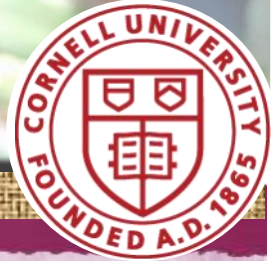


# Berry News

VOLUME 6, ISSUE 5 - JUNE 8, 2018



## Spring Berry "To Do" List

Dramatic swings in temperature accompanied by rain has made for a challenging disease management situation. High temps during bloom pushed all berries forward quickly. Still, fruit set seems strong in most areas. The best thing is that I don't know of a single frost protection event this season!

**Spotted Wing Drosophila (SWD)** has shown up in western NY – just a few individuals – but as berries ripen it will be important to keep checking. Remember – pick hard, pick often and make insecticide applications when necessary. Research has found that all stages of SWD may be able to overwinter – we just don't know how that ability sets up the season for heavy and early infestation.

Work is being done at MSU and Oregon State to determine how pesticides affect different stages of SWD. For instance, neonicotinoids like Assail are not good at killing adults alone, but may boost overall population control if tank mixed as Assail has decent larvae control. Carbamates, like Lannate, also show better activity against eggs and larvae than do pyrethroids, like Danitol or Mustang Max.

There is also some interesting work being done with evaluation of timing of organic pesticide materials including Oxidate and Grandevo. And field testing of feeding stimulants (sugar) that have been added to some tank mixes don't appear to be effective – so maybe leave the sugar for your coffee.

For blueberries and raspberries, apply second dose of fertilizer NOW. See chart in this newsletter for specific information. Foliar samples will be taken in late July and early August—make sure to do that if you haven't sampled in 2 years or more.

### —Blueberries—

- Blueberries are at fruit set in all but the latest varieties in colder areas. Set looks good but in some areas not as heavy as last year. This may be in part due to the very short bloom period, and to a smaller extent to pollinator availability. Check out the pictures of carpenter bees and honeybee damage. These 'Robbers' reduce the transfer of sticky blueberry pollen because the bee is going sideways through the blossom to get the nectar. And because bumble bees aren't aggressive, even having hives in the block may not dissuade these other

*continued on next page*

## Table of Contents

Berry "To Do".....	1
Fertilizing Berry Crops.....	3
FYI.....	6
Upcoming Events.....	7

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pollinators.

- We are seeing some sporadic shoot strikes from **canker** – and a few reports of **mummyberry** strikes as well.
- Keep looking for **scale insects** – now they will be moving toward the fruit. We've had an increasing problem with these insects over the past few years – this may be due to the SWD sprays and the loss of beneficials.
- Adult emergence of **cranberry fruitworm** happened early this week. The adult moths of the cranberry fruitworm lay their eggs at the base of the newly set fruit. The greenish larvae are up to half an inch long and brownish red on the back. Moths of the **cherry fruitworm** appear late in the blooming season, when the bloom is nearly off. The larvae are three eighths inch long and uniformly reddish orange. Larvae of both species attack the green fruit. Cranberry fruitworm larvae web the berry clusters together and feed inside. Damage is obvious. Just a few worms can do extensive damage. Two sprays are often required for control; the first should be applied at petal fall and the second 10 days later, about 2 weeks before harvest.
- Put **Blueberry maggot** traps out this week.



Photo source: OMAFRA

Gray mold caused by *Botrytis* can start with calyx infection as seen in photo on left. Sprays beginning at 10% bloom and continuing every 7-10 days as weather dictates will help avoid considerable loss.



*Cyclamen mite damage is mostly associated with stunted and malformed new growth as seen above left (Photo from [Cornell berry diagnostic tool](#)), but flowers can be infested before they open. New blossoms show symptoms as short, malformed petals especially in the king blossom and green centers may appear rusty in color. (Photo above right by Pam Fisher)*

## —Strawberries—

- Like blueberries, strawberry bloom went by quickly, but stay vigilant for good **botrytis** control. If organic – pick hard and often. Oxidate may help.
- Still not seeing many **tarnished plant bugs** seen – this has been a trend the last few years.
- Keep eye out for overwintering pests – like cyclamen mite! **Cyclamen mites** are much harder to detect, but cause leaves to be stunted and malformed as they emerge from the crown. It's difficult to control these mites – so removing obviously infested plants is a good management practice. Look for blossom symptoms as seen in the photo.
- **Spider mites** seen in strawberries throughout the region. Remember that mite thresholds are quite low – use a presence/absence method. Look at 60 fully expanded tri-foliate leaves and if you find 15 mites you have reached threshold. You may want to spray and then add beneficial predator mites as soon as possible to fields to control these pests.

Blueberry flowers are long with narrow openings. Bumblebees are the best pollinators for this crop since they can reach inside the blossom with their long tongues. Honeybees are also pollinators, albeit clumsy ones. Honeybees 'cheat' by enlarging the slits made by Carpenter bees - the ultimate nectar poacher (above right) - into larger holes in the side of the blossom (below right). This allows honeybees to get at the nectar but reduces the pollen carried to the next flower.



Photo by J. Feinstein, <http://www.urbanwildlifeguide.net>



Photo by A. Ivy

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### —Brambles—

- Primocanes popped out of the ground really quickly throughout the region. Floricanes setting fruit.
- Scout for **Twospotted mites** and **Red mites**.
- **Orange rust** has been found in many locations.
- Early onset of SWD is the big concern for summer raspberries. Consider stripping lower 12-18" of canes to help dry out planting, and improve insecticide penetration. Keep up with results of monitoring. We have traps in almost every county in the region. Monitoring is one of



Photo by J. Ferrante

the most important things you can do to control SWD – you need to know when they are there in order to control them! Trap placement will also help you trap the first insects: Place the trap in the shade of the canopy (ie put them on the east side of the row instead of the west)– and place them in the lower third of the plant.

**Blackberry Psyllid** – This relatively unusual pest in NYS (see photo at right) was found in the mid-Hudson Valley last week. These insects winter in pine trees. For more information, <https://rubus.ces.ncsu.edu/2013/06/blackberry-psyllid-in-nc/>.

## Fertilizing Perennial Berry Crops

Laura McDermott, CCE ENYCHP

May and early June is when you should apply the split application of fertilizer on perennial crops like blueberries, ribes and brambles, for fertilization so try to make sure that you have the appropriate materials on hand. Table 1, on the next page is right out of the Cornell Guidelines.

Measure your plantings if you haven't already done so. It is a common mistake to assume you have a certain size field and then when it's actually measured (not with your paces!) it turns out to be substantially different. When measuring berry plantings, consider that for fertilizer, we measure just the planted row acreage.

Measure the width and length of the rows to determine actual acreage.

The recommendation is in terms of **actual N** – not pounds of total fertilizer material.

To calculate the amount of fertilizer to apply, divide the desired amount of actual N by the percent N in the fertilizer and then multiply the result by 100. Apply the total amount of fertilizer in a band appropriate to the width of your planted row.

*Photo below left shows N deficient blueberry plant on left and adequate N on plant on the right. Interveinal chlorosis as in the photo above indicates a pH imbalance. No amount of fertilizer will cure soil pH problems. Photos from [Cornell Berry Diagnostic Tool](#).*



**Table 1 - Nitrogen guidelines for berry crops.** Source: 2018 Cornell Pest Management Guidelines for Berry Crops

Crop	Age of planting	Amount/timings (actual N)	N source	Comments
<b>Raspberries and Blackberries (summer-bearing)</b>				
	0	25-35 lb/A, 4 weeks after planting	calcium nitrate	Avoid touching plants with fertilizers after planting.
	1	35-55 lb/A, in May or split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used.
	2+	40-80 lb/A, in May or split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used.
<b>Raspberries (fall-bearing)</b>				
	0	25 lb/A, 4 weeks after planting	calcium nitrate	Avoid touching plants with fertilizers after planting.
	1	50-80 lb/A, split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used.
	2+	70-100 lb/A, split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used. Adjust with leaf analysis.
<b>Blueberries</b>				
	0	Do not fertilize newly planted blueberries	–	Soil should be adjusted to pH 4.5 prior to planting.
	1	15 lb/A, split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	2	20 lb/A, split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	3	25 lb/A, split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	4	35 lb/A, split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	5	45 lb/A split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	6	55 lb/A split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.
	7+	65 lb/A split between May and June	ammonium sulfate or urea	Use ammonium sulfate where soil pH is >5.0.

## —For Your Information—

- **Looking for JEWEL strawberries for fruit characteristic study**

Dr. Marvin Pritts at Cornell University – along with his grad student Anya Osatuke, are conducting a project looking at the sensory characteristics of strawberries. For an exchange of just 2 quarts of berries and answering a short questionnaire, you will receive an analysis of your strawberries sugar content, acidity and aromatic profile. This very specific information could be used in marketing and informing your customers of the benefits of eating local berries. Please help with this work! *Contact Laura McDermott – 518-791-5038 if you are interested.*

- **Last chance to complete the 2017 Census of Agriculture - Less than two weeks to submit the questionnaire by mail**

The U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS) is wrapping up data collection for the 2017 Census of Agriculture. The deadline for submitting the paper questionnaire is June 15, 2018. The census is what everything from the Farm Bill to the amount that your county extension association is assessed for the ENYCH regional program. Be counted!!

- **2018 Caneberry Pricing Survey**

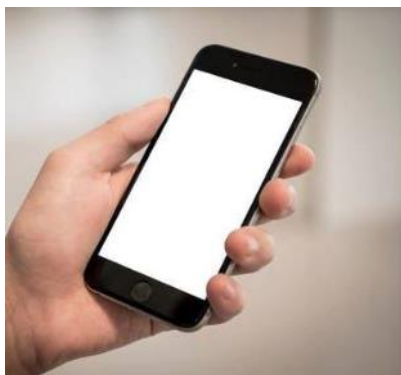
Researchers at the University of Arkansas System, Division of Agriculture, Center for Agricultural and Rural Sustainability (CARS), in collaboration with the

North American Raspberry & Blackberry Association (NARBA), and the University of Vermont, are conducting a survey to learn more about caneberry pricing and retail strategies for 2018. Information collected in the survey will be used to gain a better understanding of the marketing, pricing, and sales strategies currently being used by caneberry producers across the United States and Canada. Results will be aggregated and published in the June issue of the North American Raspberry and Blackberry Association's (NARBA) member newsletter. A report will also be emailed to all participants requesting this option.

[https://uark.qualtrics.com/jfe/form/SV\\_djzmC8tUnEirkyh](https://uark.qualtrics.com/jfe/form/SV_djzmC8tUnEirkyh)

The survey takes less than 10 minutes to complete. *The deadline is Monday, June 11<sup>th</sup> at 9:00am eastern time.* Your responses will be recorded anonymously and no identifying personal information will be collected within the survey.

If you have any questions about the survey, please contact CARS by email at cars@uark.edu, or by phone at 479-575-7381.



**This season, CCE ENYCHP will be offering text updates straight to your phone! Being informed is the first step in the success of your farm! Our texts will get you the information you need in the fastest and most concise way possible!**

Only the most important crop alerts will be sent ("Late Blight found in N.Columbia County", for example), and you can choose to receive updates on whichever commodities you wish- Vegetables, Berries, Grapes, or Ag. Business.

Ag. Business Alerts will include: funding opportunities, due dates for programs (ag district inclusion, tax deadlines, crop insurance etc...), & market opportunities

(farmers markets looking for vendors, buyers looking for product)

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Or text your name and cell phone carrier (Verizon, AT&T, etc.) to 518-450-3156



## Calendar of Events

### July 12, 2018 – FSMA Training

Cornell Cooperative Extension, Albany County – Voorheesville, NY. More information to follow. Questions? Call Laura McDermott, 518-746-2562

**FDA FOOD SAFETY  
MODERNIZATION ACT**

### July 18, 2018 - New York Soil Health Summit

Empire State Plaza, Downtown Albany, NY. For more information at this time, contact David Wolfe (dww5@cornell.edu) or Aaron Ristow (ajr229@cornell.edu).

### July 31, 2018 – Reduced Tillage in Organic Systems Field Day,

9:00am-3:00pm, 48 Sayward Lane, Willsboro, NY 12996



### August 14, 15, 2018 NASGA Summer Tour

Watsonville, California

[www.nasga.org](http://www.nasga.org)

This year's summer tour will take place in northern California. We plan to visit progressive growers and marketers in the Watsonville area as well touring low elevation nurseries near Manteca and Turlock. Along the way we will take in other agriculture ventures. In California the options are endless.

### November 6-9, 2018 NASGA European Tour

Amsterdam, Netherlands

[www.nasga.org](http://www.nasga.org)

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## 20 Minute Ag Manager

All webinars run from 12:00-12:30pm

For more information:

Contact Liz Higgins at emh56@cornell.edu

To register, go to <https://tinyurl.com/y9gfqbmX>.

*Registering once gives you access to the series.*

### June: Zoning and Land Use

- June 5—NYS Ag Assessment 101
- June 12—Local Zoning 101
- June 19—NYS Ag Districts 101
- June 26—Using On-line Data and Maps to Assess a Property Remotely

