Cornell Cooperative Extension

Eastern NY Commercial Horticulture Program

Berry E-News ~ July 22, 2021



Insect (SWD) Exclusion Netting over blueberries at the Berry Patch in Stephentown, NY.

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"To Do" List

All Crops

SWD numbers continue to rise – not a surprise given the weather. Growers should use most effective materials and stay on a 5-7 day spray schedule. Continue to monitor fruit infestation several times a

week using the salt flotation method.

Now is the time to gather foliar samples for nutritional analysis. This is the best way to monitor the fertility status of your berry plants. <u>The Berry Soil and Nutrient Management Guide</u> is free to download. The chapter on <u>Foliar Testing and Sampling in Berry Crops</u>, <u>Visual Symptoms of</u> <u>Deficiencies</u> is particularly helpful as you contemplate how best to assess your plantings fertility status.

Strawberries

 Potato leafhopper levels are high and will stunt new plantings and day neutrals. Damage in strawberries appears as stunted, distorted leaves bending at right angles, shorter petioles, and yellowing progressing from margins inward. Adults may migrate in suddenly so watch periodically. Repeat application may be needed for later 'waves' of invading adults. Controls include Assail (max 2 applications & 1 DTH), Brigadier (7 DTH,



note application restrictions around bloom and marsh setback), Sevin 4F (7 DTH), Danitol (2 DTH, note setback from water), and malathion (3 DTH, max 4 applications). Organic growers can use (all 0 DTH) Pyganic (pyrethrins=), Azera (pyrethrins + azadirachtin) or for immature stages azadirachtin (Molt-X, others). Entrust is not effective against leafhoppers. Hops, hemp, snap beans, potatoes, cut flowers (dahlia), apples, eggplant, and tomatoes are also susceptible. Symptoms can resemble Verticillium wilt in some of these crops. Watch for the bright green, slender adults, ~1/8" long; nymphs are paler, smaller, often move rapidly sideways when disturbed (aphids don't move quickly). *Source: Dan Gilrein, CCE Suffolk County.*

- Day Neutral Fertility If you are growing Day Neutral varieties like Seascape, Albion, Monterey, Portola etc., make sure that you are getting the appropriate fertility to these plants. They should be fed with a soluble nitrogen fertilizer through your drip irrigation system. You should be slowly adding between 5-7lbs of actual N/week at this time of year.
- **Phomopsis blight** is appearing throughout the region. This is perhaps the most serious of the 3 major leaf spot diseases it can spread rapidly and should be taken seriously. See Meg McGraths article in this E-News.

Raspberries/Blackberries

• **Botrytis** of fruit is a risk in this weather, and because the rain has delayed harvest. See article in this E-News about managing this disease.

Blueberries

• **Spotted Wing Drosophila** - After a number of dry summers, some growers are being surprised by the rapid onset of SWD. In order to save a crop, growers must remove and dispose of infested fruit as quickly as possible. In large U-Pick situations this is virtually impossible. If there are late varieties of fruit that may not be infested yet, redouble efforts to get insecticide spray on these plants. Remove weeds to reduce hiding places for the insect. Refrigerate harvested fruit immediately at 32.5-35 degrees F. Revisit the insecticide Quick Guides and keep your spray interval as short as possible. There is evidence that including Assail in the tank mix may help increase larvae mortality inside the fruit – it would be worth trying.

Phomopsis Leaf Blight in Everbearing Strawberry

Dr. Meg McGrath, Cornell University

Rainy weather is generally favorable for diseases. Most fungal and bacterial pathogens need plant tissue to be wet for several hours to complete infection; some are dispersed in splashing water. Powdery mildew is a notable exception developing best when dry. Thus, it is not surprising that Phomopsis leaf blight has been seen in eastern NY crops.

Phomopsis is difficult to control with fungicide applications started after symptoms are seen, due to the long period between infection and visible symptoms. Infection can occur early in the growing season and symptoms may not appear until during, or even after, harvest. Apply Rally, Sonoma or Mettle (these are all FRAC code 3 aka DMI fungicides) in alternation with Rendition (33) and Topsin-M (1). Apply these (except Rendition) with copper fungicides for resistance management.



Phomopsis lesions differ from other leaf spot diseases as they form larger lesions that often radiate from the leaf edge in an almost triangular pattern. Photo: M. McGrath

In plantings where other diseases are also occurring, note that Rendition and Topsin-M are also labeled for gray mold and the FRAC 3 fungicides are also labeled for leaf spot. Other fungicides with mobility in plants and targeted activity that are labeled for leaf spot and gray mold include Captan and Pristine. Quilt Xcel is a good choice when anthracnose and leaf spot are occurring because it has both FRAC 3 and 11 active ingredients, which needs to be recognized when planning fungicide rotations. FRAC 11 (aka strobilurin) fungicides are considered to be the most effective option for anthracnose; labeled ones also include Abound, Cabrio, and Pristine. Switch (9 + 12) is the best choice for alternating for anthracnose and it is labeled for gray mold, but neither Switch nor Quilt Xcel are labeled for Phomopsis leaf blight, necessitating also applying a fungicide labeled for it when these different diseases are all a concern.

It is important to know where Phomopsis leaf blight and other diseases are occurring because these pathogens can survive over winter. Also, correctly identifying diseases is important because the best fungicides to use depend on what diseases are present. Photographs plus information about this and other strawberry diseases that occur in NY are at:

http://blogs.cornell.edu/livegpath/gallery/strawberries/.

Control of Botrytis Gray Mold in Raspberries During Harvest

Anya Osatuke, Cornell University

Botrytis can spread from rotted berries to healthy berries. Touching healthy berries after touching rotted berries will spread the disease. The healthy berries will rot within 48 hours. Another way the fungus spreads to healthy berries is through contact with soil or direct contact with infected berries. This is especially true in humid and rainy weather.

Here are some ways to prevent the spread of botrytis during the summer:

- Harvest rotted berries separately from marketable berries to prevent spread of botrytis.
- Pick all unmarketable berries into a "rot" bucket that you will not use for harvesting healthy berries.
- Dispose of rotted berries far away from your planting, so wind cannot carry the spores to infect flowers in the spring.
- Plan to spray for botrytis next spring if you saw a lot of it in your fields this summer.

Here are some tips in case you know that you have a fair amount of botrytis in your planting, but cannot dedicate the labor to selectively remove the unmarketable berries:

- Encourage pickers not to touch moldy berries when picking, especially for quarts that will be sold fresh.
- Freeze or process your berries soon after picking.
- Encourage customers to refrigerate berries promptly.

The way berries are handled and grown is the most important factor in preventing spread of botrytis. Fungicides may be applied to raspberries during summer as well.

Switch 62.5 WDG, Rorval Brand 4 Flowable, and Elevate 50 WDG both have a 0-day pre-harvest interval. Reserve applications of these sprays for very wet, rainy periods.

A Wet July in Eastern NY

Source: Northeast Regional Climate Center



July 1-15 rainfall ranged from 50% of normal to more than 300% of normal.

According to the Northeast Regional Climate Center http://www.nrcc.cornell.edu/, there were only two days during the first half of July without flash flooding or some type of severe weather in the Northeast. On July 1, strong thunderstorm winds and several tornadoes caused damage in southern parts of the region. On July 8, downpours inundated parts of the New York City metro area, flooding several subway stations and roads. Tropical Storm Elsa produced heavy rain, strong winds, and tornadoes in the region from July 8-10. The greatest rainfall totals of over 5 inches were generally found in Connecticut and Maine, resulting in flash flooding. Wind gusts of up to 67 mph were recorded, particularly in coastal areas. Two tornadoes, as well as straight-line winds of up to 100 mph, caused damage in New Jersey. On July 12, a Flash Flood Emergency was declared for a portion

of southeastern Pennsylvania and western New Jersey when as much as 10" of rain fell within a few hours, causing significant flash flooding.

Due to numerous storms, including a tropical storm, the first half of July was wetter than normal for much of the Northeast, with portions of the region seeing more than 300% of their normal July 1-15 precipitation. Rainfall at the 35 major climate sites ranged from 57% of normal in Caribou, ME, to 574% of normal in Boston, MA. Eight major climate sites experienced their wettest first half of July on record and another 17 of the sites ranked this July 1-15 period among their 20 wettest on record. In fact, for 12 of the major climate sites, it is already one of the 20 wettest Julys on record. However, several areas including portions of Maine, northern New Hampshire and Vermont, northeastern New York, and a chunk of West Virginia, missed out on the heavy rain, seeing 50% to 100% of normal precipitation. Drought and abnormally dry conditions persisted in some of these locations but improved in wetter spots.

Average temperatures during the first half of July varied, ranging from 6°F below normal in parts of New England to 4°F above normal in parts of Pennsylvania and New Jersey. At the major climate sites, average temperatures ranged from 3.9°F below normal in Portland, ME, to 1.7°F above normal in Baltimore, MD. This July 1-15 period ranked among the 20 coolest on record for two major climate sites but among the 20 warmest for six major climate sites.

The rest of July is expected to be warmer than normal for most of the Northeast, with the greatest likelihood in New England and eastern New York, according to <u>NOAA's Climate Prediction Center</u>. There's a tilt toward wetter-than-normal conditions for the remainder of July in southern parts of the Northeast, while equal chances of below-, near-, or above-normal precipitation was predicted for

For Your Information

Lorsban (chlorpyrifos) Ban in NY

The New York State DEC has adopted changes to the state pesticide registration regulations prohibiting chlorpyrifos in New York State effective July 31, 2021. Notice of the regulation adoption was published in the <u>State Register</u> July 21, 2021. Additional supporting documents for the regulation change can be found at the <u>DEC's website</u>.

This ban goes into effect after the last applications date on July 31. We are still awaiting final regulations for handling remaining grower inventory. The NYS DEC advisory notes "while arrangements are made for distribution or disposal, unopened containers of these products may be stored until February 1, 2022 or until the Enforcement Discretion for Distribution of Unregistered Products Containing Chlorpyrifos is rescinded by the Department. But pesticides in opened containers are considered to be in use, and therefore must be disposed of immediately."

More info: <u>https://www.dec.ny.gov/chemical/122311.html</u>

Job Opening: Executive Secretary, North American Raspberry & Blackberry Association (NARBA)

Responsibilities of the Executive Secretary include:

- · Maintaining the NARBA office; managing correspondence and accounts
- · Facilitating meetings of the Executive Council (board of directors)
- · Organizing and managing NARBA's annual conference (with assistance)
- · Producing NARBA's newsletter and other communications
- Conducting membership renewals, adding new members, and maintaining membership records
- · Updating and managing NARBA's website and social media

Applicants with familiarity with NARBA and connections to the caneberry world are especially welcome.

Support and transition from NARBA's current Executive Secretary will be provided, with hiring accomplished before February 2022 to allow for transition.

This is a part-time position, with hours required varying though the year. The Search Committee recognizes that not every applicant may have all the skills required, and some tasks may be subcontracted, with board approval.

Applications are due September 1. A full job description may be found at <u>https://www.raspberryblackberry.com/wp-content/uploads/NARBA-Job-Description-2021.pdf</u>. Please contact NARBA at <u>info@ raspberryblackberry.com</u> for more information.



Upcoming Events

Berry office hours - Every Thursday afternoon from 12:30pm - 1:30pm

Anya Osatuke and Laura McDermott will hold offer a 15-minute update and then answer questions from growers. All berry growers are welcome to join us. Use this Zoom link and/or phone number to join: <u>https://cornell.zoom.us/j/98032160743?pwd=S0JDV0NIMmRhbVpidXhONVFra056UT09</u>

Meeting ID: 980 3216 0743 Passcode: 353671 One tap mobile +16468769923,,98032160743# US (New York) +16465189805,,98032160743# US (New York) Dial by your location +1 646 876 9923 US (New York) +1 646 518 9805 US (New York)

Berry Production Twilight Meeting

NEW DATE: Tuesday, July 27th from 5-7:30 pm Rulfs Orchard 531 Bear Swamp Rd, Peru, NY Cost: FREE

Join us for a twilight meeting focused on berry production at Rulfs Orchard. Rulfs is a diversified fruit and vegetable operation owned and operated since 1952 by the Rulfs family. Farm staff, CCE specialists, and Cornell research station staff will discuss the following topics:

- Low tunnels for June-bearing strawberry production
- · Managing strawberry pests using beneficial nematodes
- · Strawberry weed management and renovation
- Spotted wing drosophila (SWD) management in blueberries and raspberries
- Juneberry (aka Saskatoon berry or Amelanchier) production in NYS

DEC Pesticide Recertification Credits: 2.5 in categories 1A, 10, 22, and 23

Please pre-register at https://envch.cce.cornell.edu/event.php?id=1549

Questions: Contact Elisabeth Hodgdon (518-650-5323) or Laura McDermott (518-791-5038).

Field Day at Philia Farm

Thursday, August 5 from 4-6 pm Philia Farm 134 Miller Rd, Johnstown, NY

Join Cornell Cooperative Extension's Eastern NY Commercial Horticulture Program for a field day at Philia Farm in Johnstown, NY from 4-6 pm on August 5th. The meeting will showcase a variety of research projects, including:

- High tunnel pea variety trial
- Storage onion trial
- Leek trial
- · Biofungicide trial on beets
- · Mesotunnel insect netting trial
- · Reduced tillage trial for fall vegetable crops

DEC Pesticide Recertification Credits: 2 in category 23

This event is now FREE. Please pre-register at <u>https://enych.cce.cornell.edu/event.php?id=1553</u> by August 3rd so that we can order refreshments!

Questions: Contact Crystal Stewart-Courtens (518-775-0018).

Cornell 2021 Hemp Field Day - August 12,2021

It will be offered in-person in Geneva, at the Agri-Tech Station and virtually. Keep an eye on this Site for more information and registration:

https://hemp.cals.cornell.edu/2021/05/26/upcoming-event-2021-cornell-hemp-field-day/

Berry Specialist

Laura McDermott Phone: 518-791-5038 Email: lgm4@cornell.edu

Business Specialist

Liz Higgins Phone: 518-949-3722 Email: <u>emh56@cornell.edu</u>

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