



Vermont Vegetable and Berry News – July 2, 2020
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www.uvm.edu/vtvegandberry

REPORTS FROM THE FIELD

(S. Royalton) The pumps fall silent for the first time in 7 weeks. Damage done by not having a big enough system to move water to everything fast enough. Having said that, is it worth a bigger system given that I have never seen a dry period like this in 26 seasons? Most things look good considering. Issues: small spuds with some yellowing leaves at bottom from stress, poor germ rate with some greens and one batch of corn, mysterious virus killing a handful of random cukes and melons. Issues not worth 10 of thousands of \$ like a bigger irrigation system.

(Monkton) I was going to give a glowing report on our strawberry season but we just got 3 inches of rain today and I'm not sure what the field will look like in the morning. The season may come to an early end. But I can say that our experience running PYO under the Agency of Ag Covid-prevention guidelines has been seamless. We are enormously grateful first of all to our unflappable crew and then to all the customers who made (and kept) PYO appointments to limit crowding, wore masks, bought new containers, washed hands, and refrained from eating berries in the field. Even little kids seemed to just accept the "New Rules" as a minor trade-off for getting yummy organic berries to take home. Most people expressed relief that our structure and organization allowed them to relax and enjoy a cherished outdoor activity that felt almost "normal." We did raise our price to partially cover the increased labor and supplies but got no complaints.

(Brookline/Newfane) We have an over-supply of ripe strawberries. A heavy thunderstorm will hurt us, but we are thankful it has rained. Pick your own is restricted this year. Customers must wear face masks. A 10-pound minimum per couple in car. Also no large groups. We may be annoying some folks, but others are happy with the control. Our employees feel safer and we are still living. It's always busy this time of year. Our weeds are growing well.

(Charlotte) The blueberries and black raspberries are coming along well and should be ready in a couple of weeks. The crew for the farm stand and picking are getting Covid19 training before starting this week. We are having multiple shifts so the crew will be able to stagger lunches and breaks. We decided to have only two berries that will be PYO and the others will be pre-picked or commercial only because it will be too hard to keep social distancing in those other fields.

(Cabot) We lost king berries in the strawberries with the late frost June 5th and also most of our blueberries, which had looked great in flower. We could use some rain for the remaining strawberries. Also have mole damage in the Cabots, but strawberries are doing OK considering. U Pick customers are happy, even with Covid 19 restrictions! Increased amounts of plantings, and our new plug planter is working fantastic! Got everything in in record time!

(Grand Isle) Got our insect exclusion netting up after hearing reports of SWD. Monitoring for cherry and cranberry fruit worm. Have found both moths in our traps. Lots of green berries, watering a lot. For the first time not opening for u-pick because of COVID-19. We will pick and sell or donate to food shelves.

(Plainfield) I experimented with using a surfactant (Dawn dish soap) on the 2nd stage (shoot strike) of the blueberry mummyberry disease. That hits the leaves later in May, when the buds are opening, and makes a white sweet "powder" that attracts the pollinators that then spread the mummyberry fungal disease. The first stage little fawn deer size "turd" mushrooms (that we physically disturbed) come in early May when the forsythia blooms. A surfactant seems to have definitely knocked it back (that and the warm, overly dry weather). I am also interested in trying hydrogen peroxide mixed in as well. I will let you know how it works when the berries ripen. So far the crop looks bountiful! Here is hoping! Last year I had a half crop due to mummyberry loss (and a little drosophila loss as well). I see some new leaf growth on my blueberries, despite the record drought.

(Westminster) The bad news: since May 15 we have had less than an inch of rain, so "dry" doesn't begin to describe it. Our biggest problem is that we're running out of irrigatable land on which to plant fall crops. We've also had difficulty germinating some root crops.

Speaking of dry, sales of our crops into the Southeast have dried up, the result of industry politics, so we have many acres of lettuce that have either been harrowed up or harvested by Vermont Foodbank's gleaning program. But, as Monty Python encourages us, always look on the bright side of life. So we have an excellent workforce this year, both H2A and local employees, and our weed control is as good as it's ever been. The strawberry season has been phenomenal – retail, wholesale, and pick your own. Harlow Farmstand has had a terrific year so far, as well. Because of the Covid pandemic, people are shopping locally and growing gardens both for food and for enjoyment.

(Westminster West) We are experiencing quite severe dry weather here with hardly any decent rains since early May! Years of preparation for extreme conditions is paying off. All crops are on plastic with multiple drip lines, soil between the beds is covered with ground cover which minimizes moisture loss.

Removed 2 acres of row cover from winter squash yesterday and in spite of the weather it looks excellent, started to run and first flowers are open. I saw a few squash bugs and a few squash beetles on the squash but minor compared to when I used to grow without row cover.

Our stand is still closed and we are not yet attending our farmers' market although it is open. Finding other methods of marketing and I'm feeling a lot of changes are coming.

Hemp crop looks good, have a few hemp (corn) borers, a bigger problem than last year's crop. Demand is strong and we are sold out of product. Tomatoes and raspberries looking fantastic and Garlic harvest is almost here!

(Plainfield NH) Welcome relief in the form of rain in the recent storm has given us a respite from irrigation but complicates the strawberry harvest should it not dry out. So far, a good crop, and getting rid of a lot of high quality fruit. No major pestilence, but cabbage worms showing up and I think the hoppers are starting to show up. Weeds exploded, and will occupy us in any spare moment as we struggle to transition from strawberry harvest to vegetables, raspberries (a weak crop from orange rust and winter injury) and blueberries (fair to middling). Netting will have to be moved as well and we are still full bore succession planting.

Greenhouse season was great here, like anywhere there was a greenhouse with a tomato plant in it. We are virtually out of ornamentals and perennials. Great to be able to shift the labor, but missed sales perhaps?

The big change is pandemic protocols and effect on the retail public and our sales force. Farmstand sales are very strong, as predicted. But there is a segment of the public that has tired of the novelty of the distancing and masking-up, and we have experienced some nastiness. I talked to our (all female) farmstand crew in regards to taking unreasonable, shall we say, crap from customers. I have given the managers carte blanche to tell troublemakers to leave and not come back. I trust their judgement, and I have seen a few tears so we feel it is time to be firm. We are going to talk to our local police guy and ask him to develop protocols for handling unruly customers. For example, after you eject a patron, might it be prudent to take a pic of the license plate for future reference? Crossing a strange customer might be an invitation for vandalism? Anyway, our first step will be to consult how we should handle the troublesome in-your-face types. I feel our front-line retail folks need all the support we can give them this year.

SWD ALERT

Spotted Wing Drosophila appears to have arrived early this year, as it is being caught in traps in nearby states. If you missed the June 2020 SWD Update shared on the Vermont Vegetable and Berry Growers Association listserv, it is posted here, with other information resources:

<http://www.uvm.edu/vtvegandberry/SWDInfo.html>

REPORT FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg, UVM Extension

There are not a lot of disease issues out there due to the hot, dry weather. I suspect this will change in the next week or so since the state received so many showers. In general, look for scorch symptoms on leaf edges of plants and watch for increased populations of onion thrips, spider mites and other pests that would thrive in the hot dry conditions. When weather is warm, insects with multi-generations may reproduce quicker.

Leafhoppers are here in full force causing hopper burn in beans, potatoes, raspberries, etc. For good images see: <https://extension.unh.edu/blog/potato-leafhoppers>

Lots of four lined plant bug injury on mints, basil, mums, oregano and one home garden tomato leaf. Damage looks like angular leaf spots. More info <https://hort.extension.wisc.edu/articles/four-lined-plant-bug/>

Tomato: have seen some Botrytis/gray mold and Sclerotinia white mold (canker with fluffy white mycelium) in high tunnels where humidity was high. No leaf spot diseases yet in the field that I have seen. Blossom end rot common on some cultivars. Had an interesting sample with vascular browning and cankers on stems like that seen with bacterial canker but sent it to UMaine to be genetic tested. They found an “unknown” bacteria, not the one involved with the canker or pith necrosis. Weird. The grower reports the plants are growing out of the damage which is good.

Another grower had a problem with corky root rot earlier in the season on one tomato rootstock. We thought it might be a total loss, but the grower reports the plants are improving, although not perfect and still stunted, but with a harvestable crop. The only thing I can figure is that enough new roots are coming out to ‘outrun’ the corky root rot. Have seen pictures of suspected Rhizoctonia crown rot at the soil line, most likely a result of earlier cold weather along with wet conditions under the plastic in a high tunnel.

Cucurbits: George Hamilton UNH reports lots of squash vine borer captures this past week. He suspects the curve of the one generation/year pest will be steep and shorter than usual as result of hot weather. Scott Lewins, UVM, reported seeing the colorful adult clearwing moth laying LOTS of eggs at a farm in Barre.

Diagnosed angular leaf spot on cucumbers in one high tunnel. Spots are limited by veins and can “weep.” Disease is seed borne, see: <https://ag.umass.edu/vegetable/fact-sheets/cucurbits-leaf-spots>

The Plant Diagnostic Clinic is open for any commercial grower issue. Just contact me first (ann.hazelrigg@uvm.edu) before sending samples since I am not in the lab every day. <https://www.uvm.edu/extension/pdc>

SHORT-TERM SUMMER COVER CROPS

Adapted by Becky Maden from UMASS Veg Notes, June 25, 2020

Now that most of us have a little bit of moisture in the soil, it’s a good time to consider using summer cover crops in any unused beds or fields to prevent erosion, keep weeds down, and build organic matter. Below is a summary of some heat-loving, quick growing summer covers.

Legumes

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. Seed is mostly sourced from Hawaii at this point and may be expensive, but the N contributions may be worth it! *Drill 20-30 lbs/A.*

Crimson Clover (*Trifolium incarnatum*) is a beautiful cover crop that is a great choice for a short-term summer cover or perhaps seeded between plastic rows to reduce splash and erosion and suppress weeds. *Drill 10-20 lbs/A, and broadcast at 12-24 lbs/A.*

Non Legumes

Sorghum Sudangrass (*Sorghum bicolor x S. sudanense*) Sorghum sudangrass is a cross between grain sorghum and sudangrass. Sorghum sudangrass can reach 6-12 feet tall, but should be mowed when it reaches 2-3 feet tall to prevent it from becoming fibrous and difficult to manage. To optimize growth, you will need to 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.*

Phacelia (*Phacelia tanacetifolia*), also known as blue or purple tansy, is a good cover crop for use in rotation on vegetable farms because it is in a different plant family than most vegetable crops. Great for beneficial insects and pollinators. *Seed at 1lb/A drilled and 3 lb/A broadcast.*

Forage-Type Pearl Millet (*Pennisetum glaucum*) or **Japanese Millet** (*Echinochloa* spp.) grow rapidly but are more easy 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.*

Additional Information

[UMASS Vegetable Notes](#), June 25, 2020

[Managing Cover Crops Profitably](#), SARE 3rd edition

Or contact Becky Maden, UVM Extension, Rebecca.maden@uvm.edu

LEEK MOTH UPDATE

Scott Lewins and Vic Izzo, UVM Plant and Soil Science Dept.

The second leek moth flight of the season has begun throughout much of Vermont. Adult leek moths mate at night, laying eggs on all alliums. Shortly thereafter, you will begin to see the characteristic windowpane feeding damage of the leek moth caterpillars. These caterpillars, the offspring of the second flight of moths, have the potential to do significant damage to allium bulbs due to the timing of this larval generation. If these leek moth caterpillars are feeding on allium leaves at the time of harvest, the caterpillars will move into the bulbs as the leaves die down. Feeding damage and exit holes on bulbs while in storage can significantly reduce their marketability and open the bulbs up to secondary infection.

Research conducted by our team over the last couple of years suggests releasing Trichogramma wasps throughout the second leek moth flight may reduce damage by more than 50% (<https://www.uvm.edu/agroecology/vepart-publishes-new-research-brief>), and topping your onions prior to curing may eliminate leek moth damage while not impacting quality after 6 months of storage. The same tactic is also an option for managing leek moth in garlic, Crystal Stewart at Cornell Cooperative Extension has shown that trimming the tops of the garlic in the field rather than drying the whole plant intact does not increase disease issues or reduce bulb weight (https://rvpadmin.cce.cornell.edu/uploads/doc_773.pdf).

Other leek moth management options include exclusion with row cover and chemical controls. Covering plants with row cover at night will exclude the nocturnal female moths from laying eggs. Where this is not feasible or cost effective, chemical controls can be applied. Spinosad (Entrust, organic) and spinetoram (Radiant SC, conventional) have been shown to be effective chemical controls but must be time timed appropriately, especially in onions because of caterpillar feeding behavior. Canadian research has consistently found that properly timed insecticide applications made following peak leek moth flights can effectively manage damage resulting from the following larval generation.

For more information about leek moth in general, check out the Leek Moth Information Center website (<https://nysipm.cornell.edu/agriculture/vegetables/leek-moth-information-center>). If you have any questions or concerns about leek moth, or are interested in monitoring leek moth on your farm, please contact Vic Izzo (vizzo@uvm.edu) and/or Scott Lewins (slewins@uvm.edu).