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# Weekly Vegetable Update

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## Regional Updates:

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

Spring is arriving very slowly this year, growers report being at least a week or two behind schedule. We haven't had the heavy rains the rest of the state has had, but chilly drizzles and low temperatures are keeping the soil cold and damp. Dandelions are not in bloom yet. Overcast days with highs in the 50's may not be as bad as a killing frost but many crops are standing still. If the sun comes out next week, things should really take off.

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

Things are slowly progressing in the Capital District. Well-drained fields are plowed but heavy and wet ground is still really hard to get on. Most growers have started setting out early transplants and potatoes are going in. Early sweetcorn on plastic is in, and some bare ground plantings are starting. Asparagus is up throughout the region, and early harvests are starting in the southernmost counties. Cold soil temperatures are holding many crops back, and are providing a good environment for the development of some diseases.

Greenhouses throughout the region seem to be packed, which along with the cloudy weather is contributing to lots of botrytis. Increasing air movement, spacing out plants (if you have any space) and a few sunny days would help the situation.

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

We are seeing lots of field transplanting of brassicas, onions, and lettuce. Some of the earlier plantings have taken a beating from extremely windy conditions but are now growing out of it. Maggot activity has been noted in several fields. In high tunnels growers are harvesting greens and radishes and are now starting to transplant tomatoes. Tomatoes in greenhouses have up to three sets of fruit clusters and some nice size to them.

### *Have questions? Need something in the field or greenhouse checked out?*

The Eastern NY Horticulture team has a number of expert educators throughout the region in the areas of vegetable, tree fruit, and small fruit production; business development and food safety/GAPS. Give one of us a call and we will get you in touch with someone who can help.



Nice crop of Mortgage Lifter Tomatoes. Photo by TR

## To Foliar Feed or not to Foliar Feed?

With the heavy rains last week that delayed getting into the field, you may be tempted to apply foliar fertilizers. Let's look at the conditions and limitations of foliar feeds. -MRU

When foliar feeds are most cost effective	Cautions about foliar feeds
<p>You observe visual symptoms or have had tissue testing confirm a nutrient deficiency                      Low temperatures and soil saturation slow microbial activity.</p> <ul style="list-style-type: none"> <li>• Soil saturation robs roots of oxygen, creating additional symptoms.</li> <li>• High soil pH may be the culprit for what you are seeing too.</li> </ul>	<p>For all fruit and vegetable crops, the major pathway for mineral nutrient uptake is via the roots. Nutrients applied to the leaves can be absorbed and utilized by the plant; however, for nitrogen, phosphorus, and potassium the quantity absorbed at any one time is small relative to the larger levels required for growth by the plant. Foliar application of these three nutrients cannot be expected to supply the total amount required for crop production.(1)</p>
<p>Calcium can be effective on some crops for expanding fruit but depends on the crop.</p>	<p>Effects of foliar feeds are short lived, at best, especially for macronutrients.</p>
<p>One or 2 applications of micronutrients may be enough to reverse the problem.</p>	<p>Tend to be expensive per unit of nutrient.</p>

**Table. Relative response of fruit and vegetable crops to micronutrients under soil conditions favorable to a deficiency.<sup>1</sup>**

Crop	Relative Response					
	Zinc	Iron	Manganese	Molybdenum	Copper	Boron
Apples	high	–	high	low	medium	high
Asparagus	low	medium	low	low	low	low
Beans, snap	high	high	high	low	low	low
Broccoli	–	high	medium	medium	medium	high
Blueberries	–	high	low	low	medium	low
Cabbage	low	medium	medium	medium	medium	medium
Carrots	low	–	medium	low	high	medium
Cauliflower	–	high	medium	high	medium	high
Celery	–	–	medium	low	medium	high
Cucumber	–	–	high	–	medium	low
Grapes	medium	high	high	low	low	medium
Lettuce	medium	–	high	high	high	medium
Onions	high	–	high	high	high	low
Parsnips	–	–	medium	–	medium	medium
Peas	low	–	high	medium	low	low
Potatoes	medium	–	high	low	low	low
Radishes	medium	–	high	medium	medium	medium
Raspberries	–	high	high	low	–	medium
Spinach	high	high	high	high	high	medium
Strawberries	–	high	high	–	medium	medium
Sweet corn	high	medium	medium	low	medium	low
Tomatoes	medium	high	medium	medium	medium	medium
Turnips	–	–	medium	medium	medium	high

<sup>1</sup> From R. F. Lucas and B. D. Knezek. 1973. Climatic and Soil Conditions Promoting Micronutrient Deficiencies in Plants. Micronutrients in Agriculture. Soil Science Soc. of America.

Source: Nutrient Management for Commercial Fruit & Vegetable Crops in Minnesota by Carl J. Rosen and Roger Eliason Department of Soil, Water, and Climate, University of Minnesota (1) [http://www.extension.umn.edu/garden/fruit-vegetable/nutrient-management-for-commercial-fruit-and-vegetables-in-mn/docs/5886\\_full.pdf](http://www.extension.umn.edu/garden/fruit-vegetable/nutrient-management-for-commercial-fruit-and-vegetables-in-mn/docs/5886_full.pdf)

## The botrytis ate my garlic! And it's time to fertilize

This year garlic emergence has been very erratic in some places. Some growers suspected cold injury, but I have not seen any evidence that this is the case with hardnecks. Elephant garlic is much more sensitive, and was damaged by the cold. The issues we are seeing with hardnecks seem to be disease related. Exactly why there is so much disease is not yet clear, but if you are seeing slow or erratic emergence, it is worth digging up the small garlic or searching for cloves that never came up to see what is happening. Knowing what you are dealing with now will help you take preventative steps so this fall so you don't have a repeat performance of this year's issues. As always, if you aren't sure what you are seeing, send me a picture or give me a call.

The main culprit I have seen so far is *Botrytis porri*. Botrytis is favored by wet conditions, which we have certainly been experiencing. There are no treatments available to stop Botrytis in the soil on garlic. Seeing Botrytis on the garlic seed isn't a guarantee that your new garlic head will be infected, though it certainly increases the likelihood. It is possible for a vigorous, undamaged new plant to resist infection. The focus now should be on keeping the plant healthy by maintaining optimum fertility (N) and minimizing weed pressure, and by making sure the garlic doesn't stay too wet (if possible).



Garlic infected with *Botrytis porri* (arrow) and a secondary soft rot. This plant isn't able to use the clove as a source of fertility, so needs access to fertilizer to thrive.



Frighteningly large botrytis fruiting body.

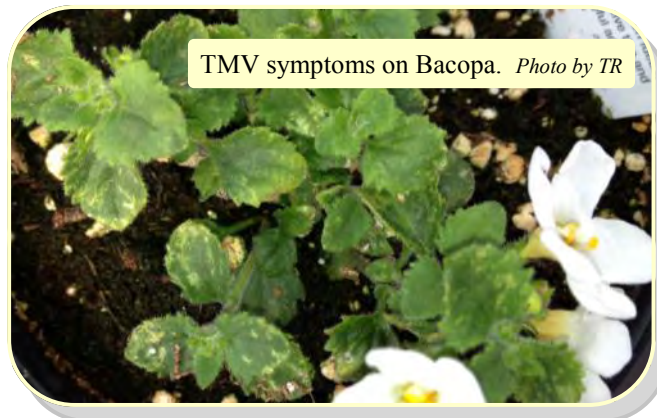
The spring focus with fertility is on nitrogen. Your phosphorus and potassium should have been optimized in the fall. Now that the green parts of the garlic plant are actively growing, nitrogen requirements are high. The total N requirement of garlic is between 50 and 100 lbs/A, depending on your organic matter levels. Remember to deduct N provided by your cover crop, as well.

Organic growers often put up to 100 pounds of N down in the fall in a slow-release form, with the assumption that it will mostly be released in the spring and they can supplement with a smaller amount of quick release N between garlic emergence and mid-late May if needed. Conventional growers, who are relying on quicker-release forms of N, may apply up to 100 lbs of N in 2-3 split applications from emergence through mid-late May. Just remember that by the end of May garlic mostly stops taking up N, so applications after that point are a waste of money. – CLS

## Tobacco Mosaic Virus Alert

We've been warning growers for several months about a potential Tobacco Mosaic Virus (TMV) problem as the disease had been detected in petunias at a propagation facility. The concern was that plant material infected with TMV might have been unwittingly shipped out to growers. Many of you grow some ornamentals as well as vegetables at your operation and this virus easily spreads from one crop to another and has a wide host range. Tomatoes with no resistance to TMV, such as many of the heirloom

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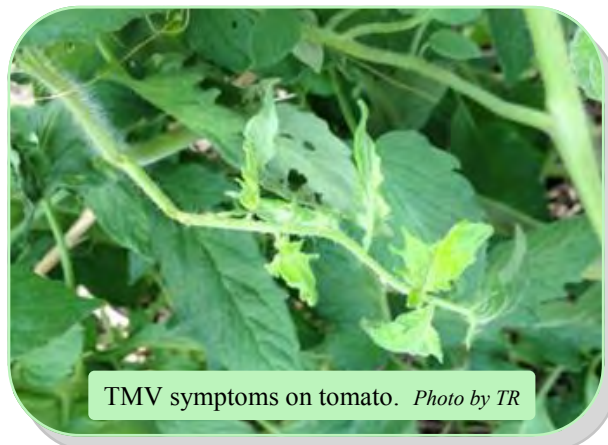


TMV symptoms on Bacopa. Photo by TR

*Tobacco Mosaic Virus Alert, continued from p. 3*

varieties, are especially vulnerable. Last week I sent in samples of symptomatic ornamental plants from a local grower to the Long Island Diagnostic Lab and they tested positive for TMV. So at this point we are not sure what the source of the TMV infection is or how widespread in that operation it is.

Growers should be vigilant in scouting for symptoms on ornamentals as well as vegetable crops such as tomato, peppers, and cucurbits. Always practice good sanitation and avoid having people from other operations come to yours without proper sanitation steps. Also the tobacco in cigarettes can be another source of TMV, so smoking should not be allowed anywhere near the operation and hands should be regularly sanitized. Seed can also be infected with TMV and symptoms may not show up in plants for some time. Be sure to purchase seed from a reputable source. If you have questions please do not hesitate to contact me. -TR



TMV symptoms on tomato. Photo by TR

## Onions Are Underway

The key to growing good sized onions is to get as much top growth as possible by June 21. Most onions are day length sensitive and those suited to our northern region are triggered by the longest days of summer to begin to bulb up. Once bulbing begins, top growth slows, so provide optimum conditions in May and June to get the best growth you can.

Onions prefer a pH of 6.0-6.8 in all but muck soils. They are heavy nitrogen feeders early in the season. On mineral, non-muck soils, apply a total of 90-120 pounds of N split into 3 applications: pre-plant, at planting, and 4-5 weeks after planting. No additional fertilizer is needed after mid June.



In heavier soils, earthworms can sometimes cause problems to newly transplanted onions as they pull onion leaves into nearby holes and dislodge the seedlings before they have time to root into the soil. There is nothing much to do about this except plant only sturdy seedlings if your soil has a high earthworm population.



Try to stay ahead of thrips, that tiny insect that is common in almost every onion planting. They feed on onion leaves and their population quickly explodes in mid-summer. Try to catch them early while their numbers are small. The treatment threshold is 1 thrips per leaf. So a young onion plant with 6 leaves should be treated when 6 thrips are found anywhere on the plant. To look for thrips, get down on your hands and knees and look closely where the leaves emerge at the center of the plant. They are tiny, yellow-orange or cream colored, and they tend to hide in the center of the plant where the newest leaves are emerging. A heavy infestation weakens the plant and reduces bulb size. Research in western New York has shown a reduction of onion thrips when grown on shiny, silver mulch. Thrips rapidly develop resistance to insecticides so rotate products and check pages 236-238 of the Vegetable Guidelines for more information. - ADI

## Roly Poly Danger

Many of us commonly refer to pillbugs as “Roly-Polies” because when touched, this little terrestrial crustacean curls up into a ball. Sowbugs look very much like pillbugs but they will not curl into a ball when touched. Also, sowbugs can be distinguished by a pair of tail-like structures on the back end of their bodies. To the grower, it makes no difference which species you are dealing with as damage and management are the same.

These creatures have a chewing rasping mouthpart and often feed on decaying organic matter such as mulch and grass clippings. You might find them under stones or logs and leaf litter as they prefer damp dark habitats. Unfortunately, we can create roly-poly habitats in greenhouse structures such as under and between wood benching and under flats of plants if moisture is allowed to collect between surfaces for long periods of time. Sowbugs and pillbugs will feed on transplants and young tender plants growing in greenhouses and if there are many of them, you can see some serious damage. I’ve seen them munch away trays of zinnia packs and more recently cucurbits planted in beds in a greenhouse.



Pillbugs and damage on a greenhouse cucurbit planting. *Photo taken by grower.*



Sowbugs and Pillbugs.

*Photo by Drees, Texas A&M Extension.*

If you see damage to your plants resembling caterpillar damage and don’t see caterpillars, check under flats and wood structures for roly-polies. They may be the culprit! They tend to come out to feed on foliage during the night, so grab your flashlight to look for them.

To control and minimize breeding sites:

- Water plants early in the day so that soil surfaces dry out by night time.
- Eliminate areas that are dark and moist
- Avoid heavy organic mulches that shelter these pests.
- Trellis cucumbers and other vining crops as soon as possible to avoid contact of plant with soil surface.
- Bug-N-Sluggo (<http://128.253.223.36/ppds/536351.pdf>) is a bait product, organic-compatible for commercial production, containing both iron phosphate and spinosad. The label claims efficacy on sowbugs and pillbugs. See the label for some additional details. - TR

## BMSB Survey

Are you a grower? Got stink bugs? We need your help! We’re surveying growers to assess the impact of BMSB on crops and gathering information that will help us defeat this pest.

Receive a free Guide to Stink Bugs if you complete the 10-minute BMSB survey. Go to link below.

[https://cornell.qualtrics.com/SE/?SID=SV\\_5ssnjXLNhvp6v1H](https://cornell.qualtrics.com/SE/?SID=SV_5ssnjXLNhvp6v1H)

Thanks in advance! – From the Northeastern IPM Center.

For more information on the survey go to <http://plant-pest-advisory.rutgers.edu/?p=9389>



*Photo by TR*



*Photo by TR*

Stinkbug damage to jalapeno peppers and tomato.

## Watch for Cabbage Maggot Flies

Brassicas grow well in the cool spring conditions, and need an early start to reach maturity at the desired time. However, this leaves them vulnerable to the spring flight of cabbage maggots, which can stunt or kill young plants as a result of root feeding. Being aware of when adult maggot flight occurs and being proactive with preventative control measures are key to getting the crop through the May flight period.

**Onset of Spring Flight:** Cumulative growing degree days and indicator plants can be used to pinpoint activity of cabbage maggot fly (*Delia radicum*) in your area. A good indicator of cabbage maggot flight is blooming of the common roadside weed, yellow rocket or wintercress (*Barbarea vulgaris*); good photos can be found at the online UMass Weed Herbarium. Onion maggot emerges slightly later than cabbage maggot, while seedcorn maggot is active earlier. *(Editor’s note: Table 1 gives approximate percent emergence of adults based on Growing Degree Days. Table 2 gives you accumulated GDD’s for select sites around eastern NY so you can determine where you might be with Cabbage maggot adult emergence. Most of Eastern NY has exceeded the GDD’s for the first adult emergence according to the NEWA Cabbage maggot prediction model.)*

**Life cycle and damage:** These maggot flies spend the winter as small brown pupae in the soil. Adults emerge in spring and can travel up to a mile in search of host plants. Cabbage maggot flies are rather delicate, hump-backed gray-brown flies, about 5-7 mm long. Eggs are laid on host crops, in soil at the base of the stem. Cool, moist soil conditions favor survival of Yellow rocket blooms at about the same time that cabbage maggot flight occurs. Small, white cabbage maggot eggs are laid in soil at the base of young transplants the eggs, and soil temperatures that exceed 95 F in the top 2-3 inches will kill them. Larvae feed on roots and can completely destroy the root system. The first sign of a problem is wilting of the plant on sunny days and yellowing or purpling of outer leaves. Later, plants collapse, wilt down, and die. On inspection of the root area you may find the legless white maggots feeding, or the small brown, oblong pupae. In Brassica root crops such as turnips, radishes and daikon, maggot feeding tunnels on or in the root render it unmarketable.

**Monitoring for adults:** Yellow sticky cards attract adult flies and can be deployed in or slightly above



Figure 1: Cabbage maggots feeding on cabbage stems: maggots are legless, tapered and white in color, and are usually less than 1/3 inch in length. Photo courtesy of Michigan State Univ.

the canopy. Check and change cards every 3-5 days. Cards are available through many pest management suppliers.

**Monitoring for eggs:** If you have transplants hardening off in a cold frame or outdoors, flies may find them and lay eggs in the flats. To check for eggs in the field or in flats, look for the 1/8-inch long, torpedo-shaped white eggs that are laid along the stem, or in and on the soil near the stem of young transplants. A pencil point or knife helps stir the soil to look for them. Field scout by checking 25 plants, in groups of 2-5 plants, scattered around the field. If you find an average of 1 egg/stem or more, significant crop damage is likely. Eggs may be more abundant in wetter areas of the field. Egg numbers may build up rapidly after the first eggs are seen. Scout successive plantings.

**Insecticides:** Direct application of insecticides to the root zone is considered the most effective means for controlling maggot damage. Two organophosphate insecticides, chlorpyrifos (eg Lorsban 4E, 75 WG, or 15G) and diazinon (Diazinon AG500) are registered for this use. Check label for specific crops allowed and other restrictions including options for soil drench in direct seeded and transplanted crops, or transplant drench. Target the seed furrow or the base of the plants after transplanting, and use at least 100 to 200 gallons of water per acre to help the insecticide penetrate to the root zone.

Table 1. Cabbage Maggot Spring Emergence by Growing Degree Days	
% Adult Emergence	Accumulated Degree Days at base 4°C
1st Emergence	161 +/- 8.1
25 percent	204 +/- 2.8
50 percent	251 +/- 7.9
75 percent	304 +/- 36.6
95 percent	387 +/- 7.7
Model by: J.L. Jyoiti and A.M. Shelton	

*continued on next page*

*Watch for Cabbage Maggot Flies, continued from p. 6*

*Editor’s note: Coragen (chlorantraniliprole) is a fairly new insecticide labeled in NYS and received a 2(ee) label for cabbage maggot. Coragen should be applied at a rate of 5.0 fluid ounces per acre as a water transplant treatment at planting in a minimum of 2.0 fluid ounces of solution per transplant. For the best results, the product needs to be taken directly up by the roots so it needs to be either put directly into the planting furrow or in the plugs—DO NOT use it as a post-plant drench as it will not be as effective! Do not apply more than 15.4 fluid ounces of chlorantraniliprole containing products per acre per crop. Growers should have a copy of the 2(ee) label and the full Coragen label in their possession when applying this product. For a copy of the 2(ee) label, contact Chuck Bornt at 518-859-6213 or [cdb13@cornell.edu](mailto:cdb13@cornell.edu).*

An organic product that may have repellent effects is Ecotrol G, a plant based-granular with several aromatic oils that is applied to the furrow. This is exempt from pesticide registration, so does not have an EPA number or official label. Floating row covers provide an effective barrier against this pest. Place the cover as soon as the transplants are set. Do not use where the same crop family -- brassicas or onions -- were grown last year, as flies left in soil could emerge under the cover. Replace cover after weeding operations. As soil temperatures rise, first flight ends and crops grow large, covers can be safely removed.

**Cultural practices and natural controls:** Crop rotation contributes to keeping populations low; greater distances are more effective. Fall tillage to bury crop residues and to expose over-wintering pupae is also important. Bury, compost, or haul away onion culls—do not simply pile them somewhere on the farm. In a vigorous brassica crop, cultivation that brings soil up around the stem may help encourage formation of adventitious roots from the stem, which can help compensate for root loss even if maggots are present. Conditions that favor vigorous growth will enable the plant to compensate and outgrow moderate amounts of root injury.

**Avoiding damage by later planting:** The first flight and egg-laying period is generally most intense in the first half of May, depending on accumulated growing degree days – thus, it will vary with the season and location. After the first flight is over, and as soils heat up, fewer eggs are laid and those that are laid are less likely to survive. Planting from late-May into June is generally safer than the first half of May.

**Natural enemies:** Soil-dwelling beetles, including ground beetles (carabids) and staphylinid beetles, feed on onion and cabbage maggot eggs as well as larvae and pupae and can cause high levels of mortality. One staphylinid

**Table 2:** Accumulated Growing Degree Days for Cabbage Maggot Emergence at base 4° C since January 1, 2014 for selected sites within the ENYCHP area. Values based on NEWA Cabbage Maggot forecasts.

Location	Accumulated GDD’s (C°)	Location	Accumulated GDD’s (C°)
Albany	188.0	Highland	235.0
Castleton	197.0	Hudson	210.0
Clintondale	236.0	Montgomery	207.0
Glens Falls	169.0	Peru	137.0

species, *Aleochara bilineata*, also parasitizes maggot larvae and has been shown to respond to chemicals given off by plants that suffer maggot damage. Because these soil-inhabiting beetles are susceptible to insecticides, broadcast soil insecticide treatments should be avoided. Other natural enemies including parasitic wasps and predatory mites. Naturally-occurring fungal diseases occasionally will reduce onion maggot numbers, particularly when flies are abundant and relative humidity is high. During a fungal epidemic dead, diseased flies, can be seen clinging to the highest parts of plants along field edges.

**Nematodes for biological control:** Soil application of the entomopathogenic nematodes, *Steinernema feltiae*, has shown efficacy against cabbage maggot in trials even at low soil temperatures (50°F, or 10°C). Apply by suspending nematodes (infective juveniles) in water and treating transplants prior to setting in the field (as a spray or soaking drench), or in transplant water used in the water wheel transplanter, as a drench after transplanting, in drip irrigation, or a combination of pre-plant and post-plant applications. Post-plant treatments are likely to be needed if maggot flight begins >1 week after transplanting. Rates of 100,000 to 125,000 infective juveniles per transplant have been shown to be needed to achieve reduction in damage. Nematodes need a moist soil environment and insect host to survive.

*Source: UMASS Vegetable Notes, Volume 26, No. 5: Ruth Hazzard. References: Network for Environment and Weather Applications (NEWA); Univ of Wisconsin Degree Day Calculator (<http://www.soils.wisc.edu/asigServlets/asos/SelectDailyGridDD.jsp>); Ontario Ministry of Agriculture, Food and Rural Affairs online fact sheet; University of Minnesota Veg Edge, Schroeder et al 1996, Journal of Economic Entomology 89:1109-1115; Chen et al 2003, BioControl 48: 713–724; IPM Labs, Lockwood, NY. Updated May 10, 2013. Edited by Chuck Bornt, CCE ENYCHP.*

## Compost Operations Training Course

July 28 - August 1, 2014

Cornell University, Ithaca, NY

What does it take to run a successful composting facility? Hear lectures from top experts, practice what you learn through indoor and outdoor activities, and visit local facilities and see how the theory gets put into practice. 40-hour, 5-day course includes lectures, hands-on activities and field trips taught by leading composting professionals and educators. Good for composters of any feedstock, equipment vendors, enforcement officials, consultants, or anyone who wants an in-depth instruction on the art and science of commercial scale compost production and marketing.

For full details/schedule go to <http://compostingcouncil.org/training/>.  
To register online [click here](#). Contact: Samantha Stallybrass at 443-433-2004.

**2014 Weather Table**—This chart is compiled using the data collected by Northeast Weather Association (NEWA) weather stations. For more information about NEWA and a list of sites, please visit <http://newa.cornell.edu/>. This site has information not only on weather, but insect and disease forecasting tools that are free to use.

<b>2014 Weekly and Seasonal Weather Information</b>						
	<b>Growing Degree Information Base 50<sup>o</sup> F</b>			<b>Rainfall Accumulations</b>		
<b>Site</b>	<b>2014 Weekly Total</b> 4/28-5/4	<b>2014 Season Total</b> 3/1 - 5/4	<b>2013 Total</b> 3/1 - 5/4	<b>2014 Weekly Rainfall</b> 4/28-5/4 (inches)	<b>2014 Season Rainfall</b> 3/1 - 5/4 (inches)	<b>2013 Total Rainfall</b> 3/1 - 5/4 (inches)
<b>Albany</b>	<b>15.1</b>	<b>73.1</b>	<b>95.5</b>	<b>0.85</b>	<b>5.36</b>	<b>4.98</b>
<b>Castleton</b>	<b>18.5</b>	<b>74.1</b>	<b>97.7</b>	<b>1.12</b>	<b>5.77</b>	<b>0.90</b>
<b>Clifton Park</b>	<b>10.6</b>	<b>55.7</b>	<b>82.4</b>	<b>1.13</b>	<b>6.01</b>	<b>5.71</b>
<b>Clintondale</b>	<b>28.2</b>	<b>96.6</b>	<b>114.4</b>	<b>2.65</b>	<b>8.79</b>	<b>4.37</b>
<b>Glens Falls</b>	<b>19.0</b>	<b>69.7</b>	<b>78.5</b>	<b>1.12</b>	<b>6.15</b>	<b>5.76</b>
<b>Guilderland</b>	<b>13.5</b>	<b>54.0</b>	<b>72.5</b>	<b>.02<sup>1</sup></b>	<b>.47<sup>1</sup></b>	<b>.55<sup>1</sup></b>
<b>Highland</b>	<b>32.0</b>	<b>98.4</b>	<b>125.8</b>	<b>2.38</b>	<b>8.59</b>	<b>2.16</b>
<b>Hudson</b>	<b>22.8</b>	<b>86.3</b>	<b>108.3</b>	<b>1.26</b>	<b>5.82</b>	<b>3.87</b>
<b>Marlboro</b>	<b>26.0</b>	<b>78.9</b>	<b>105.5</b>	<b>1.94</b>	<b>7.68</b>	<b>3.18</b>
<b>Montgomery</b>	<b>26.0</b>	<b>80</b>	<b>94.5</b>	<b>2.95</b>	<b>8.41</b>	<b>4.16</b>
<b>Monticello</b>	<b>8.1</b>	<b>41.5</b>	<b>61.0</b>	<b>0.76</b>	<b>4.23</b>	<b>0.08<sup>1</sup></b>
<b>North Easton</b>	<b>10.6</b>	<b>55.7</b>	<b>105.2</b>	<b>N/A</b>	<b>N/A</b>	<b>1.29</b>
<b>Peru</b>	<b>14.4</b>	<b>48.7</b>	<b>49.3</b>	<b>1.20</b>	<b>4.88</b>	<b>1.42</b>
<b>Shoreham, VT</b>	<b>11.7</b>	<b>49.7</b>	<b>91.9</b>	<b>0.85</b>	<b>5.09</b>	<b>4.40</b>
<b>Wilsboro</b>	<b>9.1</b>	<b>40.3</b>	<b>84.3</b>	<b>0.70</b>	<b>3.45</b>	<b>2.15</b>

<sup>1</sup>—These units were not properly working in 2013.

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.

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