



Vermont Vegetable and Berry News – June 29, 2016
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REPORTS FROM THE FIELD

(Waterbury) The Leek Moth has made it to Waterbury. We spotted a few in our Leek Moth trap this week but have seen very little evidence of them or damage from them in our garlic fields. Hopefully we will harvest the garlic before the second flight in July/August. Garlic is looking good otherwise, needing lots of water with these dry conditions.

(Berlin) Perfect Circle Farm. Of course the dry weather is the most worrisome affair. Thankfully the small rain last week has given a little relief for the many woodies that were planted this spring. Sawfly has shown up on the gooseberries. It's always amazing how quickly they can defoliate. The warm hot weather during blueberry flower has made for fruit set like I have never seen, the plants are literally covered with berries. Honeyberries dropped lots of fruit in the blazing heat. Seaberries have a great fruit set going. I have determined conclusively that deer love seaberry. They prefer it over apple and will choose seaberry first off the smorgasbord of tender young shrubs. This was my second year of walnut grafting. The June grafts look like a much better take than last years. It is a great year for nuts trees from seed; the heat is really pushing them along.

(Craftsbury) Really grateful for the weather this June. Memories of last year's chilly slogfest are still burned into the brain but this heat is helping them fade. We don't have much field irrigation and that has proven challenging for onions but ironically potatoes growing in our sandiest land are cranking. Farming is always more lucrative, enjoyable, and satisfying when it's hot and dry here in the north country.

(Rochester) We seem to have our best blueberry crop for some years. We escaped a spring frost this year although there was some winter kill. Weeds are as vigorous as ever. Raspberry cane borer was very light this year but rose chafers are full on and we are expecting SWD early this year (they have arrived early in New York.) The dry weather is a worry but our drip irrigation is just keeping up, we think.

(Huntington) Bearing in mind Vermont's pending Required Ag Practices rule, which calls for plans to reduce phosphorus application when soil tests above 20 ppm, we did some fertilizer tweaking in fields that are near that level, putting down only 15#/acre of OMRI-approved phosphate (roughly the plant P uptake rate). This was not anything scientific, but in the fields where soil tests showed 15-24 ppm P I saw distinctly slower early spring growth than I would have expected, with one variety of kale even showing telltale signs of P deficiency over the last few weeks. My goal when we purchased our land 8 years ago was to get the soil P levels up to around 40 ppm (the cut-over river-bottom hay land in our valley that we use was all around 2-4 ppm when we got on it), but the RAPs have me concerned that shooting for the lower, somewhat arbitrary 20 ppm level of soil P as a cutoff could be dangerous for heavier-feeding, early-planted vegetable crops in our short growing season, especially during a year with below-average April/May soil temps. And especially so with OMRI-approved P sources because they aren't as readily available in cold soil as super-phosphate. I'd like to see (and participate in) some fertility trials to determine if 20 ppm P is actually sufficient in our region for high-value vegetable crops in early spring (especially when using organic P sources) - before new regulations cap our ability to provide what the plants need to grow profitably.

(Fairfax) Trying the weed-mat material that Brookdale Fruit Farm sells. Using it between plastic in peppers and in asparagus. Use ground staples to keep it down. So far am really liking the weed mat and it is pretty reasonable at 16 cents a foot for a 4 ft. wide roll. Trevor at Brookdale says we should get 4 or 5 years use out of it. We shall see. Also trying ProTek netting on onions to prevent leek moth. Used hoops and should be able to leave it on till the onions mature.

(Elmore) Vegetables and weeds growing fast; trees growing slow. The most winter damage we have ever had on potted trees, will have to develop a new system. Even though it was so mild the lack of snow really did them in. Most trees in the ground are fine, good fruit set on blueberries and cherries. So hot and so dry; I don't ever remember it like this the whole month of June. We had to invest in an irrigation system with timers otherwise nothing can stand it. Our mailman says he is used to the desert and 130 degrees, so this does not seem too bad. Let's hope it does not get like that around here. Someone said this heat really is good for appreciating the shade of trees. Stay cool. Remember we are all in this for love and to be kind to each other, and to learn a few good things along the way.

(Charlotte) We had a terrible strawberry season because of the cedar waxwings. We will be using netting next year. We planted more strawberries, black raspberries, and fall raspberries and are starting to prep fields for next year plantings. Blueberries and black raspberry crops are coming along nicely, but we need some rain.

(Westminster West) Until last night's rain we received only ¼ inch of rain in June! Lucky we have spent 35 years building up the organic matter so dry spells don't affect us much. Been pumping water thru drips 14 hours a day until the weather breaks. When I started farming here 44 years ago we didn't have any irrigation. We used to get regular rains and maybe a severe dry spell in July or August, but never lost a crop. Now, I couldn't think about not having irrigation.

Garlic! Best looking crop in years and harvest should begin in a few weeks. No weeds as payback for no rain I guess. Onions and other alliums (2 acres) also look outstanding. Have thrips though, hard to kill 'em all. On the white plastic mulch same number of thrips as the black, though so far the black mulch onions are way ahead in growth. In years past by end of season no difference in crop. Weed pressure is nil due to the lack of rain and hard-working crew! Winter squash (2 acres) still under remay, probably leave it on until next week. No cucumber beetles seen here yet, only a few squash bugs, and none on the crop.

Growing sweet potatoes for the first time this year, yes, late to the party. Tunnel toms coming in now, nice! Tunnel raspberries earlier than ever and huge! Learning to give much more water to everything we grow now. Field of yellow sweet clover in full bloom, planted last fall, bees are loving it! Pickling scapes by the score now, and a big shout out to Paul Harlow for letting us use his awesome commercial kitchen to knock out jars of them!

(Hampton NY) The planting in the new garden is finally complete. The plants that were established before the heat wave are doing really well. The late transplants are struggling and require sips of water every day. We could really use some rain. We have no bugs or disease yet in the new garden. The old garden is struggling since I have been focusing the bulk of my time/energy in the new garden; the weeds are thick, the cucumber beetles and squash bugs are thriving and powdery mildew is starting on some patty pan squash. I plan on spraying fungicide tonight, and sprayed pyrethrum last evening. Peppers in both gardens are doing great and I hope to have some for market this week. I haven't figured out if it's the chickens, cut worm or bunnies that are eating the green bean plants and nibbling on the cantaloupe plants.

(Ange-Gardien, Quebec) Good thing about drought: make you realize how important organic matter is in your soil. I do have to work on that. I will be looking to ideas and "how to" establish cover crop between plastic rows. I would not want to establish alfalfa for 2 years in the rotation.

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC

Ann Hazelrigg

Lots of hot dry weather with wind. If you see leaf edge dieback, that is typical of dry conditions. Check emitters first if you see wilting in high tunnels or in field crops. Have also heard of wind damage (wind whipping) in CT. Look for constricted stems that have been twisted by wind. For past weekly updates of crops/pests in the NE area check out Pest Alerts:

<https://ag.umass.edu/vegetable/newsletters>. Also, controls and crop info can be found at the NE Pest Management Guide <http://nevegetable.org/>

Alliums-Thrips are exploding due to hot dry weather where they have not been treated. Check bases of plants where new leaves emerge. They are little and yellowish but you can see them with the naked eye. They rasp the emerging leaves and the damage can look like silver lines, white patches, tip dieback, etc. All these wounds are entry points for botrytis and Alternaria later on. Thresholds are low; 1/leaf for organic production, 3/leaf for conventional. Organic controls include entrust plus pyganic plus sticker. <http://ag.umass.edu/fact-sheets/onion-thrips>. According to Scott Lewins and Vic Izzo from UVM, "Onion leek moth 2nd flight of the season is in full swing. Leek moths have been positively identified in all Vermont counties other than Essex, Bennington and Windham. For general information about leek moth biology, detection and management options: <http://web.entomology.cornell.edu/shelton/leek-moth/>. They are happy to answer questions through email: slewins@smcvt.edu or vizzo@uvm.edu.

Bean-Have seen 2 samples with bacterial leaf spot. This is typically a seed borne issue and there is really no good control other than purchasing disease free seed.

<http://www.extension.umn.edu/garden/yard-garden/vegetables/bacterial-diseases-of-garden-beans/>

Brassicas-moths (imported cabbage worm, diamond-back) although present, are low this year. New generation of flea beetles should be emerging. There is a good discussion of flea beetles in this issue of the pest alerts

https://ag.umass.edu/sites/ag.umass.edu/files/newsletters/may_19_2016_vegetable_notes.pdf. Best control is row covers and delayed planting but may not be practical. From UMASS Pest Notes, "For organic farmers, the choice of chemistries includes spinosad (Entrust) and pyrethrin (Pyganic). In UMass trials, Entrust showed the greatest efficacy in suppressing flea beetles and reducing damage, while Pyrethrin (Pyganic EC 5) showed poor to moderate efficacy in our trials but is reported by growers to cause a significant short-term knockdown. Abby Seaman, NYS IPM, found in 2012 trials that both kaolin (Surround WP) and hot pepper wax worked well.

They did not prevent enough feeding for salad greens to be marketable, but they did prevent enough feeding for broccoli, cauliflower, cabbage, etc. to outgrow the damage. In 2013 NYS trials, Entrust, as well as both Venerate and Grandevo, two OMRI-approved bioinsecticides, were all found to significantly reduce damage from flea beetle on cabbage under low pest pressure.

Another promising organic product is Azera, a mix of azadirachtin and pyrethrins. A 2011 University of Maryland trial found that Azera significantly reduced flea beetle feeding damage, and that mixed with Surround, it both reduced feeding damage and maintained efficacy over time. Surround protects young foliage and can be used to “push” beetle to more preferred crops where they can be controlled using less material and time.”

Cucurbits-Watch for scorch damage on leaf edges due to hot dry conditions. Squash vine borers adults are in high number in traps in NH-one trap had 115 adults! There is no good organic control other than floating row covers. Damage from the larvae in the crown would cause wilting. Check the base of the plant for holes and frass from the insect.

<https://ag.umass.edu/fact-sheets/squash-vine-borer>. Striped cucumber beetle numbers are decreasing due to heat. Squash bug adults and eggs are present. Eggs are copper colored laid in the vein crotch angles on the leaf undersides. Feeding damage by adults and nymphs can result in wilting leaves/plants. <https://ag.umass.edu/fact-sheets/squash-bug>

Lettuce-Suspected earwigs causing lacey skeletonizing damage in butter crunch lettuce. These guys can be very destructive and feed at night.

Tomatoes-We should start seeing the beginning of the foliar leafspots (Alternaria/Septoria) in tomatoes in the next week or so although the diseases may be delayed/minimal due to the warm dry weather. Growers should scout high tunnel tomatoes for two spotted spider mites. Populations could explode after all this hot dry weather. Look for bronzed foliage, webbing, off-color.

First tomatoes may show up with blossom end rot. Good discussion of this abiotic disorder in the last newsletter:

https://ag.umass.edu/sites/ag.umass.edu/files/newsletters/june_16_2016_vegetable_notes.pdf

f. Three lined potato beetle may be an issue in tomatillos:

https://extension.unh.edu/resources/files/Resource001192_Rep1517.pdf

Potato virus Y noted in potatoes. This virus comes in on seed stock and causes blackening of the veins and can be moved by aphids. The disease can also cause rings of dead areas on potato tubers. Yukon gold is especially susceptible. If infected, harvest early to avoid tuber infection. https://ag.umass.edu/sites/ag.umass.edu/files/newsletters/february_19_2015_vegetable_notes.pdf Tortoise beetle damage seen in high tunnel tomatoes. The sort of look like little turtles and chew round holes in leaves. The larvae carry feces on their backs to deter predators. They can be common in sweet potatoes. Potato leaf hopper damage seen in beans and potatoes. Look for leaf edge dieback and scorch symptoms. <https://ag.umass.edu/fact-sheets/leafhopper-potato>

As always, you are welcome to send pictures to ann.hazelrigg@uvm.edu or mail samples to PDC, Jeffords Hall, 63 Carrigan Drive, UVM, Burlington, VT 05405.

BE PREPARED FOR SWD IF YOU GROW SOFT FRUIT

Lots of info on biology, monitoring, current traps counts, and management at:
<http://www.fruit.cornell.edu/spottedwing/> (Cornell)
http://www.ipm.msu.edu/invasive_species/spotted_wing_drosophila (Michigan State)

NOFA/VVBGA ON-FARM WORKSHOPS (\$20 members/\$30 non-members)

July 12, 4-6 pm. Organic High Tunnel Tomatoes at Cedar Circle Farm, E. Thetford, VT

July 19, 4-6 pm. Raspberry and Blueberry Varieties for Vermont Growers, Adam's Berry Farm, Charlotte, VT

Aug. 30, 5-7 pm. Producing Healthy Brassicas with Biocontrols and Rotation, Clearbrook Farm, Shaftsbury, VT

Sept. 13, 4-6 pm. Post-Harvest Process: Wash Station Design, Root 5 Farm, Fairlee, VT

Sept. 21, 1-5 pm. Learning Journey to Massachusetts: Atlas Farm, South Deerfield, MA and Red Fire Farm, Granby, MA.

All NOFA-VT 2016 on-farm workshops:
<http://nofavt.org/events/annual-nofa-vt-events/farm-workshop-series>