

The Blueberry Bulletin

A Weekly Update to Growers

August 2, 2022

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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

It has been some time since I discussed the use of mulch with highbush blueberries and since the season is winding down I finally have the time. The first question is why do we mulch blueberries? We mulch because we are trying to duplicate the natural soil conditions that exist where the highbush blueberry is native and thrives such as the Pine Barrens of New Jersey. Mulch has many benefits not the least of which is increasing the organic matter of the soil. Mulching increases the soil's ability to hold water and nutrients and lowers root temperature in the summer. There was no need to mulch on most south Jersey blueberry farms years ago because the soil was the perfect pH for blueberries and the organic matter was high. It was rare to find a Jersey farm that mulched before the mid 90's. Today, most farms mulch their blueberries. Why the change? We have to look at how we grow blueberries here. We use herbicides under the plants and we rototill the middles to control the weeds which are practices that are very effective but the lack of weeds does not allow organic matter to accumulate and rototilling burns up the natural organic matter. In addition, we routinely use a 10-10-10 fertilizer which usually contains

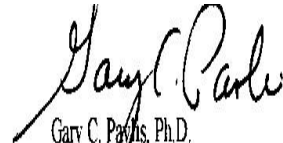
nitrogen in the form of ammonium sulfate. The ammonium slowly drives the pH down, out of the optimum range for blueberries. With decades of these practices we now have to add lime to get the pH up and we have to mulch to replace the organic matter.

DISADVANTAGES:

Growers should realize that there are also a few disadvantages to applying mulch. Many growers experience rodent problems under the blueberry plants when mulch is used because of the perfect environment created by the mulch for these animals. In addition, mulch creates the perfect environment for the grub larva of Japanese, Oriental, and Asiatic beetles. These larvae can be very destructive to blueberries and many plantings have been damaged by these insects. Mulch can also be expensive to purchase and also to apply. Lastly, I am often asked what kind of mulch is best for blueberries. I always answer, "Whatever material the grower can get for free." Often a grower can work with a local township to receive deliveries of wood chips from their utilities authority. Realize however that no matter what mulch is used, it is going to affect nutrient availability because the breakdown

process ties up nitrogen. As a result, a higher application rate of nitrogen will be required and could be as high as double the rate without mulch. It is not possible to make a recommendation as to what the additional application should be because every mulch is different and breakdown varies with soil type, temperature,

micro-organism activity, etc. Nitrogen levels in the plants should be monitored with yearly leaf analysis to determine how the mulch has affected nitrogen levels in the plant.



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

PEST MANAGEMENT

Blueberry Insects

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

SWD Traps: Numbers for SWD have been holding steady. SWD is the main target of insecticide sprays for late varieties such as Elliott and Liberty.

	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

	% Shoot Infestation Leafroller		% Terminals with Infested Aphids	
	Avg	Max	Avg	Max
5/28	0.16	2	8.3	40
6/2	0.048	4	10.75	64
6/10	0	0	6.58	72
6/18	0.04	6	6.56	66
6/25	0	0	5.6	58
7/2	0	0	7.5	60

PEST MANAGEMENT

7/9	0.02	2	7.001	76
7/15	0	0	4.8	68
7/22	0	0	2.31	24
7/29	0	0	0.07	2

Scale: Scale traps have been set. On average number of infested berries was 0.05, with a high of 0.5.

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

	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

Infested fruit - Mummy Berry, Anthracnose, and Alternaria: This week, the average number of infested fruit with Anthracnose was 0.103, with a high of 1.8. Mummy Berry and Alternaria symptoms are very low in the fields.

	Mummy Berry		Anthracnose		Alternaria	
	Avg	Max	Avg	Max	Avg	Max
6/25	0.0005	0.1	0.05	2.2	0.0005	0.1
7/2	0.001	0.1	0.05	1.2	0.002	0.2
7/9	0	0	0.05	1.3	0.019	0.5
7/15	0	0	0.07	0.9	0.045	0.4
7/22	0	0	0.124	1.5	0.03	0.8
7/29	0	0	0.103	1.8	0.02	0.6

PEST MANAGEMENT

Leps (Lepidoptera larva – green fruitworms, leafrollers, spanworms, spongy (= gypsy moth)) and Plum Curculio (PC):

	% Leafroller fruit Injury		% PC fruit Injury	
	Avg	Max	Avg	Max
5/21	0.03	0.2	0.34	3.2
5/28	0.02	0.7	0.39	2.5
6/2	0.001	0.2	0.022	0.9
6/10	0.001	0.2	0.004	0.3
6/18	0.02	0.2	0	0
6/25	0.001	0.1	0	0
7/2	0.012	0.2	0	0
7/9	0.003	0.2	0	0
7/15	0.005	0.2	0	0
7/22	0	0	0	0
7/29	0	0	0	0

News Release

For Immediate Release
August 1, 2022

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Protect Working Farms and Wetlands through the Agricultural Land Easement Program



SOMERSET, N.J., Aug. 1, 2022 – The U.S. Department of Agriculture’s Natural Resource Conservation Service (NRCS) is now accepting applications for the Agricultural Conservation Easement Program (ACEP).

While NRCS accepts applications year-round, New Jersey producers and landowners should **apply by October 31, 2022** to be considered for funding in the current cycle.

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

ACEP helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through two types of conservation easements; Agricultural Land Easements (ALE) and Wetland Reserve Easements (WRE).

Under the [Agricultural Land Easements](#) component, NRCS helps protect working agricultural lands and limits non-agricultural uses to protect the long-term viability of the nation's food while supporting environmental quality, historic preservation, wildlife habitat, and protection of open space. This component is also available for grasslands of special environmental significance, or high-quality grasslands under threat of conversion to cropping, urban development, and other non-grazing uses.

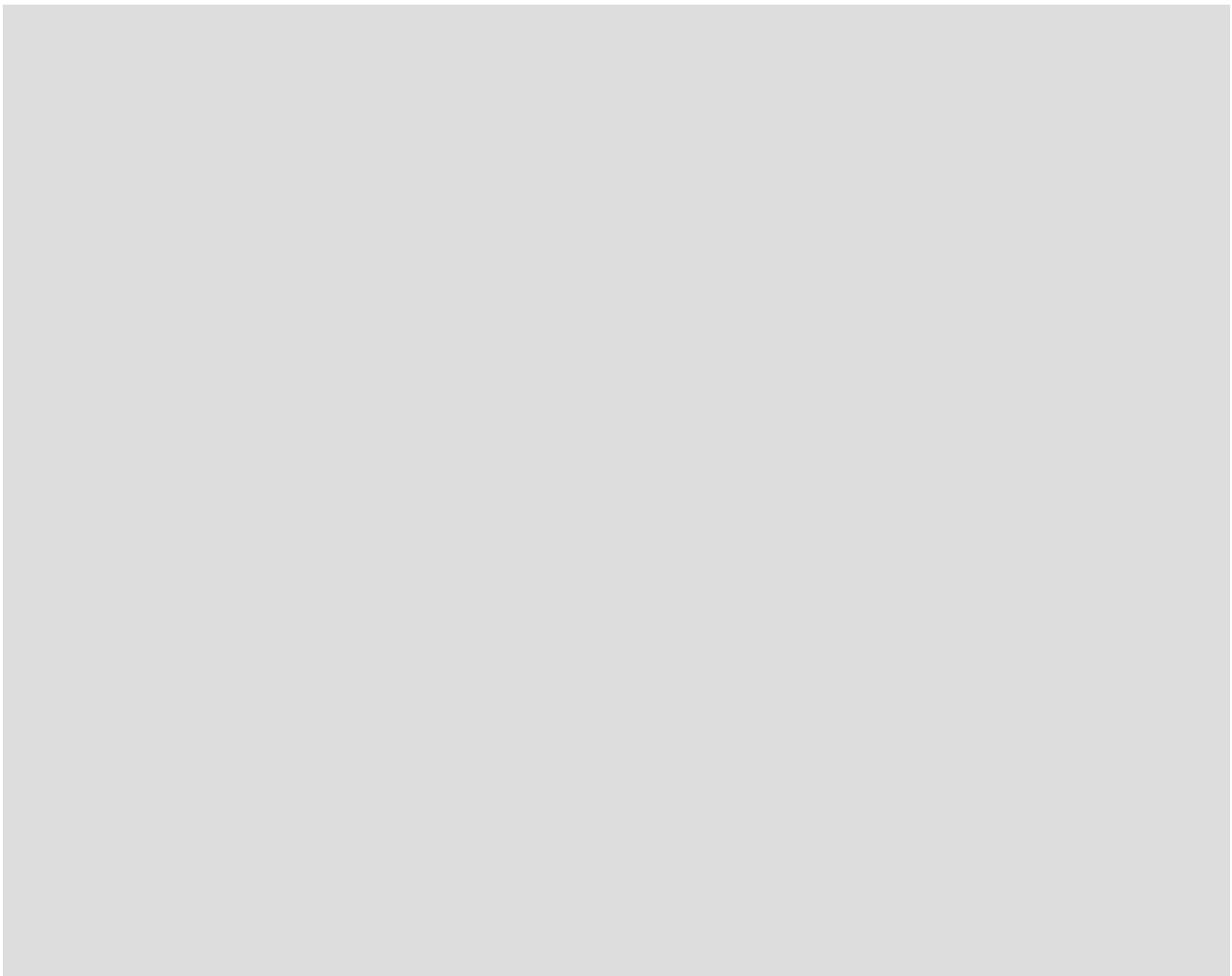
Landowners interested in ACEP- ALE must work with a cooperating entity who will submit the required application materials. NRCS does not accept applications directly from producers. State and local governments, non-governmental organizations that have farmland or grassland protection programs, and several New Jersey land trusts are eligible to help interested landowners apply.

[Wetland Reserve Easements](#) allow landowners to successfully enhance and protect habitat for wildlife on their lands, reduce impacts from flooding, recharge groundwater, and provide outdoor recreational and educational opportunities. NRCS provides technical and financial assistance directly to private and tribal landowners to restore, protect and enhance wetlands through the purchase of these easements, and eligible landowners can choose to enroll in a permanent or 30-year easement.

To apply for ACEP-ALE, or for more information, please contact [Gail Bartok](#), NRCS Assistant State Conservationist for Programs, at 732-537-6042 or [Lauren Lapczynski](#), Easement Specialist, at 732-537-6046.

Applications for ACEP-WRE are available through [your local USDA Service Center](#) and online at www.nrcs.usda.gov/GetStarted

USDA is an equal opportunity provider, employer and lender. To file a complaint of discrimination, write: USDA, Office of the Assistant Secretary for Civil Rights, Office of Adjudication, 1400 Independence Ave., SW, Washington, DC 20250-9410 or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), (866) 377-8642 (Relay voice users).



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