



Vermont Vegetable and Berry News –August 6, 2019
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REPORTS FROM THE FIELD

(East Dorset) The U Pick Blueberry farm is finally in mid-season form. The farm opened a week late and we reduced our picking hours the first ten days as fruit was ripening behind schedule. Finally, the fruit has ripened and there is plenty for the pickers. Still lots of ripening yet to happen so it could be a solid season. Normally the season ends August 16-18 and I am wondering if since the season started a week late if we will pick a week later. We could use a little rain.

Our farm also finished our fourth year of hosting a local charity for a fundraiser. It has been wildly successful and is traditionally our busiest day of the season. The charity attracts many first time visitors to the farm and also does a lot of publicity as well. It is well worth the per-pound donation we make on everything that is picked.

(S. Strafford) Morrill Mountain Fruit Farm. Berries were a little late and remarkably abundant. Apparently the bushes like a cool rainy May. Oddly, only one of the red currant bushes was attacked by currant sawfly and lost most of its leaves before I noticed. I sprayed a combination of Regalia and Stylet Oil. Nothing else was affected, the berries on that bush were fine, and it is making new leaves. White currants outdid themselves and are done; black currants are still being harvested. We started picking blueberries this week. It is a bumper year. When we finish picking, I will do another round of Regalia and Stylet Oil.

(Marlboro) SWD getting bad in the raspberries, blueberries still doing OK, we are spraying Entrust and Pyganic only under the bushes this year, thinking that it might be more effective to kill what is on the ground than trying to soak the entire row (our rows are pretty dense). Otherwise, great blueberry year; medium to poor raspberry year due to winter kill.

(Charlotte) We are having the best blueberry season ever! The season was late, but will be going for at least three more weeks. The red raspberries didn't fare well, and we are seeing SWD for the first time this year. We started pick-your-own sunflowers, and that is going better than expected. We are selling blueberry mead now!

(Craftsbury) Brown's Beautiful Blueberries: Slow ripening delayed our traditional blueberry opening day from July 20 to July 25, our latest start ever. The heat and humidity that followed quickly brought us to mid-season form. The fruit is large, dark and very abundant, with no evidence of the long winter and cold spring which preceded them.

This year we are drawing customers from as far away as Shelburne, Ryegate, northern New Hampshire and the Montpelier-Barre area, as well as the Jay-Montgomery and Newport-Derby areas. We are also serving folks from Stowe who have gravitated here after the closure of their local provider. We are looking forward to a strong August season.

We found a large ground wasp nest in one of our bushes and cordoned it off while we eradicate it. This is our second one in two years after not having seen one here before. Our Japanese beetle lures are busy and we seem to be ahead of them at this point.

(Elmore) Great crop of organic blueberries this year, though first picking was July 31! Raspberries are a little light, but northern kiwiberries are putting out fruit like never before. We have an unexpected early crop of buartnuts, a cross between butternut and heartnut. More weeds than usual in our rows and beds, and more wildflowers, too. The apple crop looks promising and there are loads of pears. We have black and red ants on our farm. the red ones have on rare occasion stung one of us. Anyone else ever see these? They tend the aphids on the apple branch tips just like the black ones. We have some new markets carrying our black walnuts and fruit jam, which is affirming that the work we do on our farm is reaching people, and storekeepers seem to be once again (after a dry period) supporting local and organic farmers, even if it means more work for them because they have more people to deal with than one checkoff sheet from a distributor.

(Shaftsbury) Crops are a mixed bag this season. Decent looking onions and potatoes. Stayed on top of leafhopper on spuds with Surround and Pyganic every 10-12 days and the plants are waist high. Onions sprayed twice for thrips and as the tops are starting to go down, considering harvest soon. Nice size on onions. Early corn plantings are a bust, never sizing up despite side-dressing. Later plantings starting next week look pretty nice however. Leaf hopper on early beans were relentless, but they have calmed down. For the first time this season, sprayed Brussels this evening with preventative mix of M-Pede and Neem for cabbage aphids. Used lots of water for good coverage. Started to harvest day-neutral strawberries. Farm stand sales have been consistently good and the farm crew is one of the best we have had, which help make going to work every day a joy.

(Orwell) Our high tunnel tomatoes have been producing well, with steady harvests and strong markets for red slicers, heirlooms, and cherries. We are just starting to see the early, ungrafted plants peter out, with smaller, lower quality fruit. A reminder that we should graft everything next year! We are taking crop planning notes right now so that our aging brains don't let it all slip away by December and allow us to repeat the same mistakes again next season.

Hornworms showed up last week; a few days of handpicking and then a round of Dipel sprays took care of them. We've also had early leaf mold on heirlooms that obliterated some rows. Wondering if it is worth investing in a fogger for preventative fungicides next year? Although we ordered some new fans called vertical airflow fans for one of our less-ventilated houses back in the spring, the shipping got screwed up and they just showed last week. It will be interesting to see if they are able to help mitigate Botrytis and leaf mold next season.

We tried tarping in our small outdoor fields this year and it's been pretty great, especially in terms of managing moisture on heavy clay soils. Our next step is figuring out how to better time tarping with high OM cover crops to help lighten our soil for future years. So many ways to do better.

(Shrewsbury) Weed control is one of the biggest areas for improvement on our farm: tarps have been wonderful for reducing tillage and giving a crop a few days' head-start on weeds, but they do allow certain summer annual broadleaf and grass species to germinate after tarp removal. We started doing a brief shallow cultivated fallow period after removing a tarp to try to decrease weed pressure, it seems to make a difference. We'll have to keep experimenting to see if we can dial in tarp-based stale seedbedding. A win this summer is a new husk cherry trellis system that keeps the vines off the landscape fabric: we can sweep the ripe fruit into a pile and winnow out any leaves or empty husks. It makes harvest so easy!

Looking ahead to winter growing, I spent some time to review last year's records to rank our winter greens on total gross sales per foot. Pea shoots, spinach, baby lettuce, parsley, and chard were the top five. Mustard greens were a definite underperformer despite good stands and little damage to the crop. We'll start shifting to baby lettuce and do our best to avoid problems with Rhizoctonia and downy mildew this winter.

(Plainfield NH) Home farm remains parched and the land in Cornish is getting adequate rains, highlighting the fickle nature of summer thunderstorms. We really need some water at the home farm to help the potatoes bulk up. Early moisture helped the blueberry crop size up well, and there is strong market demand. We will finish up wholesaling in the next 10 days or so.

Disease pressure is low, but leafhoppers snuck into the new strawberries when we weren't paying attention. So far no measureable SWD. We need to get the Heliothis traps into the later corn before the blocks start to silk. We suffer our worst corn earworm pressure in the CT Valley just before and after Labor day historically. Weed pressure with the hot weather has been epic this year, and the crabgrass got away from us in places and we have been using clethodim and oil to beat it back. Lots of growing season left.

(Ange-Gardien, Quebec) Lots of heat, cantaloupe harvest is beginning. Strong market for early melons as the heat is still present. I sadly announce that we have been struck with basil downy mildew. Man, that's a tough and fast one. Struggling to learn how he works and how to have it under control.

(Little Compton RI) Finally saw a deer scale a 10' fence in one of our fields! It wasn't graceful but she made it over. We are trying fish fertilizer like Neptune's Harvest, etc. for deer control. Progressive Grower says they are shipping pallets of the stuff to Long Island and it is ostensibly being purchased as a deer deterrent! It is certainly cheaper than Plant Skyd with no days-to-harvest issue, plus a fertility kick.

The dry-down these last two weeks has been mind-blowing. Still have puddles in tire ruts yet Brussels sprouts are wilting mid-day. Our wells are pumping full time!

Finally got our 'Baby Trim' Checchi and Maggli plug transplanter working. It sat out the first season as we figured out the multiple adjustments. But its most alluring feature is the planting (shark-like) fin that not only pushes out the plant but sends a steady stream of water 3/4" below ground level. This waters the plug trench and creates a dust mulch above ground that keeps weeds at bay for the number of days, but we need to get the plugs to root enough to take the thrashing they will endure when we blind cultivate with the Lely tine weeder.

After two trips with the Lely we follow with a two-row Eco-weeder PTO cultivator, and lastly a great two row cultivation setup from I&J Manufacturing in PA. That has a 3-point rear cultivator that takes out stubborn weeds and has ample space crops as their size increases.

Farmers' markets are good. Our greenhouses, after pumping out thousands of pounds of tomatoes, are dramatically slowing down. No matter, by August 31, we start to prep them for seeding winter greens. We are giving up on pink heirlooms; they are confusing to customers and checkout staff. So many great other varieties!

(Argyle NY) Lots of heat has brought on tomatoes and cucumbers, negatively affected the lettuce. Irrigation has been non-stop, with most storms missing us due to our rain-shadow location. Purslane and other weeds are growing fast so cultivation is non-stop. Flaming our fall carrots worked well, helps the weeding battle. Tarping continues to be a trial with good and not-so-good results.

Potatoes looking great and only a few leafhoppers around. Over-wintered onions are huge and drying on racks (what is left after pulling for sale for weeks). Just returned with the group order of Chandler strawberry tips from Canada that we will plant up this week for the 2020 crop. We are seeding a lot of our final fall crops, as well as the winter tunnel crops.

Many markets in July were record-breakers; nice to see community support for local agriculture again. We have an amazing crew and we are all grateful for the cooler days and nights!

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg

Potato leaf hopper. Lots of damage showing up in green and fava beans, hops, potatoes and other crops. If you are seeing leaf edge yellowing and dieback, check the leaf undersides for this little but mighty pest. <https://ag.umass.edu/vegetable/fact-sheets/leafhopper-potato>

Basil. Downy mildew reported at some locations. Rhizoctonia stem rot identified at one farm causing brown stem lesions and weak plants. Still seeing some four-lined plant bug injury causing angular leafspots.

Beans. Anthracnose identified on bean causing dark spotting on veins and petioles and depressed lesions on pods. Use good rotation and resistant cultivars. The pathogen can be seedborne and will overwinter on crop residues. <https://ag.umass.edu/vegetable/fact-sheets/bean-anthracnose>

Beets. Cercospora leafspot showing up on older leaves of beets. Be sure to rotate and plant a distance away from earlier plantings.

Brassicas. Large infestation of diamond back moth reported in a home garden. Larvae are small (1/3 inch) and the middle of the larvae is wider and tapering at either end. They wriggle a lot when disturbed. They feed mostly on outer or older leaves of older plants chewing out small holes or at the growing points of young plants.

Cucurbits. Downy mildew still not on our doorstep- to track the disease: <http://cdm.ipmpipe.org/scripts/map.php> Fruit rot (Phytophthora capsici) was diagnosed in MA in pumpkins. This soil borne pathogen likes warm temperatures and saturated soils for at least 5-6 hours and can attack any cucurbit in addition to peppers, tomatoes and eggplant. Although none of our storms have lately brought us 'saturated soils' this could be hit or miss so scout fields after any lingering rain. Look for a 'yeasty' rot on the sides or bottoms of fruit, especially in low spots in the field.

Tomatoes. Alternaria/early blight and septoria showing up on lower leaves, severity depends on how much rain your farm has received. Diagnosed gray leaf spot in 'Favorita' cherry tomatoes in a high tunnel caused by the fungus Stemphyllium. Not a disease we see on a regular basis here but is more common in warmer states. The disease looks a lot like septoria, i.e. small dark spots, but appears to be more aggressive. This particular outbreak is confusing because the tunnel has not been especially wet. I would be interested in more samples if other growers are seeing this. Blossom end rot common on first fruits, especially heirlooms. Getting reports of yellow shoulder and other abiotic issues in tomato. Good overview and discussion on some of these in tomato in the latest UMass Veg Notes:

https://ag.umass.edu/sites/ag.umass.edu/files/newsletters/august_1_2019_vegetable_notes.pdf

Late blight not moving much so hopefully will not present any problems until later this fall.

Hornworms reported in high tunnels.

Onions. Lots of diseases showing up now in onions: purple blotch/*Alternaria*, downy mildew and botrytis. <https://www.uvm.edu/vtvegandberry/factsheets/OnionDiseaseOverview.html> Thrips may be a problem especially due to hot dry weather. Check lower in the plant where the new leaves are emerging. They are very small, yellow and thresholds are low, 1-3/leaf, for damage to occur. <https://ag.umass.edu/vegetable/fact-sheets/thrips-onion>

As always, send a picture, email or sample to ann.hazelrigg@uvm.edu. 656-0493. 63 Carrigan Drive, Burlington, V 05405. If you are seeing an outbreak of something let us know since we are mainly in the lab!

NEW POST-HARVEST CASE STUDY AVAILABLE

Andy Chamberlain and Chris Callahan, UVM Extension Agricultural Engineering

This case study features text, images and video describing Root5 Farm's renovation of an existing barn to create a 900 sq. ft. washing, packing and storage space with an additional 12' wrap-around concrete apron around two sides of the building. Wash equipment, storage cabinets, dollies for product, and packing tables were all made to be mobile. This increases efficiency, reduces physical effort, makes the space versatile for a variety of tasks and easier to clean. See: <http://blog.uvm.edu/cwcallah/category/post-harvest/>

LEEK MOTH UPDATE

Vic Izzo and Scott Lewins, UVM

In most regions of Vermont and the surrounding area, leek moth populations have completed their second flight of adult moths. Populations on our monitored farms in the northern half of the state (Vermont) are currently transitioning into their pupal stages. This suggests that any onion crops that will be harvested in the next week or two will be less susceptible to storage damage as the adult moths emerge from the crop and hunt for overwintering habitat. Typically, the third generation of leek moth represent the overwintering generation, and therefore, do not present a significant risk for growers. However, in the face of climate change and extended seasons, this assumption may be incorrect.

Our research team is testing different pre- and post-harvest techniques to reduce the risk of leek moth damage in storage onions. As part of our research we are surveying growers from within the region to measure the current state of knowledge and explore feasible control options. Filling out this quick survey will help steer our research to best serve local growers.

<https://docs.google.com/forms/d/1aV3JYOCsdCD8w3ZiDi-qVcNGjwVmPMJWD6Cs6X0NFd4/edit#responses>

If you have any questions or concerns about leek moth please contact Vic Izzo at vizzo@uvm.edu and/or Scott Lewins at slewins@uvm.edu.

SUMMARY OF LATE SUMMER COVER CROP OPTIONS

Check out <https://ag.umass.edu/vegetable/fact-sheets/cover-crops-late-season> for an overview of species, timing, seeding rates and management considerations.

UPCOMING WORKSHOPS & TRAININGS

August 6, 9-4:30. UVM Horticulture Research & Education Center Open House. Join UVM faculty, staff, and student researchers as we show off our current research projects on apples, small fruit, vegetables, and ornamental specialty crops via a walking tour of the 97-acre facility. Make a day of it, or just attend sessions you're most interested in; join and leave at any point. Agenda is at: <http://go.uvm.edu/hrecresearchday> Questions? tbradsha@uvm.edu.

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

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
<https://nofavt.org/events/preview-event-veggie-wash-pack-getting-you-down-dial-best-practices-improve-your-postharvest>

August 22, 11- 2. Best Practices for Using Human Urine as Fertilizer. The Rich Earth Institute is hosting a field day at Whetstone Valley Farm in Brattleboro to report on research including methods to reduce ammonia loss during application. There will also be a report farmer interviews on the feasibility of this high-N fertilizer source, and the opportunity to talk with farmers who have been using urine on hay fields for several years. More info: tatiana@richearthinstitute.org or Tatiana Schreiber at (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
<https://nofavt.org/events/pest-disease-walk-commercial-growers>

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.