

The Blueberry Bulletin

A Weekly Update to Growers

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- * Visit the Blueberry Bulletin webpage at www.njaes.rutgers.edu/blueberry-bulletin
- * The 2021 Commercial Blueberry Pest Control Recommendations for New Jersey is available on njaes.rutgers.edu

*Based on the current COVID 19 public health emergency, the Department has extended an interim policy allowing 100% online CEUs for remaining credits to accommodate for applicators whose 5-year recertification cycle ends October 31, 2021 **and 2022**. To verify if you are eligible, please click [HERE](#).*

Numerous online CEU courses are available and the Department continues to work directly with course providers to maintain an adequate number of online courses and CEUs while ensuring providers adhere to minimal online modality standards including student ID verification and class monitoring. For a list of available online CEU courses and providers, please click [HERE](#).

Based on this interim policy, license recertification dates will not be extended. The Department anticipates that those licenses expiring in 2023 and beyond will be held to the standard maximum of 25% online training CEUs, however further policy adjustments will be considered based on the ongoing COVID-19 pandemic.

CULTURE

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Spring Planting Plans

Some growers may be considering a new blueberry planting next spring. It is imperative that some preparation occur beforehand so that disasters do not occur down the road. This year I visited a farm with 4 year old "Duke" plants whose berries were not yet ripe. The berry load was very large but the berries were starting to dry up

and there were very few leaves on the plants. As any reader of this newsletter knows, having no leaves is usually due to a root problem. When I dug a plant up I saw that the roots system went down 6-8 inches and then stopped. The plant could be literally peeled off the soil at a depth of 8 inches. Further investigation revealed that

the soil changed color at 8 inches to a bright orange, contained clay and was impervious to blueberry roots. So what we have here is a planting of “Duke” that was 4 years old, with a root system that will never grow any deeper than 8 inches because of the clay hard pan. These plants were trying to ripen a crop with a tiny root system and as a result, could not uptake enough water and nutrients to push leaves and ripen a load of fruit. The grower options are not very appealing: 1. Pull up all the plants and sub-soil to a depth of at least 2 feet and replant, 2. Sub-soil a new row between the old ones and move all the plants, 3. Remove the trickle system and apply 6 inches of mulch to the plant row and return the trickle system to the top of the mulch hoping that

the root system will grow up into the mulch. All three require a lot of work. The alternative is a dead block of “Duke”. This situation once again reminded me of the importance of site preparation before planting. Doing a soil boring before planting would have revealed the hard pan and the need for sub-soiling, something which is a lot easier to do before the plants are in the ground. There are some critical things to take care of before planting. Checking pH and adjusting it to 4.5 to 4.8, doing a soil boring and checking for hard pans and the seasonal high water table, and eliminating perennial weeds are at the top of the list. In the end, a little work early can eliminate a lot of head aches later.



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BLUEBERRY PEST MANAGEMENT

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General: Updated from last week – Not much has changed over the last week. We are only concerned with post-harvest pest issues. These include: 1) Spray timing for 2nd generation sharp-nosed leafhoppers, 2) Treating any fields that had or have Putnam scale populations – timing for crawler activity, and 3) Post-harvest applications of fungicides for black shadow control.

Putnam Scale: As of the past week, scale crawlers are still very active. Therefore, there is still time to treat infested fields if you have not already done so. Our average crawler count per trap was just over 70, with a high of 181. This activity is similar to what we have been seeing over the past couple of weeks.

Life history. Scales feed on plant sap, decreasing plant vigor and fruit yield. Adult scales are protected from insecticide sprays by a waxy covering. These insects are common in older canes

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when not removed, and located mostly under loose bark. In New Jersey, Putnam scale has two generations a year. It overwinters as second-instar nymphs under loose bark. Spring activity begins in early February. Eggs from the first generation are laid in late April, and immature “crawlers” begin to appear in mid-May. Peak crawler emergences occur in late May and early June. Peak crawler emergences for the second generation occur in early to mid-August. At this time of the year, crawlers from this second generation are still active.

Monitoring and management. Growers that have a scale problem need to treat post harvest for the 2nd generation of crawlers (use Diazinon or Esteem). Crawlers can be monitored by wrapping black electricians’ tape covered by double-sided sticky tape around canes. Use a hand lens to see crawlers on the sticky tape. Sprays should coincide with crawler emergence and activity, i.e., late August to early September.

Sharponosed Leafhopper (SNLH):

Trap averages of adult insects remain low. Therefore, it is NOT time for a second generation treatment yet. See graph below.

Black Shadow: Disease incidence has increased to an average of 57% of sampled canes infected, with a high of 100%. If you are going to try any treatments for this disease, then as soon as all the rain stops would be a good time. For more information please see earlier articles on black shadow:

- <https://njaes.rutgers.edu/blueberry-bulletin/pdfs/2020/bb-v36n23.pdf>
- <https://njaes.rutgers.edu/blueberry-bulletin/pdfs/2021/bb-v37n01.pdf>

