

Eastern NY Commercial Horticulture Program

Vol. 4, Issue 9 July 13, 2016

Berry News

Spring Berry "To Do" List

All Crops

- Spotted Wing Drosophila have been found in all regions of eastern NY. Sustained catch (2 consecutive weeks) of adults in traps has been reached in most counties in the Hudson Valley and the Capital District. This is 3-4 weeks ahead of when we found adults in 2015. Counties in the Champlain and Mohawk Valleys should consider checking fruit as it colors using the salt flotation method (see article in this newsletter). All berry growers should begin SWD sprays as fruit begin to color. For more information about SWD management, see the Cornell SWD Pesticide Management Guidelines attached in this newsletter.
- Bird management put up nets in berry plantings before the berries begin to color. SWD exclusion netting can also be used to deter birds, so if you are buying new netting consider using exclusion netting for one solution to two problems. Try to identify birds that are primary problems. Bird control solutions vary according to species.
- Bear control has been a question during these past two weeks. For information on building a bear fence, visit: https://www.easternapiculture.org/addons/2013/Simone/BearFence.pdf



Blueberry tip midge. Photo courtesy of Washington State University Cooperative Extension

Blueberries

- Blueberries starting to turn. Keep watering as fruit size really depends on water uptake.
- Look for leafrollers and leafminers.
- Blueberry aphids can affect growth, future production and can transmit viruses. Scout underside of leaves and new growth for pale green aphids- focus on lower part of the bush.
- Japanese beetle, Asiatic garden beetle and Oriental beetle can damage on leaves and fruits (adults) and grubs can damage roots.
- Blueberry tip midge, *Dasineura oxycoccana*, has been seen in some areas of Long Island, but so far hasn't appeared in upstate locations. Hatching larvae (maggots of a small fly) feed in the terminals causing the foliage to curl and deform. Watch for blackened tips of unfolding leaves of the terminal growth and call us if you see anything. See photo this page.

Raspberries and Blackberries

- Blackberry orange rust is sporulating. Remove the infected plant as this disease is systemic. Use Nova, Pristine or Cabrio to protect uninfected plants.
- Scout for crown borers and cane borers, both of which may be causing cane collapse. Scout for twospotted mites – especially if you have raspberries in tunnels, although this hot, dry weather is just what they love in all of the areas.
- Collapsing floricanes may be due to cold damage. The thin layer of cells right beneath the flower/fruit buds was probably damaged dur-

In this issue of Berry News:

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- ♦ Potato Leaf Hopper and Berry Crops
- ♦ 2016 SWD Insecticides for NYS 5-7
- ♦ Cornell Berry Guide 7

ing the February or April cold snap and some of the fruiting canes may be succumbing to that damage now. Just prune them out – but while you're doing that make sure that the damage isn't due to crown or cane borer.

Strawberries

Scout for leaf notching or shot hole damage from strawberry root pests. And watch for weak growing areas. Call for a diagnostic visit.

- Prepare to renovate June bearers as soon as picking finishes. See last week's newsletter for information on renovation.
- Day Neutrals are just barely setting fruit. The hot weather in early and mid June really postponed fruit set. The temperatures have settled and fruit set should be underway now. Make sure they are getting plenty of fertilizer – between 3-5# of actual N per week – moving towards 5-7# N as the fruit starts to ripen.

Blueberry Virus Diseases-What you Need to Know

Laura McDermott, ENYCHP

Blueberries are affected by a number of different viruses and this year we have seen several in our region. Viruses are transmitted when insects or nematodes pierce the plant cell membrane and transfer virus into the plant. The virus multiplies in the cell and interferes with normal cell function eventually causing poor vigor and plant death. Plants may survive for years with no symptoms but usually plants exhibit virus symptoms when stressed even slightly and certain cultivars seem more pre-disposed to being affected by virus than others. Viruses can be spread from farm to farm or from one block to another through infected plant material or by vector. Growers should be aware that there are other triggers that can cause viruslike symptoms including specialized bacteria called Phytoplasmas and even

herbicide damage. Diagnostic tests are available for pathogen detection, and when suspected you should always try

to confirm a virus through the use of the diagnostic tests.

Several states have instituted virus certification programs which are credited with lowering the incidence of viruses in blueberry fields nationwide. Buying virus-tested planting stock is the primary preventive measure for virus disease control. Several Michigan nurseries voluntarily submit to a testing program administered by the Michigan Department of Agriculture. Mother blocks in these nurseries are inspected annually for virus symptoms, and serological tests are



Tobacco Ringspot Virus – note distorted leaves. Photo by L. McDermott

conducted on random samples for all blueberry viruses. Cuttings are taken only from mother plants that are deemed free from virus-

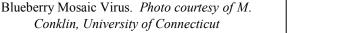
Below are a few of the viruses that we have seen this year and then a list of others that you should be aware of and always scouting for. Remember, early detection is key as diseases caused by virus cannot be cured by intervention and plant removal is the only way to make sure that the virus does not continue to spread.

Tobacco Ringspot Virus or Necrotic Ringspot (TRSV) is vectored by the dagger nematode and is found in the northern US, Canada and Chile. It is one of the

viruses we found recently in eastern NY. Leaves are deformed, curled or crinkled and covered with small reddish

or necrotic spots which may fall out, giving a shot-hole appearance. Dying plants are usually found in patches in the field, but in the recent case were found exclusively in one variety throughout the rows. Jersey is resistant to the most common strain of the virus and Bluecrop shows reliable tolerance.

Blueberry Mosaic Virus is suspected in Connecticut this summer. This virus has been found sporadically in



continued on next page

most regions that grow blueberries. It results in poor growth, late ripening and poor berry quality. Plant virus free nursery stock.

Blueberry Red ringspot is caused by a virus (BRRV) that primarily occurs in the eastern United States although it has been found in Michigan. This virus is relatively common and can be detected visually by scouting for small, red blotches or ringlike spots that appear on green stems in early to late summer. Red to purple circular spots can appear on older leaves, then progress to younger leaves. These spots are only visible on the upper leaf surfaces. In addition, light-colored blotches can develop on infected fruit. Mealybug is thought to be the vector of BRRV. Cultivars Bluetta, Blueray, Burlington, Coville, Darrow, Earliblue and Rubel are susceptible, whereas Bluecrop and Jersey are considered resistant.



Symptoms caused by blueberry red ringspot virus: reddish blotches or ringlike lesions on blueberry stem. Photo courtesy of NC State University Blueberry Journal.

quire plant removal to control the spread of disease.

To send plants to a disease diagnostic lab collect them in the late spring and early summer if possible. Samples should include leaves, stems and flowers that are symptomatic. Place plant tissue in a plastic bag and refrigerate. Ship as soon and via fastest shipping method as possible. In New York State samples should be sent to the Cornell Plant Disease Diagnostic, 334 Plant Science Building Tower Road, Ithaca, NY 14853. For submission forms visit: http:// plantclinic.cornell.edu/.

More information about virus detection available at: http://msue.anr.msu.edu/ uploads/files/e3048.pdf

There are a number of additional viruses that we are contin- **Pesticide Update:** ually on the lookout for. These include blueberry shoestring virus, blueberry stunt, blueberry leaf mottle, tomato ringspot virus and blueberry scorch and blueberry shock viruses. Some of these are more commonplace while others haven't been found yet in New York. All of them re-

Endosulfan (Thionex, Drexel Endosulfan) Uses End: Endosulfan can no longer be used on many crops. The last remaining use relevant to New York growers, perennial strawberry, ends 7/31/16.

Modified Salt Test Sampling Protocols



Blueberry fruit development stage at the farm where the SWD were caught in Suffolk County, Long Island. No signs of infestation nor egg laying were found on fruit. Photo: Faruque Zaman

2. Place fruit sample in a 1 gallon ziplock bag. Set the bag on a hard surface and lightly crush each of the berries. For

blueberries this means pushing on them just till the skin

the Berry Crops Entomology laboratory at Michigan State University. Edited for use by berry growers by L. McDermott

1. Collect ripe fruit samples to be assessed via salt test. Sample size can be scaled up or down based on amount of fruit available, although the smaller the sample the lower the

detection accuracy.

- Methods developed by breaks, for raspberries this means just depressing the berry a bit. Do not mash the berries as this adds too much pulp to the liquid which makes the larval assessment much more difficult later
 - 3. Add salt water solution (1 cup of salt in 1 gallon of tap water) to the bag so are berries are covered with salt water. Seal the bag, removing as much air as possible from the bag. Removing the air from the bag minimizes the chances of larvae crawling out of the salt water and towards the top of the bag.
 - 4. Let the bag sit for 1 hour before assessing for larvae.
 - 5. Sift liquid and fruit through a larger mesh screen, allowing the liquid to pass through into a plastic bin. The mesh hole size should be large enough to easily let the liquid and larvae to pass through, but small enough that the fruit do not pass through. For blueberry and raspberry samples we generally use mesh with a ¼ inch hole size.
 - 6. Rinse berries off with a spray bottle to remove any larvae that may

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remain stuck on berries. Once rinsed off, berries can be discarded.

7. Take bin with liquid and carefully pour the liquid through a reusable coffee filter (Fig. 2, also see supplies list). Note that heavily infested samples or samples with more pulp may drain more slowly. Filters with slowly draining samples can be placed in deli cups to let the water finish draining. Rinse the bin out with the spray bottle to make sure to remove any larvae that may end up stuck to the bin. Be careful of cross-contamination when reusing the bin from one sample to the next, especially when switching from a heavily infested sample to non-infested sample. To mitigate this risk we only use each bin one time before washing it out in the sink and letting it air dry.

8. Assess the Drosophila larvae in the coffee filters using a stereomicroscope. The number of Drosophila eggs and pupae can also be counted if present. If you are assessing blueberry samples, blueberry maggot can be counted at the same time. Be aware that smaller blueberry maggots look fairly similar to late instar Drosophila larvae and should be ID'd using diagnostic characteristics http://www.ipm.ucdavis.edu/PMG/FIG/citrus-drosophila.html. Larger blueberry maggots can be easily differentiated from Drosophila larvae by their size.

9. Once larvae are counted, coffee filters should be rinsed out and gently cleaned with a sponge, bottle brush, or something similar. To reduce the risk of crosscontamination we let our coffee filters dry completely before reusing them on a new sample.

Potato Leafhopper and Berry Crops

Kathy Demchak, Sr. Extension Associate, Pennsylvania State University

Damage from potato leafhoppers is showing up in strawberry and raspberry fields, and by some accounts, seemingly came out of nowhere. This pest moves up from the South in the spring, and by early summer is established in a wide range of crops in the Mid-Atlantic region.



Potato leafhopper on raspberry. Photo: Kathy Demchak

When fields are mowed or even just weeded, leafhoppers that had been present in them may quickly find a home in a different location. Often this is a strawberry or raspberry



Leaf hopper damage on strawberry. Note the yellow discolored areas along the leaf edges. Photo: Kathy Demchak

planting. Usually the first noticed symptom of potato leafhopper presence is a downward curling of the strawberry or raspberry leaves with yellow discolored areas along the leaf edges. This symptom is caused by feeding injury, as the leafhoppers inject a toxin into the plants' leaves. With raspberries, primocane elongation may slow enough that plants appear to stop growing. Injured leaves may appear to be more closely spaced along the cane than usual. Even though a high proportion of the leaves might be affected, it is often surprisingly difficult to find the leafhoppers themselves, which are tiny light green or yellowishgreen wedge-shaped insects. The adults fly quickly when disturbed, so sometimes you can brush the foliage to see whether small light-green insects fly out that you can then try to track and identify. The nymphs however, cannot fly, and so are often more easily found. Adults or nymphs are



found on the leaf undersides rather than the top, and will usually move sideways when disturbed.

Damage is often most serious in new strawberry plantings, where the plants have few leaves yet and are dependent on a small amount of foliage. If the plantings are drought-stressed, growth slows even more. Damage then accrues on leaves which become marginally able to translocate needed photosynthates. This is just one reason why it is important to make sure that sufficient water and nutrients are available to the plants, and that leafhoppers are controlled with an insecticide if necessary.

Be sure to minimize toxicity to beneficials by choosing safer materials and apply them at times when bee exposure will be minimized. A number of insecticides are available that are effective.

2016 Insecitcides for Control of SWD in NY Berry Crops

Compiled by Greg Loeb, Cathy Heidenreich, Laura McDermott, Peter Jentsch, Debbie Breth, & Juliet Carroll, Cornell University, July 29, 2013. Updated regularly.

June 2016 - Labeled Insecticides for Control of Spotted Wing Drosophila in New York Berry Crops

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| PRODUCT | AI1 | IRAC | EPA# | Rate/A | REI3 | DTH^4 | Max. | Total | Spray | Probable |
| | | group | | | | | Prod/A/yr (ai) | applic's | Interval | efficacy |
| *Entrust Naturalyte (2ee) | spinosad | s | 62719-282 | 1.25-2 oz | 4 hr | 3 d | 9 oz (0.45 lb) | 3 per crop | р9 | Good to Excellent# |
| ^@Entrust SC (2ee) | spinosad | S | 62719-621 | 4-6 fl oz | 4 hr | 3 d | 29 fl oz (0.45 lb) | 3 per crop | p 9 | Good to Excellent# |
| [®] Delegate WG (2ee) | spinetoram | S | 62719-541 | 3-6 oz | 4 hr | 3 d | 19.5 oz (0.305 lb) | 9 | р9 | Excellent# |
| *Exirel | cyazypyr | 28 | 352-859 | 13.5-20.5 fl oz | 12 hr | 3 d | 61.5 fl oz (0.4 lb) | 3 | 5 d | Excellent |
| *Brigade WSG (2ee) | bifenthrin | 3A | 279-3108 | 5.3-16 oz | 12 hr | 1 d | 5 lb (0.5 lb) | 3 | 7 d | Excellent |
| *Danitol 2.4EC | fenpropathrin | 3A | 59639-35 | 16 fl oz | 24 hr | 3 d | 32 fl oz (0.6 lb) | 2 | 1 | Excellent |
| *Mustang Maxx Insecticide (2ee) | zeta-cypermethrin | 3A | 279-3426 | 4 fl oz | 12 hr | 1 d | 24 fl oz (0.15 lb) | 9 | 7 d | Excellent |
| *Triple Crown | bifenthrin, imidacloprid, zeta-cypermethrin | 3A,4A | 279-3440 | 6.4-10.3 fl oz | 12 hr | 9 g | 31.0 fl oz (0.54 lb) | 5 | p <i>L</i> | Good to excellent |
| *Imidan 70W | phosmet | 11B | 10163-169 | 1.33 lb | 24 hr | Э д | 7.125 lb (5.0 lb) | 5 | 1 | Excellent |
| *Lannate SP | methomyl | 1A | 352-342 | 0.5 – 1.0 lb | 48 hr | 3 d | 4 lb (3.6 lb) | 4 | 5-7 d | Excellent |
| *Lannate VP | methomyl | 14 | 352-384 | 1.5-3.0 pts | 48 hr | 3 d | 12 pts (3.6 lb) | 4 | 5-7 d | Excellent |
| Malathion 5EC (2ee) | malathion | 1B | 19713-217 | 2.0 pts | 12 hr | 1 d | 6 pts (3.75 lb) | E | 5 d | Good |
| Malathion 5EC (2ee) | malathion | 1B | 66330-220 | 2.0 pts | 12 hr | 1 d | 6 pts (3.75 lb) | æ | 5 d | Good |
| Malathion 8 Aquamul (2ee) | malathion | 113 | 34704-474 | 1.875 pts | 12 hr | 1 d | 3.75 pts (3.75 lb) | 1 | 5 d | Good |
| Malathion 57 (2ee) | malathion | 113 | 67760-40- 53883 | 2.0 pts | 12 hr | 1 d | 6 pts (3.75 lb) | 3 | 5 d | Good |
| Assail 30SG | acetamiprid | 4A | 8033-36- 70506 | 4.5-5.3 oz | 12 hr | p [| 26.7 oz (0.5 lb) | 5 | PL | Good# |
| ^Pyganic EC 1.4 | pyrethrin | 3A | 1021-1771 | 1 | 12 hr | p 0 | i | | t | Fair to Poor |
| Pyganic EC 5.0 | pyrethrin | 3A | 1021-1772 | 4.5 – 18 fl oz | 12 hr | p 0 | i | ı | ı | Fair to Poor |
| AzaSol | azadirachtin | N | 81899-4 | 6 oz in 50 gal | 4 hr | p 0 | Ľ | () | | Fair to Poor |

Refer to label for details and additional restrictions. ${}^{}Adding\ sugar\ (sucrose)\ at\ 2\ lb/100\ gal\ water\ as\ a\ feeding\ stimulant\ will\ increase\ efficacy.$

'Approved for organic use in NY.

[®]After two consecutive applications must rotate to different mode of action.

1 Active Ingredient.

² Mode of Action, based on IRAC group code.

3 Re-entry Interval.

4 Days to Harvest.

June 2016 - Labeled Insecticides for Control of Spotted Wing Drosophila in New York Berry Crops
Compiled by Greg Loeb, Cathy Heidenreich, Laura McDermott, Peter Jentsch, Debbie Breth, & Juliet Carroll, Cornell University, July 29, 2013. Updated regularly.

| | | | RASI | RASPBERRIES & BLACKBERRIES | ACKBER | RIES | | | | |
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| PRODUCT | AI | IRAC | EPA# | RATE/A | RE13 | DTH ⁴ | Max. | Total | Spray | Probable |
| | | group | | | | | Prod/A/yr (ai) | applic's | Interval | efficacy |
| *@Entrust | spinosad | 5 | 62719-282 | 1.25-2 oz | 4 hr | 1 d | Z0 6 | 3 per | p 9 | Good to |
| Naturalyte (2ee) | | | | | | | (0.45 lb) | crop | 4.5 | Excellent |
| ^@Entrust SC | spinosad | S | 62719-621 | 4-6 fl oz | 4 hr | 1 d | 29 fl oz | 3 per | p 9 | Good to |
| (2ec) | | | | | | | (0.45 lb) | crop | | Excellent* |
| | spinetoram | 5 | 62719-541 | 3-6 oz | 4 hr | 1 d | 19.5 oz | 9 | 4 d | Excellent* |
| (2ee) | | | | | | | (0.305 lb) | | | |
| *Brigade WSG | bifenthrin | 3A | 279-3108 | 8.0-16 oz | 12 hr | 3 d | 2 lb | 1 post | • | Excellent |
| (2ee) | | | | | | | (0.2 lb) | ploom | 55 | |
| *Brigade EC | bifenthrin | 3A | 279-3313 | 3.2-6.4 fl oz | 12 hr | p & | 12.8 fl oz | 1 post | 1 | Excellent |
| (367) | | | | | | | (0.2 Ib) | ploom | | |
| *Danitol 2.4EC | fenpropathrin | 3A | 59639-35 | 16 fl oz | 24 hr | 3 d | 32 fl oz (0.6 lb) | 2 | 1 | Excellent |
| *Mustang Maxx | zeta-cypermethrin | 3A | 279-3426 | 4 fl oz | 12 hr | 1 d | 24 fl oz | 9 | 7 d | Excellent |
| *Triple Crown | hifenthrin. | 3 A 4 A | 279-3440 | 64-103 floz | 12 hr | 3.4 | 10 3 fl oz | 1 post | 7.4 | Good to |
| | imidacloprid, zeta- | | | | ļ | 1 | (0.1811b) | ploom | į. | excellent |
| | cypermethrin | | | | | | | | | |
| Malathion 5EC (2ee) | malathion | IB | 19713-217 | 3.0 pts | 12 hr | p 1 | 9 pts (6.0 lb) | 3 | 7 d | Good |
| Malathion 5EC (2ee) | malathion | IB | 66330-220 | 3.0 pts | 12 hr | 1 d | 9 pts (6.0 lb) | ĸ | 7 d | Good |
| Malathion 8 | malathion | 1B | 34704-474 | 2.0 pts | 12 hr | 1 d | 6 pts | ю | 7 d | Good |
| Malathion 57 | malathion | 112 | 01/03/13 | 3.0 mtc | 12 hr | 7 | 0 nts (6.0 lb) | c | 7.4 | Cond |
| (2ee) | malaunon | 9 | 53883 | sid o.c | 1171 | 7 | (at 0.0) std 6 | ĵ. | 5 | 7000 |
| Assail 30SG | acetamiprid | 4A | 8033-36- 70506 | 4.5-5.3 oz | 12 hr | 1 d | 26.7 oz (0.5 lb) | 5 | 7 d | Good# |
| "Pyganic EC 1.4 | pyrethrin | 3A | 1021-1771 | 1 pt - 2 qts | 12 hr | p 0 | 1 | ī | | Fair to Poor |
| Pyganic EC 5.0 | pyrethrin | 3A | 1021-1772 | 4.5 – 18 fl oz | 12 hr | p 0 | - | í | | Fair to Poor |
| ^AzaSol | | NN | 81899-4 | 6 oz in 50 gal | 4 hr | p 0 | - | 1 | • | Fair to Poor |
| Molt-X | azadirachtin | NN | 68539-11 | 10 oz in 50 gal | 4 hr | p 0 | | ì | • | Fair to Poor |
| *Refer to label | *Refer to label for details and additional restrictions. | al restricti | ons. | ſi | 10 | 1 Active Ingredient. | gredient. | ii H | | |

² Mode of Action, based on IRAC group code. *Adding sugar (sucrose) at 2 lb/100 gal water as a feeding stimulant will increase efficacy.

^Approved for organic use in NY.

@After two consecutive applications must rotate to different mode of action.

3 Re-entry Interval.

4 Days to Harvest.

June 2016 - Labeled Insecticides for Control of Spotted Wing Drosophila in New York Berry Crops

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| PRODUCT | AI^1 | IRAC | EPA# | RATE/A | REI3 | DTH⁴ | Max. Prod/A/yr (ai) | Total applic's | Spray Interval | Probable efficacy |
| *Entrust Naturalyte (2ec) | spinosad | 5 | 62719-282 | 1.25-2 oz | 4 hr | 1 d | 9 oz (0.45 lb) | S | 5 d | Good to Excellent# |
| ^@Entrust SC (2ee) | spinosad | 5 | 62719-621 | 4-6 fl oz | 4 hr | 1 d | 29 fl oz (0.45 lb) | 5 | 5 d | Good to Excellent# |
| @Radiant (2ee) | spinetoram | S | 62719-545 | 6-10 fl oz | 4 hr | 1 d | 39 fl oz (0.305 lb) | S | 3 d | Excellent# |
| *Brigade WSG (2ee) | bifenthrin | 3A | 279-3108 | 8-16 oz | 12 hr | p 0 | 5 lb (0.5 lb) | 1 | 7 d | Excellent |
| *Danitol 2.4EC | fenpropathrin | 3A | 59639-35 | 16-21.3 fl oz | 24 hr | 2 d | 42.7 fl oz (0.8 lb) | 2 | 1 | Excellent |
| Malathion 5EC (2ee) | malathion | IB | 19713-217 | 3.2 pts | 12 hr | 3 d | 12.8 pts (8.0 lb) | 4 | 7 d | Good |
| Malathion 5EC (2ee) | malathion | IB | 66330-220 | 3.2 pts | 12 hr | 3 d | 12.8 pts (8.0 lb) | 4 | 7 d | Good |
| Malathion 8 Aquamul (2ee) | malathion | IB | 34704-474 | 2.0 pts | 12 hr | 3 d | 8 pts (8.0 lb) | 4 | 7 d | Good |
| Malathion 57 (2ee) | malathion | IB | 67760-40- 53883 | 3.2 pts | 12 hr | 3 d | 12.8 pts (8.0 lb) | 4 | 7 d | Good |
| Assail 30SG | acetamiprid | 4A | 8033-36- 70506 | 4.5-5.3 oz | 12 hr | 1 d | 13.8 oz (0.26 lb) | 2 | 7 d | Good# |
| 'Pyganic EC 1.4 | pyrethrin | 3A | 1021-1771 | 1 pt - 2 qts | 12 hr | p 0 | - | | | Fair to Poor |
| 'Pyganic EC 5.0 | pyrethrin | 3A | 1021-1772 | 4.5 - 18 fl oz | 12 hr | p 0 | • | ı | | Fair to Poor |
| ^AzaSol | azadirachtin | N | 81899-4 | 6 oz in 50 gal | 4 hr | p 0 | 1 | 1 | 1 | Fair to Poor |

^{*}Refer to label for details and additional restrictions.
*Adding sugar (sucrose) at 2 lb/100 gal water as a feeding stimulant will increase efficacy.
'Approved for organic use in NY.

®After two consecutive applications must rotate to different mode of action.

 $^{^{\}rm 1}$ Active Ingredient. $^{\rm 2}$ Mode of Action, based on IRAC group code.

³ Re-entry Interval.

⁴ Days to Harvest.

Current Average Farmers Market Prices

| Product (NC = nonconventional) | Unit | Mid- Hudson | Capital | Saratoga - Lake George | Northern |
|--------------------------------|----------|----------------|---------|------------------------------|----------|
| Blueberries | pint | | \$4.44 | \$4.13 | \$3.00 |
| Blueberries NC | pint | \$5.00 | | \$4.00 | \$3.38 |
| Raspberries | 1/2 | 2 pint | \$6.50 | \$4.00 | \$4.00 |
| Raspberries NC | 1/2 pint | \$4.00 | \$3.00 | | |
| Strawberries | pint | | \$4.33 | \$5.00 | |
| Strawberries NC | pint | | | \$5.00 | |

For Your Information:

2016 Southeast Regional Caneberry Production Guide is now available in three formats:

In collaboration with David Lockwood at the University of Tennessee, Elena Garcia at the University of Arkansas and Gina Fernandez, NC State University/NC Cooperative Extension Service (NCCES), and the Southern Region Small Fruit Consortium, we are pleased to announce that the

1. An online version that includes links to videos http://content.ces.ncsu.edu/southeast-regional-caneberry-production-guide. This is the first NCCES numbered publication to include videos!

There is also a PDF version in 2 formats. Both are 44 pages long and includes all the text, color images and figures that the online version has but no videos.

- 2. The PDF version that is a smaller file size (3.2 MB) is available at the end of the link listed above. (lower quality but really not bad).
- 3. A high quality PDF version (12 MB) is available on request.

upcoming Events

July 20 – Cornell Fruit Field Day, see details at http://events.cornell.edu/event/cornell_fruit_field_day

August 13-17 – International Strawberry Symposium Quebec, Canada.

http://www.iss2016-quebec.org/ This meeting is research oriented, but it might be a once in a lifetime kind of event. Follow it up with a much more farmer appropriate educational event below.

August 17-18 – North American Strawberry Growers Summer Tour Quebec, Canada.

Several years ago Laura attended this event in the greater Montreal area. It was a FANTASTIC opportunity! Bring a spouse or partner and have some fun! http://www.nasga.org/

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