

Weekly Berry Call – June 23, 2009

Participants:

Phone participants: Molly Shaw, (South Central NY), Laura McDermott (Eastern NY), Cathy Heidenreich (Western NY), Marvin Pritts (Finger Lakes region/Ithaca), Dan Welch (Cayuga County), Amy Ivy (Clinton County), Jim Eve (Niagara County).

Via e-mail this week: Dale Riggs (Stephentown/Mass border)

GROWING CONDITIONS (courtesy NY NASS)

Week ending June 21st: It was a wet and cool stretch of weather with precipitation well above normal except across extreme western and northern New York. Temperatures were below normal. A strong upper level disturbance produced showers and thunderstorms Sunday night and Monday. Some of the thunderstorms on Monday brought large hail ranging from penny to golf ball size to parts of east central New York with hail accumulating to a few inches in portions of the Capital Region. Some locations received in excess of 2 inches of rainfall from the slow moving thunderstorms. High pressure briefly dominated over the northeast Tuesday and Wednesday before another storm system brought rainfall from the Midwest. The area of low pressure and its associated warm front produced a soaking rain fall on Thursday. The upper low brought some more showers on Friday. The heaviest rainfall Thursday into Friday occurred from the Capital Region southward down the Hudson River Valley. Another low pressure system approaching from the Great Lakes region brought more rainfall on Saturday.

Statewide results for fruit yield: Strawberries were 5 percent poor, 14 percent fair, 71 percent good, and 10 percent excellent.

REPORTS FROM THE FIELD

Berkshire foothills/Stephentown, NY: Hit by pea size to marble size hail that covered the ground on June 15th resulting in a great deal of damage to berries. Most of the damaged strawberries have been removed and we're back to picking – quality and quantity has been good. The blueberries remaining on bushes seem to be sizing nicely. Raspberries are sizing up in the high tunnel, blackberries in the tunnel are starting to bloom.

Eastern NY Region: Lower Hudson Valley finished with strawberry harvest. Albany area picking only late varieties but upper Hudson valley should be picking after July 4th. Rain amounts in excess of 5" in some areas just south of Albany, but accumulation not more than 1.5" elsewhere in region. Overall, the seasonal average for rain is 1" above normal for Capital District and 3 degrees below average temperatures.

Fingerlakes region/Ithaca area: Not seeing as much botrytis as might be expected, possibly due to the cool temperatures holding fruit ripening back and the dry weather during bloom. Blueberry crop looks very good.

North Country: Decent rains, but not too much. Cool enough that berries have NOT been ripening, causing some problems for U-Pick operations.

South Central/Southern Tier region: A few inches of rain fell over the weekend, but variable in location and amount. Strawberries seem to have a variable quality and some growers have expressed disappointment in the yield of their 1st and 2nd year plantings. Blueberries are just beginning to turn.

Cayuga County: Beginning to warm in the first part of this week. Plenty of rain over the weekend. Late frost hurt people causing an early ending to some strawberry seasons. Blueberries beginning to turn and raspberries are swelling nicely.

Western NY/Lake Ontario: Cool, cloudy weather with variable rains. Warmer and clear days just recently. Angular Leaf spot with blossom end and cap browning on the fruit. Lots of calls about possible blueberry viruses. Raspberries were in bloom and growers were applying fungicide to protect against botrytis.

Niagra County: Finally reached 70's and sunny at the same time. The lake region just started picking berries 1 week ago. Lake is 1 week behind Thruway which is almost done with their season. Volume of yield is not there – the beds did not winter well. Quality and size of berries is fine, they just need more. Disease situation seems good.

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DISCUSSION: Strawberry Renovation is more important to longevity of plantings than many growers realize, **but many growers delay this task too long.** Delay may result in poorly hardened off berries that winter kill easily. **Make Strawberry Renovation a priority with growers this year!**

STEP-BY-STEP STRAWBERRY RENOVATION:

(Reminder: Not for planting year berries!)

Renovation – A thinning process to prevent overcrowding caused by the rooting of too many runner plants.

Steps in Renovation

(Note: If conditions are dry, irrigate to offset stress of herbicide application and leaf removal before beginning the renovation process.)

1. *Weed control* should be done immediately after last harvest. Apply 2,4-D then wait 5 days. Mow leaves.
2. *Leaf removal (optional)* should be done one week after last harvest. Helps prevent disease, aids in penetration of miticides, and allows applications of herbicides that would otherwise burn foliage.
(Note: Leaf removal from plantings with unhealthy root systems, such as those damaged by root weevils or root rot, or water stress is NOT recommended.)
3. *Narrow rows* within 1 day of leaf removal to an 8-10 inch width using a disk harrow or rototiller. Plants benefit from a light layer of soil over crowns at this point, *not more than 1 inch.*
4. *Fertilize and irrigate* after leaf removal to promote growth of new runners
5. *Weed control* – Sinbar may be applied before new leaf growth occurs.
6. *Leaf sampling* should be done when newly formed leaves are fully expanded.

NUTRIENT ANALYSIS FOR BERRY CROPS:

Leaf Analysis - Late this month would be the time to collect samples for leaf analysis. Results from this analysis will help with next year's fertilizer decisions. With blueberries it is often advisable to do a soil test at the same time; low leaf analysis levels may not adequately reflect soil levels if pH is a continuing problem.

Strawberries: Collect 30 leaflets after renovation in July or August.

Raspberries: Collect 30 newly expanded leaflets from primocanes in early August.

Blueberries: Collect 30 newly expanded leaves from well-exposed branches in late July.

Currants and Gooseberries: Collect 30 newly expanded leaves from well-exposed branches in late July.

Collection instructions and the proper form are attached. Enclose a check for \$28, and send to the Nutrient Analysis Lab.

Soil Test- Obtain instructions and sample bags from your local Cooperative Extension Office or from Cornell University, Nutrient Analysis Lab, 804 Bradfield Hall, Ithaca, NY 14853 or call 607-255-4540, or visit <http://cna.cals.cornell.edu/> or email soiltest@cornell.edu.

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Comments on Insects and Other Pests:

A berry patch in the southern tier had a 200 square foot “dead zone” in the middle of the otherwise healthy, productive field. After investigation, it was determined to have been infested with **symphilids**, a small, white, soft-bodied “centipede-like” animal, 3-7 mm long with 12 pairs of legs and a pair of antennae. They are found mainly in moist open structured soils often associated with crop debris. Symphilids are sensitive to light and are very active when exposed. Symphilids feed on sprouting seeds and underground stems of seedlings, weakening or killing plants. They can be problems for potato growers as well as longer term perennial crops like asparagus and strawberries. Infested areas are usually confined to small patches of a field where the crop appears stunted or has been destroyed.

Adult symphilids usually stay in the top 50 cm of soil and can live for several years. Generations are produced continuously under warm, moist conditions taking about 3 months to develop from egg to adult. In the spring they feed on young plant roots near the soil surface. Symphilids are unable to burrow, instead travelling through pores, cracks or burrows made by earthworms. High populations are more common in well structured clays than in sandy soils. Symphilids move vertically in the soil profile in response to temperature and flooding, returning to colonize the same area each year so infestations only spread slowly. High summer temperatures and dryness cause symphilids to burrow down to the moist subsoil where they feed on decaying organic matter. Moderate spring/autumn temperatures or flooding will cause them to return to the surface where they can damage crops.



Because symphilids can retreat deep into the soil, chemical treatments may simply act as repellents, useful for protecting plants in the short-term such as during their early development. Numerous naturally occurring organisms prey on symphilids in the field including true centipedes, predatory mites, predacious ground beetles, and various fungi; however, little is known about their ability to control symphilid populations. (Source: <http://www.vgavic.org.au/pdf/MoF10.pdf>). It was suggested that rotating out of the perennial crop would help to eliminate problem.

Comments on the use of Mammal Repellants:

Small grower reported using moth balls (a.i. naphthalene) as a repellent for small mammals. Firstly, the product was not labeled for this use, and secondly, the berries, although beautiful and plentiful, were awful tasting! Apparently they took on the volatile and it resulted in a very foul taste. This also happened with the leaf lettuce grown nearby. A bit of research revealed that it is not unusual for produce to take on the flavor of volatiles, it's a major problem for herbs that are being preserved by drying. If you take a peak at more information about Naphthalene, you'll want to treat it with respect: <http://www.epa.gov/ttn/atw/hlthef/naphthal.html>.

Over cultivation of strawberries? Discussion re: the possibility that growers could cultivate too much, and cause problems with runner establishment because of that. Weekly cultivation of strawberries could definitely be a problem. Marvin cited some of his work about the timing of cultivation of weeds – weekly cultivation during the late spring and early summer would be very helpful, but once July and August hit, and the days are warmer, and usually drier, weed seed germination slows and weekly cultivation would disturb the daughter plants and the mother plants. Weekly cultivation also is a challenge for soil structure – if this is standard practice, and compaction symptoms exist, running a subsoiler through the aisles at renovation might help.

Frost protection: More discussion about frost protection that repeats concerns mentioned in previous berry call summaries. Overhead irrigation does not seem like a good first option from a cultural perspective. Too much water at the wrong time of year resulting in horrible disease pressure, muddy, inhospitable field conditions for pickers, poor fruit quality, and challenges with food safety requirements. More info about frost protection can be found at: http://www.omafr.gov.on.ca/english/crops/facts/frosprot_straw.htm
<http://www.fruit.cornell.edu/Berries/genprodpdf/frost%20protection%20tips%20techniques.pdf>