulletin



Cooperating Agencies: Rutgers, The State University of New Jersey; U.S. Department of Agriculture; and County Boards of Chosen Freeholders. The U.S. Department of Agriculture (USDA) prohibits discrimination in all programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Rutgers Cooperative Research & Extension is an Equal Opportunity Program Provider and Employer.