



Vermont Vegetable and Berry News –July 24, 2018
compiled by Vern Grubinger, University of Vermont Extension
(802) 257-7967 ext. 303, vernon.grubinger@uvm.edu
www.uvm.edu/vtvegandberry

UPCOMING EVENTS

July 26, rain or shine, 4-5:30 pm. Success with Bio-Control in High Tunnel Vegetables. Jericho Settlers Farm, 22 Barber Farm Rd, Jericho, VT 05465. Brian Spencer of Applied Bio-nomics, a major producer of natural enemies, will discuss biocontrol strategies and answer your questions. burning arthropod pest management questions. Note: please use the driveway that leads to the hoophouses and park in the field. There will be a sign. We will meet there to start. For more information: Cheryl Frank Sullivan at (802) 656-5434 or cfrank@uvm.edu.

July 31, 9-3 pm. Reduced Tillage in Organic Systems Field Day at Cornell's Willsboro research farm. Topics include roller-crimping, zone tillage in high residue, in-row cultivation tools, stale seedbed and weed seed bank management strategies and grower experiences with reducing tillage on their farms. Many great speakers. More information: Amy Ivy at adi2@cornell.edu or visit <https://enych.cce.cornell.edu/event.php?id=953>

August 3, 3-5pm. Organic Pest Control Study: Colorado Potato Beetle. Intervale Community Farm, 282 Intervale Rd, Burlington, VT. Join Scott Lewins and Victor Izzo of UVM Plant & Soil Science Department for a tour of the ICF farm and discussion of research combining beneficial nematodes in the soil with *Beauveria bassiana*, a beneficial fungus, to manage CPB. Cost: \$5, register at <https://sevendaystickets.com/events/organic-pest-control-study-colorado-potato-beetle>.

August 9, 3-6 pm. Food Safety on Farms Open to Visitors. Cedar Circle Farm, E. Thetford, VT. Learn which regulations matter for farms of all types and sizes, and meet the experts you can call on when you have questions. A tour of Cedar Circle Farm's food safety systems will demonstrate best practices for produce and prepared foods in the farmstand, PYO fields, kitchen, and cafe. Register by July 31 at: <http://go.uvm.edu/agritourismworkshops>. More info: Becky Bartlett at: 802-257-7967.

August 15, 4-6 pm. Field based Conversation on Foliar and Fertigation applications. Green Mountain Girls Farm, Northfield VT. Join Nathan Harman, Soil and Plant Health Specialist with Advancing Ecological Agriculture for a discussion of foliar feeding and fertigation goals and demonstration of equipment and methods used on the farm to apply non-denatured (not purely water soluble) products (nutrition and inoculations) to a modest vegetable, fruit and pasture production. Free. <http://eatstayfarm.com/about-us/directions/> RSVP to: Mari@eatstayfarm.com

August 15, 3-5 pm. High Tunnel Twilight Meeting. Grafton County Farm 3855 Dartmouth College Hwy. North Haverhill, NH. Join UVM Extension's Chris Callahan for a discussion on high tunnel ventilation, and UNH Extension's Becky Sideman and Heather Bryant for a discussion of high tunnel tomato nutrient and insect management. To register, contact Heather Bryant at heather.bryant@unh.edu.

FARM VIABILITY ENROLLMENT DEADLINE IS AUGUST 31

This program provides provide one-on-one business assistance to farmers through a network of advisors at the Intervale Center, UVM Extension, NOFA-VT, Center for an Agricultural Economy, and Land for Good. Business owners work with skilled advisors to increase profitability; improve financial record keeping; develop skills in marketing, sales and human resources; receive focused management coaching; and develop ownership succession plans. There is a \$75 enrollment fee; for most participants, that is the only cost. Applications and information related to eligibility, are available online at <http://www.vhcb.org/viability> or by contacting Liz Gleason at liz@vhcb.org or (802) 828-3370.

TECH TIP: GREENS SPINNERS

This blog post and PDF publication from UVM Extension Ag Engineering provide background on some of the key features to consider when thinking about a greens spinner including cost, capacity, power, space and sanitary design. Manual spinners, washing machine conversions and commercially available electric spinners are described with links included for more information. An outline of a cleaning and sanitizing SOP is also included. <http://go.uvm.edu/greensspinners>.

LEEK MOTH UPDATE

Leek moths began pupating last week, so the third flight is about to begin in most of Vermont. Adult leek moth populations are likely to reach peak numbers over the next two weeks, and will continue to fly through mid-August. Harvest and curing of alliums isolated from leek moths prior to the third flight will avoid potential damage by preventing female moths from laying eggs on your crops. Where this is not feasible, chemical controls should be considered. Spinosad (Entrust, organic) and spinetoram (Radiant SC, conventional) have been shown to be effective but must time timed appropriately, especially in onions because of moth feeding behavior.

Canadian research has consistently found that properly timed insecticide applications made 7-10 days following a peak flight of leek moth adults can effectively manage damage resulting from the following larval generation. If you have questions about leek moth, contact Vic Izzo at vizzo@uvm.edu and/or Scott Lewins at slewins@uvm.edu. For background info on LM see: <http://web.entomology.cornell.edu/shelton/leek-moth/control.html>

SWD UPDATE

In case you missed it in the last issue:

https://www.uvm.edu/vtvegandberry/SWD/SWD_Update_2018.pdf

REPORTS FROM THE FIELD

(Rochester) The warm and dry conditions have been helpful to our earliest summer raspberries although it took constant irrigation to keep enough moisture in the soil. Despite catching one SWD male in a trap two weeks ago the dry weather and the timely application of Entrust have apparently kept the pest at bay so far. The blueberry crop looks excellent and the picking season has begun with a bang. Mummy berry damage is minimal after our campaign of mulching. We also spent a couple of days going through the patch removing all the visible mummies to try to reduce their impact next year.

(Hinesburg) We had been having a great season. Pest and disease pressures are lower than usual with the dry weather and we had been irrigating to keep things growing well. The limited rain also means weed control is relatively easier. However, the dry weather is starting to take its toll. Our two ponds are emptied to the point where I have little irrigation water left. Some corn is starting to spike and the ears are small. Some of our winter squash are ripening instead of growing and the leaves are drooping. Beets are wilting, and a number of other direct seeded crops are not germinating well so some fall crops are in jeopardy. Hoping to get some rain today so maybe this will all be moot when this goes to press. But overall, a better season than last year when it would not stop raining for nearly 2 months.

(S. Royalton) Finally some rain, started harvesting cantaloupe on July 19th, earliest ever. Corn will be ready any day. Everything I was able to get water to looks great, couldn't get enough water to somethings like my last planting of beets and carrots so nothing happening on that front. In 23 years I have never seen a period in which we would get a great rain and within days everything was begging for water.

(Charlotte) Very dry! Blueberries are smaller but are still sweet. Planted strawberries and put irrigation on them. Red raspberries and black raspberries are doing well. Hoping for rain while the irrigation system is done being installed. A lot more traffic into the farm with nearby road construction being done.

(Pownal) Blueberry Fields of Vermont. All berry netting completed by early July. First round of raspberries (Prelude) have been picked and Encore have just started. Good amounts of Preludes. Blueberries are being picked as well, started with Spartans and Patriots and Rekas. Noticed Bluerays and Bluecrops are starting to make the change from white to blue and are pretty sweet when I tested. Have started testing new insect netting. Exclude Net by Tek-Knit 80 grams. It is a much heavier weave. Have covered a 212-yard row of Herberts and remainder of roll went on Bluerays. We shall see.

This will be a huge expense to replace all the netting on our small farm of 500 blueberry bushes and 500 Raspberries. Have only been selling at our rural roadside stand, with brisk sales. Will be interested in reviewing newsletter for SWD experiences on other farms.

(Grand Isle) Island Blueberries. We got the insect exclusion netting up July 4th. It was a very hot installation. No birds, Japanese beetles are not getting in, catching the ones that are hatching inside. No mosquitoes. A serene environment, customers love it. Berries are ripening very fast, unsure if it's the heat or the netting. Seeing more cherry fruit worm than previous years. Will have to work some more on the opening for customer access.

(Northfield) For the second year running we have no sign of Colorado potato beetle! Three years in a row we have planted potatoes late (June 11th) hoping for this result. In 2016 we didn't detect CPB until plants were 6 inches high and numbers were small so smushing was easy. We also applied beneficial nematodes from Arbico Organics which could have contributed.

In the set-back category, we found cankers on a couple of tomato plants and Ann and Gabriella just diagnosed Sclerotinia as the pathogen. With indoor and outdoor spaces on the same automatic irrigation we have mistakenly overwatered the high tunnel in this dry year and we are humbled by the potential long-term consequences. Amidst our concern we reflected on the amazing opportunity to have access to UVM experts and rapid diagnosis. Thanks.

We have questions as we explore mulching. We are pleased with our Pro Chopper which mulches veg beds with straw and/or hay and we use it to seed and mulch cover crops as well as after the pigs on pasture, but we are struggling to find the sweet spot of mulching early enough to suppress weeds yet after crops have grown enough that they can handle the deluge. Also wondering of it's worth taking time to shred materials very fine vs. questioning how much residue plants can grow through, and when "unmulching" is needed.

(Hyde Park) It's been an incredibly dry July with only .75" of rain. My wife and I moved our farm this past winter to a raw piece of land and are still in the midst of setting up. Irrigation is minimal and the creek we irrigate from requires vigilance while the pump is running to make sure we don't suck our "hole" dry. It has been a challenge to make decisions about what crops get water and how much time to spend moving irrigation. Root crops have suffered and though they are still growing, they are stunted and way behind.

We lost the first round of beets to weeds as we are fighting serious grass and other perennial weeds. We plowed the sod this spring because we couldn't get on the land last fall so the weed pressure is unlike any I've experienced. Mixed greens have been incredibly challenging and I am doing all I can to keep up with accounts, while starting new accounts and doing a farmers' market for the first time. Snap peas finished this week with a pretty bad performance, and the green beans are starting to come on but later than planned.

Field cucumbers are looking great which will be helpful because the high tunnel cukes got hit with cucumber beetle and I am seeing some bacterial wilt as a result. Next year I plan to install screening because this is the second year in a row that volume is way down due to that pest.

I am concerned about garlic and onions not sizing up. I planted them in a wet spot in a new field in hopes they would do well and honestly it is the worst garlic crop I've ever grown. After not irrigating garlic for the 4 previous years and never having a problem, I will be changing some methods next year!

Despite the lack of rain, I have been impressed with the vigor of some plants, which is probably due to our high amount of soil OM (almost 9%) that helps hold water. The summer/winter squash is an absolute jungle and looks healthy although an experiment with intensive spacing was not a good idea. Brassicas that were watered normally for their first month are doing well. I am growing some of the most productive kale, broccoli, broccolini of my short career. Salanova has been amazing. I get many comments at market with those heads and mixes. So I suppose all the easy stuff to grow is growing well.

We have been surprised at the resilience of most flowers with very minimal water after transplanting. Thrips have been an issue on some flowers. Japanese beetle showed up a couple weeks ago but have stayed away from basil; they seem to like broccoli leaves and red Russian kale this year.

This season is a learning year. I realize the importance of efficient systems and help. Managing 2.5 acres of veggies alone with minimal equipment has been a struggle and there needs to be a shift here to maintain a quality of life and product. Because of the nature of this transition year, most long-term plants are behind. We are feeling worn out, but I am hopeful about 2019 and have been focusing attention to next season already. The August "f-its" have come early for me this year and I am looking forward to splitting firewood, leaves changing color, sleeping in, drinking dark beer, finishing the wash/pack shed, starting a barn, and constructing a new high tunnel.

(Grand Isle) I have never been so happy to receive 1/4 inch of rain! Farmers around here can't remember a dry spell like this one. We have been pleased with silver plastic for onions after hearing it reduces onion thrips. After repeated overhead watering, the silver has rubbed off, leaving black. The thrips are now multiplying. Last year we put onions on white and also on black plastic. On the black plastic, the thrips withered the greens before the onions got big, but on the white plastic the thrips did not bother the onions as much, and we sold onions with greens for a long time.

After reading Skip Paul's field report about germinating lettuce in the barn during hot weather, we decided to try it ourselves. Vern called up lettuce pelleting experts, and they assured us that in the priming process, the lettuce in the pellet now does not need light to germinate.

So we seeded in the greenhouse as usual, watered heavily, and then stacked them up to put in our basement for 48 hours. We then brought them back into the greenhouse where they popped up nicely, even though the greenhouse was way over 80 degrees. Thanks Skip for this cool trick.

(Plainfield NH) Wrapped up a pretty mediocre strawberry season, the heat making harvest difficult and hurting fruit quality. Blueberries in full swing with quality looking pretty decent. Markets for us are strong for veg and small fruit. Onions sizing and digging early whites. Using Envols, and they are really pretty and nice. Labor continues to be an issue as we struggle with trying to balance weed control with harvest.

Dry weather has us living from rain shower to rain shower, but no good soaking rains. Because we draw water out of the northern part of the Bellows Falls Hydro pool on the Connecticut River, the timing of releases from Wilder dam can make it hard to access water for irrigation. We are concerned about potatoes and moisture levels for bulking. Finishing a good crop of summer red and black raspberries.

(New London NH) Finally done harvesting June bearing strawberries. We will try to make good use of the limited extra time to catch up on weeding, tomato pruning, cutting runners in day neutrals, and transplanting before we start picking sweet corn and day neutral strawberries later this week. The field crew has been busy simultaneously harvesting strawberries, blueberries, and raspberries on top of all the other field crops which has not left a lot of time for other tasks.

We could certainly use a few more full time crew members at this point but we just have not had the same volume of applicants that we used to see. With a large portion of our field crew being students, we lose most of our crew by the end of August and hiring help for the fall is always a challenge. We have been fortunate enough to operate the past 40 years using local labor only but this season is making us think more seriously about integrating the H2A program into our future labor force.

Irrigation continues to be an important daily task. Luckily, we have some rain predicted for this week so we are hoping to take a few days off from the constant pumping and valve turning we have been doing for the past few months. We are on town water at our home farm which is great to not have to worry about pumping a pond or river dry as we do at other fields, but in extremely dry conditions like we have had, the town implements a water ban making it so we can only overhead water between the hours of 7pm and 7am. This makes it challenging to keep young transplants cool during the day and also makes for some late nights. Luckily, most of our acreage is now under drip irrigation keeping the late night overhead irrigating to a minimum.

In the fields we are busy finishing up strawberry renovation, incorporating cover crops, seeding cover crops, transplanting the last batch of broccoli and cauliflower, seeding the last planting of beans, and monitoring pests. It has been an interesting year from a pest control standpoint.

Things like onion thrips, leaf hoppers, Colorado potato beetles, and cucumber beetles have been quite persistent while we have seen very few aphids, cabbage loopers, squash vine borers, European corn borer, and no SWD yet. Also very little disease pressure with the dry season we have had.

Tomato greenhouses are very clean, strawberries are almost free of leaf spot, still no sign of basil downy mildew, and no cucurbit powdery mildew as of yet. We did see some early blight show up in a wet section of the potato field but consistent fungicide applications have kept it at a minimum. Powdery mildew is just starting to show up in the new planting of strawberries but mostly in the Annapolis variety which is not surprising.

(Little Compton RI) Just put in our fall/winter carrot and beet planting. Hoping there is enough moisture to get them up and running! We pretty much planted into dust.

We like our Jang five-row planter but have found two things to customize on the units. One, we lengthened the depth rod so we can set parsnip pelleted seed and large beets, etc. at a depth that they get ample cover and access to moisture. Two, we added a heavy steel bar which allows us to add a 35lb weight to put a greater downward force to the whole machine. After years of use and mysterious skips I finally figured out the whole planter is just too light-weight for 3-point tractor use. The extra weight has help greatly. Lastly the plus sign wheel has been great for problematic seed shapes and sizes, like certain carrot and lettuce seed. Also, a lubricant like liquid graphite has been good for drive-wheel lubrication.

As I have feared, it looks like the previously benign wild turkey population is evolving their choice of food sources and starting to go after watermelons, strawberries, and list is growing. Looking like Thanksgiving is going to be early this year!