

## **Vermont Vegetable and Berry News – June 11, 2008**

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### **REPORTS FROM THE FIELD**

**(as of June 9)**

(Burlington) Dry weather led to good weed control and good starts (with irrigation). Much needed rain arrived in the last week. Now the June flush of weeds is already hopping! Generally plants look good. Some cucurbits took damage on the cold evenings, with burned leaves from day heat in the black plastic. I think airways under the plastic brought hot air out through the holes. Need to lay plastic better or follow transplanting with some hand soil filling of the holes to reduce the heat wave. Brassicas look great with row covering to keep flea beetles off. Lots of leaf miner damage in spinach, beet greens and chard. Way worse than ever (editor's note – see article below). Still, most crops look good. The heat will make the summer crops take off.

(White River Junction) Irrigation has been crucial these past weeks, especially for the strawberries and the young stands of carrots and greens. Germination has nevertheless been spotty due to the extra-dry soil. The onions have finally rebounded from that mid-20s freeze in early May, and started growing in earnest, but we're wondering if they'll have time to fully size up before the photoperiod starts to decline. They lost a few weeks during recovery.

(Orwell) Dry, dry, dry. There have been no substantial rains in quite a while, just "dust wetters". Everything seems to go around us. Thank goodness we have an ample water supply. We've been watering for two weeks to keep crops growing. So far, there has been no bird damage to our sweet corn crop.

(Craftsbury) We just had 40 acres of marginally wet land tile drained. A large dozer (equivalent of a D9) with a huge ripping arm on the back laid the plastic 4 inch drain pipe about 4.5 feet deep. Compared to laying tile with an excavator this is much cheaper and much less soil disturbance. A laser guides the depth of the ripping arm and it is precise enough to pitch the pipe as little as 1/2 in. in 100 feet. This means that you can drain a very flat field. We had a tile laid every 30 feet. This is the highest density they recommend for maximum drainage. It cost \$1,100 per acre. We thought this was a relative bargain compared to purchasing new land. We think that we are receiving larger rain events and longer stretches of either wet or dry weather. Maybe it's climate change, maybe its normal climatic variations, but having this land drained puts us in a more secure position to deal with precipitation extremes. Our contractor was Steve and Bob Roy from Chazy, NY. We were very impressed with their thoroughness and they have all their systems designed by a drainage engineer from their area. It took us nearly 2 years to get them to do the job so if you are interested, get in touch. Phone is 518-572-3111.

(S. Royalton) Finally got some rain and am watching the good results. Still very few weeds to deal with. Very slow early growth on the onion transplants, they are moving now. I got a new barrel of fish that was extremely oily and burned transplants, problems I've never had before.

(Little Compton RI) The rain gods have been good to us this year. Just when we get out the irrigation lay flat hose it rains and we can get back to playing catchup with planting. We are trying to grow miniature cabbage this year. We are experimenting with planting them down to an in-row spacing of 10-12 inches and putting in three rows in a bed 15 inches apart instead of the normal 36 inches between rows. The smaller cabbage heads were a big hit at the farmers markets in RI last year and we hope produce buyers will see the advantage of consumers wanting a smaller package of cabbage on the retail side. On another subject: row cover has tripled all our crops growth rate where we have been able to keep it in place through all the small dry spells and extra ordinary strong winds. We are purchasing 18" by 32" sand bags from Gemplers and taking them to a sail makers shop to have them re-stitch the bags into two skinnier 9" x 32" tubes which we will fill with small pebbles (not sand which stays too wet and rots the bags!) to put along the edges of the row cover. We are trying to solve the problem of keeping the edges held down while we take them off and on to get cultivation done. Trying to hold down the edges down with light dry soil during high and dry wind conditions just isn't working. Rocks aren't the answer either because they put stress on too small of an area and then it rips! I'd like to know how other growers are handling this conundrum of row cover management.

(Woodbury) Finally starting to see some real growth. Even with all the sun early in the season the cold nights held the plants back. With the water of last week and some heat, the farm is moving. We are planted out and now move on to weeding and deer prevention. Plant sales are strong, even late in the season. Our CSA begins this week on schedule. June always sneaks up on me, next thing I know I'll be going to the Barton Fair.

(Grand Isle) The recent rains were most welcome for the newly set out transplants and soon-to-be-ready strawberries. We are fighting weed pressure which always feels overwhelming this time of year. Asparagus sales have been great. This year we have used black plastic on our tomato greenhouse beds to save on weeding labor but are hoping we have not encouraged Botrytis as we have seen some spots on base of stems at soil line. The latest buzz that I have heard from the buy and support local movement is that folks should have their own "farmer" - the same way they have their doctor, dentist, mechanic and the like. It works for me. If we should ever retire (highly unlikely) from this farm, I'd love to pick some hardworking soul to be my "farmer".

(Westminster West) All the onions and garlic greatly appreciated the nice rains this week! Setting out pumpkins and winter squash plants this week which should get us caught up nicely. The garlic crops look great planted through black plastic mulch last fall, no weeds! Plant sales still strong with lots of items almost sold out, expect things to slow down this week with hot days here. Nice working early mornings before things heat up, most enjoyable time of the day.

(Plainfield NH) Much needed rain (the first measureable rain here since April 29) fell on June 5. Weather since has turned very hot and muggy, so stuff will jump. Weeds especially and the old Farmalls are pulling their weight now. Cleaning up the strawberry beds, putting shade cloths on greenhouses, planted bare ground strawberries, spraying fungicides on fruits, transplanting succession plantings of vegetables and lots of irrigating were some of the projects of this past week. First year since 1976 that I have not used any insecticides on the strawberries. Clipper levels low and up until now I have not seen tarnished plant bug activity, even with neighborhood alfalfa fields being taken for first cut. Despite cool temps, we picked our first 35 quarts of plasticulture strawberries on June 7th, trying to keep ahead of the cedar waxwings. First plantings of everything are out in the field and seeding the 2nd planting of melons and cukes this past week as well. Flower plant sales at the greenhouses have held up well...let's hope this trend continues into the vegetable sales.

(Shaftsbury) Much needed rain and then heat got the crops jumping these last few days. As we have not really started on strawberries in earnest the weeds are still kept at bay. Having the first real cutworm problem we have seen in a number of years. B.t. seems to be doing the trick. Lots of bunched up sweet corn from transplants. I think from the cold weather outside, while at the same time the next seeding cooks along in the greenhouse. Wondering if they will all ripen together. Probably should grow those transplants at colder temperatures while there is a prolonged cool spell outside.

(Plainfield) Best plant sale season ever. Timely rains and warm weather sure have given everything a big boost. Strawberries are blooming beautifully. I think the foliar feeding with fish emulsion and seaweed really has helped (editor's note: did you leave an unsprayed control row?). Tarnished plant bug counts still under 0.5 per cluster. Continuing with Nauralis/Pyganic sprays. Finishing with spinach, starting in with kale sales. Carrots up nicely after flame weeding 8 days after seeding. Striped cucumber beetle is on the winter squash transplants. Next project is getting weeds under control.

### **SPINACH LEAF MINER ON CHARD, BEETS OR SPINACH**

Adapted by Ruth Hazzard, [UMass Extension](#) from Eric Sideman MOFGA

Spinach leafminer is a fly larva that burrows between the layers of a leaf eating everything but the epidermis. Early damage is a slender, winding 'mine,' a tunnel, but later these expand and become blotches on the leaves. Inside the mine is a pale, white maggot. The fly overwinters as pupae in the soil and hatches in late April and May. The adult fly then lays eggs on the leaves and the resulting larvae begin their damage. The oblong white eggs, less than 1 mm long, are laid in neat clusters on the underside of the leaves. They are easy to spot if you scout by looking under the leaves. The maggots may migrate from leaf to leaf down a row. They become fully grown in just a few weeks and drop into the soil to pupate. The entire life cycle is 30-40 days. There are three to four generations per season. Typically mid-late May, late June and mid August are peak activity periods.

In most seasons the damage is minimal and the plants will outgrow it leaving only early leaves with cosmetic damage. In other years, or other fields in the same year, the damage may be great and if the plants are hit early and growth is slow because of weather conditions, the loss may be great.

Treat when eggs or first tiny mines are noticed. See the New England Vegetable Management Guide ([www.nevegetable.org](http://www.nevegetable.org)) for products; there are both conventional and organic products available, such as spinosad (Entrust). An adjuvant is recommended to improve efficacy. The spinach leaf miner also feeds on beets, chard and many weeds including chickweed, lamb's quarters and nightshade. Weed control and crop rotation are the first line of defense. Row covers can also be used to exclude flies if placed over the crop before flies are active or immediately after planting. "Spinach" and "beet" leafminers are very similar species in behavior, appearance, and damage.