



Vermont Vegetable and Berry News –August 13, 2013
Compiled by Vern Grubinger, University of Vermont Extension
(802) 257-7967 ext. 303, vernon.grubinger@uvm.edu
www.uvm.edu/vtvegandberry

DON'T MISS YOUR CHANCE TO MEET WITH FDA ABOUT THE NEW FOOD SAFETY LAW
August 20, 9:30-12:30, Alumni Hall Auditorium, Hopkins Center, Dartmouth College.
At this session farmers can ask questions of FDA officials about the draft rules for implementing the Food Safety Modernization Act (FSMA). Two rules that will directly affect farmers are the Produce Safety rule and the Preventive Control rule. Although the law and the rules are complicated, a lot of work has been done to help interpret them and identify areas of concern. I strongly urge you to: 1) take an hour or two to get up to speed on the issues, 2) show up to this session on Aug 20 and, 3) submit comments to FDA by the Nov. 15 deadline. FSMA is too important to 'leave up to others' to deal with; speak now before the rules are finalized.

Here are some resources to help you learn about FSMA and its potential impacts:
National Sustainable Agriculture Coalition (extensive background and talking points):
<http://sustainableagriculture.net/fsma/overview-and-background/>

New England Farmers Union:

<http://www.newenglandfarmersunion.org/food-safety-modernization-act/>

The NHVBGA website for growers to discuss FSMA:

<http://www.farmtalkfsma.org/>

The FDA website on FSMA: <http://www.fda.gov/Food/GuidanceRegulation/FSMA/default.htm>

REPORTS FROM THE FIELD

(Warren) Shaping up to be a pretty good year for us. With the exception of the odd spinach gap it looks like we will get through this year filling every greens order we have. Early onions are out of the ground. Really nice quality and yield. Finally I have a crop that justifies owning an onion topper. Might even put the vacuum on the skin scrubber. Later plantings looking equally good. Winter squash is shaping up really well. So are potatoes. I'm pretty surprised at how early things are finishing up. So far the major disappointment is our early carrot crop. It was thin to start and on sandy ground. I sidedressed it lightly with a mix of cheep-cheep and sul-po-mag because I figured nutrients leached with all the rain. Now I've got a thin crop of cracked, distorted carrots.

(Craftsbury) Good blueberry picking since July 20 but yields are lower than last two years. Abundance of unripened berries may signal longer season after drought curtailed picking before Labor Day in 2012. Fruit is plump, dark and sweet. Combination of cooler nights (we've already had two 38 degree mornings) and not much sun seems to be slowing process.

(Charlotte) Blueberries have been absolutely great! The fall raspberries are coming early.

(Berlin) After our soggy start and a trip to see Ann Hazelrigg for disease ID we applied a quick spray of copper at 2 lb/acre and pushed back the Alternaria in our kale. Coupled with some Pro-booster we pulled off 500 cases and cleaned up the plants this week to start the season. Heck, it's only 5 weeks late. Corn has been a bust for the first two varieties but the third while only 4 feet tall has solid plants and full size ears and is just starting. Our whole second round looks great and will carry us until frost it appears. As for catching up financially I think we can but will have to hire 10 more employees to do it. All the seeding done since the beginning of July is going to hit us in about 2 weeks. Crazy time but we can still pull off a good year.

(Royalton) This has probably been the most challenging season for us in 16 years. The pests have been rampant this year; Japanese Beetles swarmed sweet corn and cherry trees; they ate all the leaves on the trees, the fruits never matured. They literally stripped the tassels off the corn. How it was pollinated, I'll never know, but it is the sweetest, crispest corn. The cukes, summer squash and zucchini all avoided the early pests; we've hardly had a cucumber beetle or a squash borer, but there are some out there that look a little like they're wilting. Potatoes pushed through the CPBs and have been producing well. Still no signs of blight on them or the tomatoes, but my husband finally believes me that hornworms really DO bite. The onions never fleshed out after sitting in four inches of water for two weeks, and now they have purple blotch. I'm pulling them and pickling them. The leeks look good, and despite the small size of the garlic it's dried and cured nicely. Last year we lost almost the entire crop to onion maggot. Or leek maggot, I can't remember which. The dry beans were covered in bean beetles earlier, but they must've drowned. We have a nice crop, and a super versatile variety of pole bean is the heirloom Rattlesnake Pole. Lovely, crisp French-style pods when young, amazing flavor, they turn into round, plump dry beans that are perfect for soups and baked beans. Harvest is late this year because I couldn't get in the fields to plant. It's coming on now, and instead of a hectic August, barring frost, it looks like we'll have abundance in September. I'm marveling at the dearth of cabbage loopers, but a little worried that not one Monarch butterfly flew by my farm this year, when usually my son has a box full of caterpillars turning from chrysalis to butterfly at this time.

(Plainfield NH) The odd weather patterns continue, although we have not irrigated once other than for frost. Stuff slowed down significantly in maturing, with corn and tomatoes slowing the most. SWD showing up in in last fruit of summer raspberry crop and blueberries, but no counts in the traps. Hmm, traps are with yeast and sugar water. Squash vine borer is in summer squashes, DM is here attacking the cukes and melons, Alternaria starting to show on the earlier carrot crops and I suspect that DM of basil is starting to wind up, but this week will tell the full story. Corn is pretty clean with a bit of borer injury, but looking out for the CEW to show up in traps; then it gets interesting. Strawberry plants responding well in this cooler damp weather and runner set seems high. Have been spending too much time away from farm activities working on understanding FSMA and have been pretty disappointed in the level of farmer engagement at the meetings and discussions Extension recently hosted in NH. FSMA affects not only our group, but all facets of ag, right down to the folks who sell us compost, fertilizer, tractors, as well as consumers, CSA memberships and food hubs. The written comment period has just been extended to November 15 so there is more wiggle room on that, but I hope that many of you will fill the room on August 20th in Hanover NH when the FDA opens the floor for farmer comment. I know I have railed about FSMA before and I still urge you all to take a hard look at the proposals; I think it's a pretty safe bet that your operation is going to be negatively impacted if the proposed rules become the law.

(S. Cambridge NY) After 8.7 inches in June, rain has been scarce and we have been irrigating daily. Cucurbits doing well until a watermelon vine collapse in early August, when the weather got cool after extreme heat. Not sure if it is the same as the watermelon vine decline in the south that has been attributed to a virus. Cantaloupes next to watermelons completely unaffected. Potato leafhoppers not as bad as previous years but taking a toll on Adirondack Red and Blue spuds. Spraying with Surround may have helped. We've tried it before with less success, but this time didn't have heavy rains wash it off. CPB very scarce. Snails seem to have displaced slugs in the last few years; we never used to see many snails. Now they are all over the cucumbers and leave ugly brown scars. Another reason to get the cukes up on trellises. Eggplant looks good but are late coming into production. Peppers are way ahead of them this year. Brassicas loved the wet spring and are looking very happy. Over the last year or two, beets have become much more popular at our markets. Have added golden beets due to customer requests. They split during the wet weather but are doing better now.

(Enfield NH) The relatively dry weather is a big help, catching up on weeds, and good to see crops coming in. Peppers and eggplant look great, as do tomatoes. Lettuce has been great. Onions are not so good. Fall brassicas are looking great, spring and summer brassicas were terrible. Summer squash and zucchini erratic, lots one week, little the next.

Winter squash rallying, but I will be lucky to get 25% of a normal year. Potatoes are great. Most fall crops looking good, other than those the woodchucks and deer are eating.

(Hinesburg) Our sandy fields drained well during the May/June deluge. Getting attacked hard by Japanese beetles on eggplant, sunflowers and soybeans. Have started digging potatoes. Fall carrots germinated well; fall Brassicas appreciate cooler evenings but our melons and corn have not had super flavor as they normally do. Winter squash starting to ripen and die back; plenty of mildew at this point. Potatoes hit hard by leafhopper, but yields look OK, not great. Our crew will diminish over the next couple of weeks, wondering how we will get it all in through the fall.

(Burlington) Fall raspberries are coming on early, which is great for markets but we are starting to see the first signs of SWD (liquified berries with larvae swimming in them.) This is ahead of last year by about a week. We are planning on increasing the harvest schedule to every other day and cooling immediately to see how manageable it is early in the season. Not thrilled about the recommended control options out there. Also plan on testing field vs. hoophouse production to see if SWD favors one site over the other.

(Westminster West) In spite of the weird and uneven growing season, customers really want what we have and are willing to pay a bit more than last year. We can't pick tomatoes fast enough to meet demand! Our onion crop looks really good and the Walla's are averaging about 1 lb. each. Fall crop is slowly filling out and copper and Oxidate are keeping Botrytis at bay. Some thrips but we switched to white plastic mulch and that seems to have helped. Growing on raised beds in a field that had standing water for 6 weeks, but the onions hung on and did fine. Winter squash growth looks great, but fruit is sparse on some varieties but fine on pumpkins which are ripening up. Powdery mildew showed up; started spraying Oxidate. Basil got downy mildew on the last 2 plantings so we dumped them. New plantings look fine so far. Greenhouse raspberries have a much better yield than last year and very few SWD so far. We are charging a premium for the berries and customers say they are happy to pay more for better berries! Mums are budding up. Fall beets and carrots up and look nice, first time using flaming on carrots and it worked well. Plowing up new land for next year and getting cover crops planted.

(Norwich) Our corn planting schedule was the worst in years but miraculously all the varieties and plantings are coming off like clockwork; haven't missed a day of corn yet. Other growers around here were out for a couple days and we sold a ton. Worms early, but now all clean. First of three potato plantings all done and dug. No blight yet and just got copper on late June planted spuds. Greenhouse toms getting a little tired, but no disease thanks to religious weekly spray of potassium bicarbonate (Milstop).

Really amazing results from using green manure legume crops on fields where minerals were high but N was needed. After losing all our favorite varieties of melons have gone back to ancient standby, Goldstar, and it's doing great! Farm stand has been busy, helped by good corn quality. It's not organic, but still getting \$.70/ear and not coming down. Most of the bad rain has missed us and we could actually use some; only got 2/3 inch in last cycle. Being audited by US DOL, Wage and Hour Division, and we are going to get killed!

(Little Compton RI) Demand for GH tomatoes is just amazing! It beats all returns on investment and odds for getting a successful crop. We have GH colored peppers and grafted eggplant, too; that is a close second. Still, we have lost stupid money by not having a dedicated employee whose job it is to visit all greenhouse producing houses to check for clogged water filters, sudden mite and other infestations and plant nutrition/leaf tests etc. Next year this will be a designated job for one of our crew. In a year like this, with too many emergencies pulling at you daily, one has to maintain focus on what brings in your best dollar return. Watermelon radish, Black Spanish radish and rutabagas go in tomorrow. This year we are opening up the seed spacing between seeds to get bigger storage radishes. Jang planter cogs will be 11/13 and not the usual 14/9. We want "tennis ball size" crop this year not golf balls. We are also going to watch the rutabagas to make sure they don't get too big! Yellow Doll watermelon is our number one money maker in the melon patch. Can't understand why this section of the farm has done so well with all of the other rain related disasters!?

(Salisbury NH) Tomatoes, peppers and eggplants way under-producing. Eggplant fruit being eaten by adult CPB! Peppers have way less fruit than last year. Tomatoes extremely slow in ripening and weak. Almost 75% loss in our first planting of broccoli due to grubs eating roots. Winter squash is questionable; we're running out of season. This year many seeds germinated but then just sat there, especially the beets, spinach and lettuce. They are finally kicking in. Walla Walla and Red Zeplin didn't size up as much as we'd expect with all the rain. Leeks looking nice. Harvested all red potatoes but holding off on the whites. Sales very good. Our problem is not enough to sell. On a positive note, with less time spent harvesting, we have had more time to weed and contemplate.

(Rochester) Our new walk-in cooler has changed our life for the better. We can't say enough good things about Coolbot, the device that can turn your window air conditioner and a well-insulated room into a big refrigerator. Rule of thumb we heard: for every hour your berries stay warm after picking, you lose a week of shelf life. Sounds about right. So we built the walk-in, in part, to deal with SWD, hearing that their eggs may perish after a couple of days at 34 degrees (not sure if that is confirmed) and knowing that prompt cooling is a good storage strategy.

(Editor's note, see: <http://ceventura.ucanr.edu/?blogpost=2474&blogasset=19305>.) We can now confidently sell Monday's pick on Thursday or Friday without fear of early deterioration. Life on the berry farm this year is all about SWD: scouting, trapping, spraying, urgently picking, and worrying. The wine and yeast traps seem to work well. And by virtue of spraying for the biggest outbreak of Japanese beetles we have ever had--we use a 50/50 mix of Aza-Direct and Entrust--SWD numbers have apparently been kept in check along the way. We are finding SWD larvae in some overripe berries that we failed to harvest, but not all, and the fruit on the canes is still firm and sound. It was on this date last year that virtually all the blueberries went to mush. The confounding part is deciding when to spray Entrust: how to find three days without rain after spraying to fulfill the pre-harvest interval but not intrude disastrously on the picking, it being especially important for us to be open on the weekend. So far we have managed this pest, but we feel under siege and other tasks are not getting done, like weeding.

(Monkton) A difficult year. Good news is we've finally got great haying weather and hope to finish first cut soon. Bad news is it's over a month late! Also good is that our hoophouse tomatoes are producing a crop in spite of early herbicide injury from contaminated compost. We applied wood ash and Pro-Gro and extra water and that seems to have helped. Ginger planted in the same house never showed sign of injury. Good news is that we have no symptomatic raspberries or blueberries from SWD. Bad is that we are finding them in our traps. We are worried about fall raspberries as populations increase but have decided to try to trap out, use Pro-tek Net experimentally, and harvest at early edge of ripeness. These measures, instead of spraying Entrust and Pyganic on ripening fruit and lots of honey bee pollinators, are more in tune with our customers' concerns and our beliefs as organic growers. A trade journal I read last week referred to SWD as a 'game changer' for fruit growers and the excitement is just beginning. Meanwhile we are getting handy with punches and tape and cheap red wine as we sit making traps. Some problems with Botrytis in garlic but that crop is mostly in the good category.

(Plainfield) We seem to have avoided most of the worst of this season. Winter squash got weeded and re-fertilized in time to set fruit nicely. First planting of corn was vandalized by raccoons, but they seem to have backed off. Keeping up with Dipel sprays on corn silks, peppers, and all the cabbage family. Nice early harvest of carrots; I guess they appreciated all the rain. Picking on second plantings of kale and chard. Greenhouse tomatoes ripening well, but showing signs of magnesium deficiency. Last seedlings going out this week: lettuce, bok choy, Chinese cabbage. Overall wholesale demand still strong for local organic produce. Enjoying the cooler weather, but overnight low temps are slowing down ripening a bit.

(Hampton NY) Early tomatoes are just starting to turn color. Leaf spot is starting to show up as well. Powdery mildew is in summer squash. Cucumbers are starting to produce again after shutting down with the heat a couple of weeks ago. Acorn squash is producing well and Butternut is coming along; starting to see squash bug eggs. A couple of plants have fallen victim to stem borer. Stand is holding steady and will pick up as soon as I start selling sweet corn. Gladiolas are starting to bloom and I will be picking more sunflowers and zinnias.

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC – Ann Hazelrigg

Garlic is starting to come in. I suspect we will see a lot of basal rot caused by Fusarium due to the wet conditions this summer. You will see some of the basal plate/roots missing or rotted. There may be a pinkish cast to the area or the cloves. The best thing to do is get the bulbs drying as quickly as possible to slow any further rot. You may want to even consider making 2 sections/areas where you are drying the bulbs-one totally healthy and clean (can be used for seed stock next year) and one where there is some rot (can be sold/eaten right away.) For pictures go to: http://www.science.oregonstate.edu/bpp/Plant_Clinic/Garlic/Fusarium.pdf We always seem to see mites along with the Fusarium basal rots. Not sure who comes in first! These small arthropods feed on the tissue opening up wounds and move around spores. Again, I would not store/use infested bulbs for seed. You should be able to see the pearly white mites with a hand lens. For more info, <http://www.ipm.ucdavis.edu/PMG/r584400111.html>.

Basil downy mildew was diagnosed last week. This fungus disease looks first like your basil has a nutrient deficiency on the top surface of the leaf; just kind of yellow/bronze. If you look on the underside, the leaves look like they are covered in dirt. Those are the spores that can move around easily on wind currents. There really is no rescuing the crop once it is infected. It gets harder to grow clean basil in the fall because perfect downy mildew weather (fogs, dews, cool nights) occur more frequently. You could try tilling under the infected crop and replanting in another part of the farm, but it seems like once it is here, it doesn't go away! See: <http://vegetablemdonline.ppath.cornell.edu/NewsArticles/BasilDowny.html>

Lots of Septoria leaf spot on tomato (little black spots on lower leaves) and less early blight (target or bulls-eye spot) on lower leaves. I have not seen any late blight in the Clinic since the first diagnosis on potato a few weeks ago. I would like to know if you are seeing it on your farm. You are always welcome to send in leaves if you want us to take a look with the microscope.

Lots of leafhopper and early blight on potato leaves. This is typically just tip dieback and edge dieback, not big leafspots in the middle of the leaves like in late blight. Grower reports that stylet oil sprays can be effective in suppressing leafhopper.

On one farm saw scarring injury on lots of Brassicas most likely due to swede midge. Did not see any larvae but lots of damage and lack of good heads. For pictures and info go to: <http://www.nysipm.cornell.edu/factsheets/vegetables/cruc/sm.pdf>. Watch for the injury in fall Brassicas and let us know if you are seeing it on your farm.

Plectosporium is a relatively new disease of pumpkins and winter squash and is showing up on some farms in central Vermont and also in Massachusetts; it may not be a disease you are familiar with, see: http://extension.cropsci.illinois.edu/fruitveg/pdfs/946_cmplt.pdf.