

The Blueberry Bulletin

A Weekly Update to Growers

July 14. 2021 Vol. 37, No. 17

- ► Visit the Blueberry Bulletin webpage at <u>www.njaes.rutgers.edu/blueberry-bulletin</u>
- ► The Commercial Blueberry Pest Control Recommendations for 2021 are available at: https://njaes.rutgers.edu/pubs/

BLUEBERRY CULTURE

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

Every weed in the blueberry field costs you a dollar. In my travels this week I couldn't help but notice the lack of week controls in many, many fields. Now I am not the Rutgers Weed Specialist, that honor goes to Dr. Thierry Besancon, but even though the dollar per weed figure may not be exactly accurate, those weeds are costing grower's money. Weeds easily out-compete the blueberry plant for the fertilizer and water that is applied in the blueberry fields and those things cost money. Heavy weed pressure puts the blueberry plant under

water stress, robs the plant of nutrients, and due to decreased cane growth, will result in decreased yield. Heavy weed pressure at the end of the season will also decrease the fruit bud set this fall. When harvest winds down growers should assess how well their herbicide program worked and seek out Dr. Thierry for advice. Some of the fields I saw this week had blueberry plants totally overgrown by weeds. If yield is everything, then something must be done to alleviate the situation.

Gary C. Pavils, 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

Blueberry Maggot (BBM): Blueberry maggot adults started to sporadically appear in the Hammonton area last week. Counts have been very low, but one site recorded 3 flies per trap. Most trap captures have been from traps placed in Duke fields where spraying had recently stopped. Still, growers who are exporting to Canada should be covering with a BBM effective insecticide every 7 days. If you are no longer exporting, then your management would focus on SWD.

Aphids: Aphids are still being found but are a distant secondary consideration at this time.

Spotted Wing Drosophila (SWD): Adult populations continue to provide significant pressure. As the adults continue to mate and lay eggs, higher populations of larvae will be present in dropped fruit and ultimately ripening fruit if not adequately. Stay on a 7 day schedule for any unpicked fruit. Reapplications are necessary if insecticide has been applied, only to be washed off in a thunderstorm. Make sure to target the bottom half of the bush as well as berries dropped on the ground, in addition to the tops of the plants. Adult flies are the most active during the early morning hours and at dusk. Therefore, applications of insecticide during the very early morning hours and twilight will be more effective than if applied during late morning to mid-day.

By the Numbers Summary:

| % Leafroller/Surface Lep. In | jury and Plum Curc | ulio Injured Fruit | | | |
|------------------------------|--------------------------|--------------------|------------------------|-----|--|
| 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 | 0006 | 0.2 | 0.001 | 0.1 | |
| 7/9 | 0.007 | 0.1 | 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.

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

| % Cranberry Fruitworm, Cherry Fruitworm and Scale Injured Fruit | | | | | | | |
|---|------------|--------------------------|-------|-----------------|-------|----------------|--|
| Week Ending | % CBFW inj | % CBFW injury to Berries | | % CFW injury to | | % Scale Injury | |
| | | | | Berries | | | |
| | 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 | |

| Spotted Wing Drosophila Males per Red Sticky Card | | | | | | |
|---|---------|---------|-------|-----|--|--|
| Week Ending | SWD(AC) | SWD(AC) | | | | |
| | 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 | | |

| Oriental Beetle Trap Counts | | | | | | |
|-----------------------------|--------|--------|------|-------|--|--|
| Week Ending | OB(AC) | OB(AC) | | | | |
| | 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 | | |

| Blueberry Maggot Adult Captures | | | | | |
|---------------------------------|---------|---------|---|-----|--|
| Week Ending | BBM(AC) | BBM(AC) | | | |
| | Avg | Avg Max | | 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 | 0.0 |)5 | 3 | 0 | | 0 | | |
|-----------------------------|------------------|-----------|---------------|-----|----------------------|-----|--|--|
| % Diseased Fruit | % Diseased Fruit | | | | | | | |
| Week Ending % Mummy Berries | | % Anthrac | % Anthracnose | | % Alternaria Berries | | | |
| | | | 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 | | |