

Berry "To Do" List

All Crops

2nd generation of Brown Marmorated Stink Bugs in Hudson

Valley: For all Hudson Valley Growers, please read Peter Jentsch's posts re: BMSB. We haven't found this insect in traps north of Albany (at least in numbers that indicate breeding population that could be damaging to crops) BUT we have homeowner intrusion reports in almost every county in our region. For more



BMSB Eggs and newly hatched nymphs on pear leaf. Photo: P. Jentsch, Cornell

information on this pest, visit Peter's blog.

Spotted Wing Drosophila counts begin to climb. SWD is here and although the extremely high daytime temperatures may have been holding the population explosion back slightly, I anticipate that numbers will reach tipping point within the next week. Recent information suggests that we can do a better job with waiting for our first pesticide application monitoring. Come to the workshop this Wednesday in Salem, NY at Gardenworks farm and learn more about ongoing SWD research — register here for this workshop. Visit http://blogs.cornell.edu/swd1/ for postings of first detections throughout the state and information on control.

Time is running out to gather leaf samples for Foliar Nutrient Samples (tissue testing). Nutrient levels will be shifting very soon so send samples in within the next few days. All the protocols are listed on the <u>Agro-One Plant Tissue Testing web page</u>.

Blueberries

Blueberries winding down, but U-Pick has been tough! My perception is that the blueberry crop was mostly good but the heat and incessant showers were hard on pickers and fruit alike. Some late varieties will continue to be

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picked through August, but no appreciable harvest after Labor Day is expected. Some growers report small fruit size due to drought in early part of summer. This helps drive home the message that irrigation is VERY important especially in the early summer! Irrigation in late May and June helps shoot growth and fruit set.

SWD hasn't been a huge issue until now, but early spraying is taking a bite out of profitability. There is new information on monitoring and bio-control that is being revealed through research which may help us remove sprays and save a bit of money.

Elderberries

SWD loves elderberries. A number of the products labelled for other berries are also labelled for elderberries. The crop this summer looks good so protection and monitoring is really important. Check the Small Fruit Guidelines – there is an entire elderberry section! Another interesting article about excluding SWD is here: https://elderberryedge.com/elderberries/swd/.

Cane Berries

Bramble harvest continues. Fall raspberry harvest is underway. Raspberries are a preferred host for spotted wing Drosophila and the fruit always needs to be protected.

- Scout for **mites** especially in high tunnel plantings.
- Sap beetles abound! Use Assail or Brigade apply with lots of water (100-300 gallons) to insure good spray coverage. These insects have become a very

- big problem in many eastern NY fields.
- Selectively remove spent floricanes from summer raspberry planting. You can also thin the remaining new primocanes – remove shortest and weakest looking ones now. That will improve vigor and productivity when they become bearing floricanes next year. Check out article in this issue.

Strawberries

- June bearing strawberries are making good growth after renovation. Growers may need to irrigate in areas that aren't receiving adequate rainfall to maintain good soil moisture and good growth.
- As new leaves JB leaves emerge they should be protected from leaf diseases and potato leaf hopper which stunt plant growth.
- Scout for strawberry root and black vine weevil adults now. You will see notching on leaves from those insects - an easy diagnostic cue.
- Look for weed issues in the field. September is a good time to get rid of problem weeds like thistle.
- Continue managing Day neutral strawberries. Performance has been weak due to the high temperatures. Hopefully this will abate soon!! The need for runner removal is pretty much done at this point. Continue to fertilize at a rate of 5-7# actual N/ acre/week.
- Scout DN berries for mites and tarnished plant bugs.

Pruning Caneberries (Brambles) to Minimize SWD Habitat within the Planting Juliet Carroll, NYS IPM, Cornell

Examine your caneberry plantings for conditions that promote SWD infestation and take steps to eliminate them. Although we cannot change the weather, we can alter conditions in the planting to reduce the cool, dark, humid areas preferred by SWD. Pruning and training systems can help maintain an open canopy to increase sunlight and reduce humidity. This will make plantings less attractive to SWD, will reduce SWD activity, and will

improve spray penetration and coverage.

fruit yield and open the canopy. Knowing different pruning strategies will help you manage SWD. Added benefits include improved fruit color and flavor promoted by sunlight, easier picking by workers and customers, and easier weed management. Caneberries (brambles) grown in the Northeast include red and black raspberries and blackberries, all are susceptible to SWD infestation. However, fruiting season differs among cultivars, which

influences the risk of infestation.

Summer bearing varieties develop berries on floricanes that grow the prior year and overwinter.

Pruning tactics for caneberries (raspberries and blackberries) have been developed to achieve excellent BERRY NEWS

Fruit ripens and is harvested in early to mid-summer, prior to SWD population buildup, lowering the risk of infestation.

- Fall bearing varieties develop berries on primocanes that grow, flower, and fruit in the same year. Fruit ripens and is harvested in late summer and early fall when SWD populations are high and risk of infestation is extreme.
- Plants developing berries on floricanes and primocanes haven't had floricanes removed after fall fruiting. Fruit ripens and is harvested from early to mid -summer on the floricanes and from late summer to early fall on the primocanes. The risk of SWD infestation will be low early in the harvest season and will increase as the summer progresses and the SWD population builds up.

Pruning suggestions for summer bearing varieties

Summer raspberries – maintain 4-5 healthy floricanes per foot of row.

Blackberries – maintain 3-4 healthy floricanes per foot of row or hill.

Black raspberries – maintain 6-8 floricanes per hill.

Everbearing – maintain 4 primocanes and 4 floricanes per foot of row.

Floricanes should be held upright with a trellis to facilitate spray coverage and air circulation. Holding fruiting canes to the outside on a V-trellis will keep them to the outside of the growing primocanes and facilitate spray coverage and harvest. Prune out the smallest primocanes beginning when they are 12 to 18 inches high to select and keep the biggest and best canes. Keep a few more than the suggested cane density per foot of row or per hill. Begin removing spent floricanes in July along with any late emerging primocanes. In November, laterals on black raspberry and blackberry primocanes can be cut back to 3 or 4 buds.

<u>Pruning suggestions for fall bearing varieties</u>

Maintain 4-6 primocanes per plant on a trellis. Encourage early fruiting by placing row covers over the row after mowing in the spring. Remove the row covers when the primocanes are 18 inches tall. This will bring on flowering about two weeks early and help avoid or minimize SWD damage.

Source: Cornell University SWD Blog entry, June 27, 2017

Late Summer Weed Control Options for Berries

Laura McDermott, CCE ENYCHP

Organic Options: If you are an organic grower or trying to reduce your herbicide usage, late summer is a good time to consider going through the berry plantings with a crew to hand weed or use a flamethrower in plantings. Cultivation is an option for strawberries and materials like vinegar could also be very helpful for weed control. Cleaning up a patch, then applying mulch where it is appropriate will save time next season. Do not ignore late season weed control just because you don't use herbicides.

Strawberry Weed Control: Controlling fall germinating winter annuals such as chickweed and shepherds purse is critical at this time of year.

 Devrinol (napropamide) is a pre-emergent herbicide that can cause problems with rooting of daughter plants so this material should be used after early forming daughter plants have rooted. Because daughter plants that form after late August don't usually contribute as much to the yield, Devrinol can be applied without much effect at that time, but BEFORE winter annuals emerge. Devrinol must be

- moved into the soil by cultivation or water after application.
- Sinbar (terbacil) is a preemergent herbicide with some postemergence activity. Usually Sinbar is applied after renovation or after the berries have gone dormant in the fall. If leaves are present during application, immediately apply 0.5-1 inch of water to wash the chemical off the strawberry foliage. Otherwise severe injury many result. Do not use Sinbar on soils with less than 2% organic matter and do not use on Guardian, Darrow or Micmac, as these cultivars have shown extreme sensitivity while some growers report that Honeoye and less vigorous cultivars have an increase in root rot following Sinbar use. Sinbar is limited to 8 oz/A per growing season.
- Poast (sethoxydim) is a postemergent, grass herbicide. This material works well applied in late summer or early fall to actively growing grasses. Don't waste your time and the product on summer annual grasses like foxtails and crabgrass that will be killed by frost. Poast can be used in the fall to

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suppress perennial grasses such as quackgrass; control early emerging small grains, and kill winter annual grasses such as wild oats. Poast must be applied with crop oil.

 Stinger can be used if you have troublesome composite weeds like thistle. Follow label directions closely to reduce plant damage. If you see chlorosis or some stunting – don't panic. If you did follow label the off-target crop should be fine in a few weeks.

Highbush Blueberry Weed Control: August is the time to focus on problem weeds, especially woody perennial plants. As perennial weeds begin to move carbon stores to their roots, they will efficiently move systemic herbicide to the root zone. But, so will blueberry plants! Be very careful with your application. A shielded sprayer is a must, better yet would be a wick applicator.

• A 2% Round-Up solution (41% a.i./gallon) will kill most of your problem herbaceous weeds, but if you have large woody material, you might want to use a higher solution. The Round-Up Pro label gives mixing instructions for many concentrations up to a 50% solution. The cut-stem application method is also listed for problem woody plants. Using a 50-100% solution of Round-Up, apply the material directly to the woody stem using a wick applicator immediately after cutting. Many growers use a roller/wiper

application to the edges of their mulched row to keep grass from encroaching. Be sure that your mulch is nice and thick and that no blueberry roots are obvious. For pre-emergent control of fall annuals there are several choices.

- **Sinbar** can be used after harvest in all but 1 -year old plantings.
- **Devrinol** should be cultivated or watered in within 24 hours of application.
- **Solicam** is also a good choice at this time of year, IF you did not apply this material in the spring.

Bramble Weed Control: Late summer and fall is an excellent time to control troublesome perennial weeds like thistle, dock, smartweed, and morning glory by spot spraying with **Round-Up**, but take EXTREME caution to avoid getting herbicide on bramble canes.

For grass control, now is the time to apply the second **Poast** application. This should be done while grasses are actively growing. The further you get in August, the poorer the control.

To suppress winter annual germination, both **Sinbar** and **Devrinol** can be used. **Solicam**, if not applied in spring, is a good choice unless you have a new planting or light soils.

Make sure that you read the label as herbicides have caveats re: soil organic matter content and rates.

—For Your Information—

- Growers are Beaming over the Success of Lasers to
 Stave off Thieving Birds Listen to this piece from
 NPR on laser "scarecrows" in the Pacific Northwest.
 We are trialing something very similar in eastern NY
 with positive results so far. You'll see more about this
 at the winter meeting and in future newsletters.
- SWD Research and Management resources are evolving. Join us at the August 22nd workshop (registration link Calendar of Events) for information or take a look at some of the resources below:
 - Great video showing how to check fruit for SWD infestation – a <u>MUST</u> watch! Click HERE: https://www.youtube.com/watch? v=TXij-udedql
 - o SWD Management recorded webinar: <u>Video</u> recording of How to Use Biological Controls when Managing SWD

 Could Repellents Be Useful in Protecting Crops From Spotted-Wing Drosophila?
 Check out <u>this article</u> in Entomology Today reviewing work done at Cornell in the area of repellants.



<u>Using Drones as</u>
<u>Sprayers</u>: Interesting article on a new "drone" from Yamaha that is doing spraying out west. As tech improves in

information gathering, new uses for the same tools are being found.

<u>Goji Berry Information</u> – Penn State University has a nice

resource on Goji berry culture. This berry isn't an easy fit for our climate, but I've had several inquiries recently and the Penn State article



Calendar of Events

August 22, 2018, 5-7pm – Berry Field Meeting – Hummingbirds as SWD control and Update on New SWD Monitoring information, Gardenworks, Salem, NY. Blueberries and Brambles, plus a wonderful value added farm store. *1.5 DEC Credits available in categories 1a, 10, 22



August 31, 4-6 pm. Cover Cropping Workshop.

Join UVM Extension's Becky Maden, Jenn Colby

and Abha Gupta for a tour hosted by Pooh Sprague at Edgewater Farm in Plainfield NH. Pooh has many years of experience with cover crops and the farm's innovative practices include inter-seeded plastic mulch beds, late summer sowings of tillage radish, and a trial no-till seeding of sweet corn into roller-crimped winter rye.

September 11-October 23: Register NOW for "Climate Change Science, Communication, and Action" course!

Registration: \$50

Interested in working toward climate solutions? Want to learn more about how to talk to people about climate change? This course covers the basics of climate change, from science to action, and will assist you in developing a climate change action plan.

Course Highlights:

- Pre-recorded video lectures and weekly webinars with Extension associates and partners
- Join an international community dedicated to climate change action and education!

November 6-9, 2018 - NASGA European Tour Amsterdam, Netherlands www.nasga.org

December 4-6, 2018 - Great Lakes Expo, Grand Rapids, MI

January 9-11, 2019 - NARBA Annual Conference, Savannah, GA

January 28-31, 2019 - Mid Atlantic Fruit and Vegetable Convention: (Berry Tunnel workshop Jan. 28th)



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