

The Blueberry Bulletin

A Weekly Update to Growers

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CULTURE

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Atlantic County Agricultural Agent

Leaf Tissue Analysis: Readers of this newsletter are aware that fertilizer recommendations for blueberries are based on leaf analysis. We have found that there is no correlation between the soil analysis and the amount of nutrients that actually enter the blueberry plant. Soil analysis is useful to determine pH, and maintain pH in the proper range, 4.5 - 4.8. Thus leaf analysis is critical to maintain the blueberry plant in a healthy, efficient, productive condition. Now is the time to take leaf samples for analysis.

Leaf tissue analysis is a way of determining the actual nutritional status of plants. It is an excellent and inexpensive way of finding out if your fertilization program is working or if changes need to be made. The analysis provides information on foliar N, P, K, Ca, Mg, Mn, Fe, Cu, B and Zn levels for the leaves sampled, a fact sheet on what the levels should be for these plant nutrients, and recommendations for corrective measures if needed. Leaf tissue analysis can help pinpoint the source of problems and determine what measures may be needed to ensure proper nutrition of the crop. Interpretation of leaf tissue analysis is most accurate when the soil pH is within the proper range for blueberries, 4.5 - 4.8.

When to Sample: Sample healthy leaves during late July or early August.

How to Sample: Collect 30-50 leaves per sample. Leaves should be from the middle shoot, not old ones/not new ones. Sample different varieties separately, if possible. Collect

leaves from as many bushes as possible in the sample area. Gently wash the leaves in tap water to rinse off soil or spray residue.

Allow the leaves to air dry until they are brittle before placing into a paper bag.

The following laboratories can be considered:

Agricultural Analytical Services Lab
The Pennsylvania State University
University Park, PA 16802
Phone # 814-863-0841 (Cost \$24.00)

Agri-check Inc.
P.O. Box 1350
Umatilla, OR 97882
Call Joe, Lab Manager at 541-922-4894 for
Plant Analysis Fee Schedule

Midwest Laboratories Inc (formerly A&L)
13611 B Street
Omaha, NE 68144
Phone # 402-334-7770
www.midwestlabs.com

MDS Harris
621 Rose St
Lincoln, NE 68502
Phone # 402-437-4765

Note: Growers are advised that the IPM Program is now taking leaf samples for nutritional analysis. Any growers wishing to request this service should submit a list of chosen fields to be sampled and can forward to any IPM Personnel.

INSECTS

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

Mr. Dean Polk, IPM Agent – Fruit

Ms. Carrie Denson, IPM Program Associate – Fruit

Spotted Wing Drosophila (SWD): For the past 3-4 weeks our traps have shown a marked increase in adult activity. Elliott and other late varieties are still being harvested, and the SWD population is even higher this week than it was last week. DO NOT let up on your program, and keep to a 7 day program. We have done very well this season, but no buyer wants the extra protein in their fruit!

Putnam Scale: We have seen a slight uptick in scale activity this past week. This may be the start of the second crawler generation. If you kept track of which fields had 1st generation scale issues, then you may want to plan on treating over the next couple of weeks.

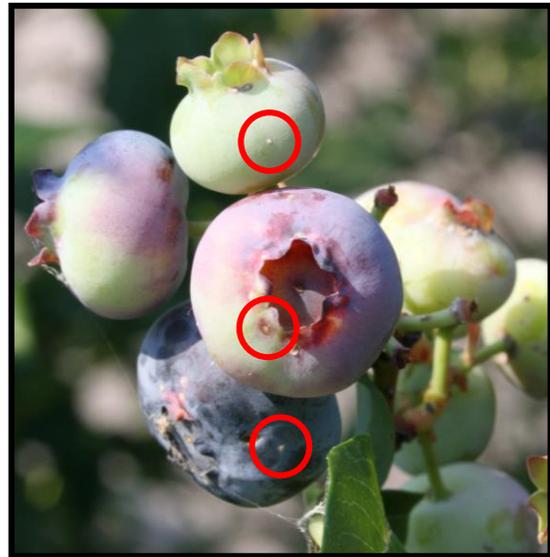
Life history: Scales feed on plant sap, decreasing plant vigor and fruit yield. Adult scales are protected from insecticide sprays by a waxy covering. These insects are common in older canes when not removed, and located mostly under loose bark. In New Jersey, the Putnam scale has two generations a year. 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.**

Monitoring and Management. 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. Growers who had 1st generation scale issues can treat the 2nd generation crawler stage with Esteem (35W or .86EC, 7 day PHI), or Diazinon (7 day PHI). Diazinon can only be used once in-season. Treatment for the 2nd

generation scale should be done in the next couple of weeks (early August).

Oriental Beetle (OB): Adult activity is decreasing. All treatments for this insect should have already been applied. From this point forward in the season, any additional treatments are purely ‘Revenge Sprays,’ and will not work since the larvae are too big to be controlled.

Aphids: Aphid infestations have decreased since last week, showing an average of 1.8% of terminal infested. This is a very low level, and indicates that aphids are no longer an issue to deal with.



Maturing blueberries showing freshly settled scales (circled).

Blueberry Traps

Atlantic County Traps

Week Ending	SWD	OB	BBM	SNLH
6/8	1.05	8.2	0	==
6/15	1.2	97	0	==
6/22	0.71	1381	0.21	0.21
6/29	4	2385	0.03	0.11
7/6	64	1856	0.06	0.15
7/13	87	1822	0.19	0.21
7/20	74	1417	0.07	0.34

Burlington County Traps

Week Ending	SWD	OB	BBM	SNLH
6/8	0.07	2.91	0	==
6/15	0.83	69	0	==
6/22	0.7	750	0.33	0.33
6/29	0.64	1113	0.125	0.8
7/6	100	2048	0.2	0.625
7/13	18	874	0.64	0.72
7/20	17	505	0.81	1.46

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www.njaes.rutgers.edu/blueberry-bulletin