## **Vermont Vegetable and Berry News – April 7, 2009**

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## REPORTS FROM THE FIELD

(Montpelier) Things are really hopping around here. Garlic has popped up already, snow is almost all gone. Greenhouses are loaded with salad, spinach, radishes, and baby turnips. Demand is really solid at the wholesale level. Farmer's Market demand is good but has slowed some over last year with people being a bit more price conscious. CSA is two thirds sold out. Have seen some early aphids in my spinach already and a bit of Downy Mildew in a wet spot in the greenhouse. Time to buy some green lacewing larva. Starting a drainage project for the greenhouses this month. So far the nematodes I applied last August and September appear to have worked really well. I am not seeing any chafer beetle grubs and so far no over-wintered flea beetles. Planting tomatoes this weekend.

(Woodbury) The snow is moving out really fast. I haven't walked the fields yet but they are almost all clear. Greenhouse is starting to fill. I am planning on a huge retail plant sale season this Spring, and am doing everything I can to have whatever people need, including having plants much longer into June. Grafting tomatoes is still really stressful, even with using side grafts as a way of reducing recovery time. They won't be ready for my targeted planting date, although they are much more forgiving in terms of having the plants be the same diameter. I am once again learning to let go.

(Grand Isle) Our Cobra greenhouse tomatoes are currently in 6 inch pots and looking most healthy. The mulch covering the strawberry plants has been raked off and row cover has been put in its place. Based on new recommendations, we removed the mulch a month earlier than usual. We look forward to tracking the outcome of that move. Overwintering spinach did not fare well but we always look at it as a gamble anyway. There is just enough left for the seven resident deer. The old ferns of the asparagus have been burned off but there is no sign of emergence yet.

(Royalton) Our 10 rows, 200 feet long, of garlic overwintered well underneath the layer of mulch hay; tips of plants are about an inch above the mulch now. Rhubarb leaves unfurling, stinging nettles almost ready for harvest. Found lots of gleaning treats: overwintered leeks and Brussels sprouts, some forgotten cippolini onions, even potatoes! Both hoophouses have been planted to lettuce, spring onions, radishes, carrots and Chinese cabbage. Arugula and spinach planted in September is on its third cutting; suspect it might bolt soon. Hardening off artichoke plants outside. Peanuts, okra, peppers, eggplants, onions all well on their way in heated greenhouse.

(Plainfield NH) With snow on the field edges we are venturing out timidly with tractors in hopes of demulching strawberries. The finicky peaches are pruned, blueberry pruning continues when we can escape greenhouse duties and weather permits. Uncovered rhubarb and garlic yesterday and at the warm end of the field; it is up 3 inches. I just love this time of year.

(Kinderhook NY) We started off with a very dry but cold March allowing us to do some early fieldwork. In some fields the soil condition were "summer like" as the droughty conditions allowed for successful sub soiling (something we generally do in August). This early field work came to an abrupt halt with a thunderstorm, providing the soil with some much needed moisture and lessening our concern for the possibility of wind erosion. At this time there is still not much greening of our hayfields, but the garlic has popped through the mulch. We hope to seed down some oats/AC Greenfix (chuckling vetch)/bell beans mix as green manure and some spinach, peas and other early veggies before the next set of storms moves in.

(Shaftsbury) First greenhouse tomatoes are in the ground and starting to grow. Amazing how different this year's saturated media test was in one tomato house as compared to last year. We are taking a "post-amendment" test to see what the immediate changes are after adding the recommended fertilizers. Planting lots more veggie starts for bedding plant sales to keep up with the projected demand; being a bit conservative with flower packs. Starting to think about taking the straw off the berries, but yesterday's snow needs to melt first.

(Enfield NH) Frost mostly out of the field. Garlic poking through in places.

(Little Compton RI) We lost our first greenhouse cukes to damping-off or Pythium. They were fine until we put them into our 4 gallon grow buckets with compost, sand and peatmoss. We tried using lots of Rootshield but to no avail. We also had a good lesson about furnaces this week. Our greenhouse tomatoes just didn't seem right. Not only were they a light yellow/green but they actually looked a bit red around the leaf edges. I rechecked our fertilizer program and decided it must be something environmental. I suspected the furnace but couldn't smell anything bad. On close examination I saw the problem; a hole below the oil gun; yellow flames clear as day. We replaced the furnace with one we had bought used a year earlier. It ran for two hours and the heat exchanger cracked. Replaced with a heater from a greenhouse we moved a year earlier. Six hours after installation that one cracked, but we were able to patch the crack. (By the way, after two days of cool nights but clean air the tomato plants immediately looked 110% better!) A friend of mine who is a great welder and metal specialist said furnace heat exchangers are made of specialized metal that is made to expand and contract. Once that process starts it is a clock ticking on the life of that metal. Add moist summer months with no use and the rust will hasten its useful life even quicker. The bottomline: 1) never buy a used furnace and keep it around for a 'someday backup furnace' it will probably be worthless if it sits around over a year. 2) Turn on the furnace once a week during the moist summer; it will keep the rust at bay. 3) Plants are very sensitive to even tiny leaks in heating systems as they releases ethylene. (Editors note: several other growers have reported ethylene damage this season – it can come from burning any kind of fuel, not just oil and gas but wood or corn, too).

(S. Amherst MA) Our fields were dry a few weeks ago, but now are pretty well saturated. We did so sow some early cover crops (oats/peas) last week, but otherwise, we can't get in the fields yet. We plowed today before the rain and will be ready to go once things dry out again (when will that be?). Grass is greening up, clover is leafing, and the snow piles are all gone last week. Our greenhouse is nearly full and the field houses have good spinach, lettuce, radishes, and winter greens. We sowed lettuce last November, it grew 1 to 2 inches then we covered with light row-cover and left it over the winter. We thought it'd be dead. But now it's about 2 inches tall and looks like it's growing. Could have cutting lettuce in 3 weeks if it stays warm...interesting.

(Argyle NY) Daffodils are flowering and there's a hint of reddish buds on trees, but rains have kept us off the fields this week. We did turn under some of the mulched/Biotello (corn starch 'plastic' mulch) areas where the late fall crops have been. The Biotello turns under great (we hope it passes through OMRI this year for organic approval as planned). We seeded about an acre of oats for a cover crop where the winter rye was thin. It's been an interesting winter trying to figure out how much of what to plant in the high tunnels for markets, so we now have an abundance of Asian Greens and mesclun, but have been pleased with the high amount of product (kale, swiss chard, greens, spinach, mesclun, and arugula) that is possible with no heat on an extremely cold year. The disease-resistant Five-Star lettuce mix survived all winter in the center of the tunnels, even with 18 below zero (it had 3 layers of additional rowcovers). We'll be totaling data as we finish the winter markets off in 2 weeks, which have given us about 80% of the income we make in a summer market! Amazing support, even with the economy down. Spinach has been a problem since February in the tunnels as it got leaf spot (Cladosporium). We've been trying Oxidate to slow the demise, but it's been very rampant in many states from the farmers I've talked to. We are harvesting the tadorna leeks that stayed out all winter; more than half are okay. Parsnips are all dug and in the root cellar. Off and running into a new season, even though we barely slowed down due to the wonderful (?) winter markets!

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

Spinach problems have cropped up around the state. I have had at least 4 samples come in from overwintered spinach with various issues. Two of the samples were infected with a common fungus disease of spinach called Cladosporium leafspot. It is pretty easy to identify because it causes a lot of small brown spots all over the leaves. They can look "shot-holed" too. The fungus likes it cool and moist so I think there was either a lot of condensation in the greenhouse or it just got wet under straw or whatever the leaves were covered with over the winter. On the old stuff, it is best to clean up infected tissue so it doesn't infect any new plantings going in the greenhouse. Also, you can hot water treated seed. I suspect it will all clear up on new plantings as long as there is no condensation. For pictures of the symptoms, see <a href="http://plant-disease.ippc.orst.edu/disease.cfm?RecordID=1011">http://plant-disease.ippc.orst.edu/disease.cfm?RecordID=1011</a>.

The other two spinach samples did not have any fungal fruiting bodies so not sure what was causing damage but probably related to winter damage, or something abiotic.

I've also have seen one instance of suspected ethylene damage to tomato seedlings with just the cotyledons showing epinasty (downward pointing leaves) and a bit of curling and twisting. Plants looked like they were growing out of damage just fine. Tomatoes are the canaries in the coal mine so they will show damage first if you have a leaky or poorly ventilated heater.

Remember, if you have a sample of a plant problem, just send into the UVM Plant Diangostic Clinic for an ID. This service is free to all VT commercial growers and the form and mailing address are available on the web at <a href="http://pss.uvm.edu/pd/pdc/">http://pss.uvm.edu/pd/pdc/</a>.

## DO YOU NEED WORKER PROTECTION STANDARD TRAINING?

The Worker Protection Standard (WPS) is a U.S. Environmental Protection Agency regulation meant to protect employees from possible harm from agricultural pesticides and to provide necessary information for helping employees protect themselves.

As an Agricultural Employer using pesticides, organic or otherwise, you are responsible for having your employees comply with the Worker Protection Standard (WPS). These responsibilities include 1) training 2) notification and 3) central information posting. As an Agricultural Handler of pesticides, you too will need specific training under the WPS.

Who must comply with the WPS? Anyone who uses pesticides in the production of an agricultural plant on/in farms, forests, nurseries, or greenhouses and who employs pesticide handlers or agricultural workers. For more information on WPS see: http://www.epa.gov/oecaagct/twor.html

Area field agents from the Vermont Agency of Agriculture will be visiting farms this season to assess their WPS compliance. Requests for information or assistance will have to occur prior to your agent's arrival. Contact Annie Macmillan at 802-828-3479, or call your field agent: Andy Squires (NW region) 793-2597, Doug Johnstone (SE) 793-2489, David Tremblay (NC) 793-3051, Dominique Golliot (SW) 793-2167, Bethany Creaser (NE) 793-1628, Steve Parise (SW) 793-2565.