



VERMONT VEGETABLE AND BERRY GROWER NEWS – July 2, 2021

Compiled by Vern Grubinger, University of Vermont Extension

<https://www.uvm.edu/extension/horticulture/commercial>

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REPORTS FROM THE FIELD

(Guildhall) Things seem to be moving along in the potato crop. The plants are dark green, Atlantics are flowering. They've been tine-weeded, S-tined, and now have their first hill on. Weed control is good aside from one patch of morning glory where last year's dry manure was staged. Leafhoppers came early, but population remains low. Overwintered CPB came and went, first generation adults are up, second generation grubs are second instar and getting sprayed today. We're tank mixing Guarantee Kelp with every spray after getting phenomenal results with it last year.

Construction season is in full swing; potato barn addition frost walls should be poured by end of next week. First time I've worked with ICF block, really good stuff.

(Rochester) We have been watering the blueberries and raspberries around the clock except on the rare occasion it rains hard. Our wells seem to be holding up. We have pump protectors on them so we no longer have fear of burning the pumps up. There will be no harvest records broken this year. Some of the blueberry varieties look great but we have had a resurgence of Fusicoccum in others despite full and timely treatment with lime sulfur. Patriots and Blue Crop again had lots of fruit but a shortage of leaves in some of the more mature canes. Regenerative growth is excellent.

Summer raspberries have a very good fruit set and are starting to ripen but floricanes are yellowing early and I suspect drought stress and temperature fluctuations might be the cause since the nutrients are where they should be. Good luck for a bountiful year everyone!

(Newbury) Potatoes started to blossom this week and Colorado potato beetles are flourishing. Favas are wilting, but will be ready this week. Shell peas were the earliest ever. The first week of June. Done now. Flea beetles are a menace. Blueberries are showing color and the netting goes up next week.

(E. Montpelier) I laid drip tapes on potatoes after the first hilling. It's super dry in East Montpelier, what a relief to not obsess on radar and turn on the water. I "think" I can remove the header and leave the drips on the hill for the second hilling and then plug it all back in, I hope.

(W. Rutland) Hot peppers and garlic looking excellent. The timing of rainfall could not be better so far.

(Poultney) Blueberries are coming along well, big, full, fat and tasty. Red and black raspberries are a bit behind that, but also coming along. Saw some kind of webworm on one of the blueberry bushes. Clipped that branch and burned it. Some kind of shiny beetle eating the tops of a few of the red raspberries in the lower field. Haven't had time to research what that is yet.

We took over this existing farm, which had been managed from afar the last several years. Didn't get up here in time to prune blueberries or take soil samples, and had to run back to Houston for a couple of weeks to get our daughters to doctor's appointments – we're still in transition this year. We've mulched several of the rows and put up pie plate pyramids on fishing barrel clips that seem to keep the birds at bay. Didn't amend the soil for fear of doing more harm than good. Goal this year was to clean out the rows, watch, assess and plan for next year. Have been surprised how well the blueberries are coming in in spite of us. Fortunately, there's been good rain, as we haven't managed to get the pump on the irrigation system going.

(Westminster) The weather has been dry but nothing catastrophic yet, and we are harvesting plenty of greens: lettuce, kale, collards, and chard, as well as bunched golden beets. We expect to begin harvesting carrots and cabbage in a couple of weeks.

Not much problem with disease or insects, except for flea beetles, which have been a real bear this year. We've managed to keep them down with organic pesticides Entrust and Pyganic. Wholesale prices have been steady and sales have been good, especially after our Florida market for greens finally kicked in. We're also proud to note that our farmstand is celebrating its 30th year in business in 2021!

(Elmore) Even the chipmunks are sitting in the shade and barely coming out. No rain, often if we drive south off the farm it has rained everywhere but in our fields. The heat is unbearable for us and our crops. The only thing keeping us going is a sense of humor.

Tree fruits seem to find a way, with deeper roots to get what they need. We have a fine crop of plums coming in and today a nice load of sour cherries, fuller than I can remember. But who has the strength to climb high up ladders and harvest when it is 90 degrees in the shade? We take longer lunch breaks in the shade and bought harmonicas for the crew. One of the staff gives weekly lessons. This keeps us cooler and makes sure we're still breathing. I'm grateful the crew shows up day after day in the heat.

Blueberries and currants are smaller this year in size, probably due to no rain. Our well pump broke and we had to call three places until someone who knew what it was fixed it same day. All the hardware stores around us are out of hoses, sprinklers, water timers. When it does rain, feels like the rainforest as birds and insects begin singing and sometimes I think I hear monkeys chattering. Could be the heat.

(Orwell) High tunnel tomato harvest began in earnest last week. Interesting to note that even though we started our plants about 2 weeks earlier this year, our harvests are almost exactly aligned with last year. Growing degree days are nearly the same between 2020 and 2021, so I wonder if the temperature swings slowed things down, or if there is just not enough natural light in early spring to make the early start pay off. Next year, hopefully we can save on the heating bill!

Tomato quality is looking good, although more signs of abiotic distress than usual, also probably due to the swings in temperature. Hard for the plants to adjust to 40-degree nights (we ran out of fuel during one cold stretch, so it got chilly!) and a few days later, daytime temps over 90.

In the fields, recent rains and now cooler temperatures have relieved some of our drought stresses, but we are actively working on ways to mitigate pressures on our farm from the climate crisis in years to come. Rain water capture, pumping water from the lake into a storage pond, more cover crops, less tillage: things we are thinking about as we look ahead.

(Salisbury NH) So we're all going to complain about the lack of rain! Still seems better than last year's drought. We'll get 1/4" or 1/2" just in time to save us from disaster. Didn't grow potatoes this year because the CPB populations were way too high. Able to keep up with the ones that appear on the eggplants. Now leaf hoppers are coming in. Heat stress is getting to the broccoli. Hopefully will not have all button heads.

Probably not practical for big growers but have found that wooden shakes (board) laid down next to squash plants works great to capture squash bugs. When we spray they can hide and survive. Really like the tarps when weedy patches show up in the garden. Now we just need some rain in the forecast to grow whatever cover crop put down once the weeds are killed.

(Argyle NY) The roller coaster ride of temperatures is still with us along with spotty rain events. No gully washers yet thank goodness as we move on to planting our fall crops of cabbage, cauliflower and broccoli. We were late getting in some of our summer crops so haven't started picking cukes and squash yet but soon. Peas are suffering in the heat so expect low yields when all said and done. Overwintered onions are the biggest yet, such a contrast to last year's dismal performance. No good ideas as to why.

Flea beetles are still our biggest insect pest with leaf miners being second. Diseases are minor at this point except for the peas. Deer are our next bigger problem. We are holding our own with weeds and gaining on them as our crew expanded since the last report.

In marketing, our deliveries took a slight dip in the last 2 weeks but we attribute it to people on vacations since NYS has lifted restrictions. Great not having to wear masks everywhere we go!

(Plainfield NH) Almost the end of strawberry season that has been pretty good. Fruit size held up and the plants look robust, in part because I pulse-fed nitrogen early in the season. The downside of keeping the plants vigorous during fruit load is a little softness and fruit rot, which given the dryness of the season would seem unlikely. But if the plants struggle and collapse under fruit load, that is not desirable: been there, done that. So we are trying to find the delicate balance. We have also found that plants that remain vigorous during the bearing season seem a lot less prone to leaf spot diseases, and are easier to renovate.

We wrapped up another great bedding plant season, with continued high demand, like last year, and retail sales that have completely cleaned us out. Not sure if this is a new normal, but we will gladly take it while it happens. CSA numbers again were good and we sold out this year; we just completed week 3. Lots of tomatoes, squash and cukes as well as greens and broccoli for the retail and CSA boxes.

A shorthanded field crew without a few stalwart collegians who moved on has left us scrambling, so we applied for 2 additional H2A Jamaicans for mid-July. Fortunately, these guys are seasoned professionals whom are getting an unimaginable amount of tasks completed. Our weed control has suffered a bit, but hopefully we can get caught up in the short time between strawberry wholesaling and blueberry harvest. We hope to be able to let the crew catch a little bit of breath before launching into blueberry season.

Blueberry crop looks fair, lots of winter injury and not sure why. We got our 2020 fertilizing program completed before July last year, and the plants looked good going into the winter. New growth looks good this year. Maybe we just are not giving them the moisture they want, because our happiest plants seem to be in the damper parts of the field. There is significant pressure from quackgrass; certainly room for improvement in our management.

Overall crops look good given the heat and drought. Irrigating all we can, when we can. We have been saved by some timely showers. We need a good rain for the plants and water table, we can't depend on lucky showers to get us into the fall without some real crop loss.

STAY SAFE IN THUNDERSTORMS

With all the lightning this time of year, please remember to have a plan to keep your crew, family and animals safe on the farm. Here is some guidance from Univ. of Florida Extension: <https://sfyl.ifas.ufl.edu/family-resources/lightning-safety/>

“Anyone engaged in outdoor work or activities should stop as soon as he or she hears the first rumble of thunder and move to a safe location. Do not come back outside and resume activities until 30 minutes after hearing the last roll of thunder. Safe: Fully enclosed building with a roof, walls, and floor or a fully enclosed, metal-top vehicle. Unsafe: picnic shelters, pavilions, tents (any kind), dugouts, greenhouses, carports or open garages; convertibles, bicycles, motorcycles, golf carts, boats without cabins.”

UPDATES FROM UVM EXTENSION AG ENGINEERING

Chris Callahan and Andy Chamberlin

Beat the Heat - Tunnels hot? Trying to cure onions or garlic? It's hot. Check out our reminders on improving ventilation (not just air circulation) at <http://go.uvm.edu/tunnelventilation>. Struggling with getting field heat out of harvested crops? Check out our simple and inexpensive plans for pallet and sub-pallet scale forced air coolers that turn walk-in coolers into precoolers at <http://go.uvm.edu/forcedaircooling>. Also useful for accelerating curing.

Cleaning Tools. Andy recently completed an in-depth review of Vikan/Remco cleaning tools specifically designed for use in food applications. They're easier to clean which will help keep your produce and food contact surfaces clean. Video at <https://youtu.be/tY7o9F1bC5w>

Concrete Repairs. Chris has been chipping away at some best practices for repairing cracked and pitted concrete floors. Short video series with step-by-step instructions available at <http://go.uvm.edu/concret crackvideos>

SOIL HEATH UPDATES

Becky Maden, UVM Extension

Summer Nitrogen Management:

This is a good time of year to check in on how your nutrient applications have worked out for your crops. If crops are looking a little low in nitrogen, it's a good idea to take a [presidedress nitrogen test](#) to understand the how much plant available nitrogen is in your soil. This can help you decide if you should sidedress and also informs your rates for future years. Samples can be mailed to the [UVM AETL](#) and cost \$9.

Summer Cover Crops:

As land opens up on your farm with early harvests, now is a good time to seed summer cover crops. These biomass builders can be a great way to suppress weeds and improve soil health.

Sorghum Sudangrass should be mowed when it reaches 2-3 feet tall to prevent it from becoming fibrous and difficult to manage. To optimize growth, add nitrogen fertilizer (40-80 lbs/A), which will be cycled on to the next crop. *Drill 35-40 lbs/A or 40-50 lbs/A broadcast.*

Japanese Millet (*Echinochloa* spp.) grows rapidly but is easier to manage than sorghum Sudangrass. *Seed at 12-15 lbs/A drilled or 15-20 lbs/A broadcast.*

Buckwheat (*Fagopyrum esculentum*): If weed suppression is your main goal, buckwheat is a good choice. Mow or incorporate when the planting begins flowering to avoid seed production and volunteers. *Drill at 50 lbs/A or broadcast at 70 lbs/A.*

Sunn Hemp (*Crotalaria juncea*): This tropical legume (not related to other hems) can produce very high amounts of biomass and can contribute over 100 lbs N/A to a following crop. *Drill 20-30 lbs/A.*

Additional Information

- [UMASS Vegetable Notes](#), June 25, 2020
- [Managing Cover Crops Profitably](#), SARE 3rd edition

UPDATES FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg

Tomatoes. Symptoms of suspected bacterial canker were seen in a field tomato sample: black streaking/cankers were obvious on stems and there was vascular browning present. Foliar symptoms can include leaf edge yellowing and browning which can also resemble drought damage. This disease is typically seedborne.

<https://blogs.cornell.edu/livepath/gallery/tomato/bacterial-canker-of-tomato/>

To be sure of the pathogen, we use rapid assay test kits and also look for bacterial streaming under the microscope. The sample tested negative for the destructive bacterial canker pathogen. Since the less aggressive bacterial disease called tomato pith necrosis can also have vascular discoloration and black streaking on stems and this was the likely cause of the problem. Tomato pith necrosis usually occurs on early planted tomatoes when night temperatures are cool, the humidity is high, and the plants are growing vigorously because of excessive levels of nitrogen.

The disease is also associated with prolonged periods of cloudy, cool weather. Serious infections can result in chlorosis and wilting of upper portions of plants with brown to black lesions on infected stems and petioles. When stems are cut longitudinally, the center of the stem (pith) may be extensively discolored, hollow, and/or degraded. Stems may be swollen, numerous adventitious roots can form, and infected stems may shrink, crack, or collapse. In some cases, if not too severe, the plants can grow out of the damage. See this link for more information:

<https://ag.umass.edu/vegetable/fact-sheets/tomato-pith-necrosis>

Club root seen on broccolini. Obvious large galls on roots but no symptoms seen in the top part of the plant. Usually wilt, death is associated since the roots can't take up water and nutrients as well as healthy roots. <https://ag.umass.edu/vegetable/fact-sheets/brassicac-club-root>

Thrips seen in onions. <https://ag.umass.edu/vegetable/fact-sheets/thrips-onion>

As always, feel free to send in samples for disease and insect identification. Buildings on the UVM campus are still locked to the public, so it is best to send samples to my home at 206 Walker Hill Rd Williston 05495. Email me first please: ann.hazelrigg@uvm.edu