Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Weekly Vegetable Update

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North Country—Clinton, Essex, northern Warren and Washington counties

The endless rain continues to cause delays. Plants are growing slowly, late plantings are delayed, wet soil can't be cultivated. The effects of this weather pattern are widespread across the whole region. Low and high tunnels are providing much needed protection from wind and rain. Raised beds are paying off by drying out more quickly after heavy rains.

Capital District—Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, southern Warren and Washington counties

In spite of the wet weather crops are growing moderately well in many areas. Summer squash are looking pretty good, tomatoes are moving along in most areas, and the later plantings of sweet corn are more even. Growers with wet fields are struggling to do anything, and those with drier fields are mostly limited to harvesting. Weeds continue to come on strong, but insect pressure hasn't ramped up too much this week.

Mid-Hudson Valley — Columbia, Dutchess, Greene, Orange, Sullivan and Ulster counties

Looks like a few growers in this region will have corn ready on the fourth of July. Hopefully, the rain will let up so they can get out there to pick it. In general crops look good. A few disease problems have established on some farms, bacterial diseases have been most prevalent so far in cucurbits, tomato and potato. Spotty hail has occurred but physical damage to the crops are not widespread. Japanese beetles are out now, keep an eye out on your basil and sweet corn (and hops if you happen to be growing some!).

Late Blight Update:

Due to the excessive rains (record amounts nearing those of 2009 for June) and extended leaf-wetting periods we need to keep an eye out for Late Blight and be sure to implement a preventative fungicide program. To date, LB has not been seen in New York but it is as close as New Jersey. If you suspect you have Late Blight, be sure to call your Vegetable Specialist for an identification and/or selection of a sample to be sent to the lab for testing.

DEALING WITH FLOODED VEGETABLE FIELDS

NOTE - Before cleaning up or destroying crops in flooded fields, check with your crop insurance and/or their local Farm Services Agency (FSA) representatives regarding exact documentation to certify losses, procedures for initiating claims, possible financial assistance.

By Steve Reiners, Associate Professor in Horticultural Sciences, Cornell University

Record-breaking rains in eastern New York State have left many vegetable growers in dire straits. What had been shaping up to be a decent season has quickly turned into a nightmare with crops under water in many locations. Growers have been asking many questions as to what they can do in the short and long term. The following are recommendations pulled from many sources including Michigan State University, Ohio State University, Texas A and M, Florida State University, as well as Cornell.

FLOODS AND FOOD SAFETY

There are two types of flooding. The first is more typical and occurs after a heavy downpour when fields become saturated and water pools on the soil surface. This type of flooding can reduce yields and even kill plants but usually will not result in contamination of produce with human pathogens. The second type of flooding is more severe and unfortunately occurred with the recent storm. This occurs due to runoff from stream/river overflows will more likely be contaminated with human pathogens, as well as chemicals. Unless you are absolutely sure that flooding is not from streams and surface water, **do not** use fruits and vegetables that were at or near harvest at the time of flooding.

In fields flooded due to poor drainage and not from surface waters, leafy vegetables (such as lettuce, cabbage, mustard, kale, collards, spinach, and Swiss chard) at or near harvest will be quick to rot. Silt and other contaminants may be imbedded in the leaves, petioles, stems, or other natural openings of fleshy structures and can be difficult to remove. Do not use if mature when flooded.

Root, bulb, and tuber crops such as beets, carrots, radishes, turnips, onions, and potatoes may be slower to rot than leafy greens. Produce with a protected fruit or impervious outer skin such as melons, eggplant, sweet corn, or winter squash may be contaminated on the surface. For melons this is a major concern as pathogens on the surface are moved to the edible part as the product is sliced and eaten raw.

It is extremely important that produce be properly washed to reduce postharvest losses. It is recommended that produce be washed in chlorinated water before storage or shipping (see table below). The wash temperature should be about 10°F warmer than the produce temperature to ensure that decay organisms are not sucked into the tissue. Since chlorine is most effective at a slightly acidic pH, it is important that wash water is buffered to adjust the pH to between 6 and 7.

Chlorine in the wash water is often inactivated when the wash water becomes dirty. Use filtering devices to remove soil and organic material, and check the chlorine concentration often. Produce should be subjected to the chlorinated wash from one to ten minutes. After it is removed, allow it to drain for several minutes before packing. **NOTE**: **Vegetables at or near harvest that were flooded with stream/river overflows should not be harvested or consumed. Chlorinated wash water will not eliminate likely human pathogens on their surface.**

Amount of sodium hypochlorite to add to wash water for 50-150 PPM dilution.

Target PPM	ml/L	tsp/5 gal	cup/50 gallons
Sodium Hypochlorite, 5.25%			
50	1.0	3.66	0.75
75	1.4	5.5	1
100	1.9	7.25	1.5
125	2.4	9	2
150	2.9	11	2.25
Sodium Hypochlorite, 12.75%			
50	0.4	1.5	0.33
75	0.6	2.25	0.5
100	0.8	3	0.66
125	1.0	3.75	0.8
150	1.2	4.5	1

PLANT SURVIVAL UNDER WATER

Many growers have asked how long a crop can live once it is flooded and what may be the effect on yield. Depending on the stage of growth and the type of vegetable, flooding of a short duration, less than 48 hours should have a minor impact on yield. That is especially true for young plants. At the stage with mature vegetables already being harvested, the problem is quality. Tomatoes, peppers and

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eggplants are likely cracked and starting to rot. Vine crop plants like pumpkins and squash will likely die. Mature or near mature fruit should be harvested as soon as possible. Results have been mixed when treating pumpkins with a chlorine wash but cutting fruit off dying vines is important as is moving fruit to dry, warm areas. For crops that are still relatively young, the two most important things growers can do to aid recovery is 1) as soon as the soil can be worked, till the soil to break up sealed surfaces and allow air to enter the soil, and 2) sidedress with nitrogen, up to 50 pounds of N per acre, perhaps during the tillage operation or, if conditions do not allow for soil applications, apply a foliar application (see below). Please note, many plant diseases will be much worse following flooding rains. It is important that growers closely monitor their crops and manage these diseases.

FLOODING AND SOIL FERTILITY

That "gasping" sound heard in some vegetable fields is the plant roots trying to get some oxygen. Many of the vegetable plants in fields across parts of New York have an off-green or yellowish color. These plants are suffering from a complex of nutrient deficiencies, nitrogen, phosphorus, potassium and perhaps others, even though the soil contains adequate amounts. But the main deficient element is oxygen. Plant roots need oxygen to take up nutrients and water to utilize the photosynthate from the tops and to grow. With the heavy rains we have had, soils are saturated; that is, nearly all of the pore space is filled with water, leaving little room for air. Ideally, for good root growth 50 percent of the pore space should be filled with air. As soils drain, air is drawn into the soil, but when it rains, the water forces the air out of the pores. As is obvious to all, what is needed now is several rain-free days so the soils can drain and draw in air to stimulate root growth. Unfortunately, the flooded fields often develop a hard surface layer that prevents air from entering. Any tillage that can be done to break that seal will be beneficial. Once the plant roots get adequate oxygen they will begin to grow and take up the nutrients present in the soil.

Plants can absorb nutrients through their leaves. Spraying the plants with nitrogen, phosphorus and potassium can help plants through stress periods. Use a low salt liquid fertilizer to supply 4 to 5 lb nitrogen, 1 lb phosphate (P_2O_5) and 1 lb potash (K_2O) per acre. Since nitrogen is the key nutrient to supply, spraying with urea-ammonium nitrate (28 % N solution) alone can be helpful. These can be sprayed by aerial or ground application. Use 5 to 20 gallons of water per acre. The higher gallons per acre generally provide better coverage. However, before investing money in trying to salvage root crops check to be sure that the main root that develops into the marketable product is still healthy. Flooded fields often kill the large taproot resulting in a fibrous root and an unmarketable product. This is especially true for fresh market carrots.

Tests were conducted in Florida to determine the effectiveness of different foliar fertilizers in recovering flood-damaged vegetable crops and found that potassium nitrate performed the best, urea the second best, and calcium nitrate the third. See table below for details.

Nitrogen fertilizer application information

Fertilizer	Formula	N%	Application* (lb/100 gal)	Rate (gal/ac)
Potassium nitrate	KNO_3	13	15	50-100
Urea	$CO(NH_2)_2$	46	9	50-100
Calcium nitrate	$Ca(NO_3)_2$	12	35	50-100

*Pounds of product, not pounds of N

WHAT TO PLANT NOW?

Some growers may be considering rushing to replace crops, or planting an alternative crop on the flooded land. Before planting, you need to take a step back and think this through. Just because a crop can be planted does not mean it should be. Do you have the proper equipment to grow the crop? Any experience with the crop? Are you aware of the crop's potential pests and what to look for in terms of damage? Do you have the chemicals needed to control these pests? Was a herbicide used in a field this spring that could cause injury in a newly planted crop? Perhaps most importantly, how will you market the crop? Don't spend two or three thousand dollars to grow a crop only to have no market at the end. Work the numbers. Will you be better of with a partial payment from crop insurance and possibly disaster relief from the federal government rather than losing more money with an unfamiliar crop?

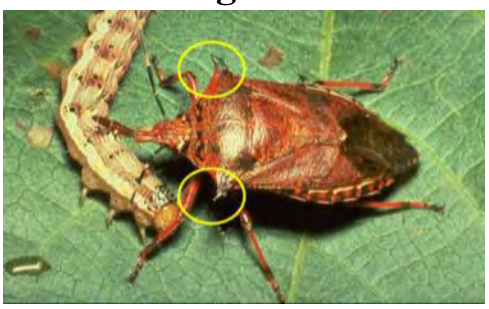
There are some cover crop options that growers may want to consider for their flooded fields. Rather than let productive fields go to weeds for a season, use the opportunity to plant a cover crop or green manure. Go to Cornell's cover crop decision tool (www.hort.cornell.edu/bjorkman/lab/covercrops/decision-tool.php) to see your options.

Know Your Bugs: Stinkbugs and Spined Soldier Bugs

Stinkbugs are a group of plant feeding insects bugs (*Euchistus* species) well known to growers. They use their piecing-sucking mouthparts to puncture the skin of tomatoes, bean pods, corn kernels and more.

But look closely and you might find you have the beneficial spined soldier bug (*Podisus maculiventris)* instead. It is well named because it features prominent spines on each 'shoulder' (see yellow circles in photo) It uses its sharp mouthparts to spear soft bodied caterpillars and beetle grubs. Adults feed on the caterpillars of corn earworms, European corn borers, fall armyworms as well as Colorado potato beetle larvae. They are found throughout the eastern United States.

Brown stinkbug *(Euschistus servus)* has blunt spines in comparison to the spined soldier bug. *Courtesy of* www.ca.uky.edu



Spined soldier bug feeding on a caterpillar

Photo courtesy of https://insects.tamu.edu

Brown marmorated stinkbug.

Nymph, left and adult, right, of the green stinkbug *(Acrosternum hilare*). *Courtesy of* www.fcps.edu

The brown marmorated stinkbug has characteristic spots on its back, antennae and legs. We'll have more on this new pest in later issues.

In 2012 all of eastern New York experienced an unprecedented outbreak of green stinkbugs. These bugs are known but are seldom a concern. Last year the population exploded and the nymphs were found clustering on many species of vegetable and fruit crops and ornamental plants. - *ADI*

Basics of Fertigation

We know that it is extremely wet out there, and that irrigation is about the last thing on most people's minds. However, if your crops are showing signs of deficiency on plastic, irrigating through the drip system is one of your only options to bring those plants back to optimal levels of fertility, especially nitrogen. Below is some information on calculating rates properly, so that you can deliver the right about of nutrients to your plants.

When fertigating you are only fertilizing the area under the plastic. Therefore you need to calculate how much area is actually covered with plastic, and then calculate how much fertilizer you need using that area. For example: if your finished bed width is 3 feet and your rows are 300 feet long, each bed is 900 square feet (3' x 300 feet). If you have 10 of those rows, then the total area you want to fertigate is 900 square ft. x 10 rows = 9,000 square feet. To determine how much of an acre this is, we divide 9,000 square ft by 43,560 square feet. The actual acreage that needs fertilizing is 0.21 acres.

How much fertilizer to you need to apply after you figure the acreage? If you want to apply 10 lbs of actual nitrogen per acre using a Peter's 20-0-0, you would need to use 50 lbs of 20-0-0. Get to this number by taking what you need divided by what you have or in this example 10lbs of nitrogen needed /0.20 which is our nitrogen source expressed as a percentage by weight. Remember that the area we are treating is only the .21 acres that we determined are under plastic. Therefore, you would actually only dissolve 10 lbs (50 lbs per acre x 0.21 acres) of the 20-0-0 fertilizer. Using a 5 gallon bucket with 3-4 gallons of water is fine. I would then siphon that material into my drip system and I'm done. Note, these same sorts of calculations are what you can use to figure out rates for banding fertilizer on bare ground plantings.

There are a couple more keys – first, make sure your drip system is "charged" or that it is fully pressurized and dripping before you start your fertigation. Second, the longer it takes to siphon the fertilizer, the more uniform distribution you will get. Third, after the fertilizer solution has been siphoned up, make sure you continue to run the drip system for a while longer to "flush" the system. Lastly, be sure that you have a back flow preventer on your drip system to prevent fertilizer from being pulled back into your water source. If you are on a municipal water source, check with your municipality as they may have specific regulations on back flow preventers. *–CDB, edited by CLS*

Tomatoes

My main concern on tomatoes (and potatoes) this week remains Late Blight. As noted on the front page it has moved closer to us and was found in a commercial field of tomatoes in New Jersey on June 25th and in a commercial field of potatoes in Delaware on July 1st. I know that with all the rain it has been difficult to keep tomatoes covered with a fungicide, but it is critical that you try to maintain a good coverage program. Bravo or any chlorothalonil product remains the best choice for now or copper products for organic producers.

Many of you have been and are continuing to fertigate tomatoes and other crops being grown on plastic mulches which is why we included the information this week on calculating fertigation rates for injecting into drip systems. I want to remind those of you that attended the winter meeting in Colonie about a tomato fertility talk given by a colleague from Florida. In Florida they require much higher fertility levels to produce a crop due to differences in soil types and the lack of residual fertility in their soils compared to our NY soils. They achieve these fertility levels by fertigation or injecting fertilizer into their drip systems on a daily or weekly basis. They have done quite a bit of research in Florida over the years and have come up with some very interesting fertility recommendations based on the age of the plant and how much nitrogen and potassium that plant is using per day.

Nitrogen, as you may remember, is important for overall plant growth and vigor while potassium is responsible for flavor, firmness and shelf-life. With the help of Dr. Steve Reiners from Cornell, we evaluated the nitrogen and potassium recommendations that were given for Florida tomatoes and came up with adjusted values that we think are appropriate for NY grown tomatoes. Table 1 has the rates of nitrogen and potassium that plants are using per day, per acre. Since most growers are not going to fertigate on a daily basis, Table 2 gives you the rates that are needed per week, per acre. **Please note that these levels are for beds that did not receive any fertilizer applications in the bed prior to bedding and planting.** Rates could be further adjusted if soil tests have been taken on the field for this growing season.

These recommendations also do not include any phosphorus additions which may need to also be addressed. However, it is our experience that most soils that have been in vegetables for years and years and in which phosphorus has been added to starter fertilizers require little additional phosphorus, especially when crops like tomatoes are planted in raised beds and mulched with black plastic. This warming of the soils allows phosphorous to be more readily available to our tomato plants unlike cold soils that we experience in early spring plantings of vegetables. Again, if a soil sample has been taken and shows low phosphorous levels, and no phosphorus was added pre-plant, it is possible to fertigate with a good, soluble grade of greenhouse fertilizer which contains either just phosphorous or a complete analysis (ie. 20-20-20).

Table 1: Adjusted Nitrogen and Potassium Daily Fertigation Recommendations for Tomatoes Grown in NY

	Pounds of Fertilizer Required Per Day Per Acre			
	Weeks 1—2	Weeks 3—4	Weeks 5—11	Week 12 +
Nitrogen	1.0	1.25	1.5	1.25
Potassium	2.0	1.5	2.0	1.25

Table 2: Adjusted Nitrogen and Potassium Weekly Fertigation Recommendations for Tomatoes Grown in NY

	Pounds of Fertilizer Required Per Day Per Acre			
	Weeks 1—2	Weeks 3—4	Weeks 5—11	Week 12 +
Nitrogen	7.0	8.75	10.5	8.75
Potassium	14.0	10.5	14.0	8.75

In my opinion, weekly fertigation (which some growers are doing) and spoon feeding our tomato plants is a better way to go instead of applying a large dose of fertilizer a couple times a season. It might be that this constant feeding and watering improves not only yield but fruit quality as well. I've often wondered when we apply a good dose of nitrogen (20 lbs plus), if we push the plant too hard and too fast and the result is tomatoes that crack or are more susceptible to other disorders that affect the fruit. If you need help calculating rates or have questions about these recommendations or need recommendations for other crops, please feel free to contact Chuck Bornt at 518-859-6213. *-CDB*

Harvest and Curing Considerations for Garlic

Garlic harvest will begin in the week or two, possibly while we are still stuck in a wet weather pattern. This will make both harvest and curing more challenging. We're still working to determine the best ways to harvest and cure garlic n varied weather conditions, but here is the best information we have right now.

Harvesting Considerations

When the ground is dry, it is possible to undercut the garlic, then let it begin to dry standing in the field for a few days up to a week. When the ground is wet, the garlic will almost immediately start sending out new roots after being undercut. This will both use some of the bulb's energy reserves and make harvesting more difficult. Thus, when the ground is wet or rain is forecast, undercut from a few hours to a day before harvesting.

Knowing when to harvest garlic can be tricky. Use the leaves as a first indicator, but also feel and look at the bulb. You want the bulb to be very firm in its skins, and when you cut it in half perpendicular to the scape you want to see a small gap around the scape. The garlic on the left isn't quite ready; the garlic on the right is.

Garlic harvested covered in mud will take longer to dry and will be harder to clean. I hope that we don't end up harvesting garlic in this state, but if it comes to that you might want to consider washing it prior to putting it into the drying area. During our trials last year at three farms in the Capital District and Hudson Valley, garlic that was washed immediately after harvest (while the dirt and bulb were still damp) did not develop more storage disease than garlic that was not washed. The outermost wrapper leaves on washed garlic discolored slightly, and had to be removed to reach the same visual quality as unwashed bulbs. This extra step meant that washing the garlic took slightly longer than leaving it unwashed. However, if this is the best way to remove excess dirt, as may be true when dealing with mud, washing is a good option based on last year's data. We will be examining this question again on three farms this year, and will report the results beginning in September.

The other big question at harvest is whether or not to cut the tops off the garlic. During our trials last year we saw no increase in diseases on garlic which had the tops removed at a height of 6 inches. Trimmed garlic did, however, lose an average of 18% more weight during drying than uncut garlic, which translates into lost sales weight. The benefits of cutting the tops are that each plant will take up less space in your drying area, allowing for increased air circulation; and that you are bringing far less moisture into the drying area because you are cutting off so much succulent growth and leaving it outside. Bottom line: if you feel like your garlic will be too crowded in your drying area and that you will suffer more than 20% loss from that, cutting the tops is a good option, based on one year's data.

Drying considerations

The goal of drying is to take the garlic from succulent and green to completely dry as quickly as possible without exceeding 120° F. In our trials, the best way to do this was in a high tunnel with a layer of shade cloth. Last year, when air temperatures were quite high anyway, garlic dried an average of 3 days faster in high tunnels than in open air structures such as sheds and barns. Hay mows and other warm, dry locations are also good choices. Generally sheds with dirt floors and garages have been the worst options, because they are cooler and can be quite moist. Every day that garlic isn't dry is a day with increased risk of infection by diseases like botrytis neck rot.

Wherever you dry your garlic, you want to make sure to promote good air circulation. Air circulation within and out of the drying area will move moisture away from the garlic. The exception is of course when it is raining, at which point the relative humidity is 100% and you could actually bring moisture into your drying structure by promoting movement of outside air into the structure.

The impact of dehumidifiers at night in closed structures at night hasn't been quantified yet, but anecdotally growers using this system have been pretty happy with it. They are able to remove gallons of water from inside the drying area, which can only be beneficial. We will be measuring the impact of this.

If you have questions as you are setting up your drying system this year, please feel free to call Crystal to discuss. In the meantime, let's hope for some dry, sunny weather for all our crops. -*CLS*

Got Perennial Weed Problems? Act Now!

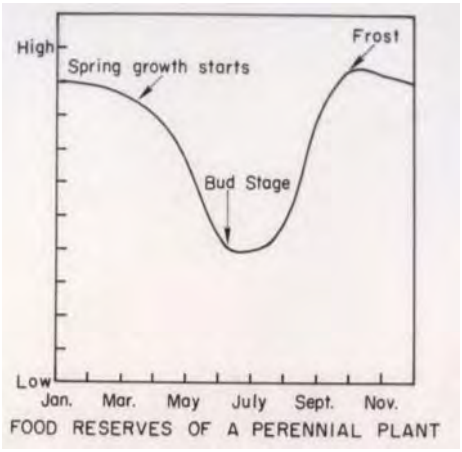
By Justin O'Dea, CCE Ulster County

Mid-summer is a vulnerable time for perennial weeds such as Canada thistle, milkweed, mugwort, and grasses like quackgrass. Perennial weeds store their food reserves in belowground organs, which helps them survive/rebound from control efforts of land managers. In mid-summer many perennial weeds have used root reserves to build leaf biomass and sometimes to flower and produce seed. In the latter half of the summer, perennial weeds will use their aboveground biomass to photosynthesize food reserves for the winter and next year. Cultural control efforts are optimized when food stores are low because root reserves are more easily exhausted. Chemical control efforts are optimized when plants begin to invest in replenishing root reserves, and systemic herbicides can be more effectively translocated to roots.

- **Cultural controls** have to be focused on keeping plants from photosynthesizing to exhaust root carbohydrate reserves. Using tillage can be useful but it must be done strategically; since tillage breaks up and spreads roots, it can lead to more widespread infestations if left unchecked. So, once tillage is implemented, be vigilant about persistently re-cultivating newly sprouted shoots to prevent further photosynthesis. Deep tillage followed by shallow tillage that pulls creeping rhizomes of perennials to the soil surface can be effective. Dry, hot weather in mid to late summer may also help kill viable root organs exposed after tillage. Strong competition from thick stands of annual cover crops or other desirable perennial covers may also help weaken perennial weed infestations, especially if shoots are rogued out or mowed. Cutting stems off deeply below the soil surface when rogueing out perennial broadleaf weeds can help exhaust roots. Mulches are generally not effective unless they are very strong (ex: woven synthetic fabric mulch) and/or opaque and flexible (ex: black plastic used for solarizing). I have literally seen Canada thistle sprout through blacktop!

Canada Thistle diagram showing creeping root system where food reserves are located.

Image Credits: Dr. Russ Hahn, Cornell Univ.



Generalized graph of food reserves in roots of a perennial cropland weed over time.

Image Credits: Dr. Russ Hahn, Cornell Univ.

- **Chemical controls** should generally follow suit with mechanical controls according to lowering root reserves and weakening plants. Translocation of systemic herbicides is ideal at this stage of growth as well, and for many broadleaf perennial weeds the bud stage is the optimal application time. Mowing in conjunction with herbicides can also have a synergistic effect on perennial control, but it depends on the weed. For some weeds herbicide translocation may be more effective when leaf area is at its maximum. Even at this timing though, completed eradication may require more than one herbicide application. **Keep in mind that perennial weeds are robust survivors, so effective management requires you to be vigilant, strategic, and persistent!**

For more examples and more detailed information see Cornell's sections on Canada thistle: http://weedecology.css.cornell.edu/weed/weed.php?id=9 and/or Quackgrass: http://weedecology.css.cornell.edu/weed/weed.php?id=12

Herbicide charts for vegetables from Cornell Recommends: (select crop, weed management is the last section of each chapter, XX.7): http://www.nysaes.cals.cornell.edu/recommends/ or see http://weedecology.css.cornell.edu/herbicide/

Meetings and Notices

Save the date: July 17th - Twilight Meeting with Tom Zitter at Charlie Brizzell's farm

This is Tom's final twilight meeting, as he will be retiring this year. Stop by to learn about the latest disease updates and to wish Tom a happy retirement. DEC credits applied for. Look for more details in next week's update.

Hudson Valley Lab Field Tour & Barbecue / Vegetable Twilight Meeting– July 18, 2013

Come help us celebrate Cornell's 90th year of tree fruit research in the Hudson Valley by attending the orchard tour and barbeque at the HV Lab on July 18th. There is a lot to see and learn, plus an opportunity to socialize with other growers at the barbecue in the orchard. The ENY Hort Program is hosting a grower meeting on vegetable diseases later in the evening, and we hope those growers will also join the event before their meeting.

Please preregister for the barbecue ($20 per person) - go to: http://hudsonvf.cce.cornell.edu/meeting_announcements/HVL%20tour%20&%20barbecue%207-18-13.pdf or contact Donna Clark (djc16@cornell.edu or 845-691-7151) for more information on registration and the orchard tour and barbecue, or if you have any special needs.

Separate registration and fee is required for the Vegetable Diseases Meeting. More information can be found at: http://counties.cce.cornell.edu/orange/veg_field_meetings_2013.pdf or contact Cathy Hughes at 845-344-1234 or email cah94@cornell.edu.fs

Weekly and Seasonal Weather Information

	Growing Degree Information Base 50^{O} F			Rainfall Accumulations		
Site	**2013 Weekly Total** 6/26—6/30	**2013 Season Total** 3/1 - 6/30	**2012 Total** 3/1—6/30	**2013 Weekly Rainfall** 6/19—6/30 (inches)	**2013 Season Rainfall** 3/1—6/30 (inches)	**2012 Total Rainfall** 3/1—6/30 (inches)
Albany	**126.8**	**911.8**	**1098.1**	**2.51**	**17.40**	**12.79**
Castleton	**121.4**	**889.6**	**1100.4**	**2.74**	**14.09**	**12.76**
Chazy	**90.1**	**775.7**	**1122.1**	**2.47**	**16.11**	**9.94**
Clifton Park	**118.8**	**843.8**	**1039.8**	**4.81**	**17.67**	**16.95**
Clintondale	**122.4**	**992.4**	**781.5**	**NA**	**NA**	**10.68**
Glens Falls	**110.1**	**779.3**	**909.5**	**2.17**	**13.98**	**12.32**
Granville	**NA**	**NA**	**863.5**	**0.03**	**NA**	**15.27**
Guilderland	**116.5**	**826.5**	**1016.1**	**0.43**	**4.13**	**5.14**
Highland	**121.1**	**986.0**	**1166.4**	**3.08**	**11.09**	**14.39**
Lake Placid	**76.4**	**478.3**	**NA**	**1.98**	**16.14**	**NA**
Montgomery	**120.5**	**925.2**	**1057.0**	**2.59**	**12.71**	**NA**
Monticello	**100.8**	**713.2**	**880.0**	**0.01**	**0.17**	**0.70**
Redhook	**122.9**	**899.0**	**1059.5**	**0.98**	**11.68**	**11.36**