



Vermont Vegetable and Berry News – August 9, 2016
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REPORTS FROM THE FIELD

(Plainfield) The berries are abundant this year. Started picking July 13, about a week early. I thought the heat would shorten the season but the picking is still great. No one has dug the dig-your-own Echinacea, but there is interest, and it is beautiful. Summer raspberries are doing great, Nova's almost gone, Encore's coming in. The early varieties I planted last year, Taylor and Heritage, have not started producing yet. I put up bear fence; got some bacon to hang over it to "train" the bears (sensitive mouth and nose to electric shock) but I guess food is abundant enough now. After the first four passes through my yard (not in the berries, they ate Jack in the Pulpit root two nights in a row) and two cub poops I have not seen any more bear sign. I have not turned the electric fence on, and will take down the step-in posts at the end of the season. The lower berry price in exchange for weeding/mulching helping is working out again, this year 2. The place looks great; people are invested in it, and I am not overwhelmed. I leave sleds around then find them full of weeds, and it is looking great. Still offering flowers for a donation to the Senior Center. That offer gets taken up occasionally: one wedding last year, occasional take-home bouquets this year. No sign of drosophila and relatively few cedar waxwings.

(Hinesburg) Our season is dry! One pond dry and sucking down another. Crops are great, when we have given them enough water. Weed control is easier with less rain. Some winter squash already almost ready, a bit early for us. So warm. Wrong year to cut back on the 4th melon planting, easily would have made it this year. On top of farming 60 hours a week, trying to campaign across the state. Regardless of who voting for, please get out and vote!

(Burlington) I am feeling fortunate we are on the wet side of the dry summer. Still dry where we are, but since we have such sandy soil, and sit on a main stem river, we are well set up for irrigation, and we feel for those who aren't. Finally seeing some plant diseases move in, including powdery mildew in our tomato houses, which we've never seen before. Alternaria, which apparently is not that common in cantaloupe, is rapidly taking down all of the foliage. Tried copper on the second planting, but either it was too late (though prior to 96% of lesions) or ineffective.

So far 'Divergent' cantaloupe looks to be the best against the disease; fortunately, it tastes great and seems to yield well. Onions diseases nearly non-existent, though thrips are hammering them. Amazingly fewer thrips on the silver mulch than on the adjacent black, and now I am appreciating the cooler soil beneath the poly that I hated in the cool spring. Awful second generation CPBs this year; spinosad is definitely becoming less effective, despite limiting ourselves to one spray annually. What with the super PLH populations, this won't be our best-ever potato crop.

(Dummerston) I'd never known tomatoes were on a deer's list of favorite foods but the deer have really done some damage in my remote high tunnel, munching unripe and semi-ripe fruits. Maybe they're doing that to get moisture since the nearby streams have dried up. Repellent didn't stop the problem so I had to cover sides and door openings with chicken wire. Other than that, crops are doing great in these dry conditions. Early potatoes never got irrigation but did pretty well anyway. But they had more scab than usual. I'm irrigating most crops frequently. I'm happy to have put in a good well a few years ago. Probably the day will come when I can say the same for the drainage I put in this year.

(Holland) My high CBD hemp crop has been doing great. We cannot have asked for a better summer. The nights were a little cold last week. There is a lot of clay in the ground here, it has been keeping the little rain we get close to the roots. I have not had to water any of the plants all through July. I feed home brewed compost teas to my fields once a week or every 10 days. I hooked up a pressure washer to a pump that takes my mix from a bulk tank in the box of my truck. A lot easier than walking the fields with a backpack sprayer; it was taking me a week to spray my fields then I had to do it all over again.

(E. Dummerston) Two inches of rain last week saved the day but just a portion of what we need to get ponds and springs back to normal. One of the driest spells for us in 30 years but a lot different now since we have wells and a pond for irrigation. Still lots of hours saving parched crops. Second round of flea beetles and cucumber beetles attacking in force and European corn borer flights are starting. Seeing signs of basil downy mildew and hoping our later plantings of Elonora in a field at higher elevation will stay clean for a while longer. Planting SV4719CS cukes from Johnny's outside and Excelsior picking cukes from Seedway in greenhouses as they did well for us last year in holding off cucurbit downy mildew. Field tomatoes ripening late as they probably dropped blossoms during the hot weather. Crew catching us up on weeding just before a load of them head back to school and have to give them praise for holding up in the many 90 degree days. Didn't even mind some of them chasing Pokémons through my Brussels sprouts during lunch hours.

(Westminster West) Received about 2" rain last week and not a moment too soon! Somehow we squeaked thru by running drips 12 hours daily and allowing the wells to recharge overnight. Fall crops maturing fast, all Walla Walla harvested and they are huge! Early red onions, Cabernet were all picked today; such a great red onion in size and color. Bridgers all picked and Expressions are next. White plastic or black, didn't seem to make a difference in the end in either for size or thrips. No bottom rot on any varieties yet. Patterson not quite as large as I had hoped but still green tops so might bulb out a bit more this week. Winter squash and pumpkins are maturing and some varieties will be ready next week, starting to see squash bug babies hatching out now. No CPB on potatoes as of now, not sure why! No diseases yet on all crops, hardly any bug damage. Overall, much happier having a dry year than a wet one!

(Ange-Gardien, Quebec) Most crops are doing good in this drought. Great conditions for drying garlic, smaller than usual because of lack of water. Melons are ripening, almost done primeur cantaloupe. Starting to hunt for crows, racoon or whoever want to get the crop before it is ripe. Sweet potato looking good. Behind with weeding as I spent all my time building new greenhouse.

(Hampton NY) When the rains come I have more produce than I can sell. With the heavy dew, powdery mildew has finally shown up in the new garden along with aphids and squash bugs. The tomato plants have produced a ton of green tomatoes and not a red one in sight. No blights at this time. Cucumbers, kale, Swiss chard, patty pans, and summer squash are still producing several bushels most days and the gladiolus are just starting to bloom. String beans are slowly petering out. Sales at the veggie stand took a nose dive this week and I'm assuming it's from the heat. It's hard to keep veggies looking fresh when it's pushing 90.

(Plainfield NH) Drought like conditions still exist. We have had two very lucky rain events this summer that have staved off disaster. We continue to irrigate what we can, but the water table is getting so low that it is making it very complicated to run pumps or draw water from the river for any meaningful amount of time. Thus, our fall crops are starting to suffer again. .Despite the drylike conditions, the fungal pathogens have arrived on time as usual and we are fighting PM, Alternaria on many veggies, DM. Purple blotch and a host of other seasonal pests. In the plus column is weed control which is the best it has been in sometime. The drylike conditions have allowed for easy harvesting of berry crops and vegetables, and retail as well as wholesale demand is strong . But the drip is going full bore and the travelers and solid set are busy, so labor will undoubtedly be the highest for us that it has ever been.

(Salisbury NH) SO dry it isn't even funny. When it does rain it is barely measurable and goes on for just minutes. We are lugging water from a dug well to try to keep as much going as possible but some things will just have to survive on their own. Our "early" corn finally came in. Beets and carrots doing well, especially considering the dry conditions. Even the weeds are wilting. Business has been very good. At a tipping point where we need to hire part time help but trying to find reliable people is very hard. Japanese beetles are low in numbers. Had some leaf hoppers but they seem to have gone away. Was able to harvest arugula without flea beetle damage. Tomatoes are finally coming in abundance but they are also flying out of here, hard to keep up with demand. Purslane is taking over parts of our garden. It's like the hydra; if you cut off the head, twelve more grow. Very hard to control. We actually have one customer who likes to eat it because of the Omega 3s. Wish I could convince more people and we could have a 'pick your own'.

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg

We were able to dodge it for a while with the hot dry weather, but basil downy mildew has shown up in several locations. Look for yellowing on the upper side of the leaf that looks like nutrient deficiency and dirty looking undersides. See the link for good pictures:

<http://awaytogarden.com/basil-pressure-fight-devastating-downy-mildew/>

The pathogen does not overwinter here but blows in on storms. Not much to do about it once it shows up. Downy mildew has also shown up in cucumbers. Angular yellow spots show up on the upper leaf surface that are limited by the leaf veins. The leaf undersides have purplish/dark dirty looking spores. This disease also blows in on storm fronts. Protect your plants.

http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Cuc_Downy.htm

For control recommendations check the New England Vegetable Guide

<https://nevegetable.org/crops/disease-control-7>

Gummy stem blight diagnosed on melons. The fungus causes both foliar and stem infections. The same disease on the fruit is called black rot. Black rot often follows powdery mildew infections, so controlling PM may reduce black rot on the fruit. Infected stems first show water-soaked lesions and later appear tan. Older stems, especially muskmelon and cucumber, show black fruiting bodies (pycnidia) within the affected tissue. Stem lesions often cause gummy, reddish-brown beads to exude, a symptom that can be confused with Fusarium wilts and injury caused by insect feeding. We suspected a relatively new disease on some vines that rapidly collapsed called "Monosporascus root rot and vine decline of melons." The vine showed

gummy stem blight on the above ground portion but the roots were lacking fine roots. The roots also had fruiting bodies that we suspected were *Monosporascus*. However, the spores from the fruiting bodies did not look like the “cannonballs” as described for the disease *M. cannonballus*. (Who says plant pathologists don’t have a sense of humor?!) If you are seeing a rapid collapse in melons, send entire plant samples including roots so we can rule out *Fusarium* crown rot, *Monosporascus* or gummy stem blight.

Squash bugs are widespread. Removing debris after harvest from around the field can kill overwintering squash bug, reducing the following year's population. It is possible to trap squash bugs by placing old boards in the field before cool nights which will often attract squash bugs to spend the night. Early the next morning the bugs can be eliminated.

<http://ento.psu.edu/extension/factsheets/squash-bug>

No late blight confirmed by plant pathologists in Mass or VT during a weekly pest and disease conference call last week. If you suspect it, please send in samples. Other leaf spot diseases are showing up on lower leaves and working their way up the plant with each rain. I suspect there will be a lot of blossom end rot on fruit due to the dry conditions. Tomatoes need lots of water when they are producing fruit.

Some two spotted spider mite damage in high tunnel tomatoes. Scout undersides of leaves of high tunnel tomatoes. Look for off color foliage/bronzed in hot spots. You can spot-treat problem sections.

The spinach downy mildew race that was found in Vermont earlier this spring/summer on resistant spinach (races 1-13) was race 14 according to the testing done by the seed company. This is a relatively new race of the fungus-like organism (there also is now a race 15) and is not covered by most of our resistant cultivars of spinach. I noticed Seaside had some intermediate resistance to 14. As plant breeders are breeding for resistance, pathogens are unfortunately adapting and overcoming the protection.

Have seen a fair amount of bacterial blight in beans. Symptoms include brown leafspots with advancing yellow margins. This is a common problem on saved seeds and on seeds not grown in the arid west. <http://www.extension.umn.edu/garden/yard-garden/vegetables/bacterial-diseases-of-garden-beans/>

As always, if you suspect a problem, send a picture or sample to PDC, Jeffords Hall, 63 Carrigan Drive, UVM, Burlington, VT 05405.