



Vermont Vegetable and Berry News –May 21, 2013  
Compiled by Vern Grubinger, University of Vermont Extension  
(802) 257-7967 ext. 303, [vernon.grubinger@uvm.edu](mailto:vernon.grubinger@uvm.edu)  
[www.uvm.edu/vtvegandberry](http://www.uvm.edu/vtvegandberry)

## REPORTS FROM THE FIELD

(Warren) Almost done with transplanting for the year. Happy to not have people around any more. From here till fall harvest it will just be me and 1 part timer. Short day direct seeded crops are the focus for the summer. Really happy with the wobbler irrigation setup for getting things to germinate. It's simple, easy to move and can be run off our well. Potato seed was the nicest I've seen in a while. Wondering if that is because we purchased from someone other than fedco for a change? Onions planted on silver mulch looking good. Last week's heat seemed to help warm the soil just enough. I'm loving our new rainfall mini-bedder. I can sleep well knowing that the plastic won't blow away on our new hilltop fields.

(Williston) Dodged the frost last Tuesday but got light frost Wednesday morning with no damage. Nice rain started Sunday which is very much needed. Working on irrigation system which will be coming from pond and not house supply. Garlic is looking a bit brown on tops but hope the rain will help. Pulling everything out of hoop house to start new summer rotation. Great soil sample from U of Maine with UVM Extension recommendations Vern which is very helpful. Seeded down one field with buckwheat to work on soil organic matter. Flea beetles already on sorrel and other crops. Had some leafhoppers on sage in hoop house but spayed Pyganic and am harvesting beautiful sage. Spittle bug already on the scene in tarragon and other herbs. Farmers market to start in 2 weeks.

(Dummerston) A big thank you to whoever shared the advice about using fishing line to deter the deer on the list-serve. Last year, the deer had gotten into the habit of jumping my 2 strands of electric fence. I added a 3rd strand of electric rope spaced several feet out from the other 2 then watched a large doe leap the whole thing effortlessly. When I put the electric fence up again this year the deer went back to their old tricks. But fishing line strung tightly along the edge of the woods (3.5 feet from the ground) seems to have stopped them. I'm also happy with the results of flame weeding early carrot and parsnip beds. Greens are also doing well as long all the brassicas are row covered to protect against the flea beetles. Heat loving crops in the high tunnel made it through the cold snap. So the year is off to a good start.

(Shelburne/South Burlington) Greenhouses are full, winter crops just finished being pulled out, new kale is on and looking great. Soil testing and amending a ton, looking forward to balancing soils this year and really getting a handle on what is going on in my high tunnel soils. This summer's winter planting will be more diverse than last year (mostly kale and spinach) so I am looking to round out with another few families: umbel and aster. Making winter planting plans now!

(Rochester) Two consecutive nights of frost at the berry farm had us worried. We had 24.8° F. on the second night according to our digital sensor in the field, but somehow the open blueberry blossoms appear to have survived well. The thermometer may not be correctly calibrated, but the flowers were covered with tiny shards of frost and it is hard to understand how more of them have not turned brown. The generally dry conditions have slowed the ripening process and fewer were fully open than we might otherwise have expected. It remains to be seen if the raspberries have been compromised, but they look OK for now. Seems like we dodged a bullet. Hoplia beetle emerged this week. The numbers are tiny and confined to one part of the blueberry patch by the parking lot, but they are not generally seen in Vermont and we have to think they were introduced by visitors to the farm at some point: a risk associated with PYO that is seldom mentioned.

(Plainfield NH) Corn is in and up. First plantings of melons, peppers, tomatoes out and hooped with remay. The 1.5 inches of rain received 10 days ago was a welcome respite but recent windiness has got things very dry again, and serious irrigating will commence again if we don't get rains this week. Greenhouse sales have been good, corresponding to the high number of sunny days. Pest problems thus far are foxglove aphids in the greenhouses; not seeing the high number of flea beetles as this time in past. Lots of die back on blueberries on my sandier ground this past winter, and the summer bearing raspberries seem to be taking their time waking up. Strawberries look good and at about 15% bloom. Resisting the temptation to give them a little extra nitrogen at this time of the year. Garlic looks in serious need of additional nutrient, hit it hard with Kreher's this week past, hope it's not too little too late.

(Westminster) We had 3 nights of frost last week, down to 30 degrees. Any asparagus that was not cut was zapped/damaged. I have been cutting asparagus since May 2, earlier by a week from last year. Tarnished plant bug has been on it since day one. Not a very heavy pressure but they are there. Though we need the rain, it has been the nicest springs in many years

(Montpelier) Finally some rain. Started running irrigation 4 weeks ago. A great deal of trouble getting early outside plantings going. Frost last Sunday and Monday caused quite a few problems. Monday night was the most damaging with low temp at 25 degrees. Lost the first round of strawberries, a lot of early greens, and even the radishes and arugula were zapped.

Only pests so far are the flea beetles, but they are into everything including eggplant starts up on a bench in the seedling shed. Garlic crop looks great. Coming strong and appears to be little to no loss from this winter. Greenhouses are almost all planted, tomatoes are flowering. Asparagus crop is doing well. The only reason is the drip tape we ran last year. Turned it on and they started producing. Lost at least one day's harvest to the frost. Early season markets are doing well. CSA sales are on target and getting a lot of wholesale requests from caterers. Perhaps the economy is finally on the upswing.

(Woodbury) I have been repeating the phrase "It always works out by October" with increasing frequency lately. The dryness we had is gone, now I need a little window to catch up on some field work. The greenhouses are going strong, and plant sales have been solid, but we have lots and lots of plants to sell. My returning crew continues to be a blessing, and I find myself leaving lists of things to do that get done... amazing. Have turned to drinking coffee right from the Thermos; who has time for a mug anyway.

(Sudbury) Soils remain pretty dry and we have had to spend time irrigating early to ensure germination. Beans were slightly damaged with recent frosts but seem to be recovering and growing nicely. Garlic crop may be the best we have ever had. We are laying black plastic and hope to transplant peppers, squash and eggplant by next week. First farmers' market scheduled for this week and our small farm hopes to have arugula, lettuce, radishes and scallions for our customers.

(Westfield) We survive the "long" frost: at 10pm the temperature was below 32, by the morning the strawberries had a nice layer of ice and I turn off the irrigation at 10 am. The other crop outside could stand a frost as we haven't yet planted the sensitive crops. After a slow start bedding plant sale are good, found a few aphids, sprayed some soap and hopefully the predatory wasp will do the rest. Garlic looks good as the field crops. Flea beetles not as intense as last year.

(Norwich) Squeaked through with a low of 30 in Union Village last week. The onions, lettuce and broccoli fared fine under mid-weight remay. Now the planting push is on. Serious flea beetle damage to any direct seeded brassica crops that I was too busy to row cover, but the ones that are covered look great. Our CSA opens this week with big heads of Flashy Trout lettuce, arugula, mesclun, and wild crafted ramps. Wishing that our year old rhubarb and asparagus patches were harvestable, but we'll give 'em another year.

(Hinesburg) Monday night we just dodged a frost, but Tuesday night got pretty cold. Frost started appearing at 3 am and by 6 am I had close to a quarter of an inch of ice frozen on some crops I was irrigating. A surprise was that the beans that had just started sprouting survived!

One thing I did (which may have helped, who knows) is I slightly hilled them Monday evening throwing 1/4 inch of soil over the many elbows just starting to come through. There were only about 10% with actual leaves out, and those also survived so I am not sure if the hilling actually helped or not. Otherwise crops are coming along nicely, a bit dry (before this spell). Lots of irrigating, worried about pond getting low already!

(Barnet) We had 25 degrees Wed morning. Plasticulture strawberries in full bloom survived under hoops and two layers of 1 ounce row cover. Blooms along the edges of the patch with only a single layer saw some frost. Other crops that probably shouldn't have been out also made it through: zucchini and squash under hoops with perforated plastic and one layer of 1 ounce saw some spotty frost nip but were otherwise okay. Prior to Sunday we had received about .5 inch of rain since the middle of April. Have had a hard time transplanting into plastic mulch that was probably laid when the soil was too dry. A single row of drip tape doesn't seem to be enough no matter how long you leave it on. We will probably switch to two lines per bed. Wobblers are working pretty well for germinating small plantings when the larger overhead irrigation is tied up in other fields. We seem to be able to irrigate about a 30' by 200' block off a garden hose with 8 wobblers.

(Montpelier) Asparagus shriveling from lack of water.

(Norwich) Pretty hard frost that one night. Down to 26 F. Irrigated plasticulture berries in full bloom and very early cuke/zuke transplant field. Had double covers on transplanted beans. Everything made it, but a long night! Been irrigating everywhere, even green manure crops. Glad to have our big 3 phase electric pump. Nearly done harvesting first spring planted 1/3 acre spinach. Staking transplanted peas. First GH toms showing color. Really trying to grow our own nitrogen because our soil tests for P/K/Ca are off the chart and most fields have a pH of over 7. Don't want to add anything more than N. Overwinter rye/vetch looks really good, but spring planted pea/oats slow because of drought. (Last rain missed us as usual!) Last fall raised a nice crop of spinach on nothing but a pea/oat green manure, so hope we're onto something. Really good aphid control in bedding houses using banker grass plantings for raising aphidius. Very solid two weekends for bedding plant sales.

(Agyle NY) Dry has been the word and we are under full irrigation which is different for April/May but also gives us the opportunity to keep the seedings and transplantings on a schedule. The cover crops are not breaking down as fast though, so we are starting to irrigate those field areas as well. We just started on head lettuce last week out of the high tunnels and are harvesting many different varieties of spinach in the field from the spring transplants. Many are doing great including: Donkey, Lombardia, Pigeon, Space, Reflect and Raccoon.

The over-wintered spinach, direct seeded last Aug 28th is getting its final cutting this week and the yields were very impressive. The high tunnel Salanova lettuces have been cut 2 to 3 times for salad mix and have performed great with very efficient harvest times. The overwintered Forum onions which were planted as sets in early December and just row-covered all winter look great and should be ready in early June. The strawberries are just starting to turn red and we put the bird netting over them today. Spring seedings of most crops are doing well and the Lely tinweeder/Williams Tool custom system we have is doing a nice job of cultivation on all crops. Flea beetles came on strong then have subsided some for the moment. The summer work crew is shaping up and the farmers' markets remain consistently busy.

(Middlebury) The dry windy weather has got us burying drip tape in bare ground for the second year in a row. It started as a desperation move to get water to transplants with the pond running dry and not enough overhead pipe. Now I'm starting to like it. We rigged a spool to the front of a Farmall and bent a pipe to run through the tool clamps for the cultivators. It feeds it right in a couple of inches below the surface and loose soil falls behind to cover it up. We run it for ten minutes or so before planting and have perfectly spaced wet spots to plant in. It does cut down on some of the available weeding tools. You won't be tine weeding or sending junior from down the road to hoe over it, but for crops you can throw a little soil at I like it.

(Grand Isle) We are grateful for the rain. Moving irrigation pipe and dealing with temperamental pumps was becoming a daily occurrence. Now we are getting a breather from that and find we can concentrate on getting the rest of the ready- to- go transplants out in the field or on plastic mulch. Harvest of asparagus and wintered over spinach continues. Fruit set, while still green, looks good on grafted tomatoes in the hoop house. We just missed the frosts that were forecast by a few degrees. The versatility of employees to jump from one task to another numerous times in a day is impressive. I don't think the farm would survive the rigors of hard work and changing weather without the well-deserved coffee, tea, and bagels for daily break.

(Calais) Last week's frost brought temps lower than twenty in our main fields. Brassicas, and most everything else, took a hit and changed from growing and dark green (after the bit of rain we received) to sad and yellow-tinged. Lambsquarters did not seem to be set back and lettuce looks great. Baby red Russian kale and chard seemed to be affected most, other than the melted nasturtiums and marigolds. Calendulas on a pallet outside the greenhouse fared fine while transplants in the field were damaged. Onions on the side of the greenhouse are fine. Most tomatoes in an unheated high tunnel covered in AG-19 row cover and mulched with straw perished but shorter peppers were mostly unaffected.

Some cutworm damage in the high tunnel on smaller transplants of peppers and tomatoes. Sprayed Bt and hand picked around damage. Wireworms and June beetle larvae (white grubs) have been found and killed in the field. Some of our fields are new ground. Our garlic crop, planted through Biotello with winter rye and red clover in pathways, fared well and has had steady growth throughout spring.

(S. Royalton) Still harvesting the last of our overwintered greens, the winners for us were: Beedy's Camden kale, Argentata chard, Aerostar, Antago, Gaviota and Sulu lettuce, Emu , Pigeon and Raccoon Spinach. We found that green sprouting potatoes will show up diseases like Blackleg if they are in the seed. The Salad Bowl and Red Salad Bowl seed this year seems like a new variety of each, more like an oakleaf than the ones we had been growing. Lots of flea beetles resting on the row covers trying to get in the brassicas. The plus of the dry weather is that we are able to get into some wetter parts of our fields earlier than usual , but having to run the irrigation more on new seedings and transplants.

(Little Compton RI) For the last five years I have had a progressively more virulent attack of Fulvia, or leaf mold on greenhouse tomatoes. I am desperately trying to keep the humidity down even to the point of cooling the greenhouse down to the low sixties. I am at the point that I will have to get a somewhat sophisticated greenhouse temp/vent control box next year. That way I can easily do predawn humidity purges. I am also thinking of just getting a bobcat to take ten inches of soil/beds out of the house. It has been 22 years! I guess it is time. It has been a cool spring but a good slow awakening for our fruit trees; compared to last year's 85 degree blasts that set us up for some frost damage. We had a serious white fly out break which we just couldn't lick with the normal Encarsia formosa; come to find out it was sweet potato white fly, which is weakly controlled with Encarsia releases. Should have gotten my hand lens out earlier. Kreher's high potassium blended organic fertilizer is doing a great job with our early "chittened" potatoes. Never seen them so solid and just plain healthy. Garlic is looking incredible but for one variety which I now suspect has the "bloat nematode" problem. I need to find time to dissect some cloves.

(Williamsville) All early field crops are planted. We got 2 nights of frost- newly planted broc wasn't too pleased. Garlic is evenly standing tall. Started planting beans, some hoop house tomatoes, and an unsuccessful early planting of hoop house cukes. Set up the black plastic for all summer squash, winter squash, and field cukes. Flea beetles seem to be the only major pest at this time of the season for field mesclun mix and bok choi. Plucking blossoms on newly planted apple trees and blueberry bushes. First significant weed pressure of the season. Just started mowing.

(Plainfield) We had 27 degrees here in Plainfield. Two layers of row cover brought the strawberry blossoms through in good shape. Doing a lot of irrigating on a small area to get a few early crops going. Trying bare fallow prior to planting cover crops. Plant sales going well. Rhubarb almost ready to pick. Weeding raspberries. Selling the last of the greenhouse spinach, time to shift over to tomatoes.

(Fairfax) Striped cucumber beetle has emerged on cucumbers in our tunnel: the battle begins! Has been a great plant season so far. Lots of warm weather, sunny weekends, and frosts. I do feel bad when I have to resell someone a bunch of plants, but doesn't everyone have their ears and eyes glued to the National Weather Service, like me? We had a small amount of frost damage to asparagus, and the strawberries needed the water so I looked forward to irrigating on those cold nights. Was a really tough winter on perennials. We have a UVM graduate student doing a field trial on native perennials, and selected cultivars and their attractiveness to native bees. Unfortunately she had about 40% mortality. She told me that Leonard Perry, UVM extension floriculture specialist) said he had recorded soil temps of 23 degrees in his perennial beds last winter, which was 5 degrees colder than he has ever seen in his beds! Glad we really put extremely heavy cover of straw on our strawberries. Those soil temps explain why none of our yellow sweet clover survived, this year though we had had great stands the past two years.

(Westminster West) The first winter kill in Garlic we have ever had: maybe 50% mortality or more. We pulled some samples and will send them to Ann Hazelrigg for testing for Fusarium; the roots look pretty bad on weak plants that survived. The last two week's night time temps have been way below average for this time of year with a low of 27 just last week. Lucky thing about putting things out late is that we didn't suffer any loss from frost! Tunnel tomatoes looking real nice with all our grafts succeeding. Plant sales have been ok, with the cold weather taking its toll but returning to normal just this week. This should be peak week then slowly winding down. We did manage to plant lots of potatoes and 40,000 onion plants in the last week so all hope is not lost! It is really dry though.

(Hampton NY) All crops survived the frost. Green string beans under vented plastic are branching with 2 full leaves on most of the plants. Yellow and purple beans looking good. With the soil being so much warmer under the plastic and frost cover, Japanese beetle larvae seem to be migrating to that area so some reseeding is needed. Seeded beets, turnip and swiss chard have finally made their appearance. Peas are coming along although slowly. Broccoli, cauliflower, Cheddar cauliflower, purple cauliflower, red cabbage transplants are all in and doing well. Some sunflowers are starting to pop up as well. Cut flower bulbs will be put in this week and tomatoes should be done by next week. I think that I will put some pepper plants in under plastic and get a jump on them.

## UPDATE FROM THE UVM PLANT DIAGNOSTIC CLINIC- Ann Hazelrigg

There are lots of abiotic problems due either to cold temps (basil with browned leaves) or uneven watering (brassicas, tomatoes-browning between the veins). These kinds of problems seem to happen "overnight" or quickly, with the crop looking fine one day and the next it looks bad. Sometimes it looks like the problem is spreading, but that is because the damage is already done and the leaves are just showing the damage from a previous lack of water, cold temp, etc. Always look to see if one age of tissue is affected, i.e. if the second set of leaves of a tomato plant is affected but below and above it ok. That typically tells me the damage happened when those affected leaves were most vulnerable and the plant has grown out of the problem. Look at the new growth. As long as the new growth is healthy and green, that is a good sign the damage is due to an abiotic disorder (non-living) rather than a living organism (fungi, bacteria). Plus most living organisms are less active when it is cold/cool. They tend to like humid or wet and 70-75 degrees, which we really have not had a lot of. They will have their time later in the summer! Of course, you are always welcome to send pictures or samples if you want the plant looked at and checked for fungi/bacteria. The other main problem in the Clinic for veg/bedding plant growers has been root rots. When you see lack of vigor in a plant (yellowing, wilting, lack of good growth) ALWAYS check the root system first. The 5-6 different fungi that cause these rots like it cool and wet and can really take off under those conditions.

Black leg also diagnosed in potato seed. The damage looks like black/brown circular areas under the skin of the potato. <http://www.umext.maine.edu/onlinepubs/pdfpubs/2493.pdf>. The grower just threw out the seed, rather than battle the disease later. <http://ohioline.osu.edu/hyg-fact/3000/3106.html>.

## PLAN AHEAD TO USE TRICHOGRAMMA WASPS FOR EUROPEAN CORN BORER CONTROL

*Trichogramma ostriniae* is a tiny parasitoid wasp that is exceptional at dispersing and attacking ECB eggs. It seeks out and finds ECB egg mass, then lays eggs inside all the ECB eggs, killing them. Up to three wasps emerge from each destroyed ECB egg to search for more eggs. Timing is important: set out the packets of *Trichogramma* during moth flights (when the ECB eggs are being laid) in corn that is at least 8 inches tall. That means you need to plan ahead and order when you plant the sweet corn you want to protect! Carol Glenister of IPM laboratories in Locke, NY is our local supplier; call her at 315-497-2063 or email [carolg@ipmlabs.com](mailto:carolg@ipmlabs.com). In order to grow the wasps, they need to grow the parent wasps first; and in order to grow the parent wasps, they must have the moth eggs ready in advance.

DRIP IRRIGATION MEETING – 3 pm. May 22, Conway NH  
<http://www.uvm.edu/vtveganberry/meetings/meetlist.html>