



Vermont Vegetable and Berry News – June 3, 2024
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<https://www.uvm.edu/extension/horticulture/commercial>

REPORTS FROM THE FIELD

(Westminster) I used to hope we would have ten days in a year where everything went right: the planting, cultivating, weeding, and harvesting done on time; getting the prices we want. And we'd get just the right amount of rain. If I could get a half-inch every Tuesday night, I said, that would be perfect. For years people asked me if we've ever had a perfect year. I always said no. For the last ten years we haven't had three days in a row when everything went right. And last year we didn't have one day when everything went right.

Not to jinx it but... last month it rained an average .45 inches either Monday night or Wednesday morning. Everything is germinating well, crops are coming up ok and look great, and we've had perfect cultivation. We've been harvesting lettuce, kale and strawberries for several weeks.

The perfect season usually ends when I freeze the first planting of sweet corn in the cold frame in May. But this year we have an outside chance of picking corn by the Fourth of July; that's something we've never done. I suspect it won't last and we'll get a brace of hurricanes in September and October, you never know, but it would be a hell of a lot of fun trying to have a perfect year – and isn't that what farming is all about?

(Grand Isle) The blueberries are developing nicely. Have placed monitoring traps for cherry fruit worm. Did a pollinator survey for the second year. Counted many bumble bees at start of bloom. As the boom was ending honeybees started to appear. Now I'm able to start identifying the different bumble bee species. Sampled for Japanese beetles and averaged 5 grubs per square foot.

(Hinesburg) Crops growing well. The gradual buildup of temps this spring was preferable to the spiking temps of recent springs. CSA and farmstand demand on par. Restaurant sales down and hearing comments about trying to cut costs. Had some success treating thrips on overwintered onions with nematodes from IPM labs.

(Huntington) With cooperative weather at-hand, we have been able to get most crops in the ground 4 to 7 days early this year. 4.5" of rain in April and 3.9" in May put us on the slightly drier side of average, which has been greatly appreciated.

Early seedings of baby spinach are beautiful and lush, with none of the damping off that can often afflict that crop. After a cloudy-yet-warm April, tunnel crops have reveled in the return of the sun since early May.

Potatoes are up and have received two fine weddings to date. The hillier will have to get dusted off within a week, which is ahead of schedule. Our onion crop has been startlingly slow to grow, in a remote field that had a cover crop of red clover last year. I've been scratching my head trying to figure out what is going on, but no answers or even good leads, yet.

(Burlington) First summer CSA pickups this week. We're all filled up despite our July 2023 flooding travesty. Our dedicated members are our biggest asset besides our staff, without question.

Normal early June green things (baby salad, head lettuce, spinach) are looking good, and I am happy that our tunnel cukes are producing on the early side. I always wonder how much of the 'bounty' element of a CSA share is really about having the veggies that people want most, more than large quantities. Clearly, each contributes to a sense of abundance, but our early tunnel cucumbers, a very popular item, definitely helps our sense of abundance in the early weeks.

For a not notably hot spring, and with no change in our planting dates and approaches, we are about to start picking our earliest field Zucchini this week. Go figure. Looking forward to a soaking rain so we can seed out 5-6 acres of a Sudangrass - sunn hemp cover crop mix. We haven't been suppressing weeds well in our clover mixes in fields where we have a chickweed seedbank, so we are moving to something more weed-competitive.

(Orwell) We are experimenting with some new types of clips for tunnel tomatoes in an effort to reduce the use of plastic. Potato aphids continue to be a challenge, although timely releases of beneficials and spot spraying is helping. We're continuing to experiment with soil building in tunnels, trying additions of chopped mulch, wood chips, and composted manure. Seeing some good soil improvements but also some N tie up where wood chips are heavy. Hoping we can catch up on work and clean up loose ends as summer helpers ramp up.

(Greenfield Center NY) New Experience: extremely mild winter led to extreme early asparagus beetle pressure in asparagus. Count was what I would expect mid-summer. Not quite prepared. Next new experience: Botrytis in blueberries. Subsequent dry weather helped. Note to self: be more proactive managing disease.

Would like to point out that Laura Griffin McDermott, our long-time Extension berry specialist here in eastern NY, is retiring. She is the friendly face that panicked farmers have welcomed seeing for many years. We will miss you, Laura! Best wishes going forward.

(Saratoga Springs NY) We are seeing an abundance of pests this year: cucumber beetles, Colorado potato beetles, cutworms (especially in cabbage), flea beetles, hornworm moths and a ton of voles and rabbits. The weeds and grasses are growing like crazy; it's hard to keep up. Forum sets are vernalizing a lot more than usual, which is a bummer. All of our nightshades are planted as of today (finally). Cucumbers, squash and potatoes look good so far. Plant and vegetable sales have been strong at market despite an unexpected move. We're tired, but managing!

(Plainfield NH) Our spring has been pleasant, a bit on the cool and dry side. First round of everything is in the field, the strawberries are about 2 weeks from letting loose, and all the H2A help is finally here. A bit of leek moth damage in the garlic was diagnosed and dealt with, and a bit of shoot strike in one area of the blueberries.

We are irrigating a lot at this point; fortunately no brutally hot weather so the transplants have not suffered. Starting to set up deer fencing as they are in the woods and field edges everywhere at this point, even in daylight. I think the clover that we use in living mulches and cover crops is helping us at this point, providing plenty of preferable food, but I am worrying about the beans this week.

The ladino clover is in full bloom, so all the pollinators and little beneficials ought to be happy about that. Greenhouse sales have been strong, the farmstand opens in 2 weeks.

ELECTRIC TRACTOR DEMO, SWEET CORN, SORGHUM MAZE AND MORE

Thursday June 20, 4-6 pm. Chamberlin's Farm, 100 River Rd, Underhill.

UVM Extension / VVBGA On-Farm Workshop. Free and open to all.

Andy and Kiley Chamberlin are in their second year of managing and scaling up this farm after the retirement of Andy's grandparents. This year they will grow 8 acres of sweet corn, 3 acres of pumpkins, a half-acre of cut flowers, a 2-acre sorghum maze and 60 acres of hay. Andy will describe the farm's transition and their goals for retail sales and agri-tourism. Other topics include sweet corn and pumpkin varieties, scheduling sweet corn plantings, and Trichogramma wasps for corn borer management.

Folks from Monarch Electric Tractor <https://www.monarchtractor.com/> will be on hand to demonstrate their driver-optional MKV tractor using some of Andy's equipment including a Lilliston rolling cultivator, a 3-foot rototiller used between pumpkin rows, and maybe it can handle a water wheel transplanter.

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg, UVM Extension

If you see wilting in seedlings, check for maggots. Onion, cabbage and seed corn maggots can all do damage in cool moist springs. Onion and cabbage maggots just attack the hosts they are named for, but seed corn maggot can damage a wide range of plants. If they are involved, you should see holes in the lower stem/roots and the little whitish maggots. They don't like warmer soil temperatures, so any new damage should be minimal. See:

<https://ag.umass.edu/vegetable/fact-sheets/onion-maggot>

Early wilting in brassicas can be due to a soilborne disease called wirestem caused by *Rhizoctonia solani*. The disease can be a problem in direct seeded plants or transplants. The root looks like a rat tail and can be constricted. There really is no rescue, start over. Rootshield may have some preventative benefit.

Bronzing on basil has been seen in a high tunnel. This can be caused by downy mildew, cold damage or sun damage. If you do not see dirty-looking spores on the leaf undersides, it is likely an abiotic cause, especially if the damage is appearing only in one age of tissue. In this case, the grower was seeing the bronzing in the older tissue, with the new leaves healthy and green.

Lots of four lined plant bug damage seen in greenhouse herbs. This little pest causes angular leaf spotting that looks like a disease on mints, basil, oregano and other herbs. You often see the damage but rarely the yellow/greenish striped bug. <https://extension.umn.edu/yard-and-garden-insects/four-lined-plant-bugs>

Dieback and poor flavor of Annapolis strawberries reported. Samples showed Colletotrichum, the pathogen that causes strawberry anthracnose in the crown and on petioles. This disease used to be considered a more southern disease but it appears to be on the rise in the Northeast. For pictures and more information: <https://ohioline.osu.edu/factsheet/plpath-fru-16>

Leaf curl in anemones diagnosed. This disease is caused by the fungus Colletotrichum fioriniae and can also infect celery, causing curled and twisted leaves that look like herbicide damage. Black lesions can also appear on the stalks. The pathogen likes warm wet conditions, and also attacks apples causing the disease called bitter rot. Weed hosts include lamb's quarters, redroot pigweed, common groundsel and oakleaf goosefoot. Landscape plants such as peonies and box elder have also been shown to be good hosts. Rotation and hot water seed treatment of celery kills the pathogen on the seed, and there are some tolerant cultivars.

SOIL HEALTH TIPS

Becky Maden, UVM Extension

Summer cover crops: a short window between crops during the summer can be an excellent opportunity to reduce weed pressure and build soil organic matter. Suggestions for quick growing summer cover crops include Buckwheat (50-70 lbs/A), Sorghum-Sudangrass (35-50 lbs/A), Sunhemp (Crotalaria juncea) (20-30 lbs/A), and forage-type Pearl Millet or Japanese Millet (12-250 lbs/A)

Summer nitrogen management: As the season progresses, you may see crops that are pale in color or show weak growth, which may be a sign of nitrogen deficiency. Nitrogen is always changing form in the soil and availability in plant available forms can be difficult to predict. More information about nitrogen management can be found in the New England Vegetable Management Guide.

One tool that can help you assess N status in annual crops is the pre-sidedress nitrate test, which measure soil nitrate (plant available N) at the time the soil sample is taken. Samples must be brought or mailed immediately to the UVM soil analysis lab (\$10 per sample).

Tissue samples (leaf analysis): in perennial fruit crops or long season vegetable crops (like tunnel tomatoes), this is an important way to assess the nutrient status of crops. Tissue samples reveal what the plant has actually taken up from the soil.

Test results provided by the Dairy One lab come with Cornell fertility recommendations for fruit; cost is \$30 per sample. <https://dairyone.com/services/forage-laboratory-services/plant-tissue-analysis/>

POLLINATOR SUPPORT REPORT

Laura Johnson, UVM Extension

This month's report comes UVM graduate students, Leslie Spencer, a PhD candidate studying blueberry pollinators and pests across 10 Vermont farms.

A few (native) bumblebee species are doing a lot of the pollination, and we've seen lots of large bumblebee queens collecting pollen to bring back to their nests to feed developing bumblebee larvae. Last week, the larvae began to hatch and emerge as worker bumblebees. Workers look the same as the queens, but about half the size; they collect pollen as well.

Several species of (native) mining bees are also hard at work pollinating blueberry blossoms. At farms with hives, lots of honeybees are out visiting blueberries.

Less common pollinators we've seen visiting blueberry flowers this spring include: Green sweat bees, Bee-mimic robber flies, Red admiral butterfly, Canadian tiger swallowtail, Bedstraw hawkmoth, Ruby throated hummingbird, Forester moths, Several species of wasps, Carpenter bees, both big and small, The yellowish cuckoo bumblebee (like a cuckoo bird, this species is a brood parasite, laying its eggs in the nests of other bumble species), and Northern amber bumblebee (an uncommon species of bumblebee in Vermont!)

VVBGA MEMBERS - CREATE YOUR FREE PICK YOUR OWN LISTING

Will you sell PYO fruit, flowers, pumpkins or other crops this season? Later this month we'll launch VVBGA's brand new searchable list of PYO farms – open to the public. So please take 5 minutes to add your info today! You can change your listing as often as you like. It's easy!

- 1) Login to your VVBGA member account at <https://vbgga.org/>
- 2) Click "Pick-Your-Own-Listing" on the left-hand menu.
- 3) Click the orange "Add Your Listing" button.
- 4) Click on each section of the listing. A drop down will appear. Fill in all the details relevant to your farm's PYO operation.
- 5) Hit the "Save" button at the bottom of the page after you complete your listing.

TECH TIPS FROM UVM EXTENSION AG ENGINEERING

Andy Chamberlin, UVM Extension

The latest podcast episode from The Farmer's Share features Jacob Mills of McDonald's Farmstand in Danville VT: EP20 <https://thefarmersshare.com>

PRE-HARVEST AGRICULTURAL WATER UPDATE FOR PRODUCE FARMS

Tucker Diego, VT Agency of Agriculture, Food & Markets

The FDA recently published revised pre-harvest agricultural water requirements for produce farms subject to the FSMA Produce Safety Rule. Pre-harvest agricultural water is water used during growing that directly contacts produce, such as water used for irrigation, crop sprays, or frost protection using a direct application method.

Produce farms are now required to make pre-harvest agricultural water assessments to identify any potential hazards and implement corrective or mitigation measures as appropriate. These revisions replace the mandatory microbial water quality testing that was previously required in the 2015 version of the Produce Safety Rule. While no longer required, microbial water quality test result can still be an important factor for a farm to consider if they choose to conduct testing as part of their agricultural water assessment.

Compliance dates for the pre-harvest agricultural water requirements are tiered by farm size. Farms subject to the Produce Safety Rule with annual produce sales above \$500,000 must comply by April 7, 2025. Farms with sales between \$250,000 and \$500,000 must comply by April 6, 2026, and farms with sales between \$25,000 and \$250,000 by April 5, 2027.

Annual Agricultural Water Assessment: Produce farms are required to conduct annual agricultural water assessments to evaluate factors that can impact the produce safety of their water. Factors include: the location, type, and degree of protection of the farm's agricultural water sources and distribution systems; agricultural water application methods and application timing; crop characteristics; environmental conditions; other relevant factors, such as the results of any microbial water quality testing.

Risk-Based Outcomes: Based on the findings of annual agricultural water assessments, produce farms must determine if corrective or mitigation measures are necessary to reduce the potential for contamination of produce or food contact surfaces with hazards identified in their assessment. See this chart for a summary of actions farms are required to take based on assessment results: <https://www.fda.gov/media/178219/download>

Questions? Contact Tucker.Diego@vermont.gov