

The Blueberry Bulletin

A Weekly Update to Growers

April 24, 2019

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AT A GLANCE...

BLUEBERRY GROWER TWILIGHT MEETING

Thursday, May 30, 2019 @ 5:30 p.m.
Atlantic Blueberry Company
7201 Weymouth Rd.
Mays Landing, NJ 08330
For directions call 609-561-0612

Visit the Blueberry Bulletin webpage at
www.njaes.rutgers.edu/blueberry-bulletin

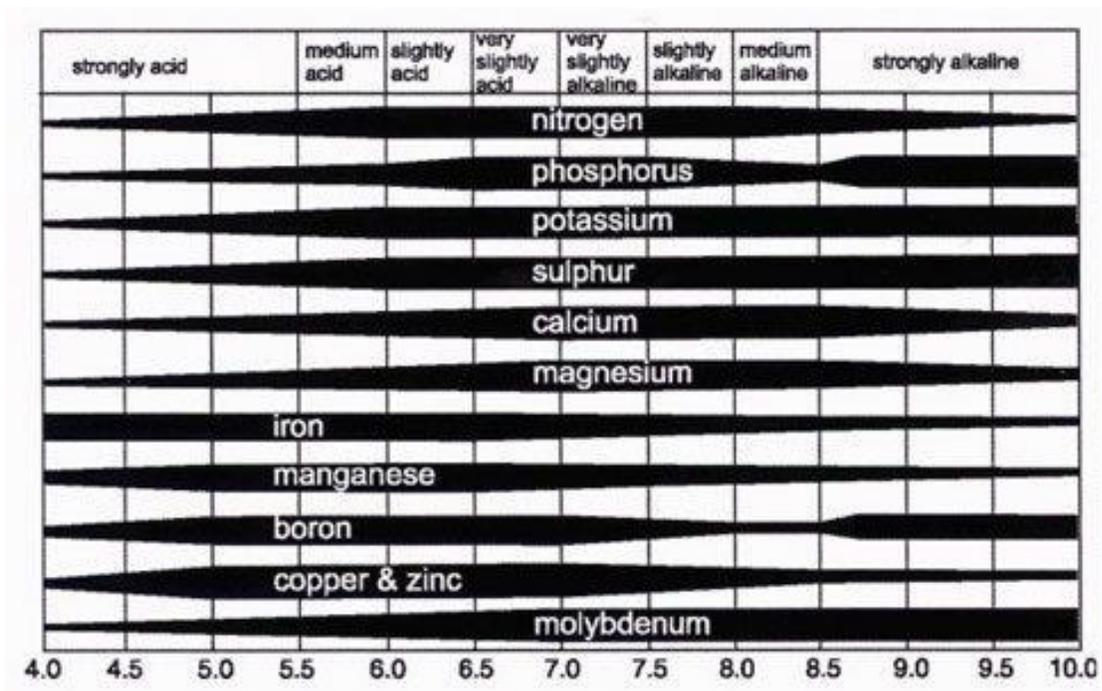
BLUEBERRY CULTURE

Gary C. Pavlis, Ph. D.

County Agricultural Agent

One component of the Rutgers IPM program for blueberries is conducting a soil and leaf analysis of the farms in the program. This year 236 soil samples were taken and analyzed. What alarmed me about the results was the fact that even though it is common knowledge that the optimum pH range for highbush blueberries is 4.5 to 4.8, an overwhelming number of fields were not within that range. In fact, 43% of the fields came back with a pH of under 4.0 and 79% came back under 4.5. A pH this low drastically affects the uptake of nutrients in the blueberry plant. (See chart on following page.)

Fertilizer costs the grower money but if the plant cannot take it up, the money is wasted. The result is decreased cane growth and as a result, lower yields. I would advise growers to apply lime as soon as you can to raise the pH into the correct range. This can be done at any time. Once the proper range has been established, an annual maintenance of lime is warranted. Realize that the annual application of ammonium fertilizers drives the pH down.



BLUEBERRY INSECT

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

Mr. Dean Polk, IPM Agent – Fruit

Ms. Carrie Denson, IPM Program Associate – Fruit

Cranberry Weevil (CBW): Over the past 7 days, CBW activity decreased since the previous week. Scouting data showed an average of 0.69 weevils per bush with a maximum of 4.6 weevils per bush. The threshold level for adult CBW is an average of 5 weevils per bush. In addition, with bees coming into the fields, the window is now closed for any CBW treatments. Most insecticides have a residual effect for 7-10 days. The next insecticides will normally be applied for plum curculio at the first post pollination timing, and for cranberry fruitworm if needed.

Plum Curculio (PC): The first adult PC (See Figure 1 on following page) was captured on April 17th in a non-sprayed blueberry field. PC adults have also been seen in other crops, so the activity we see so far represents a normal season. This week's average for PC counts was 0.007 per bush with a maximum of 0.3 PC per bush. These numbers should increase throughout the bloom and the immediate post pollination periods. No treatments should be applied at this time.

Life Cycle. In New Jersey, PC completes a single generation a year in blueberries. This insect overwinters as an adult in leaf litter.

Adults become active during bloom and feed on young fruit just after bloom, causing feeding scars. We have noticed that in the absence of fruit (i.e., this time of year), adults feed on blueberry flowers (petals). Females lay eggs in the fruit causing crescent-shaped oviposition scars. White maggot-like larvae develop inside the fruit (one larva per fruit). Feeding by the larvae causes fruit to develop prematurely and fall off the bush. Mature larvae exit the fruit to pupate in the ground, and become an adult in July and August. If berries are picked before they drop, larvae can contaminate harvested fruit.



Figure 1. Plum curculio adult. Note the rough, warty body appearance.

Scouting and Control. To monitor PC populations, scout for the semi-circular scars on the fruit. Sampling should be biased towards field edges or infields that border woods and hedgerows. PC infestations are more common in weedy fields and those with sod middles. This pest is more of a problem on early maturing varieties. No threshold has been established, so treatment is mainly based on past history and an estimate of damage to fruit. Chemical controls targeting the adults should be applied soon after bees are removed. Post-bloom control options include Avaunt, Danitol, Brigade, Mustang Max, and Imidan.

Leafrollers and Other Lep larvae: A few spanworms were present again this week, but numbers were very minimal. Average counts were 0.007 larvae per bush with a maximum of 0.2 larvae per bush. This is nowhere near treatment level, but we will keep you posted during the coming weeks.