

Weekly Berry Call – June 29, 2011

Participants: Cathy Heidenreich (Western NY/Finger Lakes region, Geneva), Dale Ila Riggs (Stephentown, Eastern NY), Jeff Miller (Oneida County, Marcy), Sharon Bachman (Erie County, East Aurora.), Marvin Pritts (Finger Lakes region, Ithaca), Molly Shaw (South Central/Southern Tier, Owego), Laura McDermott (Eastern NY/Upper Hudson/Lower Adirondack, Hudson Falls).

Growing conditions: (courtesy NY NASS)

Week ending June 26, 2011: Temperatures and precipitation generally averaged above normal for the week across much of the state, although precipitation was below normal across portions of Long Island. Despite temperatures averaging above normal for the week, daytime highs actually averaged below normal for much of the central, eastern and southeast New York and Long Island due to persistent clouds and rainfall, while nighttime lows averaged above normal. The week started with high pressure across eastern Canada extending southward into the state. A low pressure system developed across the central plains by Tuesday and then tracked slowly northeast into the Great Lakes from Wednesday through Friday, and across northern New England Saturday. A warm front associated with this low very slowly tracked northeast across the state Wednesday through Friday, triggering widespread showers and thunderstorms, some of which produced locally heavy rainfall. A cold front then moved east accompanied by additional scattered to numerous showers and thunderstorms, although the coverage was more isolated across extreme southeast New York and Long Island. Strawberry condition was 18 percent poor, 30 percent fair, 37 percent good, and 15 percent excellent. Adult blueberry maggot emergence has begun and will continue through the summer. In Albany County, strawberry season ended with a short harvest. In Ontario County, strawberry harvest was well underway.

Reports from the Field

Erie County

Nuisance showers over the weekend but not significant amount of rain, unlike other areas.

Central/Southern Tier

Ample rainfall at this point; has been dry enough to irrigate in some locations. Strawberry harvest is winding up; harvest of summer raspberries is just beginning ('Prelude'). 'Duke' blueberries just starting to color.

Western NY/Finger Lakes region/Geneva

Sporadic rainfall with significant amount in some locations (0.5 to 1.5"). *Strawberries* – harvest well-advanced. Problems with overabundant rainfall and berry quality occurring in some areas. *Summer raspberries* with incredible fruit set; canes without support snapping under weight of green fruit in some instances. 'Prelude' now being harvested in Seneca County; u-pick price reported \$4/qt. Blueberries starting to color.

Oneida County

GDD 86/50 is 850 from May 1, 2011. Rainfall for 4 consecutive days with 3.4 to 4" rainfall this past week. Strawberries experienced 10% damage immediately (splitting); fields now with gray mold developing. Other fields with abundances of over-ripe fruit due to lack of U-pick customers during 4-day rainy period. Operations closing down as customers now need to sort throw berries as they pick, making picking more time-consuming, less rewarding. Blueberry crops looks good but is estimated to be at ½ the crop load as compared with other years. Raspberries are coming on.

Eastern NY/Upper Hudson/Lower Adirondack

Strawberry yield/harvest this season is very disappointing, even given no frost damage during bloom. Growers reported one good weekend harvest early in the season with the remainder of the weekends very poor due to weather conditions. Last week, rain fell every day except Monday. Berries were hammered by rains. Raspberries look great with very high fruit set. Blueberries are coloring. Ribes are looking good as well.

Stephentown, Eastern NY

Rainfall four days in a row last week (Wed. through Sat.) with 1" falling in 20 minutes on Saturday. Strawberries were holding up well initially in spite of rainfall; 35% of crop lost to splitting after Friday-Saturday rains. U-pick closed; small amount of fruit still being harvested for farm markets and farm stand; no wholesale sales. Fall raspberries – harvesting summer crop this week of 'Polana' and 'Autumn Britten'. Blueberries coloring, crop looks good. Bird netting going on.

Troubleshooting:

When should leaf sampling be done in blueberries and how?

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Use a leaf analysis (supplemented with a soil test) to determine fertilizer needs after the planting is established.

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

Cranberries: Collect upright tips only (no more than top 2" of growth), mixing flowering and vegetative uprights for about 1 cup material between mid-August and mid-September.

Wash dirt off collected tissue, blot off excess water, place tissue in a paper bag, allow tissue to air dry and then send to: Agro-One at address listed above for soil test. *(from 2011 Pest Management Guidelines for Berry Crops)*

Blueberries often have 2 flushes of growth during season. Leaves for analysis should be fully expanded new growth from 1st flush, not second. Foliar analysis in new blueberry plantings may be beneficial but sometimes produce rather erratic results. This is attributed to the need for 4-5 years to pass after planting for plants to settle down and juvenile growth spurts to be over. Age usually calculated from when plants go in the ground; transplant age not necessarily included in calculation in this respect (i.e. 3 year old transplants, planted 3 years probably still in juvenile growth spurt.)

With fall raspberries, sampling timing maybe a little tricky; and it is good to have soil analysis to compliment it. For example – foliar analysis in an early fruiting year showed low Potassium; soil levels were adequate. Probable explanation – fruit acting as a sink for foliar potassium.

Should you wait a certain number of weeks after fertilizer application before soil sampling? Will it burn out any latent infections? For field crops, 4 week wait suggested...

Soil N testing not very useful for perennial crops as levels fluctuate seasonally and over the course of the season. Suggestion is to sample PRIOR to application of fertilizer(s) in early spring or late fall. This prevents getting artificial readings from digestion of recently applied fertilizer taken up with soil samples.

Using a Cardy meter to monitor nitrogen status in day neutral strawberries (trickle irrigation, weekly applications of N through Nitan) – sudden drop in nitrogen from adequate to hardly detectable this week – plants now fruiting and/or recent heavy rains (leaching) possible explanation(s)?

Yes.

- a. N is needed to take up C to make sugars; fueling fruit. N drop to be expected during period of rapid fruit filling.
- b. Leaching plays huge role in soil N levels.

Source for Cardy Meter:

- a) Crops: <http://www.agriculturesolutions.com/Nitrogen-Meters/Horiba-Cardy-Twin-Nitrate-NO3-Kit-For-Crops-B-341.html>
- b) Soil: <http://www.agriculturesolutions.com/Nitrogen-Meters/Horiba-Cardy-Twin-Nitrate-NO3-Kit-For-Soil-B-342.html>

Spad chlorophyll type meter used in strawberries?

Some work done using this instrument – not very useful in this case due to perennial crop nature.

Source for Digital Chlorophyll SPAD Meter:

<http://www.agriculturesolutions.com/Chlorophyll-Meters/Digital-Chlorophyll-SPAD-Meter-With-Data-Logging.html>

Boron applications – is it too late to apply Boron to HT fall raspberries not fruiting?

It's never too late to apply Boron; no best time of year to apply it. If you're short applying it anytime doesn't hurt (unless you apply too much). Boron is probably best applied now through drip application to avoid foliar burn.

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Strawberry production in stackers – information available?

Most information seems to be available through vendors of systems, especially fertilizer recipes etc. Some growers in both eastern and western regions are trying out this production system under protected production (high tunnel) as a means of circumventing wet weather issues. Day neutral tunnel production is a good system but not sufficiently productive, one grower indicated. being Compost being considered as possible soil base for stackers; strictly hydroponic strawberries tend to lack flavor. Stacker pockets for holding soil mix are typically very small – will that be an issue with compost?

Best time for strawberry renovation? Problems if it's done too late?

ASAP to give plants as much time as possible to recover and set flower buds for next year's crop. Too late after the middle of August – winter hardiness maybe affected; also crop load for next season potentially reduced.

Review of strawberry renovation steps:

Activity	Timing
Weed control (2,4-D, others)	Immediately after last harvest
Leaf removal (optional)	One week after last harvest (no later than 5 days after 2,4-D application)
Fertilizer application	After leaf removal
Narrowing rows	Within 1 day of leaf removal
Leaf sampling for analysis	When new leaves are fully expanded.

(from:; Strawberry Production Guide for the Northeast, Midwest and Eastern Canada)

Note: accompanying soil test should be done at same time of leaf sampling if never has been done or hasn't been done for past 3 to 4 years.

Prophyt and other phosphorus-based fungicides used on berry crops – why not organic (OMRI) certified?

Lack of OMRI certification may be due to manufacturing process, or inert ingredients. Resource people to ask: Meg McGrath Cornell Long Island Lab; Eric Sideman, Organic Crop Specialist, Maine Organic Farmers and Gardeners Association, O Box 170, 294 Crosby Brook Road, Unity, Maine 04988. Phone: 207-568-4142, Fax: 207-568-4141, Email: mofga@mofga.org

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Weather Data for Week Ending Sunday, June 26, 2011

Station	Temperature (°F)				Growing Degree Days Base 50° ^{1/}			Precipitation (Inches) ^{1/}			
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm
<u>Hudson Valley</u>											
Albany	84	53	69	+0	132	959	+253	2.00	+1.16	13.81	+4.25
Glens Falls	83	45	66	-1	115	793	+201	1.58	+0.88	12.66	+3.30
Poughkeepsie	84	53	70	+2	144	1026	+268	2.53	+1.69	14.91	+3.80
<u>Mohawk Valley</u>											
Boonville	78	47	63	-1	91	569	+130	4.02	+2.97	21.32	+8.26
<u>Champlain Valley</u>											
Plattsburgh	79	48	65	-3	107	686	+78	0.78	+0.08	16.83	+8.48
<u>St. Lawrence Valley</u>											
Canton	81	47	66	+2	113	728	+206	1.74	+0.97	14.84	+6.17
Massena	84	48	68	+3	129	783	+220	1.25	+0.48	12.33	+4.43
<u>Great Lakes</u>											
Buffalo	84	58	70	+3	144	848	+186	2.77	+1.94	17.28	+8.16
Wales	80	52	67	+3	120	684	+169	1.54	+0.56	15.55	+4.56
Niagara Falls	84	53	70	+3	141	798	+120	1.73	+0.96	14.17	+5.09
Rochester	83	52	69	+3	138	863	+202	1.20	+0.50	11.95	+4.02
Watertown	84	47	68	+4	129	725	+210	1.65	+1.06	13.30	+5.71
<u>Central Lakes</u>											
Dansville	87	54	73	+6	158	1017	+362	0.97	+0.06	11.57	+2.52
Geneva	84	50	69	+3	136	833	+200	1.02	+0.17	12.37	+3.25
Honeoye	83	51	69	+2	135	845	+189	2.46	+1.60	13.79	+4.76
Ithaca	85	47	69	+4	135	799	+231	0.52	-0.38	15.09	+5.58
Penn Yan	84	51	70	+4	143	906	+273	0.86	+0.01	10.57	+1.45
Syracuse	88	52	72	+5	153	1046	+376	2.60	+1.69	15.53	+5.65
Warsaw	79	50	66	+3	110	653	+181	1.50	+0.52	17.38	+6.78
<u>Western Plateau</u>											
Angelica	84	50	68	+4	128	732	+213	1.31	+0.42	16.19	+7.31
Elmira	85	50	70	+4	140	871	+264	0.50	-0.40	13.48	+4.31
Franklinville	82	54	67	+5	122	686	+277	2.48	+1.50	19.59	+9.07
Jamestown	82	57	69	+6	134	776	+298	2.20	+1.15	18.54	+6.82
<u>Eastern Plateau</u>											
Binghamton	81	52	69	+4	135	814	+228	1.73	+0.89	18.51	+8.90
Cobleskill	83	46	65	+0	108	715	+177	1.97	+0.99	13.60	+3.02
Morrisville	84	48	67	+4	121	673	+169	2.44	+1.50	15.29	+4.94
Norwich	83	46	67	+3	121	755	+218	3.19	+2.26	19.05	+8.35
Oneonta	83	46	67	+3	118	745	+256	2.56	+1.58	18.50	+7.07
<u>Coastal</u>											
Bridgehamton	82	54	69	+2	133	830	+213	1.55	+0.73	11.86	+0.92
New York	83	63	73	+0	162	1153	+164	0.58	-0.26	12.92	+2.22

^{1/} Season accumulations are for April 1st to date. Weekly accumulations are through 7:00 AM Sunday Morning