

Vermont Vegetable and Berry News – October 14, 2015 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

(Plainfield) Winding down. Cover crops just germinating. Garlic in. Putting some serious fertility into the greenhouses; compost and lime. Seeding spinach and arugula mainly. More rutabagas, cabbage, and daikon to harvest; selling well. Endless kale. Butternut did fine, but the buttercup family did not make much size. Saying goodbye and thanks to many crew members. Glad that there are still folks to do this work and do it well.

(Tunbridge) One of the best falls I can remember. We only had to cover some lettuces and chicory, which was a relief since we have no help. Finally let the last beans go, after picking them for a month. The greens all look nice with the dry weather keeping molds and rot away. Red peppers galore. Onions, winter squash in; yields and quality very high. Still some potatoes, storage carrots, and beets to dig. Garlic is not planted. Been pressing lots of apples. Markets on Saturdays have been strong with the good weather. Brussels sprouts rallying in the end after being too dry attracting flea beetles then too wet causing spots and having to side dress with Progro. Now they are perfect looking. Beautiful fall broccoli and cabbage. Lots of clean-up ahead.

(S. Ryegate) Still no frost here. Tomatoes, summer squash, eggplants and peppers still producing, but we're done. Garlic is planted, but not mulched. Waiting for maple leaves to fall.

(Westminster West) Mid-October and no killing frost here. Not a record yet but close. Finally got cover crops on squash and onion fields. Still have much more veggies to harvest so probably won't get a chance to cover crop those fields for the winter, a shame. All crops selling very well thru wholesale channels, and the farmers' market is doing better than ever due to a more aggressive pricing structure we have taken. Preparing the field for garlic planting any day now. Building the raised beds with plastic mulch tomorrow and will plant soon after. An interesting note: we always rush to get the large onion crop dried and harvested as soon as we can, but last two years I have found many onions left behind, either under the plastic mulch or just lost in the field, a full month or more left on the ground in all sorts of weather, some never even pulled out and they are in great shape, fully dried, no rot of any kind. So, it makes me wonder about onions and drying techniques and maybe worth more research. Still keeping a crew busy, probably thru end of month and then lots of greenhouse repairs and maintenance. Trying to enjoy the amazing fall colors and weather as much as possible!

(Plainfield NH) This has been a very generous fall, with warm temps and dry weather. We are finishing potato digging; have yet to dig the carrots. The farmstand closes today, which will enable us to catch up on projects if good weather continues. Finally finishing pruning the summer raspberries. Cutting back perennials and winter-readying them. Re-covering and cleaning out greenhouses. Need to get soil samples taken, and maybe get to pruning blueberries which have been neglected a couple of years. Hedgerows seem to grow as fast as lambsquarters, will work on cutting back the fields if winter permits. Biggest new invasive nasty weed for us is the solanum horsenettle. This nasty fellow appears late June, has a taproot as tough and deep as trees and grows like gangbusters in July, August and early September when you have no time to deal with it. Spines make it impossible to pull without leather gloves and the PYO people don't like it much either. I saw it eastern New York cornfields 20 years ago; now it's our problem along the river, probably coming to a farm near you.

(Salisbury NH) Tomatoes in the unheated hoop house had problems with watery spots and some complete 'melt downs.' Jasper cherry tomatoes are still hanging on and tasting sweet. Our eggplants, once they finally sized up, have been producing like crazy and absolutely no blemishes. Have sold a lot but need to reduce number of plants next year. Peppers were smaller than usual this year. Not many people seem to pick the lunch box size, they want large peppers for stuffing. Had a problem keeping hot versus sweet red peppers separated so ended up warning people "it might be hot!" Last big storm we got 6.5" of rain. Our hills drain well so not many water problems. Finally got all the transplants into the hoop house. We've had two mild frosts that didn't seem to hurt anything in the fields. Brussels sprouts are barely getting to picking size. Crop way behind past several years even though we transplanted same time as previous years. Beets had a lot of scab. We knew potatoes were susceptible but hadn't ever had a problem with beets. Onions still have too much green on them. Our first batch mostly died due to dry weather so had to replant which made us late in sizing up. Had some compost from local dealer and had it tested. Was surprised to see a fairly high level of aluminum. We always find getting anything off farm has problems: chamomile from straw/mulch, weeds galore from manure. Better to close our ecosystem. Overall sales have been good and hope to stretch out season until end of November.

(Argyle NY) What a great, warm autumn we are having. It has given us a chance to get root cellared crops harvested at a more leisurely pace and get all field work, cover-cropping, and clean-up done. Our sweet potato crop is 3 times what it was last year; big, beautiful, and just finished curing at 90 degrees for 5 days with some of the winter squash, also a good crop. The broccoli and cauliflower has all been coming in earlier than ever before but the Brussels sprouts are behind; not sure why as they are next to each other. We still have kohlrabi, cabbage, rutabagas, turnips, radishes, celeriac, leeks and some beets to get harvested and packed in the root cellar.

We prepped the garlic area today with raised beds (no plastic) and we will plant it with a waterwheel in the morning before rains come, then cover the whole area with straw with our bale-chopper machine. All three high tunnels are fully planted for winter except 2 sections that will get the spinach transplants still in the greenhouse, while the 2 rows of cherry tomatoes still produce well for us in the tunnel. Farmers' markets have remained strong this fall and we move to the winter sites Nov 7.

PUMPKIN AND WINTER SQUASH STORAGE (adapted from UMass Vegetable Program)

Take care to avoid chilling injury, which occurs when squash or pumpkin is exposed to temperatures below 50°F in the field or in storage. Injury increases as temperature decreases and/or length of chilling time increases. Chilling injury is of particular concern with squash intended for storage because it increases the likelihood of breakdown. If squash has been exposed to chilling injury it should be marketed first and put in long-term storage.

Ideally, pumpkins should be harvested when fully mature, with a deep orange color and hardened rind. However, as long as pumpkins have started to turn color, they will ripen off the vine if held under the proper conditions in a well-ventilated barn or greenhouse. The best temperatures for ripening are 80-85 degrees Fahrenheit with a relative humidity of 80-85%. Night temperatures should not drop below the sixties. Even if pumpkins are ripe, a period of curing for about 10 days can improve storage life by helping fruit skin harden and healing wounds.

Pumpkins should be stored in a cool, dry place. Ideal temperatures are between 50° and 60° F and relative humidity of 50 - 70%. Higher humidity allows condensation on the fruit with risk of disease, and lower humidity can cause dehydration. Higher temperatures increase respiration and can cause weight loss. Temperatures lower than 50 F cause chilling injury (see squash, below). In a greenhouse, temperature can be managed with ventilation on sunny days. If it is quite cold, heat may be needed even if the house is closed up at night.

Growers often plan to store winter squash for much longer than eight weeks. Fruit that are free from disease and haven't been subject to much chilling (below 50°F) should be selected for longterm storage. Fruit from fields where Phythophthora is present are not the best choice for storage. Storage life depends on the condition of the crop when it comes in and your ability to provide careful handling and a proper storage environment. All fruit placed in storage should be free of disease, decay, insects, and unhealed wounds. It is important to handle the fruit with care to avoid bruising or cutting the rind, which allows decay organisms to invade. Place fruit gently in containers and move bins on pallets. Use gloves to protect both the fruit and the workers. Removal of the stem from squash (butternut, Hubbard, etc.) will also decrease the amount of fruit spoilage because the stems frequently puncture adjacent fruit, facilitating infection. A period of curing after harvest can help extend storage life of squash. This pre-storage treatment permits rapid drying of the outer cell layers, and when combined with a dry atmosphere for storage inhibits infections that can take place at this time. Any clean cuts during harvest a likely to heal over and are no longer a source for injury or infection.

After curing, move squash or pumpkins to a dry, well-ventilated storage area. Pressure bruises can also reduce storage life, so avoid rough handling, tight packing, or piling fruit too high. Fruit temperature should be kept as close to the temperature of the air as possible to avoid condensation, which can lead to rot. Ideally, the storage environment should be kept at 55-60°F with a relative humidity of 50-70%. Lower relative humidity increases water loss, resulting in reduced weight, and if excessive, shriveling of fruit. High relative humidity provides a favorable environment for fungal and bacterial decay organisms. Under ideal conditions, disease-free pumpkins should have a storage life of 8-12 weeks and butternut squash up to three or four months. Even if it is difficult to provide the ideal conditions, storage in a shady, dry location, with fruit off the ground or the floor, is preferable to leaving fruit out in the field.

CHANGES TO EPA'S FARM WORKER PROTECTION STANDARD

Revisions to this 1992 regulation are intended to increase protection from pesticide exposure for people who perform hand-labor tasks in pesticide-treated crops, such as harvesting, thinning, pruning) and pesticide handlers' (those who mix, load and apply pesticides) use and contact with pesticides on farms, forests, nurseries and greenhouses. Major changes to the regulation include:

- Mandatory annual training of farmworkers on required protections (currently every 5 years).
- Expanded training includes instructions on work clothing and other safety topics.
- Children under 18 are now prohibited from handling pesticides.
- Expanded mandatory posting of no-entry signs for the most hazardous pesticides.
- New no-entry application-exclusion zones up to 100 feet surrounding pesticide application.
- Requirement to provide more than one way for farmworkers and their representatives to gain access to pesticide information centrally-posted, or by requesting records.
- Mandatory record-keeping, and requirement to keep records for two years.
- Anti-retaliation provisions comparable to Department of Labor's.
- Changes in personal protective equipment to ensure respirators are effective.
- Specific amounts of water to be used for routine washing, emergency eye flushing, etc.

Additional information on the revised rule is available at:

http://www2.epa.gov/pesticide-worker-safety/revisions-worker-protection-standard For info on training and enforcement of WPS in Vermont, see: http://agriculture.vermont.gov/pesticide_regulation/WPS

LAND ACCESS WORKSHOPS FOR FARMERS, Oct. 26 and Nov. 7 from 1-6 pm

Are you a farmer interested in leasing, purchasing or reclaiming farmland in the near future? Come learn about land and building assessments, useful mapping tools, financing options, case studies of successful farm purchases, and more.

Oct. 26: Bread and Butter Farm, Shelburne, VT. Presentations by: Ben Waterman, UVM Extension Center for Sustainable Agriculture; Justin Rich, Burnt Rock Farm; Adam Hausmann, Adam's Berry Farm; David Lane, Yankee Farm Credit; Andy Wood, VT Agricultural Credit Corp. RSVP to Stacy Bernstein at stacy@intervale.org

Nov. 9: Yoder Farm, Danby, VT. Presentations by: Ben Waterman, UVM Extension Center for Sustainable Agriculture; Jeremy Gildrien, Gildrien Farm; Tim Hughes-Muse, Laughing Child Farm; Jean Conklin, Yankee Farm Credit; Andy Wood, VT Agricultural Credit Corp. RSVP to Jen Miller at jen@rutlandfarmandfood.org

UPCOMING NOFA-VT WORKSHOPS

Space is limited, register soon. For info on these and many other events see: http://nofavt.org/upcoming-events-calendar

Oct. 28 - Practical Soil Science | Part 2: Supporting Biologically Active Soils

Nov. 5 - Gas Fueled Machines: Tractors, Pumps & Friends

Nov. 7 - Six Figure Farming for Small Plots with Jean Martin Fortier

Nov. 12 - Why Doesn't This Thing Turn On? Dealing with Electrical Problems

Nov. 19 - Tricks for Taking Apart & Fixing Rusted Parts