RUTGERS

New Jersey Agricultural
Experiment Station

# The Blueberry Bulletin
## *A Weekly Update to Growers*

*\* Visit the Blueberry Bulletin webpage at [www.njaes.rutgers.edu/blueberry-bulletin](www.njaes.rutgers.edu/blueberry-bulletin)*

*\* The 2021 Commercial Blueberry Pest Control Recommendations for New Jersey is available on [njaes.rutgers.edu](njaes.rutgers.edu)*

## CULTURE

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

Now that harvest is all but over the timing is right to first, submit a leaf sample to a lab to determine the nutrient status of the blueberry fields and second, to observe how this year's herbicide program performed. Determining both of these will greatly affect yield and harvest next year. It is also a good time to do a soil test to make sure the pH is within the proper range for highbush blueberries which is 4.5 to 4.8. Lime applications to raise the pH or sulfur applications to lower the pH can be made at any time. The pH levels of New Jersey fields are slowly getting lower and lower due to the yearly application of the ammonium form of nitrogen that is typically used.  Soil pH values in the low 4's or high 3's result in inefficient uptake of nutrients. This can result in lower yields, soft fruit, poor fruit set, and poor cane growth.

It should be once again be noted that those who are planting the new blueberry variety 'Draper' should not do so if your pH is low. This variety requires higher levels of calcium. Calcium is more available at a pH above 5.0. We have found the ideal pH for this variety is in the 5.5 vicinity.

*Gary C. Pavlis*
Gary C. Pavlis, Ph.D.
Atlantic County Agricultural Agent

## BLUEBERRY PEST MANAGEMENT

*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*

**Spotted Wing Drosophila (SWD):** This is the only pest of concern, and only on the late-season varieties.

**Aphids:** No further treatments are needed.

**Putnam Scale:** Crawler traps will be placed this week and the second generation should be starting in the near future. Information on treatment options will be provided in future articles.

**Sharp-nosed Leafhopper:** Traps have been placed and spraying should be starting in the near future for this pest. Information on treatment options will be provided in future articles.

| Week Ending | % Leps injury to Berries | | % PC injury to Berries | |
|---|---|---|---|---|
| | Avg | Max | Avg | Max |
| 5/14 | 0.13 | 2 | 0.68 | 7.8 |
| 5/21 | 0.13 | 1.8 | 0.80 | 9.8 |
| 5/28 | 0.013 | 0.5 | 0.13 | 3.7 |
| 6/4 | 0.002 | 0.2 | 0.008 | 0.3 |
| 6/11 | 0.002 | 0.3 | 0.005 | 0.4 |
| 6/18 | 0.001 | 0.2 | 0 | 0 |
| 6/25 | 0.001 | 0.1 | 0 | 0 |
| 7/2 | 0.006 | 0.2 | 0.001 | 0.1 |
| 7/9 | 0.007 | 0.1 | 0 | 0 |
| 7/16 | 0.005 | 0.2 | 0.002 | 0.3 |
| 7/23 | 0.004 | 0.2 | 0 | 0 |
| 7/30 | 0 | 0 | 0 | 0 |
| Key: Leps = Lepidoptera larvae, PC = plum curculio, CBFW = cranberry fruitworm, CFW = cherry fruitworm, SWD = spotted-wing drosophila, OB = oriental beetle, BBM = blueberry maggot. AC = Atlantic County; BC = Burlington County. | | | | |

| Week Ending | % CBFW injury to Berries | | % CFW injury to Berries | | % Scale Injury | |
|---|---|---|---|---|---|---|
| | Avg | Max | Avg | Max | Avg | Max |
| 6/4 | 0.009 | 0.1 | 0.005 | 0.1 | | |
| 6/11 | 0.014 | 0.6 | 0.001 | 0.1 | 0.012 | 0.9 |
| 6/18 | 0.001 | 0.1 | 0.015 | 0.7 | 0.018 | 0.4 |
| 6/25 | 0.001 | 0.1 | 0.002 | 0.2 | 0.021 | 0.9 |
| 7/2 | 0.007 | 0.4 | 0.001 | 0.1 | 0.009 | 0.3 |
| 7/9 | 0.003 | 0.2 | 0 | 0 | 0.006 | 0.3 |
| 7/16 | 0.005 | 0.1 | 0 | 0 | 0.001 | 0.1 |
| 7/23 | 0.006 | 0.3 | 0 | 0 | 0.001 | 0.1 |
| 7/30 | 0 | 0 | 0 | 0 | 0 | 0 |

| Week Ending | % Mummy Berries | | % Anthracnose Berries | | % Alternaria Berries | |
|---|---|---|---|---|---|---|
| | Avg | Max | Avg | Max | Avg | Max |
| 6/18 | 0.002 | 0.2 | 0.05 | 1.4 | 0.06 | 1 |
| 6/25 | 0.002 | 0.1 | 0.090 | 2.2 | 0.072 | 1.2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7/2 | 0.002 | 0.1 | 0.07 | 1.8 | 0.03 | 0.5 |
| 7/9 | 0 | 0 | 0.1 | 1.6 | 0.241 | 2.7 |
| 7/16 | 0 | 0 | 0.99 | 30.8 | 0.34 | 22.1 |
| 7/23 | 0 | 0 | 0.72 | 18.5 | 0.82 | 26.6 |
| 7/30 | 0 | 0 | 0 | 0 | 0 | 0 |

| Week Ending | SWD(AC) | | SWD(BC) | |
|---|---|---|---|---|
| | Avg | Max | Avg | Max |
| 6/4 | 1.5 | 8 | 0.375 | 3 |
| 6/11 | 1.84 | 9 | 1.77 | 1 |
| 6/18 | 3.4 | 25 | 2.86 | 6 |
| 6/25 | 5.3 | 42 | 2.87 | 9 |
| 7/2 | 7.03 | 98 | 7.36 | 22 |
| 7/9 | 22.58 | 105 | 29.73 | 77 |
| 7/16 | 16.32 | 115 | 26.0 | 80 |
| 7/23 | 18.14 | 123 | 55.8 | 263 |
| 7/30 | 22 | 173 | 32.46 | 95 |

| Week Ending | OB(AC) | | OB(BC) | |
|---|---|---|---|---|
| | Avg | Max | Avg | Max |
| 6/4 | 3.9 | 32 | 0.25 | 1 |
| 6/11 | 185.72 | 2025 | 15.8 | 60 |
| 6/18 | 292 | 1350 | 285 | 2025 |
| 6/25 | 1767 | 11000 | 974 | 6075 |
| 7/2 | 2813 | 13000 | 1326 | 6075 |
| 7/9 | 2214 | 11000 | 1806 | 10125 |
| 7/16 | 2255 | 15000 | 1288 | 11135 |
| 7/23 | 762.24 | 6000 | 412 | 4050 |
| 7/30 | 1937 | 1000 | 83.94 | 650 |

| Week Ending | BBM(AC) | | BBM(BC) | |
|---|---|---|---|---|
| | Avg | Max | Avg | Max |
| 6/4 | 0 | 0 | 0 | 0 |
| 6/11 | 0 | 0 | 0 | 0 |
| 6/18 | 0 | 0 | 0 | 0 |
| 6/25 | 0 | 0 | 0 | 0 |
| 7/2 | 0 | 0 | 0 | 0 |
| 7/9 | 0.05 | 3 | 0 | 0 |
| 7/16 | 0 | 0 | 0 | 0 |
| 7/23 | 0 | 0 | 0 | 0 |
| 7/30 | 0 | 0 | 0 | 0 |

| Week Ending | Unsorted Berries Salt Test | | Sorted Berries Salt test | |
|---|---|---|---|---|
| | Avg | Max | Avg | Max |
| 7/2 | 0.30 | 4 | 1 | 3 |
| 7/9 | 0.29 | 5 | 2.5 | 5 |
| 7/16 | 0.46 | 3 | 3.6 | 6 |
| 7/23 | 0.11 | 1 | 0 | 0 |