

## Vermont Vegetable and Berry News – July 21, 2009

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### REPORTS FROM THE FIELD

(Montpelier) Summer? All in all plants are very healthy and doing well. Cool temperatures continue to keep everything behind schedule. Sandy soil continues to drain well but nutrient leaching is a problem. Potato beetles being controlled really well with Entrust. Slugs a problem in everything but Sluggo continues to work well. Cherry tomatoes are trying real hard to come in. Plants are loaded with fruit but need some sun/heat to get them going. Slicing tomatoes starting to pink up. Peppers doing well, eggplants are behind, all of this in greenhouses. Tyria and Greenfinger cukes looking great on trellises. Fruit is there and should really be in by the end of next week. Gold bar squash in the field looks great, fruit is there but sizing up slowly. Brassicas doing well. Winter squash look healthy but just not growing, even on biotelo mulch. Again cool temps I think. Deer and other vermin continue to be scarce. I am seeing TPB but not noticing the usual damage from them so far. Field tomatoes look surprisingly healthy so far with no sign of disease. Watermelon and Cantaloupe trying to grow but when it's 51 degrees in the morning or cooler they are just not happy. Customers at market were really surprised I had a few cherry tomatoes. Here's hoping for a strong August-October since that is when everything is going to come in.

(Starksboro) I'm still mourning a poor strawberry season, the cucumbers are not looking good and the tomatoes are taking their time. Basically the summer crops are not shaping up very well, but the fall crops look great. Anyway, it's creating a bit more of a cash flow pinch than usual. Over all, the season will be fine, just a little late.

(Royalton) Being just a mile from the reported late blight, we're pretty scared. Our tomatoes are planted in biodegradable plastic, and the rows are mulched. They're all heirloom varieties. Eggplants, artichokes, zukes, cukes, peppers, garlic, chard, onions, doing great. Our biggest challenge remains getting hay in the barn. Lots of squash beetles, no hornworms, yet. Melons are trying to make flowers despite the cold weather. Mexican bean beetles seemed to have drowned in all the rain as the beans look great.

(Northfield Falls/Moretown) Lettuce is loving this weather. It is large and beautiful as are the brassicas. The curcurbits, tomatoes and peppers are less excited and having a hard time. The cucumber beetles are so much worse than last year and it is a challenge to keep them at bay.

The baby red potatoes are coming along nicely even with Bambi having an all-you-can-eat buffet each evening. Keeping fingers crossed for no hail and late blight.

(Little Compton RI) Where do we start to salvage this year? For us it's lowering our expectations and in some cases discing under our late field plantings of tomatoes. We are going to accept the trend of the weather and try to use it to our favor. The tomato land will soon be planted to beets, broccoli, cauliflower, carrots etc. Our last planting of field tomatoes (that never made it in the ground) will go into our new "mobile" walking tunnels. We will hopefully get some fruit by October. I am almost feeling the same way about our winter squash. If it is delayed much more (not flowering or setting vines) we will disc them in and plant them to more cole crops. We feel our CSA members will be more forgiving if, at least, we can end with a bang.

Our grafted greenhouse tomatoes have been under great stress; first with botrytis and now we think possibility late blight. Our Rx is to keep pruning as we pick each day and pick fruit very early (at pink) and ripen them in the cool packing house. Strangely enough this is working. As far as potatoes go we have four plantings at four separate farms. The first one just started showing late blight when the sun can out for three days. We quickly mowed them down and harvested some beautiful tubers. We are tired of blasting the other three fields with copper every six days and on our next day of sun we plan on mowing the fields down and will just have to accept the tuber growth we have. The two big commercial potato growers in town have late blight and we don't want to push our luck. We feel we are safer killing the vines then fighting cool, cloudy and wet weather. Good luck to all. There are some sad stories out there.

(Plainfield NH) We had a nasty visitor arrive on the farm and won't go away: late blight came in sometime over the week end of July 14th or earlier. We had been dealing with alternaria and botrytis issues that all of us have had this summer, but then I got a call that there was something awry in one of the tomato houses and sure enough, it looked like a textbook case of late blight with the stem and petiole lesions, white powdery sporulation underneath the leaves. It even had a certain hay-drying smell in the house where it was most firmly established. Further inspection showed it had established in the field tomatoes and potatoes.

Upon positive identification from Cheryl Smith (UNH plant pathologist) we opted to begin a program of serious pruning followed by a spray program. All plant refuse was buried in 2 large holes dug with a hired backhoe. Fortunately I had laid in spray materials that were recommended in one of Vern's early e-mail late blight warnings back on July 2, so we were ready to go in with protectant and (hopefully) "curative" materials just as soon as the folks completed pruning. Now we are living day to day.

Things seem to be in a holding pattern, given the speed with which it initially established) but it's hard to say whether the improving weather or the spray materials is playing the most important role. The disease seems to be momentarily contained in the tomato greenhouses, but seems to be spreading in some of the field varieties of potatoes. Yukons seem to be more susceptible to the disease than either Reba or Red Norland. I plan to go back on a five day spray schedule if it indeed works. Having spent the greater part of last week spraying vegetables to keep them going, I am feeling less and less "green" with every passing day.

(Plainfield VT) It's a strange summer. Kale, chard, lettuce, beets, carrots, broccoli all doing well in the cool and wet. Peas dying early. Winter squash needs a side dressing. Corn just coming into silk. Peppers, eggplant, plum tomatoes setting fruit in the field. First ripe tomatoes, cukes and eggplant ready from the greenhouse. Excellent foliage on the potatoes, few CPB. Spraying Entrust and Serenade weekly. Seeding fall lettuce and oriental greens. Weeding crews working whenever it stops raining. Still picking late strawberries. Raspberries look promising.

(Argyle, NY) It's been quite a month for many farms in our area. On July 1st, our farm got 6.25" of rain and 3 bouts of hail in a matter of a few hours, which was devastating to many crops, but also many rebounded. First time in 20 years we've experienced hail, so I guess we're lucky. Thank goodness for tunnels, which have been producing beans, squash, basil and cucumbers for many weeks. Tomatoes are just starting. Markets have been very strong, but we've been hoping for more folks who want to can and freeze veggies...maybe later this summer. The very cool weather has brought on some diseases such as powdery mildew, purple blotch on onions (damaged badly by hail), and angular leaf spot on cucumbers.

So far, even with late blight on commercial farms nearby, we've not seen any and we've been doing a 5 day program with copper and serenade to hopefully keep it at bay. Today we started clipping our own strawberry tips and planting them in trays that are under the mister system; they are the Chandlers which we do the annual bed system with. I haven't added up the yields yet this year, but they were tremendous! We're harvesting celery and carrots, and just harvested/racked all our garlic this past week and it's one of our best crops of it ever...it loved the raised beds

## **HARVESTING POTATOES FROM FIELDS WITH LATE BLIGHT**

After talking with several plant pathologists I suggest that if late blight is starting in your potatoes and you're not willing or able to apply fungicides in a timely manner to combat it, or if it starts to get the upper hand, then cut the chances of infecting nearby tomatoes or losing what tubers you do have to infection. Mow or burn down the crop to kill it.

Then allow time for the foliage to die and the skins to set. Harvest should not be started until vines are completely dead, so a minimum of two weeks should pass between vine killing and harvest. Late blight will not survive on dead vegetation, thus the tubers that are exposed at harvest are less likely to be infected. Remove any obviously infected tubers before storage to reduce additional losses from soft rot. Do not wash tubers, as they should be dry when placed in storage. Wait 3 or 4 days before selling any and check to see if they are breaking down. If any infection is believed to be present, forced air ventilation through the storage bin can help minimize spread from tuber to tuber. Storage of potatoes with small amounts of late blight should be at 38 F to retard late blight tuber rot. If you must wash tubers before sale, organic growers can use Storox (Oxidate) or chlorine (must dilute to 4ppm before discharge) at labeled rates in wash water; another more effective option for suppressing late blight tuber rot appears to be Phostrol but it is labeled for russet-skinned varieties only.

#### **FROM THE UVM PLANT DIAGNOSTIC CLINIC** (Ann Hazelrigg)

The wet weather and scattered storms are keeping disease pressure high. Here are some highlights of diseases growers have sent in to be identified recently.

Black leg on potato often develops after plants are well up or even in flower. In this case, stem bases of diseased plants typically show an inky-black to light-brown decay that originates from the seed piece and can extend up the stem from less than an inch to more than two feet. Leaves of infected plants tend to roll upward at the margins, become yellow, wilt, and often die. Blackleg is favored by cool, wet soils at planting followed by high temperatures after emergence. Did we ever have high temps? This disease is usually very hit or miss but send into the clinic if you want positive id. See: <http://ohioline.osu.edu/hyg-fact/3000/3106.html>

Bacterial wilt on greenhouse cucumbers causes entire vines of cukes and melons wilt rapidly due to feeding by striped cucumber beetles infested with the bacteria. Squash and pumpkins may not wilt rapidly but may be dwarfed with extensive blossoming and branching. Watermelons are rarely affected. Wilt is caused by a slimy ooze which plugs the entire water-conducting tissue of the plant. The wilted plant will not recover, even if there is enough water in the soil. Bacterial wilt may be distinguished from other wilt pathogens by cutting a severely wilted stem at the base of a lateral branch or just above ground level and squeezing the cut end. Ooze will exude from the water-conducting tissue. By touching the ooze with your finger then slowly drawing your finger away, the milky, sticky ooze will string out into fine strands up to one-quarter inch long. This test works best for cucumbers and is less reliable for other cucurbits. I have tried this a lot in the field and about half the time it works!

White rot on tomato and potato is common in low wet spots in the field. Look for the fluffy white mold on the outside of the stem and the black sclerotia on the inside of the stem. Bag and remove plants as soon as you find the disease.

Leaf spots on cucurbit foliage include scab and Septoria leaf spot. Scab (and angular leaf spot) can cause ragged angular holes in the foliage of summer squash. Scab will also cause small spots on fruit covered with green/gray spores whereas angular leaf spot could also cause fruit problems but they would not be covered with green spores. See: [http://vegetablemdonline.ppath.cornell.edu/factsheets/Cucurbit\\_Scab.htm](http://vegetablemdonline.ppath.cornell.edu/factsheets/Cucurbit_Scab.htm) Septoria leafspot causes small leaf spots often whitish with a brown border and small black fruiting bodies within the spots. See: [http://vegetablemdonline.ppath.cornell.edu/factsheets/Cucurbit\\_Septoria.htm](http://vegetablemdonline.ppath.cornell.edu/factsheets/Cucurbit_Septoria.htm)

### **DONATING PRODUCE TO THE VERMONT FOODBANK**

The Vermont Foodbank seeks farmers with unmarketable or surplus produce that could help feed those in need within their communities. Agricultural donations to the Foodbank can either be through direct contribution of harvested produce, or allowing supervised volunteers to pick excess fruits and vegetables via the Foodbank's gleaning program. Contact Theresa Snow at 802-477-4114 or [tsnow@vtfoodbank.org](mailto:tsnow@vtfoodbank.org) if you have produce available for donation. This can be crops that are unfit for commercial sale, or are not profitable to harvest. If the fruits and vegetables are already boxed or packaged, the Foodbank can arrange to have the produce picked up at the farm. If the produce remains in the field, the Foodbank can harvest it through its gleaning program which provides tools, transportation, and labor (volunteers under close supervision by an experienced Foodbank employee). All that is required from farms is notification of what, where, and when to glean with enough advance to coordinate the effort; 5 days is best.

### **JOHNNY'S SEEDS RESEARCH FARM TOUR**

On Wednesday, August 19<sup>th</sup> from 5 p.m. 8 p.m. there will be a tour of the Johnny's Research Farm in Albion, ME. This is an opportunity to tour their extensive trial fields, connect with other growers and quiz Johnny's researchers. Some of the crops to be showcased include tomatoes, peppers, cucumbers and beans. Light refreshments will be served. Please contact Kelly Dionne at [kdionne@johnnyseeds.com](mailto:kdionne@johnnyseeds.com) or call her at 207-877-5869.