

The Blueberry Bulletin

A Weekly Update to Growers

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- ❖ Visit the Blueberry Bulletin webpage at njaes.rutgers.edu/blueberry-bulletin
- ❖ The 2022 Commercial Blueberry Pest Control Recommendations for New Jersey is available on njaes.rutgers.edu

BLUEBERRY CULTURE

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

Leafhoppers of many species feed on plants by piercing the surface of leaves or stems and sucking juices from the phloem tissues. Any leafhopper feeding in the phloem of a stunt-infected blueberry plant has the potential to pick up some stunt phytoplasma's in its meal. Fortunately, only one species of leafhopper is known to be able to harbor these phytoplasma's in its body and transmit them to other plants. This is the blueberry sharp-nosed leafhopper, *Scaphytopius magdalenensis*. This leafhopper feeds and reproduces on a relatively wide range of blueberry cultivars and on the wild blueberry which grows nearly everywhere in the pinelands of New Jersey. Sharp-nosed leafhoppers are not a pest unless the following steps are completed:

- 1) They must feed on stunt-infected plants.
- 2) They must move to healthy plants.
- 3) They must feed long enough to transmit the phytoplasma to the plants.

Stunt disease will spread quickly if these three steps are favored by the particular situation in a blueberry field. Disrupting any of these steps to a sufficient degree can reduce the spread of stunt disease.

Of course, getting rid of all leafhoppers in an area would halt the spread of stunt disease. This is a very impractical solution, since the wild blueberry plants in our area provide for a large population of leafhoppers in the areas around our cultivated fields. We can't control the development of these populations, so we must defend our cultivated plantings from them. We do this with insecticide treatments, made during the periods when adult leafhoppers are active. Only adult leafhoppers have wings and the ability to move great distances, so these are the real pests in the stunt disease problem.

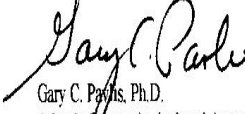
Pesticides can affect only the second and third steps of stunt disease spread listed above. Leafhoppers are either killed before they reach healthy plants or they die before feeding long enough to transmit the phytoplasma to a new plant. Errors in detecting the presence of adult leafhoppers and problems with the timing of pesticide treatments make it difficult to achieve 100 percent stunt control by chemicals alone.

This is why the roguing of disease bushes provides an important factor in stunt disease

control. Stunted bushes are easy to find especially when symptoms become bold in the fall. Attacking the stunt disease transmission cycle at steps one, by the removal of infected plants, is both simple and very effective.

Remember that it is highly recommended to spray stunt-infected plants with a short

residual insecticide like Sevin or Malathion before the plant is removed. This will keep any phytoplasma carrying leafhoppers on the infected plant from dispersing to healthy plants when the infected bush is disturbed during removal.



Gary C. Pappas, Ph.D.
Atlantic County Agricultural Agent

PEST MANAGEMENT

Blueberry Insects

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

Ms. Carrie Mansue Denson, IPM Program Associate – Fruit

Scale Traps: Scale trap counts are on average 97, with a high of 231 per trap. Trap counts for the 2nd generation will be moderate for the next few weeks, which will be when an insecticide treatment will be needed.

SWD Traps:

	SWD AC		SWD BC	
	Avg	Max	Avg	Max
5/25	6	9	0	0
6/2	4.6	6	2	3
6/10	2	3	4.3	8
6/18	33.47	76	12	71
6/25	22.95	82	12.07	43
7/2	31.86	159	13	17
7/9	40.55	163	17.1	45
7/15	37.22	201	63.92	177
7/22	51.12	279	23.33	73
7/29	79	460	27.2	113
8/6	61.26	270	21.93	138
8/12	43.93	183	20.93	146

Blueberry Maggot (BBM), Oriental Beetle (OB), and Sharp-nosed Leafhopper (SNLH) traps:

	BBM AC		BBM BC		OB AC		OB BC	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
6/18	0	0	0	0	195	340	173	675

6/25	0	0	0	0	675	675	1536	8000
7/2	0.011	1	0.04	1	2395	8100	1763	6000
7/9	0	0	0	0	3358	12825	2174	6743
7/15	0	0	0.05	1	1486	6075	1059	7087
7/22	0	0	0	0	1308	6075	1572	6075
7/29	0	0	0	0	494	4050	358	3000
8/6	0.01	1	0	0	156.37	2050	23.45	100
8/12	0	0	0	0	56.93	2025	13.12	50

	SNLH AC		SNLH BC	
	Avg	Max	Avg	Max
6/18	0	0	0	0
6/25	0.02	1	0.76	10
7/2	0.22	5	0	0
7/9	0.456	7	2.33	13
7/15	0.22	2	0.09	1
7/22	0.01	1	0	0
7/29	0.135	2	0.07	2
8/6	0.05	1	1.83	12
8/12	0.07	2	4.79	28

NEWS

The New Jersey Department of Environmental Protection has released an announcement "Pesticide-License Renewal Info 2023" to licensed applicators via email. The announcement is posted at:

https://www.nj.gov/dep/enforcement/docs/Pesticide-License-Renewal-Info-2023.pdf?utm_medium=email&utm_source=govdelivery. All Private Applicators are now required to process their "zero" license invoice online. Private Applicators are encouraged to book an appointment for one-to-one assistance in processing their online license invoice by Rutgers NJAES. Details below.

Patricia Hastings - Bookings Page

Rutgers Private Applicator 2023 Online License Renewal Assistance

30 min

New Jersey Private Pesticide Applicators can make personal appointments for one-to-one assistance in processing their 2023 license invoice online. This is a free service provided by Rutgers Pesticide Safety Education Program. Appointments are available on all Tuesdays in August, September, and October from 1 pm to 5 pm. First come, first serve. Other appointment times available upon request.

(email pdh@njaes.rutgers.edu). Once you have booked your spot, you will receive an email confirmation with your appointment time and Zoom link.

This link will expire on: November 10, 2022

Book meeting