

# Vermont Vegetable and Berry News – August 23, 2016 compiled by Vern Grubinger, University of Vermont Extension (802) 257-7967 ext. 303, vernon.grubinger@uvm.edu www.uvm.edu/vtvegandberry

### REPORTS FROM THE FIELD

(East Dorset) We ended the U-Pick blueberry season on Aug. 18th. A great crop and lots of pickers over the 42-day season. The 2016 season was the same length as 2015, to the day. The crop was much better than 2015. This is only our fifth summer on this farm and we don't have records from the prior owners but many long time pickers tell us they thought this was the best crop they have seen. Obviously Mother Nature smiled on us.

(Craftsbury) Strong blueberry season despite late (July 24) start to picking. Crop has held up well due to timely bursts of soft rain and sunny days. Also experienced strong customer activity despite appearance of other U-Picks in area and region. Fruit and bushes very healthy, no signs of SWD to date. Deployed Japanese Beetle traps for first time. We placed them along the south west (windward) side of hillside. We were shocked by initial yields and pleased by longevity of attractant. We note appreciable decline in frequency of beetles in berries at weigh out. We are lining up local schools and organizations to provide gleaning and capture last berries of the year.

(Marlboro) SWD finally reared its ugly head on the 14th following a good soaking rain. I think the dry weather may have suppressed it for a while. Luckily most of the summer crop of berries is about done except for the blackberries. We are managing to keep on top of it with one spray of Entrust, regular picking and two more weeks of dry weather. Despite the drought most crops seemed to leave done fine. Harvesting Patterson onions, pumpkins have colored up early, beautiful leeks, kale and other greens. High tunnel tomatoes are cranking and field tomatoes are starting to ripen. Cooler weather is much appreciated and nice to start thinking about things other than vegetables - firewood for instance!

(Charlotte) We had a great but short blueberry season due to the lack of rain. Our blackberries are growing nicely. We haven't seen as many bad bugs as we have in the past probably due to the lack of rain, so our need to spray has been a lot less.

(Rochester) It has been a great blueberry crop this year and it is still ongoing. We escaped most of the challenges we have recently faced: winter kill was minimal; spring frost was dodged; pollination weather was perfect and wild pollinators were plentiful; scarab beetle numbers have been light; and, with our drip irrigation going almost around the clock, we were not hurt too badly by the dry conditions. SWD appeared ahead of schedule but their numbers have not built up as rapidly as we expected in part, it seems, due to hot, dry weather and also because our spray opportunities have not been interfered with by rain days. We have been using Trécé pheromone lures in our traps this year and they have made the trap preparation infinitely simpler. They also seem to be far more powerful than the yeast and flour concoctions we were brewing up last year. The fall raspberry fruit set is excellent so our attention now goes to keeping it. We have hired a worker whose mission in life for the next month or more is to not let a single raspberry over-ripen.

(Benson) The late summer switch to long, moist nights comes every year but it still surprises me. Cukes went from beautiful to almost non-existent in a few days. The older summer squash plantings finished up quickly but the newer one is ok. Fall roots look very good and I spent some time yesterday reviewing the fall and winter greens seeding and planting target dates. It's time now to kill some more weeds and get some of this bare ground covered.

(Westminster West) Rain! Just in time as our wells were sucking air and no matter how much I irrigate, real rain makes veggies really grow! Half way thru onion harvest and amazing how fast they bulbed out once we received adequate rain. Cabernet is a great red onion, red wings are still filling out, Expressions are huge and solid. Pattersons are mostly down now and just waiting for Red Wings to finish up. Garlic getting cut and graded. Winter squash ready about two weeks earlier than last year. A little powdery mildew showing up but have sudden wilt disease on some of the crop and hoping squash ripens up anyway. Raspberry tunnels at full production and fruit looks very nice with a very small amount of SWD seen as of yet. Sales seem fairly strong for all crops now and im hoping things stay strong thru the fall

(Newbury) Romanesco broccoli heads are developing nicely. Brussels sprouts are fantastic and field grown tomatoes, peppers and eggplants are the best ever. A Goldie weighed just over a kilo.

(Holland) The nights have been cold, we got enough rain last week to keep the plants hydrated for a month (we have lots of clay.) Wind is more of an issue; the violent winds have snapped a handful of the big plants right in two.

(Burlington) Reporting from Starr Farm Community gardens in the New North End. This season has been DRY. Working in sand, with such little accumulative rainfall has put an extreme stress on my production. It has brought to my attention, the absolute necessity of drip irrigation. But without the proper infrastructure I was unable to setup lines and am greatly paying the price. It has also been a splendid year for the Mexican Bean Beetle. I did not see it right away and the population got ahead of me before I could order in the parasitic wasp/biological control to keep the population down. My bean leaves look like lacework. :(

(Plainfield) Growing season rolls on. Very grateful for regular rains here. Greenhouse cherry tomatoes yielding ok, but the plants look spindly in spite of a lot of fish emulsion. Might try putting them on Maxifort next year. Pozzano, a Roma type, looks terrific on Maxifort. Greenhouse eggplant and cucumbers flourishing. Field peppers seem late to load up with fruit, coming along now. Crabgrass got into the winter squash after the last cultivation, but yield looks good anyway. Lots of rust fly and Alternaria in the early carrots. Second planting of kale and collards doing well. Solubor and kelp in the spray tank helps. Ready for that surge in orders that comes with the beginning of the school year.

(Charlotte) Most of our crops weathered the heat and dry weather well enough. We've been very happy with our onion yield, and still have quite a few to bring in. Didn't notice a second round of leek moth like we did last year. Hoop house tomato harvest is almost half of what it was this time last year. Watering habits are the same, so I'm not sure if it's a nutrition thing or maybe too much heat? Markets are going well and we were pleasantly surprised how many people were out on that rainy Saturday a couple weeks ago.

(E. Montpelier) We have just shy of a half-acre of potatoes. Despite dry conditions in June and July the plants developed early signs of early blight and septoria; much earlier than expected. Perhaps due to drought stress? Trying hard to keep the plants alive to bulk up tubers but they are getting crispy fast. I'm putting on another copper application to keep them going. German Butterball was the worst hit with disease. Either it came in with the seed or this variety is more susceptible compared to Russet, Fingerling and Green Mountain. Russet yield was twice the yield on a "Sangre" red skin variety at 70 days post planting and at least a month more to mature.

(Stanfordville NY) Willow Vale Farm. Finally have time to write a report! I feel the end of the season coming; a low of 49 degrees predicted for tonight. So far, what's worked: silver metallic mulch for onions, scallions and leeks, no noticeable thrips or leek moth damage. Cabernet and Candy onions were very strong producers. Honey Drop, an OP cherry tomato, seems to be a

good candidate for replacing Sungold; very little cracking during the August storms, delicious low-acid and sweet taste. The color is not quite consistent and also not as deep orange. A few individual plants of basil (Italian Large Leaf, I think?) seem to be resistant to downy mildew, so I might try to save seed. So far what hasn't worked: I've also had germination issues with pelleted Bolero seed, both last year's and this year's seed. Strangely enough, Nelson pelleted was great, but I only use it for early/mid carrots, when germ conditions are ideal. Ground hogs and voles have wreaked havoc, biggest damage in broccoli and beets. I noticed the groundhogs were bolder when I had the broccoli covered, so I have actually uncovered them and kept up with mowing around the field. That seemed to reduce the damage. I opted for no-copper tomatoes and I am paying the price, a few varieties (including Charger, Nyagous, Indigo Rose, Large Barred Boar, Cherokee Purple and lately German Johnson) have bit the dust from early blight, but Juliet, Estiva, Honey Drop, Sungold, New Girl, Valencia and Black Cherry are as strong as ever. No sign of late blight in any plants yet. I'm growing on biodegradable black mulch with cultivated paths. About to get a greenhouse set up for winter growing, would love any tips about using a propane heater to manage humidity over the winter. Good luck for the rest of the season, everyone!

# UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC - Ann Hazelrigg

Still no late blight of tomatoes and potatoes reported in Vermont or neighboring states. Check https://usablight.org/map to see where it has been reported. Lots of potato leafhopper damage on potatoes causing leaf edge dieback. Also early blight (target or bulls-eye leaf spot) prevalent on lower/older leaves of potato and tomato. Fair amount of tomato hornworm being reported. Blossom end rot usually seen on first and second hands, but this year it is being seen on 3rd and 4th hands due to drought and uneven watering.

Pepper maggot and European corn borer damage seen in pepper. ECB causes larger holes in the sides of peppers and it is the 2nd generation of the pest which can cause damage to peppers (and beans?!) http://ento.psu.edu/extension/factsheets/european-corn-borer-on-peppers https://pubs.ext.vt.edu/444/444-006/444-006\_pdf.pdf

The pepper maggot fly stings the pepper fruit so you don't see much damage on the outside but you find the larvae on the inside feeding followed by fruit rot from the inside out. This pest can also sting eggplants.

http://ipm.uconn.edu/documents/raw2/Pepper%20Maggot/Pepper%20Maggot.php?aid=57 Lots of sunscald noticed on upper sides of pepper fruit, followed by Alternaria (black fungus). Two spotted spider mite a common occurrence on beans and high tunnel tomatoes. Check leaf undersides!

Cucurbit downy mildew found in Chittenden County on cucumbers. Looks for pale/yellow angular leaf spots delineated by the veins on the upper leaf surface. Check lower leaf surface for dirty spores. http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Cuc\_Downy.htm

Downy mildew can also look water-soaked on the lower leaf surface on melons. Most cukes have resistance but it depends on the race of the fungus that blows in from the south. Once it is in your fields, it is too late. You have to protect with a fungicide BEFORE the pathogen appears. For fungicides go to https://nevegetable.org/crops/disease-control-7 Also seeing gummy stem blight on water melon https://www.extension.purdue.edu/extmedia/bp/bp-142-w.pdf. There is a stage on the foliage (leafspot), stems (gummy exudate/droplets on stems) and fruit (black rot). Also seeing some plectosporium on summer squash. Look for raised triangular lesions on stems which can also look a bit like cuke beetle feeding damage. https://ag.umass.edu/fact-sheets/cucurbits-plectosporium.

Most people are seeing downy mildew in their basil now. Yellow lesions on upper leaf surface, dirty spores on lower leaf surface. Comprehensive article on the disease is at: http://vegetablemdonline.ppath.cornell.edu/NewsArticles/BasilDowny.html

Saw some suspected slippery skin in onion causing internal rot. MA received a sample of an onion with a brown internal scale that the clinic is suspecting is the result of drought. Cabbage aphids reported in NH and MA. Treat if >10% of the plants are infested with aphids, especially after heads or sprouts begin to form. If you have high populations of beneficials you would like to protect, consider using the following active ingredients first: azadirachtin, Beauvaria bassiana, insecticidal soap, or petroleum oil. Black rot damage seen in broccoli. Look for v shaped yellow lesions on leaves and browning in vascular system. Hot water treat your seeds.

Seeing some curling and twisting of celery foliage with stem lesions and will test for celery anthracnose. Please let us know if you see this in your celery. It is a new fungal disease that has been destructive in other states.

http://www.omafra.gov.on.ca/english/crops/hort/news/hortmatt/2013/09hrt13a3.htm

As always, if you have a question about a sick plant or insect, send a picture or sample to the Clinic: ann.hazelrigg@uvm.edu, 802-656-0493, Plant Diagnostic Clinic, Jeffords Hall, 63 Carrigan Drive, UVM, Burlington, VT 05405.

# SMALL FRUIT MANAGEMENT UPDATES – Mary Conklin, UConn Extension

Blueberries: Phomopsis twig blight, caused by the fungus Phomopsis vaccinii, is alive and well throughout blueberry plantings in CT. Infections take place in the spring, particularly when plants have been under stress or suffer from cold injury (think Valentines's Day weekend and the cold April) with canes and twigs dying soon after. Symptoms will also appear well into the summer as leaves die and the canes go too. The fungus overwinters on the plant so an application of lime sulfur at 5 gal/acre in the fall after 2/3 of the leaves have dropped, or in the spring before bud break, will help to reduce the overwintering population. Be sure to follow this up next spring with fungicides at bud break, followed by another application 10 days later. Left unchecked, this disease can cause extensive damage to your plantings in subsequent years.

Strawberries should receive an application of nitrogen anytime from now through mid-September to give the plants the boost they need to get through the winter and the spring growing season. Nitrogen applied now will not push the plants to grow too late into the fall like it does with some fruit. Apply at the rate of 20-30 lbs N per acre. It is better to apply it when rain is forecast or if you have irrigation to water it in. Continued drought conditions are not conducive for moving the nitrogen down to the root system. If your foliar analysis and soil test indicate deficiencies of other nutrients, fall is a very good time to apply them so they have time to be taken up by the plants. Applications in the spring are good but the benefit is not going to be as apparent in the June crop as it will be with a fall application. Nitrogen is not recommended in the spring because of the potential for soft fruit.

Brambles: With harvest over on summer bearing varieties, now is a good time to remove canes that had fruit. The 'old school' thinking was to keep the spent canes into the fall for additional photosynthesis and food production which would make the plants stronger. The newer school thinking is to remove the spent canes once harvest is completed which will open up the planting to additional sunlight penetration and air circulation which will reduce disease problems and increased bud development. The canes tend to go downhill and even die off immediately after harvest so the benefit of keeping them into the fall is slim,

### **UMASS VEGETABLE NOTES**

If you haven't seen it this is a great newsletter for growers. The most recent edition includes detailed explanations of Fruit Rots of Pumpkin and Winter Squash; Harvesting and Curing Potatoes, and A Quick Guide to Standard Operating Procedures. All issues are archived at: https://ag.umass.edu/vegetable/newsletters

# PREPARING AND USING BOKASHI, August 25, 3-5 pm

This field workshop will take place at the UVM Horticulture Research and Education Center, 65 Green Mountain Drive, S.Burlington, Vermont. Cost: Free! Learn how to make and use bokashi, a type of fermented compost with Japanese origins. Topics include: differences between bokashi and compost, how to prepare bokashi bran with a microbial inoculant to make bokashi, and how to use the resulting product in a garden or on a farm. We will also share results from a graduate student SARE project which compared the use of bokashi alongside compost and vermicompost and its effects on soil quality and crop growth. Snacks and information handouts will be provided. Contact Dana Christel at 920-323-7212 or dchrist2@uvm.edu with any questions. Please RSVP ASAP if you will attend.