



Cornell University
Cooperative Extension

Capital District Vegetable & Small Fruit Program

Weekly Update

Vol. 3 Issue 11
June 28, 2011

CONTACT INFORMATION

Chuck Bornt

61 State Street
Troy, NY 12180
Office: 272-4210 ext
125
Cell: 859-6213
cdb13@cornell.edu

Laura McDermott

415 Lower Main Street
Hudson Falls, NY
12839
Office: 746-2562
Cell: 791-5038
lgm4@cornell.edu

Crystal Stewart

141 Fonclair Terrace
Johnstown, NY 12095
Cell: 775-0018
cls263@cornell.edu

Late blight reported on Long Island

From Meg Mcgrath— “On June 28 I examined tomato fields at 3 farms and potato fields at 2 farms all with late blight. Reports of late blight on potatoes were made from VA and DE as well.”

Here is a summary of Meg’s findings, which were shared just this morning with the Late Blight Network via email: The fields on Long Island are all on the South Fork where long periods of morning fog make conditions even more favorable for late blight than elsewhere on LI; one grower commented that during the recent rainy period there was one week without sun. All fields examined were in close proximity.

One of the farms is one of a very few growers who had LB last fall on LI. Whether the source of infection is one of the infected farms, a home garden, or another source is yet to be determined. Meg noted that the grower had produced his own tomato transplants.

Symptoms were on leaves, stems, and fruit, depending on the farm. Some farms had the tomatoes staked, some did not; all were on plastic. Most of these growers were on a weekly spray schedule using preventative fungicides, including Bravo and Endura+Actigard.

One farm had symptoms that indicated the plants had completed an entire life cycle of late blight, indicating this had been here longer than the few days between scouting. Meg noted that one of the potato fields appeared to have a very aggressive strain of late blight.

Make sure you are scouting your fields, and contact us if you see anything suspicious!- CLS



Summer Meeting Notice

July 13th—two locations!



Join Dr. Tom Zitter and the team as we tour two Capital District farms. We will discuss diseases that are already here in 2011 and talk about what we might expect for the rest of the growing season. Feel free to bring your questions and your samples, if **sealed** in Zip-Loc bags.

10 a.m.-noon: Montgomery County: Yoders’ produce farm. 463 Argersinger Road. Fultonville, NY. Tour a very diverse produce farm that sells as a CSA and to the produce auction.

6 p.m.—8p.m.: Albany County: Stanton’s Feura Bush Farm: 210 Onesquethaw Creek Road, Feura Bush, NY. Tour a high tunnel with grafted tomatoes, see annual strawberry production, and more.

2 DEC credits applied for per meeting

“Serving the research and educational needs of vegetable and small fruit growers in Albany, Columbia, Fulton, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, & Washington Counties”

Small Fruit Update

Start getting ready to net blueberries

For best results, netting should have been in place BEFORE berries start to color. Despite the perceived high cost of netting, a vast majority of growers that have made the investment consider it a profit generating purchase. Yield is increased an average of one third simply by installing netting and the quality of the crop improves dramatically. A few tips for those considering netting:

- If netting is installed higher than 7' the installation and removal costs increase dramatically. It may be less expensive to purchase low-profile tractors and sprayers.
- Netting that has 3/4" mesh is needed to keep small birds out. A 1.5" mesh may be satisfactory through the netting from the top.
- Pounding support poles gives a stronger support system than auguring in the poles. The only way to set



As we learned this winter, unless you are planning to train your own raptor, netting is a great investment.

a pole with a dug hole is to add cement.

- The outside poles still need bracing with a shorter smaller pole pounded outside the netted area serving as an anchor.
- Tops of poles are generally covered with some type of smooth covering (rubber inner tubes, plastic bottles etc.) to protect netting as it is applied and removed, and as it moves in the wind.

For an excellent article on using netting for bird control, visit:

<http://www.nyshs.org/pdf/2006-Volume-14/Vol-14-No-2/Controlling-Birds-with-Netting-Blueberries,-Cherries-and-Grapes.pdf>

For a good all around article on bird control techniques, visit: <http://www.nysaes.cornell.edu/pp/extension/tfabp/newslett/nybn66a.pdf> -LGM

Strawberry season ends on a sour note

The Strawberry season which in April seemed so promising has turned into an extremely variable production season. The weather seems to be to blame as very heavy rain during bloom may have prevented pollination and fruit set in some areas. This may have also contributed to the uneven ripening. Statewide there have been reports of poor foliar growth and plants collapsing while having a full fruit load. This may be due to lack of soil oxygen due to prolonged wet periods this spring. Also some issues with fruit cap infection possibly due to Phomopsis. Some fields with excellent weed control are now losing berries to cedar waxwings in flocks of 100 or more because the berries are exposed. I saw this in the western part of our region and it has also been reported in eastern Rensselaer county and Washington county. Cedar waxwings (*Bombycilla cedrorum*) have a "bandit mask" and are in between the size of a sparrow and a robin. Waxwings eat berries and fruit year-round. Cedar Waxwings often feed in large flocks numbering hundreds of birds; the entire flock will move together if the berry numbers are low. -LGM



Photo courtesy of C. Heidenreich

Sap beetles in strawberries, raspberries



Sap beetle enlarged, and on corn to show actual size.

Sap Beetles Seen In Strawberries If sap beetles are becoming a problem, clean-pick or remove overripe fruit attractive to beetles. Some have tried trapping beetles out by placing containers with decaying fruit around the field and periodically collecting and destroying attracted beetles. As a last resort, Assail, Brigade or Danitol are labeled. Assail can be applied with a 1 DTH interval and 12 hr REI; note two applications are permitted with minimum 7-day interval. Brigade WSB, a formulation of the pyrethroid bifenthrin, is labeled for strawberries with 0 (zero) days to harvest with 12-hr REI; note buffer strip and max. use requirements. Brigade is federally restricted. Danitol (another pyrethroid, also restricted-use) has a 24-hour REI and a 2 days-to harvest interval. Long-residual pyrethroids are generally quite disruptive to beneficial natural enemies such as predator mites, so treated plants should be watched carefully for possible spider mite resurgence. *Source: Long Island Fruit and Veg Update*

Pesticide handling reminders

I know that all of you know this, but I thought a gentle reminder from the article below was appropriate. In the past I know that DEC inspectors have ticketed growers because they did not have a backflow preventer or a gap between the fill hose of their water source and their spray tank. This doesn't only make sense from environmental safety perspective, but also for your family and those around you who might also be pulling water from those same sources. Be smart and be safe.

“Protect your water supply from back siphoning of pesticides:

There are easy steps to prevent back siphoning of pesticides into your water supply. Back siphoning of pesticides into water sources when filling sprayers is a dangerous occurrence. Pesticides are inadvertently “poured” into wells, rivers, lakes, etc. by accident. Preventing this problem is quite easily solved and requires minimal, if any, financial obligations.

To prevent back siphoning follow these simple procedures:

1. Fill the spray tank with water before adding pesticide
2. Fill on an impervious surface or, if you fill in-field, rotate location
3. Fill the tank from an offset hydrant that is at least 150 feet from the wellhead. If this is not feasible, get a 150 foot hose and fill 150 feet away from wellhead
4. Secure the water hose 6 inches above the tank opening to ensure at least a 6 inch air gap
5. Use an anti-backflow device on pumping equipment If chemigating and/or fertigating use a legal anti-backflow device.”

(Source: Christina Curell, Michigan State University Extension, [MSUE News for Agriculture](#), 6/23/2011)

Managing leaf spots on beets and carrots

BEETS: Cercospora leaf spot (CLS) is the most common leaf disease of table beets. Lesions appear as small circular spots that are light tan to brown with a distinct dark brown to purple halo (see photo). Injury from post-emergence herbicides can be confused with CLS. Note that herbicide injury will not spread, whereas CLS may continue to spread to new foliage. Phoma leaf spots appear as lesions of various sizes with concentric ring pattern and fruiting bodies of the pathogen. When the lesions of both pathogens mature, the centers become gray and brittle and fall out giving a shot-hole appearance. When an average of one lesion per leaf is found, a fungicide treatment should be applied if the field still has a long time before harvest. Quadris, Cabrio, Gem and copper are labeled for this disease. See page 106 of the 2011 Cornell Vegetable Guidelines.

CARROTS : Weekly scouting is recommended for Cercospora (CLB), Alternaria (ALB), and Bacterial leaf blights (BLB). First fungicide applications should go on when 25% of leaves are infected with CLB or ALB. CLB produces small, circular, cream to gray spots with dark borders. On stems the lesions are more elliptical in shape. ALB is usually more prevalent in late August and Sept. and produces dark brown to black irregular spots on the leaf margins. See pg 142-144 of the 2011 Cornell Vegetable Guidelines for

fungicide options. The treatment threshold for BLB is reached as soon as the disease is observed in the field because it can spread so fast. This disease produces dark lesions surrounded by yellow tissue. Copper sprays may help to reduce spread. Strong thunderstorms and hail can damage leaves, creating wounds for fungal and bacterial blights. Fields should be scouted and treated if this damage occurs. For more photos and more information see the fact sheet at <http://www.nysipm.cornell.edu/factsheets/vegetables/misc/clb.pdf> □ -By Julie Kikkert, CVP



Cercospora on beet. Image: NDSU



Cercospora on carrot. Image: OMAFRA

Cover crops for early summer

COVER CROPS FOR EARLY SUMMER

Buckwheat and sudangrass

Summer may seem an odd time to use cover crops because it is the time when the main crops are growing. But summer may be the right opportunity to improve fields with a cover crop. If the soil is wearing out, summer is when a soil-build-ing crop can be a lot more beneficial. Also, if the crop rotation leaves an opening in the summer, using a short cycle cover crop is much better than leaving the field subject to rain erosion and weeds that are going to seed. There are two early summer opportunities to sow cover crops: one is in late May or early June before vegetables such as pumpkins, broccoli, or late cucumbers. The other is after lettuce, peas, early beans, spinach or small grains are sown. For planting in June, there are really only two choices. One is sudangrass, or sorghum-sudangrass, and the other is buck-wheat. Both grow rapidly in the summer warmth.

Making the choice:

Buckwheat and sudangrass have different properties, so the management goal and field condition will determine which is the right one to use. What does your soil need? Sudangrass is often chosen for improving soil organic matter. It produces a strong root system and lots of biomass. The deep root system helps reduce subsurface hardness. Sudangrass is also a good choice for reducing root-knot nematode pressure. If weed suppression is the main goal, buckwheat is preferable. Buckwheat is best known for weed suppression and mellowing the soil. It covers the ground earlier than sudangrass, especially in early June, and outcompetes weeds that may establish in sudangrass. Sudangrass requires a higher seeding rate for effective weed suppression.

When will the cover crop be planted? The amount of time until the fall crop is to be planted is a significant decision factor. As a cover crop, buckwheat is in the ground for 35-40 days. It can be sown as early as May 20. The recommended seeding rate is 60 lbs/acre. Sudangrass needs 60-70 days to be effective, and is most worthwhile if planted once June has become thoroughly warm. The recom-

mended seeding rates for sudangrass is 50 lbs/acre. Both cover crops should be mowed after about 40 days. This is the end of the season for buckwheat, but the beginning of major root growth for sudangrass. Sudangrass needs a final flail mowing and immediate incorporation to suppress nematodes.

What is the current condition of your soil? If the soil is hard or the field is prone to standing water, sudangrass is a good choice, but buckwheat will do poorly. However, if the field is low in nitrogen and phosphorous, buckwheat will do well without additional fertilizer, while sudangrass

needs about 40 lb of nitrogen to give satisfactory performance.

What are the needs of the fall crop? If the crop to follow the cover crop needs a fine seedbed, it will be easier to produce after buckwheat. Buckwheat mellows the soil for easy working and decomposes quickly after incorporation. Sudangrass crowns take some time to break down, so the following crop needs to be one that can be sown in a somewhat lumpy field.



Field of buckwheat, ready to be tilled in. Image: kretschmannfarm.com

What production risks are you willing to take? The main production risks associated with buckwheat are a failed stand and letting it go to seed. The failed stand usually follows a heavy rain around the time of emergence. It will be obvious two weeks after planting. If the seedlings are not doing well then, till them in and plant again. To avoid volunteer buckwheat seed, kill the crop before there are filled green seeds on the plant. This takes about 40 days from a July planting or 50 days from a June planting.

The main production risk associated with sudangrass is that the crop gets too big to mow or to incorporate after frost has killed it. This crop grows very fast, so keep an eye on it. Mow the first time when it reaches 3 feet and the second time while the flail mower can still chop it well. If sudangrass gets too big to control, it will be killed by frost and make a nice winter mulch. However, the biofumigant effect will be lost. (Thomas Bjorkman, Cornell University)

Quick guide to current cover crop options

Created by Mallory Ryan, Cover Crop Intern, Capital District Vegetable and Small Fruit Program.

Crop	Seeding Rate	Advantages
Buckwheat	40-100 lbs/ acre (½ - 1 inch deep)	Excellent Weed Suppression Promotes Soil Tilth Fastest to Emerge and Establish Only in ground 35-40 days Mow after 40 days Kill before green seeds fill plant Decomposes Quickly
Sudangrass	30-50 lbs/ acre (½ - 1 ½ inches deep)	Improves Soil Organic Matter Strong Root System Reduces Subsurface Hardness Large Biomass Reduces Root-knot Nematode Pressure Heat and Drought Tolerant
Japanese Millet	15-35 lbs/acre (½ - 1 inch deep)	Can tolerate wet feet/ high rainfall Weed suppression – smother crop Use higher rate if weed suppression if main goal
Mustard (Brown, Yellow)	5-15 lbs/ acre (¼ - ¾ inch deep)	Soil Borne Disease Suppression Verticillium, Rhizoctonia, Pythium, Fusarium Root Nematode Suppression Weed Suppression
Cowpea	25 – 50 lb/ acre - drilled 120 lbs/acre – broadcast (½ - 1 inch deep)	Deep Taproot Fast, Heavy Biomass Production Legume – needs inoculants N fixation

Updated pricing information available through the following websites:

The USDA Fruit and Vegetable Market News Service provides information on current supplies, demand, and prices for over 400 fresh fruit, vegetables, and other specialty crops updated on a regular basis during the season. Reports for both conventional and organic fruits and vegetables are provided. Information can be accessed by visiting the website at www.marketnews.usda.gov/portal/fv. Market price reports for organic fruits and vegetables can be accessed by visiting the New Farm Organic Price Report website at <http://rodaleinstitute.org/Organic-Price-Report>, or the Maine Organic Farmers and Gardener’s Association puts out a report reflecting prices charged by Maine farmers and this information can be accessed at <http://www.mofga.org/Publications/OrganicCropPriceReports/tabid/260/Default.aspx>. As always, other helpful websites are also listed below. (Source: Long Island Fruit and Vegetable update)

Websites of Interest

- Diagnose pest and disease problems using color pictures: <http://vegetablemdonline.ppath.cornell.edu/>
- Cornell Guidelines for fruit and vegetables: <http://www.nysaes.cornell.edu/recommends/>
- Cucurbit Downy Mildew forecast: <http://www.ces.ncsu.edu/depts/pp/cucurbit/>
- USDA Fruit and Vegetable Market News: www.marketnews.usda.gov/portal/fv
- Organic Prices: <http://rodaleinstitute.org/Organic-Price-Report> or <http://www.ers.usda.gov/Data/OrganicPrices/dd>

Weekly and Seasonal Weather Information						
	Growing Degree Information Base 50° F			Rainfall Accumulations		
Site	Weekly Total 6/20—6/26/11	Season Total 4/1 - 6/26/11	2010 Total 4/1—6/26/2010	2011 Weekly Rainfall 6/20—6/26(inches)	2011 Season Rainfall 4/1—6/26 (inches)	2010 Total Rainfall 4/1—6/26 (inches)
Albany	125.7	924.6	948.5	1.99	13.05	7.34
Bennington, VT	103.5	772.0	760.0	2.10	11.20	8.77
Clifton Park	114.5	837.5	912.0	2.77	14.51	8.99
Glens Falls	113.1	772.2	775.5	1.58	11.61	6.37
Guilderland	116.5	872.0	955.5	1.07	10.83	8.20
Granville	92.0	743.5	NA ¹	2.34	15.46	NA ¹
Valatie	119.9	878.3	932.9	1.66	14.68	8.13

NA¹—The Granville weather station was established this year (2011) so there will be no 2010 data reported because we have no records. The Hudson site has been removed from the NEWA network. No more data will be reported for this site

Calendar of Events

July 17: Organic Berries and Apples—Adding Value and Diversity to your Farm a NOFA-NY event from 1:00 pm – 6:00 pm (including potluck) at Thompson-Finch Farm: 750 Wiltsie Bridge Rd., Ancram, NY 12502 (Columbia Co.).

This Beginning Farmer-gearred tour and lecture will provide insight into the practices and tools used in the production of five acres of strawberries, one acre of blueberries and a half acre of raspberries at Thompson-Finch Farm. The tour and talks will include information on crop rotation, site preparation, planting, cultivation, specialized tools and equipment, crop protection, harvest, and sales. Organic apple production may also be covered, time allowing. A potluck supper follows the workshop; please bring food to share and your own place settings.

This workshop is FREE for NOFA-NY and other NOFA Chapter Members/\$15 for All Others. Some scholarships are available for New York Beginning Farmers to attend this and other NOFA-NY workshops. For more information on scholarships or the content of this workshop, please contact Rachel at (585) 271-1979 ext. 511. Please register for this event by visiting the NOFA-NY Shopping page or by calling Katie (Membership & Registration Coordinator) at (585)271-1979 ext. 512.

Funded by the Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture, USDA, Grant # 2010-49400-21847.

July 16th: Hops 101 – Introductory Level: Atlantic Hops will be hosting a one day educational seminar on Hops covering topics such as production history on the East Coast, hop yard infrastructure, plant nutrition, and processing. Hops 101 will be held at the Hilton Doubletree in Tarrytown, NY, on July 16. The workshop will run from 8:30 am - 4:30 pm with lunch included, for \$125 per participant. Register online at www.atlantichops.com.

Valatie Summer Meeting: 1st week in August, 9:30 to noon. More details to follow.

ECB trap catches for the week of June 27th

Location	Z - Race	E - Race
Central Rensselaer	0	0
Central Washington	0	0
Northern Rensselaer	2	1
Northern Washington	0	0
Northern Columbia	0	0
Greene County	n/a	n/a
Fulton County	0	0

Cornell Cooperative Extension and the staff assume no liability for the effectiveness of results of any chemicals for pesticide use No endorsement of any products is made or implied. Every effort has been made to provide correct, complete, and current pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly and human errors are still possible. These recommendations are not substitutes for pesticide labeling. Please read the label before applying any pesticide. Where trade names are used, no discrimination is intended and no endorsement is implied by Cornell Cooperative Extension.

Cornell Cooperative Extension provides equal program and employment opportunities.