UPCOMING EVENTS

**Organic Management of Cabbage Root Maggot**
Bear Roots Farm, 175 Snowbridge Road Barre, Vermont 05641
June 28, 4:30-6:30 pm

Join Scott Lewins and Victor Izzo of UVM Plant & Soil Science Department as we tour Bear Roots Farm and discuss their NE SARE Partnership Grant funded project using entomopathogenic nematode (EPN) soil applications to control CRM. They are performing field trials in radish of a commercially available and regionally adapted EPN strain to determine their efficacy, feasibility and utility to reduce yield loss from CRM. This workshop is free, see: http://nofavt.org/events/organic-pest-control-cabbage-root-maggot

**VVBGA On-Farm Workshop**
**Strawberry Production at Four Corners Farm**
306 Doe Hill Road Newbury VT
July 11, 5-7 pm

The Gray family grows about 50 acres of fresh produce including 10 acres of strawberries. They use innovative plasticulture techniques, grow their own straw mulch, rotate with cover crops for soil health, and have tried many varieties and production systems over the years. Currently they have 11 different varieties in production. This workshop is free.

**Organic Management of Leek Moth**
UVM’s Catamount Farm, 65 Green Mountain Drive, South Burlington, VT 05403
July 19, 4-6pm

Join Scott Lewins and Victor Izzo of UVM Plant & Soil Science Department on a tour of Catamount Farm to look at field trials and discuss their VT Agency of Agriculture Specialty Crop Block Grant project coordinating LM monitoring throughout the state and comparing impact on six different varieties of yellow storage onions. A grant from City Market funded trails with beneficial nematodes as an alternative to Entrust for managing LM. This workshop is free, see: http://nofavt.org/events/organic-pest-control-leek-moth
REPORTS FROM THE FIELD

(Charlotte) Charlotte Berry Farm: Blueberries are looking great this year. The bushes are loaded and berries beginning to ripen. We had a field of strawberries ripen early which was a nice surprise in this wet year. Finished planting 2400 more brambles this spring, all are doing well. The black raspberries look terrific and think this will be an outstanding year. We are purchasing a replacement irrigation system this year and will begin installation later this summer. Pumpkins and gourds planted late this year due to the wet soil, hoping we got them in the ground in time for a decent fall harvest.

(Braintree) Last week’s sun was welcomed by all plants in the fields, including the weeds. Nutsedge is relentless. Sweet corn is knee high before the 4th of July and the field tomatoes are looking great. On the pest side, I’ve never seen such pressure from cucumber beetles. They are on my cucurbits in huge numbers. Spraying a Pyganic, Surround and Fish cocktail to keep them at bay.

(Wells) We are having a hard time with flea beetles and also cucumber beetles. Hopefully the rain will wash them away, one can only hope. Picking lettuces, beet greens, scallions, radish and some herbs. Corn is looking fabulous. We were lucky to get it in between all the rain earlier in the spring. Hoping to get our pumpkin patch in but the weather has not been cooperating!

(Shelburne) Bread & Butter Farm. Seeing more cuke beetle pressure than in the past. The plants seemed to bounce out of the cold wet lull with last week’s warmth and sun. Things looking good. We have a key-line one-third acre of sheet-mulched garden planted out for the first time this season and we are excited about seeing how it does. It is allowing us to grow some crops we haven't yet, given our Vergennes clay soils.

Greenhouse production is going well, some crops doing better than normal and others not as strong, but that is always the case. We have not seen symphylans pressure since our fall planted spinach struggled. All beds where we saw symphylans are doing well with other crops in them now.

Our pastures are drying out. All the rain made for an intense beginning of grazing season and our cattle were getting moved 4 to 5 times per day for several weeks in order to prevent damage to the pastures. The Devon herd is in full blown calving and all calves and mamas are beautiful and in great condition. Piglets all arrived as well and sows are doing great.
(Plainfield) Finally set out my pepper planting, two weeks late. Weather seemed to be always too cold and wet, when it wasn't too hot and windy. Dreary spring is making for a nice patch of strawberries. TPB was late to arrive. The nipper was present but not real bad either. Got good control on both with 5% Pyganic, Azadirect, and MPe at full labeled rates. Cherry tomatoes flowering nicely in their hoop house. Eggplants slowly getting established in theirs. Glad my field plantings are small this season with the choppy weather.

(Argyle NY) Pleasant Valley Farm. It's been a roller coaster ride of weather this spring which has brought on many pests and diseases with abundance, and shortfalls of product. Markets that were strong in the winter are now weak this spring. With a good crew and willingness to adapt you can steer toward a good finish. Strawberries are lackluster this year being late and not a good set. Overwintered onions are late and small but look good. Starting to pick peas this week with zucchini, summer squash, and cucumbers also. Root cellar products are all gone but greens such as lettuce, spinach, and arugula are going gangbusters. Unfortunately, some cabbage aphids overwintered on kale and are on our Happy Rich broccoli, so finding the best cure is needed since ladybugs don't seem to eat them. Any suggestions?

(Plainfield NH) Strawberry season is always our busiest--and most confusing time. The advent of the season was hampered by uncooperative spring conditions, but is now here in earnest. Very concerned about the forecasted weather patterns which look to be damp and grey in the near future. The calyxes of the ripening berries have browning on them so Botrytis is ready to spring. Difficult to get sprays on the plants because of bird netting on the beds. Keeping our fingers crossed for meteorologist to be wrong, in our favor.

Greenhouse and early farm stand sales have been promising, with plenty of product to move. Cukes, tomatoes, summer squash, zucchini and all the greens. Plantings in the field of all the crops are bunched up. For example, our first and second crop of beans were planted 20 days apart yet they’ll be ready at the same time, and the same with the beets and beet greens. The crew is focused on harvesting berries, but we have transplanted our later plantings of peppers, cherries, cucumbers and melons along with the ongoing plantings of greens, coles and crucifers.

Weed control is the best it has been for some years on the farm, but damp hot weather and harvesting will throw all that out the window. Lots of striped cucumber beetle all of a sudden, and fall armyworm has shown up in local field corn. All the deer and rodents seemed to have wintered very nicely, proliferated and soon Bambi will be chewing carrot tops, beans and greens with the same gusto that her mommy does. All the folks experiencing the environment by staring out the car window at Bambi and her mommy grazing in the strawberry field makes it hard for me to get in there and try to run them over with the tractor.
(Little Compton RI) What a year of extremes! Seven days ago I was cussing at the rain. Three days ago I had to water new transplants and newly seeded parsnips! As of last night it is so wet we can’t lay plastic for a few days, or longer if it rains more! Seems like nothing is growing like it should even our peas are looking stunted and slow to ripen! Only bright spot is our “green sprouted” potatoes, which we will be harvesting for July 4th sales. Weather is even effecting crowds at the farmers’ markets. Slowest start we have seen!

Our powdery mildew problem requires weekly shot of Milstop. Was doing a pre-drench of Oxidate but don’t know if that helped much. No time for it anyhow. With many folks in the same boat, and talking about electric back pack sprayers, I am putting a link here for a sprayer/drencher machine from Seibring Manufacturing. It comes with 150’ hose that electrically retracts and is a 'godsend' compared to trying to fit down aisles with a back pack sprayer. We have the “Fox” model. http://www.siebringmfg.com/sprayers

(Newburyport MA) Challenging season. Harvesting nice strawberries, plenty of greens, overwintered onions, transplanted beets, and greenhouse tomatoes. Farmers’ markets off to a somewhat slow start, but nice to have better cash flow. However, still trying to catch up on spring planting. Last field tomatoes going in today--20 days late. Still have to plant winter squash. Doing triage of what needs planting next: cucumbers, zucchini, beets, beans, cabbages, red onions, currant tomatoes, and leeks all waiting in line for transplanting, and all about 10 days late. And now weed control and harvesting eating in to transplanting time.

After seven years, deer have suddenly learned to jump 9' high tensile New Zealand-style fencing. Will have to raise the fence height on almost a mile of fence. But I'm thinking of just growing in tunnels and greenhouses: so much easier and more productive. This is my fifty-fifth year of growing--might be time to cut back a bit anyway.

LEEK MOTH UPDATE

The second flight of leek moth appears to be imminent in the region. We have a few reports of male moths already flying in the upper Champlain Valley. We expect adult populations to reach peak numbers sometime in the next 10 days, by the end of June.

Control options include covering plants with row cover at night to exclude the nocturnal female moths from laying eggs. Where this is not feasible or cost effective, we suggest applying any chemical controls 7-10 days following peak adult flights. (Editor’s note: there is little data on insecticide efficacy but one study comparing materials found B.t and neem to be ineffective; spinosad (Entrust, organic) and spinetoram (Radiant SC, conventional) were highly effective: http://web.entomology.cornell.edu/shelton/publications/pdf/Olmstead_and_Shelton_2012_Leek_moth_control.pdf)
USE OF TARPS FOR WEED CONTROL AND REDUCED TILLAGE
Brian Caldwell, Cornell University

Based on farmer suggestions, Cornell and the University of Maine are studying the use of removable impermeable tarps in organic vegetable production. The basic idea is to cover several beds at a time with 6-mil black plastic (silage) tarps for several weeks, then remove and plant. We used tarps without tillage in organic permanent bed experiments at Freeville, NY and Monmouth, Maine. Results so far have been promising. In 2015, tarps were put out in mid-April and removed in early June before planting cabbage. In 2016, tarps were deployed over winter, and removed in late May before planting winter squash. The tarp/no-till treatment was compared with varying tillage intensities from full-depth and shallow rototilling to no-till. Three surface mulch treatments - straw mulch, a 1.5” layer of compost, and bareground - were also compared within each tillage treatment.

In both years, tarping improved the performance of no-till production, especially with bareground no-till. Tarps created weed-free planting conditions without soil disturbance and reduced labor for hand weeding by 70% in 2015 and 80% in 2016, when compared to no-till without tarps. Spring soil temperatures increased under tarps. After removal, plant-available soil nitrogen in bareground, tarped treatments was over four times greater than tilled soils in 2016. Crop yields with no-till tarping were similar to or greater than the tilled systems.

Another experiment is underway to look at the effects of various lengths of tarping time on weeds and crop growth. Tarping may be a valuable tool for small-scale organic farmers to minimize tillage while improving planting conditions, weed control and crop productivity. For more information, see the webinar at: http://smallfarms.cornell.edu/projects/reduced-tillage/reduced-tillage-webinars/

Questions? Contact Brian Caldwell at bac11@cornell.edu. This research has been supported by the USDA OREI grant # 2014-51300-22244