

Vermont Vegetable and Berry News – September 2, 2014 compiled by Vern Grubinger, University of Vermont Extension (802) 257-7967 ext. 303, vernon.grubinger@uvm.edu www.uvm.edu/vtvegandberry

REPORTS FROM THE FIELD

(Newport Town) Garlic drying conditions were surprisingly good despite the wet start. Due to our heavy soils we wash our bulbs to remove most of the soil, and then rapidly dry the plants. This will be the second year we've done it with no regrets; staining is near zero and very little clean-up to do after curing is complete. During the last week of July I observed 20-30% of the crop to have leaf damage from leek moth. This was just before harvest; yield and plant vigor did not appear to have been affected. This past week while finishing up final cleaning of bulbs I observed several holes which were clear through the garlic skin and didn't think much of it; crab grass roots/runners are sometimes to blame. However, I then observed one of the same green larvae seen just prior to harvest on the outside of the garlic leaves, along with the characteristic webbing. It was now emerging from one of the holes. Fortunately only about 5% of the crop appears to have holes on the bulbs themselves. We are unaware of the extent of damage that will be caused from now until planting, but will update at that time.

(Elmore) Still dry here, I think the rains keep skipping us. The deep roots of fruit and nut trees can care less, though and are putting out great crops of plums, apples, pears, hazelnuts, pine nuts. Our baby ginger in up about 2 feet and we are feeding and hilling it and hoping for some good pungent roots and rosy stems and good weight. Horseradish and asparagus are very happy but our vegetables are barely growing. I think the deep rooted plants thrive in these conditions but the newly planted annuals just need a lot more care and water. Last of the blueberries and currants going to market and we are harvesting every plum for a big order; have to keep it mowed so they fall on soft grass and we can find them. Eating peas from our cover crop blend is always a bonus around now. We will plant our last cover crop for the season next week, both between our rows and for one more earth stroking month or two in our vegetable beds as harvests come out.

(Rochester) After four weeks of success with our Bird Gard distress calls, the Blue Jays out the danger was not real and began to get into the blueberries, but we protected the crop fairly well during abundance. SWD numbers seem not to have built up since we first caught them two weeks ago, allowing the late lingering blueberries to ripen and be picked. Japanese beetle numbers are finally dropping. We have started picking fall raspberries and if we get enough heat and a late enough killing frost, the yield should be very good.

(Richmond) We are having a great fall raspberry season here. We went from twelve 300-foot rows done to 8 rows, to help us better manage the berries if SWD returns. Thankfully no sign of it yet. Lots of PYO berries are being picked.

(Huntington) Late blight ID'd on red potatoes on August 6, sprayed the whole field with copper, and mowed the offending variety. Ten days later all varieties showed some LB so we mowed the rest. The crop was in great shape beforehand (May 12 planting date) so yields have not been badly affected. Began spraying a tank mix of Pyganic + Aza-Guard + Nu-Film + Stylet oil + Regalia + Serenade in early July after the leafhopper population started to show damage, and we had our best-ever foliage into August until LB arrived and I hitched up the flail mower. Not sure how much of that was luck as opposed to spray regime. Garlic is showing a bit more Fusarium in storage than had been expected, though ultimate cull rate is TBD. Our new storage barn addition is making putting up storage crops a bit less stressful this time of year. My dreams are full of smooth concrete and pallet jacks.

(Plainfield NH) Going through the annual turn-over of the labor crew as schools open up. Trying to spend a little more on labor with the thought of doing a better job on perennial crops as we go into the winter, and getting maintenance projects done as well. Usually we tighten up our belt and work longer hours during fall harvest, thinking that it is money in our pocket. This year we are going to see if spending more on labor in the fall will pay off in in the spring. Disease-favorable weather of late will put some real pressure on the field crops and our spray program. Fall raspberries are in very good shape this year, but Botrytis showing up as I missed the protective spray at petal fall. Last planting of melons just coming in with remarkably good flavor for this time of year, corn seems to be really flavorful this year as well. Onions are in and selling well, farmstand sales very good over Labor Day weekend. Heading into our traditionally slower season, with potatoes yet to dig.

(Charlotte) Blueberry harvest has more or less come to end with decent yields and excellent flavor/sugar maturity with the dry conditions. We have just completed netting our fall raspberries for SWD. We used the Pro-Tek 80 from Dubois on the exterior walls of our high tunnels. The investment seemed more cost effective than an annual spray program. We are hoping that this infrastructure gives us full protection without the use of sprays as this is something that our customers (and farmers) want. I am not as worried about the decreased airflow as much as the limited pollination. We have bumble bees in the houses but it still seems quiet in comparison to the uncovered fall berries. The next couple weeks should be the test of effectiveness as the SWD population grows.

(Benson) We're looking forward to cooler weather, wood cutting, and winter markets. Winter storage crops look very good with cabbage, rutabaga, beets, carrots, celeriac and winter radishes in great shape. All winter kale is planted as of today except high tunnel kale. Winter greens seeding is on schedule with lots more seeding to come over the next six weeks or so. All in all it seems we are well positioned for winter markets.

(Westminster West) I saw first signs of late blight on 8/20 on potatoes. I removed foliage and used a copper soap (.08% copper octanoate), alternating with Serenade. This appears to have had no effect; all eventually succumbed and I had to remove all tomatoes and foliage on all potatoes. However, my blight resistant tomatoes, Defiant, Mountain Merit, and Mountain Magic, are all showing good resistance and are still standing with lots of fruit. I would love to hear of folks' experience with 'Iron Lady' which I didn't grow this year. I also wanted to report that one heirloom variety of orange cherry "Amy's Apricot" seems to be showing some LB resistance and is still standing with ripening fruit. I only have one plant - so not exactly definitive, but I will be interested to hear back from my seedling customers if they have had the same observation with plants they bought from me. Seed was from Tomatofest. Powdery mildew on cucurbits started 8/20. I sprayed Serenade alone or in combination with Actinovate and this DID appear to suppress or slow spread of PM considerably. First elderberries ripe and very heavy crop!

(Plainfield) Tomatoes are pouring in. Greenhouse cherry and grape tomatoes fruiting heavily in spite of leaf mold on some varieties. The disease does not seem to effect fruit quality or overall yield, as it started up after the plants were fully grown. Looks ugly, though. Mountain Merit has very clean fruits out in the field, as does Plum Regal. Butter Boy and Avalon butternuts are loaded with squash well on their way to maturity. Root crops filling out, cabbages heading more slowly than I wish. I could fire up the irrigation, but there is always a rainstorm a few days off in the forecast. Still spraying for cabbage moth. Generally a very nice growing year.

(Grand Isle) Overall it has been a great growing season to date. Our weekly shipments of Trichogramma wasps from IPM laboratories have proved to show great promise in controlling the corn borer worm in our peppers and corn. Even with a bit of a later start in the spring, our winter squashes moved along quickly and are showing full maturity and good yields. We rediscovered the obvious this season: that a family farm works best when communication is enhanced with a regularly scheduled weekly meeting. We have decided we will always make time for a meeting, regardless of how busy we are feeling.

(Argyle NY) It's been a good growing season for the most part but irrigation was vital in between the rain storms. We got hail about a month ago which damaged the greens and put holes in onion plants but it wasn't too bad (like other times!). Onion crop has been looking good with many curing in the field; we had lower N fertility this summer which seems to have helped them go down sooner and be easier and healthier for dry down. Squash has a lot of powdery mildew but keeping it under control with stylet oil and Kaligreen. No late blight yet and have been doing preventative sprays weekly with Copper and Serenade. Flea beetles dissipated but maybe not for good, as arugula continues to be a good crop; we will continue with the Biothrips netting which has worked fantastic. Potatoes are mostly down as leafhoppers were a challenge; Pyganic helped to a degree to reduce the damage but we will note the varieties that were not as susceptible. Some winter tunnel crops are seeded in greenhouse, like chard and kale and onions (Bridger) plus the onion sets are being ordered now for November planting. We got strawberry Chandler tips from Canada in the first week of August and they will be planted out as plugs very soon. Hoping for a good sweet potato crop after running electric fence around them to control the deer. Days getting shorter, solar panels tipped more, and we hope for more sleep though not ready for cooler temps!

UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC - Ann Hazelrigg

Tomato: Late blight is pretty much statewide. Keep plants protected if you want tomatoes into the fall.

Potato: Late blight also reported but it seems more prevalent on tomato. Diagnosed 'pinkeye' of potato with help from Dr. Steve Johnson at UMaine on fingerlings. Pinkeye derives its name from the pink and somewhat raised areas around and between the eyes on the surface of the periderm, especially on the bud (apical) end of the tuber. It is a 'periderm disorder' and is related to current season growing conditions associated with excessive moisture and high soil temperatures leading to cell damage and death of both the natural tuber periderm and the underlying cells. It is not seed borne. Cut tissue fluoresces under black lights so pull all those old black lights out from the 70s to check for this disorder! See pictures and more here. http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Pinkeye%20of%20Potato%20in%2020 11.pdf. If you are only seeing damage on potato leaf edges, rather than in the middle part of the upper foliage, it may just be early blight and hopper damage.

Eggplant: Verticillium wilt prevalent causing scorch, wilt and death. http://ohioline.osu.edu/hyg-fact/3000/3122.html.

This also affects tomato, potato and pepper. Most tomatoes are bred for resistance to this disease (VF resistance) but heirlooms would likely be susceptible.

Cucurbits: Downy mildew diagnosed in Bradford. Keep plants protected to keep them safe until harvest. This disease does not affect the fruit per se, but the loss of foliage will prevent ripening/harvest. Symptoms are confined to the leaves and their appearance varies widely among cucurbit species. On most species, lesions are first visible on the upper leaf surface as small, irregular to angular, slightly yellow areas.

Symptoms appear first on older leaves and progress to younger leaves as they expand. When conditions (leaf wetness and humidity) favor sporulation, the production of fruiting bodies (sporangia) on the lower leaf surface gives the undersides of the lesions a downy appearance, varying in color from light gray to deep purple. Lesions can coalesce and result in large areas of dead tissue which exposes the fruit to sunscald. Extensive defoliation can occur when conditions are favorable. For more info and pictures.

http://extension.umass.edu/vegetable/diseases/cucurbit-downy-mildew

Scab diagnosed on winter squash. Look for holes/indentations in fruit with green velvety spores. <u>https://extension.umass.edu/vegetable/diseases/cucurbit-scab</u>

Plectosporium blight has not come into the lab but scout your fields for this disease because it is out there! <u>https://extension.umass.edu/vegetable/diseases/plectosporium-blight</u> It is easy to diagnose on the petioles causing diamond shaped white lesions. The petioles become very brittle.

Brassicas: Black rot diagnosed in kale. No visible symptoms in leaves but very obvious in stems. https://extension.umass.edu/vegetable/articles/black-rot-brassica

For more info on fall diseases of brassicas and pumpkin/winter squash harvest and storage go to the latest UMASS veg notes.

https://extension.umass.edu/vegetable/sites/vegetable/files/newsletters/August%2028%202014% 20Vegetable%20Notes.pdf