

# Vermont Vegetable and Berry News –July 15, 2019 compiled by Vern Grubinger, University of Vermont Extension (802) 257-7967 ext. 303, <a href="mailto:vernon.grubinger@uvm.edu">vernon.grubinger@uvm.edu</a> www.uvm.edu/vtvegandberry

#### REPORTS FROM THE FIELD

(S. Royalton) Things are finally blasting off. Melons are undersized and have smaller leaves then normal. They are setting lots of fruit that look to be very small, but on time for the end of the month if not before. Corn finally stretching out, pockets of N deficiency in numerous places. Chilean should bring them around. Sweet spuds under covers look good, the ones not under are very small for this time of year. Markets have been strong last 5 weeks.

(E. Middlebury) Bumper year for overwintered onions (Bridger and Electric red). Guess they like a cold wet spring. Still question their value as we have been maintaining them since we seeded them third week of July 2018. Some growers had asked if that was too early and if that timing would lead to excessive bolting, but it was not an issue for us. Less bolting than previous years. We choose that seeding date because we had the time. Customers are buying them up because no one else has local onions, but they are not overly appreciative like they would be for an early tomato or cucumber.

(Rochester) (Rochester) Prelude raspberries ripened up this week and it's always nice to open up the farm for the season. Our Green Laser and Bird Gard distress callers are in place and seem to be keeping the bird losses down although nothing discourages cedar wax wings entirely. The blueberry crop looks good but seems to be sizing up a little late. Mummy berry is more widespread than usual, no doubt encouraged by the wet conditions. We have done a fairly thorough job of collecting the mummified berries in an effort to help break the cycle for next year and intend to mulch all the affected areas late this fall to cover the mummies we miss.

(Craftsbury) Blueberry ripening has been slower this summer. We historically open our U-Pick around July 20 but will likely miss that date this year. Berries are plentiful and healthy but slow to color. We are fortunate to not have experienced mummy berry. Our apple trees, too, are well fruited but very late. One concern is that will give insects more time to move in. We have used Japanese beetle traps with great success for the past few years and will continue to this season. We are hoping that the wet and warm weather will do the trick. We have had many inquiries regarding opening and look forward to a busy year. Good luck to our grower friends.

(Elmore) I have not seen it so dry in a long time, trees wilting and seeds not sprouting, but when it rains, big washouts! What happened to those summer sunny days with soft gentle rains at night? Heavy crops of cherries, plums and pears. Wildflowers in the field like I have never seen before, with yellows, blues and reds in every glance. A lot of ants this year. little black ones, large black ones, medium black ones and some red ones. They fluff up the earth and make more of themselves proficiently. A few monarchs and more swallowtails here. We are leaving a lot of milkweed areas for them.

(Plainfield NH) Wrapping up a rather tepid strawberry season here. This year's weather coupled with labor difficulties have made for some heavy risk-taking. Some gambles did not work out so well. One that worked was a lot of spring applied nutrients to our strawberry crop, which came out of the winter mulch late in the season (May 1) and was pretty beat up. We applied over 40 lbs. of N plus additional foliar feeding under the theory that the plants were not going to support the fruit load and needed help, even though we were putting ourselves at risk for Botrytis.

The weather cooperated for the most part and the later fruit had decent size, even though it was noticeably softer. PYO was off, but we were able to service our accounts adequately. About ready to start renovating, maybe this week.

Black raspberries are heavy and into harvest now. Never got last year's Niwots (primocane bearing) canes pruned off and now they are loaded up with fruit. Last fall we fruited them and it was a significant crop, but the flavor lacked. Turns out what they lacked was summer heat, as they are tasty this summer. Lots of winter injury in the reds, and the planting is pretty old and has viruses as well. Replanted some this past spring.

Netting blueberries, and will likely start harvesting this week as well. Elsewhere, crops are fair, responding to heat. Very good sales thus far. So far low hopper pressure, nuisance level of Asiatic garden beetle so far, and a little bit of early blight in tomatoes and potatoes.

(Little Compton RI) In my advancing years of farming, the conundrum of how to incorporate massive amounts of fresh organic matter is still an unsolved mystery. In 2018 we had a winter rye cover we rolled and crimped with perfect timing and thought we were all set for our first notill cabbage when, within a week, a massive explosion of red clover came up and so we decided just to let it go. This spring we had a no-till grain drill put in oats and peas into the clover. By June 21st we had five-foot tall peas, which dwarfed the oats. We flail mowed it twice and chisel plowed as best we could, but now have a clumpy mess that is there for the rest of the season.

I have tried to get rid of our plows but with scenarios like this, we have to come up with something else. Rock burying rototiller, big spader? We rented a small rock-burying rototiller and it was a joke. The big ones look good on video but start at \$12-15K and need at least 110 HP. If someone has a YouTube solution, please send out to all of us.

An equipment lesson for folks with 100+ hp tractors: if you have a rear flat make sure you don't use "tire grease" to put the tire back on! The torque ratio on big tires will cause the tire to spin on the rim and tear off the tube stem! Happened to us three times before figured this out. Solution is to use dish soap or Murphy's soap is available in semisoft version in a can. You need a lubricant that dries up and grips the tire later so "tire grease" is not the answer. This principle is demonstrated in big tractor-pull competitions: they rivet their tires to their rims, so they can't spin independently.

(Ange-Gardien, Quebec) Lots of sun, lots of heat and good 31mm of rain last Thursday, nature has been generous. Preparing for garlic harvest. field crop look good, try to take care around the fields. Cucumber beetle not that present. Aphid under control in greenhouse. New concrete slab in our main building, brushwasher came in. Now concentrating on building new greenhouse.

(Hyde Park) After 18 months developing raw land into a farm, we are learning about limitations, efficiency (or lack thereof) and how to manage weather swings on top of everything else. Knowing we need irrigation is one thing but waiting for the new pond to fill up as the mercury approaches 90 degrees is another.

Fighting against inefficient systems in addition to all the normal farming stuff has been bad for morale and exhausting. We are struggling against quack grass and other perennial weeds. Our new (old) cultivating tractor still at the shop. We made our first foray into hiring part time employees but the time it takes to train a young, new employee is almost equal to simply not having one. A teacher friend with summers off has been helpful but she will be gone by the end of August.

Roots are challenging due to serious weed pressure. Spring Brassicas growing well though slow to start. First round of cabbage is sizing up nicely and earlier than expected. Tunnel tomatoes look healthy if a little behind due to cool, dark spring. The hybrids are more robust than the heirlooms, that's not a surprise.

Cucumber beetles love it here. Waiting for back-ordered Proteknet to prevent damage. Surround seemed to work well, probably due to the lack of rain around planting. I hoped regular row cover would work but a few sunny days cook the plants. Proteknet seems to be a better option despite high cost. Next year I will invest more in that as well as a proper black mulch layer.

Potatoes look healthy in a new field and dare I say there is little CPB yet. Probably will be tomorrow. Field peppers are behind and after a great start and looking sad. We have fertility issues in a new field we turned this spring that was in pasture for 100 years. Had some leaf miner issues in chard early in May but I haven't seen any damage since.

Baby greens have been hell this year between the early wetness and now heat. Weeds in new fields are challenging to stay ahead of. I am concerned about extra labor going into harvest/wash/pack, reduced quality of product, and issues with a new Jang seeder. It's more efficient but still learning to use it, over seeding has been an issue.

In our flowers, heat and humidity encouraged powdery mildew on early, tunnel-planted Ranunculus. Sprayed to control it and will remove the corms to prevent spread. Will let this area rest before planting anything new. In the same bed poppies, sweet peas, and edible blooms are healthy and productive.

Got a late planting of greenhouse-started dahlias in the ground first week of July, and healthy new growth indicates we will get nice production! In the other bed are bare-root dahlias, many with gangly growth from growing inside the winter storage box. I hope for root stock for next season, if not many blooms.

Six months of deep snow protected many perennials making for earlier than expected harvests. Annual flowers are looking great, but due to other projects got planted late, pushing harvests out further than planned. Time crunches also delayed timely staking, which led to crop loss during several heavy rainfalls.

There are still so many infrastructure projects to complete. In process currently, we have a wash pack house with a new radiant slab, but no walls, hardwired electric, and plumbing. A walk-in cooler has yet to be constructed and we're planning more high tunnels. We look forward to the time in our lives when we look back and laugh at these first years getting set up on the land.

(Argyle NY) We are hot and dry after several months of cold and wet! Having all the systems in place has helped us float through it. Crops are doing average or above average. Tomatoes in our high tunnel just starting, cucurbits abundant. Over-wintered onions are exceptionally large with NO bolting at all (first time). We lost 50% of them in the outside beds for unknown reasons (as did others in our area) but survival in the low tunnel was nearly100%. Walla-Wallas did great and the yellows (Keepsake, Forum) and red (Electric, not available any more) all selling well, mostly at \$2 each. So the 14x100 tunnel with about 3500 onions grosses about \$6000, which extrapolates to over \$185,000 per acre! It's a system worth perfecting!

Irrigation is going full tilt, insect pressure is minimal except for leaf hoppers and flea beetles. We are spraying Pyganic and Surround on the potatoes and the crop looks good. We use close spacing of 4-6 inches in rows 3 feet apart, except Russet and Fingerlings spaced at 8 inches. We have been working with Cornell on research to manage wireworm with beneficial nematodes, used them on 4 acres after good success last year.

Pollination of the squash was a challenge, despite neighbors having hives. Wondering why? Markets have been busy for a month, with strawberries a huge draw. Annual bed Chandlers) performed great as usual except we had some gray mold in the middle of harvest, but it went away and we finished strong. Unfortunately, peas and strawberries came in at the same time, since the berries were very late! Our 6 varieties of beans are yielding well.

Securing straw this year has been a challenge as it was all harvested late and has seed.

Final seedings of fall storage crops are going in, with row-covers on all direct seeded crops to aid germination by holding in moisture during hot, sunny days. Flaming will be critical on the carrots, and tarping has had its pros and cons this year as we work on that new system.

## UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg

Blueberry: Mummy berry fungus is obvious on unripe cut berries. Look for a white star-shaped pattern on inside of fruit. Best to harvest and destroy infected fruit. Drops can produce fruiting bodies for up to 2 years. Exobasidium leaf and fruit spot diagnosed on two different blueberry samples. This fungus disease can also infect azalea and rhododendrons.

In blueberry the pathogen causes light green leaf spots that can be thickened and reddish. Circular spots (1/4 inch) may be sunken and red-tinged on fruit and become apparent when fruit starts to ripen. The spots on berries can occasionally show sparse white fungal growth. Infected berries are unmarketable. Increasing air flow through pruning and a single late-dormant application of lime sulfur provided some management in studies. https://blueberries.ces.ncsu.edu/2019/05/exobasidium-leaf-and-fruit-spot/

Strawberry: the powdery mildew that was identified on the sides of Cavendish fruit a couple of weeks ago disappeared or did not cause any further issue at harvest according to the grower.

Brassicas: Clubroot identified in field in VT. Symptoms include wilt, poor vigor, etc. After digging plants, roots are knobby and galled. The disease is more severe on cold, wet, acidic soils (lower than pH of 7.0) and is spread by drainage water, infested soil on equipment, tools, or shoes, and infected transplants. Resting spores remain viable in the soil for up to eighteen years. <a href="https://ag.umass.edu/vegetable/fact-sheets/brassicas-club-root">https://ag.umass.edu/vegetable/fact-sheets/brassicas-club-root</a>

Onions: watch for thrips damage especially after hot dry weather. These tiny yellow insects feed safe within the leaf blades at the base of the plant. Feeding damage can appear as whitish lines/patches, tip dieback, curling and twisting of leaves, slowed growth, decreased bulb size and yields, or if severe enough can result in plant death. Treat if there are more than 1-3/leaf. Downy mildew identified in Massachusetts but should be slowed down due to hot sunny weather.

Tomato: Bull's-eye lesions of early blight/Alternaria seen in high tunnel tomatoes mainly on edge rows where rain can blow in. White circular rings, called ghost spot caused by botrytis, noted on green fruit in tunnel with high humidity. Bacterial canker can also cause white spots on fruit typically more raised. Watch for wilt in high tunnels due to not enough irrigation (plants wilting but recovering at night), Sclerotinia white mold (fluffy white rot at base of the plant) or bacterial canker. Cutting the stem lengthwise will show browning in vascular system common with bacterial canker. <a href="https://ag.umass.edu/vegetable/fact-sheets/solanaceous-bacterial-canker">https://ag.umass.edu/vegetable/fact-sheets/solanaceous-bacterial-canker</a>

Cucumber: Bacterial wilt diagnosed on high tunnel cucumbers.

Squash vine borer adult trap numbers have been high and damage should be apparent soon. <a href="https://ag.umass.edu/vegetable/fact-sheets/squash-vine-borer">https://ag.umass.edu/vegetable/fact-sheets/squash-vine-borer</a> Watch for wilt in the field, check for frass (insect droppings) at the base of the plant. One field of squash was showing foamy, slimy rot at plant bases possibly a secondary bacteria coming in after borer damage.

Potato leaf hopper causing damage in apples, beans, potatoes, among other crops. Look for chlorosis on leaf edges and nymphs running sideways on leaf undersides. https://ag.umass.edu/vegetable/fact-sheets/leafhopper-potato

Send pictures of problems to <u>ann.hazelrigg@uvm.edu</u> or send samples to PDC, 63 Carrigan Drive, Burlington, VT 05405, 656-0493.

### **ON-FARM COMPOST PROJECT**

The Farm to Plate Food Cycle Coalition is working to identify gaps in closing the food loop in Vermont and to identify opportunities and barriers for small farms that could manage community food scraps as a part of their on-farm fertility, and possibly develop a new farm enterprise. We are looking for farmers to interview by phone or in-person, about 15 -20 minutes. Please contact Cat Buxton at <a href="mailto:catduffybuxton@gmail.com">catduffybuxton@gmail.com</a> if you'd be willing to participate.

#### **UPCOMING WORKSHOPS & TRAININGS**

Details and links at: http://www.uvm.edu/vtvegandberry/?Page=meetlist.html

July 17, 4-7 pm. Diversified vegetables in field, caterpillars and high tunnels; tarping, soil health, and on-farm processing at Root5 Farm, Fairlee, VT. VVBGA members free, \$10 others.

August 1, 10am-1pm. Wash/Pack and Post-Harvest Workshop. Pleasant Valley Farm, Argyle, NY. \$10 for ENYCH farms, \$25 others. Registration link not available yet, contact <a href="mailto:chris.callahan@uvm.edu">chris.callahan@uvm.edu</a>

August 1, 4-7 pm. Laser system for bird control in sweet corn, greenhouse tomatoes, and more at Wood's Market Garden, Brandon VT. VVBGA members free, \$10 others.

August 6, 4-8 pm. 5th Annual Farmer Olympics, Intervale Community Farm, Burlington VT. Farmer participants: free; Spectators: \$10 suggested donation for pizza. <a href="https://nofavt.org/events/5th-annual-farmer-olympics">https://nofavt.org/events/5th-annual-farmer-olympics</a>

August 8, 4-7 pm. Organic blueberry and raspberry production, harvesting and marketing; laser for bird control and more, Sunshine Valley Berry Farm, Rochester VT. VVBGA members free, \$10 others.

August 20, 4-7 pm. Seed saving, small-scale no-till, and more at Heartland Farm, Hartland VT. VVBGA members free, \$10 others.

August 21, 3-6 pm. Postharvest Efficiency, Profitability and Food Safety, Footprint Farm, Starksboro VT. Cost: \$30 farmers, \$40 others

 $\underline{https://nofavt.org/events/preview-event-veggie-wash-pack-getting-you-down-dial-best-practices-improve-your-postharves\underline{t}}$ 

August 22, 1-4 pm. Human Urine as Fertilizer. Whetstone Valley Farm, Brattleboro. Rich Earth Institute has been testing urine to fertilize hay for several years, researching best methods to reduce ammonia loss during application, and interviewing farmers to assess the feasibility of urine fertilization. For more info: <a href="mailto:info@richearthinstitute.org">info@richearthinstitute.org</a> or Tatiana Schreiber (802) 387-2781.

August 29, 3:30-5:30 pm. Pest and Disease Walk for Commercial Growers with Ann Hazelrigg. Hurricane Flats Farm, S. Royalton VT. Cost: \$20 farmers, \$30 others <a href="https://nofavt.org/events/pest-disease-walk-commercial-growers">https://nofavt.org/events/pest-disease-walk-commercial-growers</a>

September 25, 3-6 pm. Custom-built wash/pack shed, tunnel tomatoes, living walkways and more at Mighty Food Farm, Shaftsbury VT. VVBGA members free, \$10 others.

October 1, 3-6:30 pm, Improving Soil Health: Mixed Vegetables and Cut Flowers at Elmer Farm, E. Middlebury VT. Farmers: free; Non-farmers: \$15 to cover cost of dinner. https://nofavt.org/events/exploring-practices-policies-improving-soil-health-series-middlebury

October 16, 3-6 pm. Tunnel crops, wash/pack shed retrofit in old barn and more at Deep Meadow Farm, Windsor VT. VVBGA members free, \$10 others.

November 6, 2-5 pm. Off the grid, small-scale diversified vegetables and reduced tillage at Small Axe Farm, Barnet VT. VVBGA members free, \$10 others.