



Vermont Vegetable and Berry News – June 5, 2012
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

(Montpelier) Fields and greenhouses are looking great. Running out of planting room as drainage projects got delayed due to machinery availability. Trying to get them done so the fields can go into production. The results of the mild winter and weather in general are appearing in the form of higher deer pressure and other rodents. Insects are all arriving at once. To date we have cucumber beetles, Mexican bean beetles (they like tomatillos), flea beetles, TPB, CPB in our eggplant, aphids in the peppers, and finally the weird experience of army caterpillars in the growing points of some tomatoes? Oh yeah cutworms too. All are being dealt with and under control. CSA membership is beyond our target and starts next week. The new management software we are using is a big plus and time saver. Customer satisfaction is way up. The new experiment this season is 14 mil white plastic down in the tomato houses. I was concerned it would keep soil temps too low at the beginning of the season but it didn't. The hoped for benefits are weed suppression, moisture conservation, lower air temps, and light reflection into more of the canopy. We have one house with no plastic as our control. The plants on plastic look great. Farmers market in May is always a good month as we show up with a lot of early greens and a number of growers don't come until June.

(Burlington) Lots of fun things happening this year, most of all having spring crops ready at a reasonable time! Without being ONE with the river, we are looking at a strong beginning to our 2012 season. In 20 years of growing, my earliest ripe (outdoor) strawberry was May 30. This year, we have much of our field ripe as of June 1. Seems to fit with our earlier assessment of being 10-14 days earlier on our perennial crops. Used the Extension roller-crimper and zone-tiller last week to plant out half an acre of butternut, with an adjacent half-acre on bare ground. Several days after rolling a distressing number of the winter rye plants are bouncing back up. We do have a good mat of biomass for weed control this time around, but if it isn't dead, we'll have to chop it up or something to keep it from swamping the young squash transplants. Seems like it could work better if we'd direct seeded and could still go through and roll it a second time over the crop; since we transplanted, this is not an option.

Interested to see if our strip crops of buckwheat and potatoes lead to acceptable control of CPB, as suggested by some recent Cornell Extension work.

(Grand Isle) We are dodging rain storms to get the last of the summer time transplants out in the field. We continue to do greenhouse seedings for the fall broccoli transplants. Asparagus picking started early so will also end at an earlier date than we are used to. We are picking ripe Wendy strawberries. A small flock of cedar wax wings are already feeding. We hope they move on. Our other berry varieties are still showing green. We expect PYO to start around Father's Day. No serious disease or pest pressure to date. Early farmer's markets have been well attended and we expect tourists to arrive in our county once school is out. We continue to strive to get marketable crops early.

(Sudbury) We've had a good start to our growing season. We lost almost all of our garlic last year due to planting in the wrong area and all of the early spring rain ended up rotting it out - perhaps a good lesson as we have planted new garlic further away from our ledge and it looks fantastic right now with garlic scapes appearing just in time for our farmer's market this week. Spinach, arugula, and greens have been great this spring and our French Breakfast radishes have been a hit with the market. Recent rain and wind blew off some of our row covers to reveal early zucchini - a pleasant surprise. Peas are flowering nicely and strawberries are ripening and the bugs - knock on wood - don't seem to be worse in spite of the mild winter although we are using Pyganic this year. Using a lot more row covers early also seems to be helping. We're hoping for more sunshine and a little more heat.

(Plainfield) Excellent plant sales this spring. Rainy weather has been great for setting out transplants. Almost done transitioning greenhouses from spring salad crops to tomatoes peppers and eggplants. Lacinata kale is the flea beetle's favorite snack. Low TPB counts in strawberries, little spraying required. Lots of little green berries, ready for the sun to come out.

(Craftsbury) Recent hard rain and wind stripped many blueberry blossoms from the plants. Too soon to know of long-term effect. Several frosts during May had no observable impact on blueberry crop growth. The combination of early warm weather and abundant sun seems to have accelerated plant growth, combined with thorough mulching of roots and base of plants we anticipate an earlier start to harvest (last year's began on July 19) and a slightly longer season.

(Westminster West) Finishing a record breaking May for plant sales but all the focus on that side of the business has left the produce side way behind our planting schedule. Maybe that was a good thing as we had a devastating hail storm last week with huge quarter size hail balls for almost 10 minutes. Some damage on the garlic crop and the onions that were just set out but the real damage was to the plastic on greenhouses. Hundreds of punctures thru the outer layer on fairly new 6 mil plastic requires recovering sometimes this summer. Way to much rain of course. On a good note, insect controls have been excellent in all the houses, virtually no aphids or whiteflies this year. Very little powdery mildew and no root diseases that I can find. Tunnel raspberries are flowering. Garlic scapes popping out. Have a wonderful crew this year with great skills and finally have a full time diesel mechanic and tractor driver to share the work with; I feel very lucky.

(Plainfield NH) On the verge of strawberry harvest. Effects of the winter still visible with spotty ripening on later varieties as well as earliest. Some leaf spot showing up, and Asian garden beetle larvae moving up into root zone and feeding on roots, weakening plants in older beds, make them pretty unattractive with poor fruit. Cedar waxwings starting to flock and attack fruit. Will begin netting today after picking. Greenhouse sales still strong, an encouraging sign in this economy. Nearby grower reported seeing tomato hornworm moths feeding on azalea flowers; get out the Dipel. Damp, cool weather is good for transplanting but little else at this point. I guess I don't have to evaporatively cool fruit when it's like this.

(Salisbury NH) Plants inside hoophouse are suffering from the heat but outside plants not quite ready for cool, rainy weather. Tons of bugs. Growing for Market featured a leaf-footed bug recently and we found one in the hoophouse. Found tortoise beetles, Colorado potato beetle, striped cucumber beetle and flea beetles. Had poor germination on first planting of Wildfire lettuce mix and Space spinach outside. Replanted and it still didn't come. Read root maggots could affect germination. Assume seeds are not the problem because they came up beautifully in the hoophouse plantings and in our outdoor raised beds that have lots of compost. Bears galore this year; mother and 3 cubs one night and then a lone bear one afternoon. Keep running out of asparagus and spinach. Red Norland potato rows look wonderful; hilled twice already. The barley we planted is very slow growing; just an experiment. Bought an old potato digger designed to be pulled by horses but modified for tractor. Missing a few parts but we're hoping to get ready in time for fall harvest. Onions in raised beds doing excellent compared to the small amount in the field. Trying some cukes, canteloupe and watermelon in hoophouse and will have the vines eventually grow out the sides.

(Argyle NY) Too hot, too wet, too cool; the usual ups and downs with Mother Nature but managing to get most crops/seeds planted in some of the fields. Really need a nice dry spell to get the sweet potato slips and Brassica transplants into the fields. Our annual bed strawberry planting from Sept. plugs has gray mold for the first time ever, so that has taken a toll on production of number one berries. Saw our first minor thrip damage on the onions that were planted in December as sets or as plants seeded in August; they are sizing up real well and we will start harvesting them this week. We have seen cucumber beetles, potato beetles, and tons of flea beetles. The tomatoes and cucumbers look great in the tunnels, with the last of the winter/spring greens coming out, although the new tunnel will have spinach and arugula seeded in it all summer, as those crops do very well inside the tunnel. Even in the rain, our customers are still coming to markets to support all the farmers, and to get strawberries, beet greens, and garlic scapes.

LATE BLIGHT ALERT

Late Blight has been reported on Long Island and now several counties in PA where both tomato and potato have been identified with late blight. Be sure to scout your crops often! Cool wet weather is optimal for development of this disease. Black, somewhat greasy looking infections can occur on leaves and stems, often surrounded by a halo of gray-green tissue. Under humid conditions, delicate whitish growth (spores) develop at the edges of infected areas, especially on the underside of leaves. When the infected areas dry up they turn brown and the white spore masses are not visible. On stems, infection often occurs first at the junction between the stem and leaf, or at the cluster of leaves at the top of the stem. If you suspect that a plant has late blight please send a sample for confirmation to the [UVM Plant Diagnostic Clinic](#), 201 Jeffords Hall, UVM, Burlington, VT 05405. For more information and to monitor reports of late blight across the country see www.USAblight.org.

PREVENT PHYTOPHTHORA ROT (adapted from UMass Extension)

[Phytophthora blight](#) is the most destructive disease of cucurbits and peppers in the Northeast, and getting worse each year. The pathogen is soil-borne and will remain in the soil for years; it is moved around on farm equipment, in irrigation water, or in infected crops that are discarded in the field. It depends on water to initiate disease and to move from plant to plant. The disease begins in low spots or poorly drained areas. Improving drainage in fields will prevent the disease from getting started. The critical goal is to manage water so that there is never standing water for longer than 24 hours anywhere in the field.

A combination of pre-plant cultural practices are necessary to manage the disease and reduce risk of crop loss. These include: Only rent land for susceptible crops that has no history of this disease. Power-wash tillage equipment between fields to prevent contamination of new fields. Use long rotations and wait 5 years to replant cucurbits, peppers, eggplant or tomato in fields where infections occur. Use pumpkin varieties that have hard, gourd-like rinds. Improve drainage before planting by subsoiling and avoid heavy tillage afterward to avoid re-compacting soil. Use between-row ripping during the season to speed drainage after heavy rains. Don't plant susceptible crops in low areas, instead plant a cover crop, corn or leave bare. Use dome-shaped raised beds at least 9 inches high for non-vining crops. Make breaks in raised beds that run across a slope to allow water to drain instead of puddle. Clear soil away at end of rows to create drainage ditches that allow water to flow out of the field. Set up and monitor irrigation carefully to avoid leaks that create puddles of water. Avoid irrigation with contaminated water; if contaminated fields drain into a pond, then irrigation can spread it. Rivers and streams can also be sources of inoculum in mid to late summer if contaminated fields are upstream and water is warm.

STRIPED CUCUMBER BEETLE (adapted from UMass Extension)

In addition to direct damage, these beetles can spread Bacterial Wilt. Cucurbits from cotyledon to 1-2 leaf stage are more susceptible to infection with bacterial wilt than older plants, and disease transmission is lower after the 4-leaf stage. Beetle numbers should be kept low, especially on young plants. To prevent bacterial wilt in highly susceptible crops, including cucumber, beetles should not exceed 1 per 2 plants. Less wilt-susceptible crops like butternut and pumpkins can tolerate 1-2 beetles per plant. Crop rotation is the primary cultural tool for reducing early exposure to beetles, after that use of row covers and/or proper timing of foliar insecticide is key. See the New England Vegetable Management Guide for [insect control options](#). Organic growers have several options for control. We recently tested the efficacy of Entrust, Pyganic, and Surround and found that regular applications of Surround were most effective. There is some indication that combining Entrust or PyGanic with Surround may increase its efficacy, but these materials alone are not likely to provide sufficient control. [Perimeter trap cropping](#) can be used to significantly reduce pesticide applications.

CYCLAMEN MITES IN STRAWBERRIES

I am seeing more of this problem than in the past, and in NY Extension also reported many farms with this pest last year. [Cyclamen mite](#) feeding causes wrinkled, distorted leaves, slightly darker in color than uninfested leaves. Injury is similar to winter injury, herbicide damage, or virus infection. When populations are low, leaves grow to nearly full size. Heavily infested leaves become stunted and crinkled, resulting in a compact leaf mass in the center of the plant. Fruit on infested plants is small, bronzed, with prominent seeds. Mites overwinter as adult females in the strawberry crown. At low population densities, they are found along the midrib of folded leaves and under the calyx of the fruit. At higher population densities, they can be in any protected part of the plant. They prefer high humidity. Populations build rapidly soon after a field becomes infested, and tend to peak in late spring and again in early fall. Mites can be spread to new fields on infested planting stock and transferred from plant to plant by routine cultural practices. Closely inspect new plants upon arrival before setting them in the field! In established fields, walk a large area and look for plants slightly stunted with distorted or crinkled leaves. Pinch out the newest leaves in the crown, unfold them and examine the mid vein and lower leaf where it joins the petiole using a good hand lens or microscope. Masses of eggs look like piles of salt. Destroying very small areas of obviously infected plants may help limit spread, but mites are likely to be elsewhere. Predatory mites may be effective in searching out cyclamen mites; release these in the initial problem areas. Ask your biocontrol provider what specie(s) they recommend. If applying a miticide it's important to get thorough coverage and use a high volume spray. The best timing is when there is little leaf canopy as in early spring, when buds are extending from the crown, and after renovation, when plants are beginning to grow back after mowing. JMS Stylet oil may provide some control for organic growers.