



## Vermont Vegetable and Berry News – April 19, 2011

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<http://www.uvm.edu/vtvegandberry>

### REPORTS FROM THE FIELD

(Rochester) The snow finally receded enough for us to start pruning blueberries on April 10. Subsequent warm winds and rain rapidly melted down the remaining snow and we got going on the raspberries April 14. Our Patriot blueberry buds seem to be swelling faster than ever with some bud break occurring already in the youngest plants. As usual, the delayed start means a shorter period to complete the spring pruning, so we are pulling in some extra help. Happy to get going at last, but feeling the pinch physically as we adapt from being fairly sedentary and indoors to totally active and outdoors all day. Survival tip in the cool, windy fields: drink a lot of water.

(Plainfield NH) As long as I don't look at last year's calendar I suppose we are in good shape. Strawberries uncovered, fields drying out as the last of the snow evaporates. Greenhouse activities are occupying most all of our time, but hope by next week at this time to have some land worked up and carrots, beet green and spinach tucked in. Temps in our part of the valley still pretty cool but when the sun comes out, you had better hustle back to open up the greenhouses and get ready to water. Waiting to see if the buds will develop on the peaches before committing time to pruning them; still wading through the blueberry pruning.

(West Brookfield) Snow is still in patches in the field so it is still strictly tunnel growing. Peas, radish, mesclun, arugula, beet greens and chard are all up and perky. First cut of mesclun greens was cut for an order on April 16th. A bit later than last season due to the winter that just won't leave. But it is go time now! New 30x76 tunnel due to go up as soon as the snow melts.

(Westminster West) Putting finishing touches on new high tunnel, built last fall. Also final planning on spring development and water storage projects, though it doesn't seem like the thing to be doing as the saturated grounds receives even more rain as I write this! The garlic is looking great after receiving a top dressing of Pro-gro nitrogen. Tunnel raspberries showing some leaf growth, that tunnel also doubling as a back-up space for thousands of vegetable packs we grew for our burgeoning business. The crazy weather is slowing down sales but overall we seem to be ahead; that could change if the sun stays hidden for several more weeks. We have 10 employees now and it's funny that we have grown to that stage, but it feels right and we have a good crew.

(Salisbury NH) Finally a little warmer weather. Everything in the hoophouse is growing well. We thought the spinach had a problem but after sending a picture to UNH, we were told that white granules that feel kind of like salt on the spinach are not a disease, they're normal! They are glandular trichomes, a normal part of the leaf. Becky Sideman at UNH said in her experience they seem to be more common in spinach grown in cool weather.

Transplanted several varieties of lettuces from Johnny's: Skyphos, Red Cross, Sylvesta, Buttercrunch and Dancine into outdoor raised beds. This is a trial to see what grows best, what customers like best and which will produce the better income. Nights are still treacherous, will it go much below freezing?

(Argyle NY) The high tunnels are transitioning to more spring greens and lettuce, with summer crops not far away. We have 2 direct seedings of carrots, beets, radishes, herbs, and arugula out in the fields so far, all under rowcover due to the cold weather. Our first planting of peas are almost ready to transplant outside. We seed 2 seeds per cell in 200 speedling trays, let them grow about 2-3 weeks, then transplant out and it works real well and gives a nice stand (especially because the earthworms eat a lot of the pea seeds when we direct seed them in the field). Just dug out all the parsnips, lifted with a single chisel tooth, and have them stored in the root cellar; spring parsnips are unbelievably sweet! We're pruning the orchard, clearing hedge rows, chopping firewood, doing tractor maintenance, etc. waiting for the real busy season to start. We have been quite dry (only 1/2 inch of rain this past week) so we might need to start up irrigation. The Saturday farmers' markets are booming and we move outdoors after May 1st.

(Montpelier) Continued colder than normal temps are causing problems in the unheated greenhouses. I am really learning to hate rowcover more than I love it. I will be tearing out the over wintered spinach in the next day or so. It is bolting about 2-3 weeks early and the aphids are taking up residence. Have managed to keep them under control with an application of Pyganic right after harvesting and then a release of green lacewing larva. Starts are doing well and we are potting stuff on and trying to get early cucumbers and summer squash going. New seedling greenhouse frame is up, just need to decide how I want the end walls and baseboards to be done. Really looking forward to finally having a dedicated and heated seedling shed for both ends of the season. Chickens are out roto-tiling everything and the new birds are proving to be quite stupid and a challenge. Loss rate this spring quite high. Garlic is quite tall and coming right up through the mulch and row cover. Time to uncover the overwintered fava beans and see how they have done. Fields are drying out quickly and hope to get on them early next week to start prepping. Shifting to more salad and spinach production this summer. New CSA is up and running and shares are trickling in. Looking at buying an iphone and taking credit card payment with it at the farmer's market this summer. That should be interesting and I am hoping to increase sales at least during the higher tourist season periods. One last thing: high wind produced a 30 foot tear along a crease in my outside layer of plastic and I will attest to the use of 'Tyvek tape'. It is 2 inches wide, a noticeable red color but works very well. Apparently a lot of copycat brands but the lumber yards call it Tyvek tape if you are looking for it. I am still going to replace both layers before this winter.

(Durham CT) Oddly enough, something good has happened as a result of our hoopouses' plastic having to be slit in the winter. We cut the plastic because it seemed imminent that they would be crushed by the very heavy snow. The result was that our greens were covered by two feet of snow and we had a long wait until we could recover the houses. Lots of rain fell on the soil during that time. Perhaps this flushed out extra nitrogen that can build up in hoopouses and attract aphids in the spring, or maybe it was the colder soil temperatures. Whatever the cause to date we've seen next to no aphids, a rarity for us this time of year.

I wouldn't recommend cutting plastic every winter, but at least something positive resulted out of all this mess. Our spinach, once it finally recovered from too much snow and cold, has been the best ever. Out in the field last fall's spinach grew up sturdy and delicious: it's Red Cardinal, a variety I thought was mostly an early spring or late fall crop, not the sort to survive under a few feet of snow. Surprise.

(Grand Isle) We grafted Cobra tomato onto Emperor rootstock in February. We had extra Cobra plants so just continued to grow them without grafting. We put them in their final growing greenhouse 2 weeks ago. Even with the shock of grafting, the grafted plants have caught up and are now about the same size as the plain Cobra. We will see what happens, but at this point we are impressed by the grafted plants.

### **ADD YOUR FARM TO TOMATO TRANSPLANT LISTING FOR 2011**

Is your farm listed on the Extension Master Gardener web page for locally grown tomato transplants? If you see your name on the list already, you don't need to do anything. If you are selling tomato transplants and want to be on the list, let Lisa Avery at the UVM Master Gardener program (lisa.avery@uvm.edu) know. Here is the list compiled from last year.

<http://www.uvm.edu/mastergardener/help/documents/BUYLOCALtomatos2010.pdf>

### **GREENHOUSE TOMATO DISORDERS**

Ann Hazelrigg and Vern Grubinger

Lots of tomatoes are growing in greenhouses now; there should not be many infectious (biological) leaf diseases at this point in the season, but there are several abiotic (non-living) diseases caused by environmental conditions.

Watch for edema (sometimes called oedema), which happens when plant roots take up water but leaves can't transpire due to cloudy, cool conditions. The water builds up in cells and then ruptures causing corky lesions along veins on leaf undersides. New growth, once conditions have changed, should grow out fine. Image:

<http://www.ipmimages.org/browse/detail.cfm?imgnum=5369133>.

Another relatively common problem is ethylene injury that results from improper furnace venting or heat exchanger cracks. Tomatoes are very sensitive to ethylene. The leaves will turn downward and may look stringy, flowers may abort. Here's a fact sheet with images of greenhouse crop damage and details of ethylene effects on many crops:

<http://www.ces.ncsu.edu/depts/hort/floriculture/hils/HIL530.pdf>

Chilling injury has been reported on several farms this year. When tender young transplants plants get exposed to low temperatures it can kill off cells; there will usually be light colored spots or larger areas on a set of leaves all the same age, then new growth will look OK. It often occurs in one section of the greenhouse more than others due to temperature differences. Here's a link to images of chilling/frost injury on tomato foliage:

<http://www.ipmimages.org/browse/subthumb.cfm?sub=768&area=63&Res=4>

Nutritional problems also have been reported this year; they arise from improper fertilization (usually resulting from a 'shotgun' approach without a soil test) and/or cold soils that limit root growth and nutrient uptake. Image of soluble salt and ammonium injury on tomato seedling: <http://www.negreenhouseupdate.info/index.php/nutritional-disorders/362-soluble-salt-and-ammonium-injury-on-tomato-seedlings>

## **NEW PESTS TO KEEP AN EYE OUT FOR THIS SEASON**

(Ann Hazelrigg)

It's a good idea to familiarize yourself and key crew members with these insects that have been found in our region. Vern and I would like to know if you see these pests on your farm so we can keep abreast of their location, and if you are unsure please send in samples.

Brown marmorated stink bug was found in Stowe this past fall. It has been in southeastern NH for several years. It has been wreaking havoc in the mid Atlantic and states in the south. This pest causes stings on lots of different fruits and vegetables rendering them unmarketable. For details see: <http://ento.psu.edu/extension/factsheets/brown-marmorated-stink-bug>.

Swede midge was found on a second farm in Chittenden County last fall. This pest attacks all crucifers and feeds on the growing points. Symptoms include decaying (stinky) growing points and multiple small heads. Several generations occur throughout the season so the pest may become increasingly worse on later Brassica plantings. Rotation as far as possible from previous plantings and row covers may help with the pest. For more information see: <http://www.nysipm.cornell.edu/factsheets/vegetables/cruc/sm.pdf>

Onion leek moth is another new pest for us that attacks garlic, onions and leeks. Larvae feed on foliage and cause "window pane" symptoms. See this factsheet for info and pictures of damage: <http://cce.cornell.edu/Ag/Horticulture/Documents/Leek%20Moth%20Fact%20Sheet%20Ivy%2006%2018%2010.pdf>.

## **HELP US IDENTIFY ON-FARM PRODUCE SAFETY ISSUES**

Please help UVM Extension understand the challenges and barriers faced by diversified fruit and vegetable growers around on-farm produce safety. Even if you are not planning on getting GAPs certified, please take this survey! We are trying to have as many commercial produce farms as possible participate. There are two versions of the survey - one for farms that have completed GAPs certification and one for farms that have not; Either one should take less than 10 minutes. Questions? Ginger Nickerson (802) 656-5490, [virginia.nickerson@uvm.edu](mailto:virginia.nickerson@uvm.edu)

Here are the links: For VT produce growers who are NOT GAPs Certified: <https://survey.uvm.edu/index.php?sid=23626&newtest=Y&lang=en>

For produce VT growers who are GAPs certified: <https://survey.uvm.edu/index.php?sid=54483&newtest=Y&lang=en>

## **FARMER TO FARMER: VERMONT TO JAPAN DONATION**

In order to help farmers suffering from the situation in Japan, Radical Roots Farm in Rutland has organized a campaign asking local farmers to donate 5 to 10% of their proceeds from their opening day of Farmers' Market here in Vermont and the region. All funds will be donated to the American Friends of Asian Rural Institute (AFARI) which promotes sustainable agriculture and community development ([www.friends-ari.org](http://www.friends-ari.org)) and ShelterBox USA which provides aid boxes to supply extended families with a tent and essential equipment to use while they are displaced or homeless ([www.shelterboxusa.org](http://www.shelterboxusa.org)). Go to [www.RadicalRootsVT.com](http://www.RadicalRootsVT.com) and click on the Farmer to Farmer Donation tab for details and instructions; please email [radicalrootsfarm@gmail.com](mailto:radicalrootsfarm@gmail.com) to let them know if you are participating. There is a poster and other outreach materials you can download and print to let customers know you are participating.