



Vermont Vegetable and Berry News – November 15, 2016
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REPORTS FROM THE FIELD

(Fairfax) great weather for fall harvest. Swede midge is mystifying. Had lots of injury in early July on cabbage. Tried late broccoli, had some midge damage but in general a decent crop. Late kale had very little damage. Last year we had extensive damage in July on broccoli but had a great fall crop. We continue to move brassicas as far as we can but starting to think that planting timing can play a role in management. Who knows. We're going to continue with brassicas assuming some loss will occur every year, but hopefully multiple plantings will result in some success. We had great success with using black textile cloth between plastic on peppers. Will use more next year, likely try it on winter squash as well. Will be interesting to see how many years use we get with the material.

(Starksboro) We still have a few things in the field, but otherwise we're wrapped up with field work. Good stands of winter rye on most fields. We interseeded winter rye on the late harvested crops. There was a time, not too long ago, when we were the only farm with much for winter cover in the neighborhood. In the last couple of years, even the dairy farms have covered their corn fields with winter rye. It looks great. I assume it's the pressure from the new RAP regulations. Last week, I had an errand to do out in the Champlain Valley of Addison County, where it's all heavy clay, and I was rather surprised. There wasn't a single sprout of winter rye on all the corn fields out there. It appears that no effort is being made. In addition, the question still lingers unanswered: What are the dairy farms going to do with all their manure, given the new RAP regulations?

(Craftsbury) We're prepping land for next spring, can't afford to waste the tremendous fall weather. Would love to see research on how much N is leached away from late fall applications of raw and composted poultry manure. As our falls get longer and longer we have more time to spread fertility and prepare beds for the spring, it's fun to do field work without the stress of time pressure and for just 8 hours a day instead of 14. We even joked about planting potatoes in the fall, most years we get snow before the ground freezes deeply enough to freeze potatoes and uncut spuds would winter in the ground just fine.

(E. Dummerston) Thanks to the University of Massachusetts November VegNotes newsletter, to which all growers should be subscribing (<https://ag.umass.edu/vegetable/vegetable-notes/subscribe>) I've finally learned the name of the critter that's been turning some of our greens into Swiss cheese. It's a relatively new pest called the winter cutworm which can be active at very cold temperatures. You can usually find them in the soil at the base of a chewed plant during the day. The other night at about 10 p.m. I walked through one of our greens houses and found ten cutworms in the aisles close to Swiss chard plants. We were late controlling that house but have found Entrust works better than Dipel DF. Weekly distributions of lady bugs have been keeping us aphid-free in the greens tunnels so far. Now the problem is keeping the greens cool enough during these warm days which is a better problem than worrying about freezing.

(Westminster West) Almost over, still picking for orders and packing and delivering, but with Thanksgiving next week, we will be mostly done. Friday we finished up carrot harvest, including a nice load of Rainbow carrots. Washed, bagged and in the cooler now. Most fields in cover crops, thick and green now. Need to get row cover on the garlic field this week after we lay down the textile cloth ground cover between the beds. First time trying this after giving it a try on summer crops, we really like it. Leeks and kale about the only crops left in the fields, they should be done this week as well. Storage onions pretty much gone except for the few smart stores that pre ordered their Thanksgiving needs with us. Amazing how quickly almost 30,000 lbs of onions went thru here in the last 6 weeks, but I'm almost happy to see it all gone! Winter squash moving nicely, hopefully the holidays will clean those up as well. Maintenance phase beginning as well, the weather takes its toll on the greenhouses, important to keep up with the repairs. Farmers' market all done, did one pop-up market and that was fun and worth it!

(Ange-Gardien, Quebec) Mild and cloudy end of fall here. Oat and peas still growing a bit in the field trying to get this extra biomass for green manure. Tried 30 acres of winter rye for grain this year. Looks good although some quackgrass did come back. Greenhouse crops look good except green Oakleaf salanova which pretty much rotted. I guess its creeping growing habit plus humidity is the reason. Customer will have a mesclun without these leaves. Next year I will try white plastic mulch plus raise the lettuce to get some air between older leaves and the plastic. I am pretty surprised about the plant. For the ones that did not rot, I will be at my third cut. Harvesting windows for the leafy stuff gets narrower if I do not want to harvest the leaves too humid. Still have lots of kale but price does not seem to come up yet. I will try to stretch this one up.

(Dummerston) I'm really enjoying the mild weather and still harvesting a great crop of carrots and parsnips for storage. Lots of greens, scallions, leeks, radishes and Brussels hanging on in the field; high tunnel doing pretty well but I'm constantly trying to get rid of cutworms. I'm looking forward to starting up my winter CSA and bringing lots of exciting crops to the winter market

(Plainfield NH) Trying hard to refrain from thinking about mulching strawberries. In my dream world I sit down to Thanksgiving dinner with the strawberries mulched, but they are just now starting to show signs of dormancy. I have mulched in the snow and find it treacherous to work around the mulcher. I worry about the guys loading it with snow covered surfaces; the mulcher is a nasty machine to work around. Experiencing some new weeds in our strawberries: horsetail, stinging nettles a broadleaf with nasty rhizomes, along with the usual clover and dandelions. Horsetail has been working its way up the Connecticut River valley just behind the advance of knotweed; it is nastier to control and doesn't lend itself to hoeing or pulling. The PYO folks are not pleased when it finds them. Trying to get the blueberries mulched with hardwood chips. Turkeys in one field have scratched everything away from the base of the plants, exposing the shallow root systems. At first I thought it was coydogs trying to dig up voles. Currently I am just monitoring and hoping this activity will run its course. Otherwise, we are packing out wholesale 3 times a week, and will wrap up our fall CSA the week before Thanksgiving. Trying to get machinery serviced and stowed away. Readyng the ornamentals house full of stock plants in hopes of starting taking vegetative cuttings by Thanksgiving. Have been introducing beneficials early into that house in an effort to achieve a better predator/pest balance.

(Little Compton RI) September rains pulled us out of our death spiral from the drought of 2016. But not a drop for the last three weeks so we were irrigating to finish broccoli, cauliflower and storage cabbage. That is a first! Aphids showing up on schedule (in high tunnels) and we have boxes of lady beetles going to work straight away. Grey aphids in outdoor Brassicas as bad as ever. May be giving up on Brussels sprouts. Late-planted curley kale is clean. Seems the only way to defeat this problem is to keep planting and moving out of fields where they rule the day. No organic spray touches them! Very late-planted Watermelon radish putting on tremendous growth since September 20th. Usually, we plant that mid-August. Indoor winter markets slightly down so far. Our primary fertility in high tunnels this season is alfalfa meal. Takes a good amount of moisture to get it to give up its nutrients but is a beautiful thing when it finally kicks in.

COVER CROP SURVEY WILL GUIDE OUR RESEARCH

Please take this 5-minute survey to help Extension folks in the region better understand your cover cropping practices and information needs. We are planning research and we want it to be most useful. Any information shared is confidential.

<https://www.surveymonkey.com/r/covercrop>

DOWNY MILDEW ON SPINACH NOW DEVELOPING IN THE NORTHEAST

by Margaret Tuttle McGrath, Cornell University Long Island Horticultural Research and Extension Center

Downy mildew has been found recently in spinach at several farms in the northeastern U.S. This devastating disease has not been confirmed in the region for several years, thankfully, as it has been a major production constraint in California. Pathogens causing downy mildew are Oomycetes and thus are related to the late blight pathogen. They are similar in ability to produce an abundance of wind-dispersed spores capable of moving long distances, they do not need leaves to be wet to infect (high humidity is sufficient), and they have the ability to devastate crops.

All growers with spinach should inspect their plants for symptoms promptly. If downy mildew is suspected, please contact your local extension specialist and e-mail Meg McGrath at: mtm3@cornell.edu.

****It will be CRITICAL that all high tunnel and overwintering spinach crops with downy mildew be destroyed a couple weeks before the start of the spring spinach production season in the region, to avoid carry over into 2017.**** Promptly destroy infected, abandoned crops to eliminate this source of inoculum for other plantings in the region. The pathogen can survive a few years in soil when both mating types are present together enabling production of oospores.

Symptoms: purplish-gray, fuzzy growth of the pathogen, which is usually on the underside of leaves, is diagnostic. Early morning is the best time to see as the growth (which is spores and the structures holding them) is produced overnight, then during the day the spores are dispersed. On the top side of leaves, opposite where the growth develops, the leaf tissue will be yellow, initially dull becoming brighter and larger with time. Subsequently affected tissue will become dry and tan. If only leaf yellowing is seen, which could occur when humidity is low, put suspect leaves upside down on wet paper towel in a closed ziplock bag for a day. Keep the bag in the dark, such as inside a box, to further promote the pathogen if present to develop.

Here is a site with images of downy mildew on spinach, click on them to enlarge.

http://mtvernon.wsu.edu/path_team/spinach.htm#downymildew

(You can scroll around this page for images of other spinach diseases.)

Management. Resistant varieties are an important management practice, but the pathogen has been developing new races able to overcome host resistance. Last year, race 16 was discovered. To maximize success of control with fungicides, start early in disease development, preventive best, and apply weekly. Conventional fungicides for this disease include: Actigard, Aliette, Merivon, Quadris and other QoI fungicides, ProPhyt and other phosphorous acid fungicides, Ranman, Reason, Revus, Ridomil Gold, and Tanos. Downy mildew is difficult to manage with organic fungicides based on experience of researchers and growers in CA. Labeled products include copper, Actinovate, Double Nickel, Regalia, Oxidate, Trilogy, and Zonix.

Pathogen Sources. It is possible contaminated seed or infected spinach produce from outside the region was the source of the current outbreak. The pathogen, *Peronospora farinosa* f. sp. *spinaciae*, is only known to infect spinach. It is possible some *Chenopodium* weed species are susceptible to some races.

Favorable Conditions. Cool with high humidity. Optimal temperature range for this pathogen is 59–70 degrees F. Minimizing irrigation in high tunnels and keeping them well ventilated is important to reduce humidity levels.

Reference to commercial products, trade or brand names is for information only; no endorsement is intended. The specific directions on fungicide labels must be adhered to; they supersede these recommendations if there is a conflict. Check state registrations and labels for use restrictions.

UPCOMING EVENTS- details go to: <http://www.uvm.edu/vtvegandberry/?Page=meetlist.html>

Nov. 17. Growing Vegetables and Small Fruits in High Tunnels. Vernon, CT

Dec. 6,7,8 and Jan. 24,25,26 in ME, NH and VT. Farm Succession Schools.

Dec. 14. High Tunnel Production conference, Manchester NH

Jan. 12-14, Winter Greens short course, Bread and Butter Farm, Shelburne, VT.

Jan. 23. VVBGA Annual Meeting, Fairlee VT. Stay tuned.

Jan. 24. VVBGA Cover Crop conference, Fairlee, VT. Stay tuned.

Feb. 18-20. NOFA-VT Winter Conference, Burlington VT. Stay tuned

March 6. Strawberry Grower School. Fairlee VT. Stay tuned.