



VERMONT VEGETABLE AND BERRY GROWER NEWS – July 1, 2022

Compiled by Vern Grubinger, University of Vermont Extension

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

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REPORTS FROM THE FIELD

(Guildhall) It's a late year for all our crops, including potatoes. On June 8 we finished planting 47 acres of spuds this year, 5 acres short of last year, but we ran short of seed. Our planter is running so nice it laid down 2300# to the acre instead of the 2k# we plan on.

The percentage of golds we planted this year is higher than ever before. Put out 35 acres instead of 16. Whites got cut out. Because we rotate with a dairy farm, I can never get the soil pH low enough to grow a white potato that's competitive with Maine spuds. Potatoes are growing good, all at first hilling now.

It's been dry but not an emergency yet. Planted 3 acres of Jack o' lanterns instead of our usual 5. If the cost of fuel stays high until fall it'll have a major effect on the price shipping of a bin of pumpkins. They are too cheap to begin with, last year a bin was \$190 delivered.

Other spring projects, running into early summer, are cleaning the leftover potatoes out of the barn and sterilizing, wrenching on trucks, and picking up last year's pumpkin plastic. We bought 6 spray-coups in Madawaska, and they're sweet machines, doing a little wrenching to get them ready, but the trucking has been a bear. Long trip with high fuel. Looking forward to finishing projects so we can start construction season. Barn addition needs roofing and sheathing, and some awkward bins in the cellar are getting fresh concrete.

(E. Wallingford) Not much insect or disease activity here. Mostly dealing with weeds! Had to replant some pumpkins, winter squash and sunflowers because turkeys ate the seed. Could use some more rain and heat. not much rain recently.

(Westminster West) We do well in dry years here with mostly transplants on plastic mulch with drip. Just removed row covers from 2 acres of winter squash. They look fine, some fruit already set. Cantaloupe and watermelon look awesome coming out from row covers. Just started picking tunnel tomatoes in time for weekend farmers' market. Have been cutting tunnel celery for two weeks now, excellent quality and quite popular. Trialing several varieties for yield and flavor. Just picked first tunnel raspberries, taste great! Garlic crop looks excellent with big bulbs this year, hard to beat Music. Started doing nightly yoga to help with back pain, big improvement along with daily collagen supplements. Keeping this aging chassis going is a challenge.

(Hinesburg) Crops vigorous and healthy. The mix of rain and sun has been pretty good here. Sales are steady. Great crew. Potato beetles worst ever. Deer are more and more of a problem.

(Newfane) Strawberry crop is early. Production is below average due to a low-snow winter. Raspberries are early and yield is good. We are very dry here. Irrigation is very necessary. We are struggling to get our work done.

(Elmore) Very hot and dry. All plants in pots and in high tunnels are thirsty and demanding more and better water systems from us growers. Larger blueberry, gooseberry, and currant crops than last few years. Good new growth on fruit trees and berry plants, but huge amount of dieback from winter conditions causing secondary fungal infections that hurt the trees.

Some of our best plum trees just died or half died. A March freeze/thaw is blamed; temps were not so low, but snow cover was less than usual. Best strategy we see is to continue to plant only the hardiest varieties in order to make it through unusual winters and new summer heatwaves. Also focusing on maintaining water all season and keeping plants well fed and well mulched.

(Westminster) The great growing weather is still holding. It's a little dry. We've been doing some irrigating but there's still a fair amount of moisture in the soil. Dry weather has helped keep disease and insects at bay. We saw flea beetle problems early, but they seem to have moved on, so our brassicas look very good.

We started cutting chard – red, green, and rainbow– and will soon be harvesting red and green cabbage and bunched beets. Sweet corn should be ready for harvest on July 12, give or take a day or two. Strawberries are done for the year. We had good yields, and PYO continues to be popular, even with a price increase. Blueberries are showing a good crop.

Sales have been steady, although we could use more outlets. The good weather and the success of regional organic farms have boosted the supply of produce. Makes more competition for us but hurrah for a robust local farm economy!

(Salisbury NH) Will be using more insect netting in the future. Root maggots wiped out almost all my early planting of cabbage, broccoli and kale. The potatoes, eggplant, and peppers under netting are bug free. It is also wonderful for arugula, no flea beetles getting in. Would like to find a cleaner way to secure sides besides dirt. Have experimented with pool cover tubes filled with water, which work but isn't practical. Was thinking of attaching PVC pipe so it is easier to lift tubes up to weed or harvest. Anyone have ideas? My rows are usually 50 or 100 ft lengths.

We didn't grow potatoes last year and the CPB population this year is almost nonexistent. Terrible slug problem in lettuce. Usually a quick soak after harvest would get rid of them, but the babies are all through the heads as I pull off each leaf. Is the straw in aisles adding to the problem? Rain has been in the 1/4 - 1/2" range. Would like a few more soaking, all-day rains. Tomatoes are loaded. None are ready yet as we do not heat our houses. I like Lizard spinach. It holds up well. Space still my favorite.

Customers have been slow to come. Lots of "fair weather" customers don't like to shop if it's too cold, too hot, too rainy.

(Plainfield NH) Three biggest problems in farming are weather, labor and... weather. We are extremely dry and limping along on irrigation and intermittent showers; the kind that settles dust.

Wrapping up a so-so strawberry season. Problems in the early varieties arising from a number of things: hard winter, late uncovering, some root disease issues, and a few Asiatic Garden beetle larvae. Fortunately the later varieties stepped up but were still disappointing. Weather has been perfect for crop harvest and soft fruit disease suppression.

Garlic looks great, and blueberries are coloring and look to be a good crop. Sales have been strong, but not as crazy good as the first pandemic year. A net gain for us nonetheless even with consumers returning to their old buying habits.

Disease and insect suppression has been on the low side, we keep waiting for the SCB onslaught in the cucurbits to happen, so far little to nil. Biggest pest by far is ticks this year, especially for the guys trying to irrigate. If you get anywhere near a tree line you stand a pretty good chance of picking one up. Big concern is getting moisture to the later crops so they will fare well.

SURFACE WATER RECORD KEEPING REQUIREMENT BEGINS JULY 1, 2022

Although proposed legislation was modified earlier this year, in part due to grower input, there is still a new law that affects Vermont's vegetable and berry growers. Permitting is not required but you need to estimate your use of surface water. If your farm withdraws over 10,000 gal. in a 24-hour period, or 150,000 gal. in 30 days from rivers, streams, lakes, or natural ponds you are required to file a report to the Vermont Agency of Agriculture by Jan. 15 each year. The report must include: 1.) An estimate of total volume withdrawn in previous calendar year. 2.) Location of withdrawal. 3.) The daily maximum withdrawal for each month. See the law at:

<https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT135/ACT135%20As%20Enacted.pdf>

To track your water use, keep a protected clipboard by each irrigation pump and write down each irrigation event, or record on your phone. Document the date and duration of each irrigation event. Additional information you should note is the type of irrigation (e.g., overhead or drip) and total area irrigated. At the end of the year, compile this data into monthly and annual totals. If you use less than 10,000 gal./day or 150,000 gal./month, you are not required to report. Not sure if you are at the reporting threshold? Need help estimating? Contact Ryan.Patch@vermont.gov at the VAAFAM or rebecca.maden@uvm.edu at UVM Extension.

MONITOR AVAILABLE NITROGEN IN YOUR SOIL.

Becky Maden, UVM Extension

To assess how well your fertilizer program is providing N to crops, take a Pre-sidedress Nitrate Test (PSNT) to measure the level of nitrate-N in the soil at a given point in time. This test can help determine the need for mid-season N applications (sidedressing or fertigation). It can also help guide future nutrient management by helping you understand how much nitrate is available from legume cover crops, or how much nitrate is left at the end of the season. Analysis costs \$10 at the UVM soil lab. Be sure keep the soil cold immediately after sampling (to minimize

microbial activity) and then either dry the sample thoroughly or ship it immediately to the lab. For more information see: <https://nevegetable.org/cultural-practices/nitrogen-management>.

LEAF ANALYSIS TO GUIDE TUNNEL TOMATO FERTILIZATION

Becky Maden, UVM Extension

Leaf, or tissue analysis tells you what nutrients your tomato crop is actually taking up from the soil. Samples cost \$28 analyzed through Dairy One in NY. <https://dairyone.com/services/forage-laboratory-services/plant-tissue-analysis/> Sample 15 to 20 recently mature, fully expanded leaves that are at a 90-degree angle, typically the 4th leaf from the top. Ship immediately in a paper bag to the lab. Need support? rebecca.maden@uvm.edu

JUNE POLLINATORS IN BLUEBERRIES

Laura Johnson, Pollinator Support Specialist, UVM Extension. [UVM Extension Pollinator Program](#)

Recent blueberry crop pollinator reports suggested less bee activity in late season varieties than seen during May blooms. Researchers at the UVM Gund Institute, Dr. Taylor Ricketts and Jason Mazurowski, offered this explanation: In May, there were far fewer flowering plants overall, so blueberries might have been more attractive because they were one of the only food sources at the time. Now there are more options for bees to choose from. There are fewer overall blueberry blooms, so they are less attractive to bees. Bumblebee queens are starting to stay in their nests and are observed less as worker bumble bees begin to emerge. The first clutch of workers is tiny and relatively few in number compared to those from the rest of the season. Smaller solitary bees, not just bumble bee queens and workers, are emerging more now. They are harder to spot and less obvious but are important crop pollinators.

BE ON THE LOOKOUT FOR APHID PROBLEMS IN HIGH TUNNELS

Cheryl Frank Sullivan, Entomologist, UVM Entomology Research Laboratory, cfrank@uvm.edu

Potato aphids ‘PA’ (*Macrosiphum euphorbiae*) were identified in high tunnel greens at a few locations this spring which indicated they had overwintered there. **We now have several reports of PA reaching damaging levels on tunnel tomatoes.** Green Peach aphids ‘GPA’ (*Myzus persicae*) are also a common problem that can carry over. Timely scouting to find patchy, problem areas and early interventions can reduce the risk of future damage. Now is a good time to take another look for aphids on your crops before it gets too late.

These two aphid species are often confused with each other because both can occur in shades of pink and green and infest the same plants. It’s important to distinguish between them because management with biocontrol is not a one size fits all approach. PA prefer to feed on young growing tips spreading downwards over time (top down). GPA feed on lower leaves and tend to move upwards (bottom up). GPA issues often resolve from routine pruning and natural enemies (released or naturally occurring). However, PA can linger, go unnoticed and reach damaging levels quickly. If unsure what species is present, send a lot of specimens in a crush proof container to the [UVM Entomology Research Laboratory](#) or the [UVM Plant Diagnostic Clinic](#).

Releases of parasitic wasps (*Aphidius* spp.) and the midge *Aphidoletes aphidimyza* (a fly with predatory maggots) can be applied when aphid numbers are low. *Aphidius colemani* wasps attack GPA and *Aphidius ervi* prefers PA. *Aphidoletes* attack both aphid species and then some. For well-established aphid populations causing damage, with low evidence of natural enemies (i.e., maggots or mummies), common insecticides options available as organic formulations include insecticidal soap, oils and pyrethrins. For more specific information see:

Sustainable Pest Management in Greenhouses and High Tunnels (NE SARE):

<https://www.sare.org/wp-content/uploads/Sustainable-Pest-Management-in-Greenhouses-and-High-Tunnels.pdf>

Tomato, Greenhouse & High Tunnel - Insect Control (New England Vegetable Management Guide): <https://nevegetable.org/crops/insect-control-25>

ORGANIC FUNGICIDES FOR MANAGING CERCOSPORA LEAF SPOT IN BEETS

From Meg McGrath, Cornell University, Long Island Horticultural Research Center

<https://www.vegetables.cornell.edu/pest-management/disease-factsheets/>

Symptoms of this common disease were reported this week. The biopesticide Double Nickel tank mixed with the copper fungicide Cueva has provided good control in several experiments. This combination was more effective on inoculated plants (sprayed with pathogen spores after the second of five weekly applications) than the conventional fungicide treatment of Tilt (FRAC 3) alternated with Quadris (FRAC 11) in an experiment conducted in SC in 2021.

There are several FRAC 3 and 11 fungicides labeled for this use; they are at risk for efficacy being impacted by resistance developing in the pathogen. Actinovate, LifeGard, Regalia, Serenade, and Stargus are biopesticides that were effective in 3 experiments conducted in upstate NY (all except Regalia provided > 50% control). LifeGard was very effective alternated with Double Nickel + Cueva (91% control). The treatments in all experiments were on a preventive schedule started before plants were inoculated. Starting fungicide applications after symptoms are found will compromise efficacy.

RESOURCES FROM THE UVM AGRICULTURAL ENGINEERING TEAM

Andy Chamberlin and Chris Callahan

New Blog Posts

Farmer's Favorite Cleaning Tools. As part of our SCRUB Project, we have demonstrated a wide range of Cleaning Tools on-farm with growers. <https://go.uvm.edu/ffcleaningtools>

“Dry Cleaning” on Produce Farms: Alternatives to Using Water & Detergents. You may feel like it is necessary to soak everything with water, scrub with detergent, and dose with a sanitizer no matter what. Well, hold on. There may be situations when a “dry” approach to cleaning and sanitizing makes more sense. <http://go.uvm.edu/drycleaning>

Detergents for Farm Food Contact Surfaces. What is an “Appropriate detergent for food contact surfaces?” Don’t get confused by the word, “detergent.” A detergent really is anything that has the chemical ability (due to surfactants) to grab onto soil, oils, fats, or other filth with more strength than those things grab onto the surface being cleaned. <http://go.uvm.edu/detergents>

New Videos

Heated Greenhouse Benches at Blue Star Farm. Sue Decker of Blue Star Farm <http://bluestarfarmny.com> shares how the benches were constructed in her high tunnel for growing plant starts. These hot water benches are thermostatically controlled and eliminate the need to heat the entire space in the early spring months. <https://youtu.be/muYtRvLal-I>

Rebuilding a Vegetable Brush Washer for Produce Safety. Ever wonder what it takes to rebuild and update an old brush washer? We take you along the project to see all that is involved. <https://youtu.be/BRmzBQv-EtE>

Building A Better Greens Bubbler [Updated]. Key points to consider when building a greens bubbler so it is safe to operate, easier to use and keep clean. <https://youtu.be/GI2tWR5amZs>

How to Quickly Rinse Bins, at Root 5 Farm. Danielle and Keith share how they do it at Root 5 Farm. <https://youtu.be/KnST6KRfwck>

New Podcasts

Heated Greenhouse Benches at Blue Star Farm: Ep75
<https://agengpodcast.com/2022/06/20/heated-greenhouse-benches-at-blue-star-farm-ep75/>

High Tunnels, Cat Tunnels and Wash Pack Tour of Blue Star Farm: EP76
<https://agengpodcast.com/2022/06/27/greenhouse-cat-tunnel-wash-pack-tour-of-blue-star-farm-ep76/>

SURVEY ON FARMER WELLNESS

The folks at Farm First, Vermont’s wellness resource for farmers, is conducting a survey to better understand the physical and mental-emotional challenges that keep farmers from being productive and enjoying their work. With this information, they can access federal funds for accommodations and programing. For example, a bum knee can be aided by a custom-built step-up for their tractor, paid for by federal funds. Please complete the confidential survey here: <https://bit.ly/farmersurvey2022> by July 15. It will just take 2 minutes! Thanks.

UPCOMING EVENT

Farm Practices for Pollinators and Crop Health. Wednesday July 13 from 4-6pm. Intervale Community Farm, 282 Intervale Rd, Burlington, VT 05401