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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

A few sunny days last weekend helped move crops along although air temperature remained on the cool side. Drizzle and cool temperatures will continue to slow progress through this weekend. Most soils are dry enough to work but soil temperatures were still at 60 degrees earlier in the week. The earliest sweet corn was planted last week but the bulk is on hold until soil temperatures rise. Garlic is growing fast and asparagus harvest has begun. No frost is in the near term forecast but the cool, cloudy days will keep all but the cool season crops at a slow pace this week.

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

A pretty good stretch of weather has allowed most field cultivation to near completion. The warmth is welcomed, but the wind continues to be tough on young transplants in the field. Potato planting has gone pretty well with the favorable conditions, and it seems that most seeded crops that were ready to be planted are now in the ground. Soil temperatures are slowly creeping up.

Bedding plants have finally started to move out of the greenhouses due to warm weather and Mother's Day, which should help with diseases being caused by overcrowding. Greenhouse tomatoes are looking good with the warmth and a few sunny days. High tunnel tomatoes are variable, with those on cooler ground still struggling to get going.

Weed control of garlic and early crops is already under way as perennial and annual grasses and a few early broadleaves start coming through.



Greenhouse flowers.

Photo by CLS

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

In the past week, field conditions have improved greatly over the region and the extended forecast is looking favorable through May 22. Growers have begun to put tomatoes out in the field and crops planted earlier have really jumped ahead with the warmer day and night temperatures. However, with the warmer temperatures (we hit 80s a few days this past week) some transplants on black plastic suffered heat damage on lower leaves and stems in contact or close to plastic. For more on this see the articles on transplant stress and heat necrosis on black plastic inside this newsletter.

In greenhouses/high tunnels, we've seen downy mildew on lettuce and botrytis on tomato leaves and fruits, especially where there is lush growth, poor air circulation and high humidity levels. Injured leaves and stems are areas botrytis will first invade.

*Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in
Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Rensselaer, Saratoga,
Schoharie, Schenectady, Ulster, Warren and Washington Counties*

Transplant Stress

Growers are eager to move transplants out to the field but the weather has not been cooperating. Throughout Eastern NY we've generally had cold and wet soils, lots of windy days and cool temperatures. Now it seems things are turning around with highs in the 80s this past week through much of the region. Dry to wet, cold to hot, or windy weather adversely affects how those little plants thrive once you've pulled them out of the ideal greenhouse environment into the often harsh conditions of the field. Transplant shock or stress is a setback in growth and it can happen for a variety of reasons some which you as the grower may or may not be able to control. Finding a window of ideal weather for transplanting can prove to be a serious challenge.

Symptoms of stress can be severe, wilting, drying of leaves and stems, and in severe cases full plant collapse and death can occur. Plant species vary in their ability to reestablish growth after transplanting. The best adapted include: tomato, lettuce, cabbage, brussel sprouts and broccoli. Celery, onion, pepper, eggplant and cauliflower are considered intermediate but are often successfully transplanted. Legumes and sweet corn have slow root re-development, but can be transplanted successfully if root disturbance is kept minimal. Transplanting taproot crops such as turnips, beets or carrots generally causes root deformation.

Tips on how to reduce transplant shock/stress:

- Use bigger cell trays to lessen competition, smaller cells produce transplants with a smaller root system more vulnerable to damage.
- Plants grown in individual cells prevent root entanglement with neighboring plants.
- Grow seedlings to optimal age for transplanting. Transplanting at early seedling stage reduces transplant shock, however roots must be developed enough to avoid damaging during removal from cells. Very old transplants may have initiated reproductive growth rather than vegetative growth. Root bound plants take longer to re-establish.
- Avoid shoot or root pruning or drying, damage to roots will reduce establishment especially in melons, cucumbers and squash.
- Using a starter solution at or just before transplanting can reduce transplant shock (see last week's newsletter for more on starter solutions).
- Harden off plants - "hardening" refers to any treatment that results in a firming or hardening of plant tissue.



On left, 3 weeks ago, newly transplanted brassicas with significant wind and cold damage. On right, same transplants looking much better, picture taken a few days ago. *Photos by TR*

Hardening results in an increased level of carbohydrates in the plant permitting a more rapid root development than occurs in non-hardened plants.

- Reduction of temperatures, fertilizer (particularly nitrogen), and moisture or exposure to outdoor conditions for 7 to maximum 10 days prior to transplanting will help plants to acclimate to outdoor conditions. Caution: Overly hardened plants are slow to get started.
- Watch weather forecasts; avoid transplanting during unfavorable weather conditions. Watch for frosts, wind, and very hot temperatures especially if planting on black plastic which can cause injury to lower leaves and the stem, enough to cause the death of the plant (see article on heat necrosis in this issue).
- Inadequate water at transplanting can lead to losses.
- Use of row cover can help minimize, wind, insect and frost damage but be careful of overheating transplants on warm days. Some crops such as tomato and pepper will need wire supports to keep row cover from damaging plants.
- Plant so that soil covers the root ball so that it is not exposed to drying. In the case of watermelons and cantaloupes, make sure that soil does not surround the stem.
- Deep planting in cold wet soils will result in additional stress. -TR

Consider Asparagus for an Early Season Crop

Asparagus is an ideal crop to add interest to your market table or CSA share in the early season when variety is lacking. And because it has a short season, customers usually snap it up whenever available. It is relatively easy to grow and once established will last 8-12 years.

Plant asparagus crowns in the spring in trenches 6-8 inches deep. Cover the crowns with just 2 inches of soil at planting, and then gradually fill in the trench as the stems grow. Take time to prepare the soil well before planting and adjust the pH to 6.0-6.5. Choose a site with good drainage and avoid low lying, frost-prone areas. Late spring frosts damage emerging shoots resulting in twisted, contorted spears. Remove any damaged spears and those that follow will be fine.

Mary Washington is the old standard variety that produces both male and female plants that are less productive since energy is diverted to seed production. The newer varieties are all or mostly male with much improved vigor and yield. Some recommended varieties include Jersey Supreme, Jersey Knight and Jersey Giant. Each of the Jersey varieties is resistant to Rust (see Figure 1) and tolerant of Fusarium, a common soil-borne disease. Note that 'resistant' and 'tolerant' are qualifying terms so some damage can still occur with these varieties in locations with heavy disease pressure.

Weeds are the biggest overall challenge to growing asparagus although many herbicide choices exist. Organic growers need to stay ahead of the weeds and mulch heavily since cultivation within the row is very difficult in established plantings.

Wait to harvest until the second year after planting to give plants a chance to establish a strong root system. Harvest the spears by cutting or snapping off at ground level when they reach about 10 inches tall. As harvest continues, spear diameter will decrease. Stop harvesting when spears are thinner than a pencil and allow the ferns to develop to replenish root reserves for next year's crop.

Asparagus beetles (Figure 2) are the only insect pest of concern but can be controlled various insecticides including Sevin, Ambush, Radiant and Entrust, as well as various natural enemies. If left unchecked they can defoliate the plants by late summer which reduces the yield the following year. -ADI



Figure 2. Asparagus beetle larvae. Courtesy U Minn. Ext.



Figure 1. Asparagus rust. Courtesy of U Mass Ext.

All the information above, plus a lot more, can be found in the manual that everyone in the Eastern NY Commercial Horticulture Program receives free as part of their enrollment: *The 2014 Cornell Integrated Crop and Pest Management Guidelines for Commercial Vegetable Production*. Varieties, soil conditions, fertility, spacing and harvesting are included in the chapter on each crop. There is much more to that manual than pest management.)

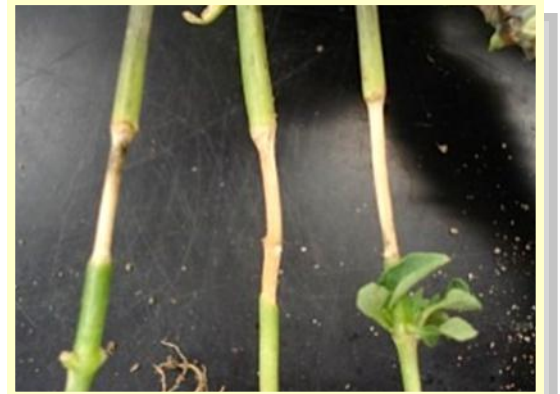
Heat Necrosis in Transplants on Black Plastic Mulch

By Gordon Johnson, Univ. of Delaware Cooperative Extension, Kent County

Black plastic can heat up to well over 110 F on hot days in the late spring and summer. Vegetable transplants are exposed to these high soil temperatures at the soil line around the transplant hole. The stem tissue just at or above the level of the plastic will be killed at these high temperatures and the transplants will then collapse and die. Small transplants do not have the ability to dissipate heat around the stem as roots are not yet grown out into the soil and water uptake is limited. Another factor in heat necrosis is that there is little or no shading of the mulch with the leaves of small transplants.

There are a number of practices that can reduce heat necrosis in later planted vegetable transplants:

- Avoid using tender transplants that have not been hardened off.
- Use larger transplants with greater stem diameters and more leaves to shade.
- ‘Leggy’ transplants that lay across plastic mulch and even those transplanted onto bare ground are prone to sunscald injury.
- When transplanting into the plastic, make sure the stems of transplants do not touch the plastic once set. Make a larger planting hole, cutting or burning out the plastic.
- Water sufficiently in the hole to reduce heat load.
- Plant in the evening once the plastic has cooled down or in the very early morning. Avoid transplanting on very hot days or when extended hot, sunny weather is forecast.
- Switch to white or aluminized plastic mulch for later plantings. This will reduce the heat loading significantly.
- In smaller plantings you may paint the planting zone on the black plastic mulch white with latex paint and then plant through this white strip once dry. You can also mulch around the planting holes with wet straw to reduce heat loading.
- Use overhead irrigation after planting to keep the plastic cooler.



Sunscald injury on the stems of newly transplanted pepper seedlings, which is caused by stems laying against edges of black plastic mulch on hot, sunny days. Note that secondary pathogens such as *Alternaria* can infest bleached out areas of stems over time.

Photo by Andy Wyenandt, Rutgers Cooperative Extension

Recent Reports Warrant Looking Out for Basil Downy Mildew in Protected Culture

By Margaret McGrath, published in *Long Island Fruit and Vegetable Update*, No. 6, May 8, 2014

Downy mildew was observed on basil in greenhouses and a high tunnel operation in VA and NJ. This indicates that conditions have likely been favorable for disease development on LI as well. Potential sources of this disease are contaminated seed and infected plants being maintained since last fall, when downy mildew was widespread on outdoor basil and thus there were numerous wind-dispersed spores to serve as inoculum for basil plants in greenhouses. The plants in the high tunnel had been over-wintered on heated mats under row cover, and likely were infected throughout the winter. Infected plants could be over-looked during winter months because the diagnostic fuzzy sporulation of the pathogen on the underside of leaves is very limited under low humidity levels typical of winter. Thus yellowing of leaves is the only symptom. This has been observed on research plants; spores developed overnight on these plants when put in a humid environment (enclosed in a plastic bag).

Ranman and phosphorous acid fungicides are labeled for use in the greenhouse. To control downy mildew effectively with fungicides, it is considered necessary to start before first symptoms appear and to make applications frequently. Another management practice that can be implemented in the greenhouse is to keep plants under light during nighttime, which has been shown to inhibit spore formation.

More information on the outbreak in NJ is at <http://plant-pest-advisory.rutgers.edu/?p=9579>. For more information on this disease and its management plus photographs see <http://vegetablemendonline.ppath.cornell.edu/NewsArticles/BasilDowny.html>.



Cabbage Maggot Update

As you can see by Tables 1 and 2, we are well into the emergence of cabbage maggots for most of the locations around the lower Hudson Valley and Capital District areas, with emergence just getting underway in parts of the North Country. There have been reports from Massachusetts that eggs and some larvae have been found in early cabbage and broccoli plantings. If you have not applied any insecticides, now is the time! Direct application of insecticides to the root zone is considered the most effective means for controlling maggot damage: chlorpyrifos (eg Lorsban 4E, 75 WG, or 15G) and diazinon (Diazinon AG500) are registered for this use. Target the 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. Coragen (chlorantraniliprole) is also labeled 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!** Growers need to 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. 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 it does not have an EPA number or official label. It may be too late for applying floating row covers as adult flies have already emerged. -CDB

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

Table 2: Accumulated Growing Degree Days for Cabbage Maggot Emergence at base 4° C since January 1, 2014 to May 11, 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	263	Highland	318
Castleton	270	Hudson	291
Clintondale	315	Montgomery	285
Glens Falls	247	Peru	197

Herbicide Options for Pumpkins and Winter Squash

It's that time of year when I start thinking about pumpkin and winter squash planting that will start to happen in the next couple of weeks. What you will find in this article are the labeled materials for these crops and any important details that need to be mentioned about using them. I also want to mention a couple cultural practices that I think will make these materials work to their best potential. First, the herbicides labeled and mentioned below all work best as post plant, pre-emergent applications. They are mostly seed germination inhibitors or root inhibitors and in some cases they do have some post-emergent activity. In my opinion, there are three important factors for these herbicides to work their best:

- ⇒ **Field preparation:** Fit and plant the field as closely together as possible. Do not fit the field and let it sit for more than 2 or 3 days before planting it as this will allow weed seeds to germinate (if the conditions are right) and in the case of many of these products, their activity and

efficacy is reduced when seeds are already germinated. If you have to wait for some reason, I would consider re-fitting the field with a shallow cultivation before planting. Also, make sure the field is not full of clumps as this will also reduce the efficacy of the herbicides.

- ⇒ **Application timing:** As with field fitting, do not delay your herbicide application for more than a couple of days after planting! The same reason applies—this gives seeds time to germinate and reduces their activity. Planting and spraying your herbicide within a day or two will improve weed control.
- ⇒ **Moisture:** All of these materials require either a rain or irrigation after application in order to “activate” them. Not only does this activate the herbicide, but it also activates seed germination. If

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Herbicide Options-Pumpkins and Winter Squash, continued from p. 5

it looks like there is no rain coming for a while and you don't have irrigation, my suggestion is to go ahead and still get the herbicide on. It's better than waiting for a rain.

Lastly, I would not use any of these products pre-emergent/post-plant by themselves with the exception of Strategy (already has 2 different active ingredients pre-mixed). We have seen that tank mixes are the best value and result in much better weed control. Many of these products have a narrow range of weeds they target so tank mixing a couple of them improves overall weed control. For the last couple of years the most widely used tank mix has been Sandea and Dual Magnum. It works fine but there were some other combinations that we found in our direct seeded pre-emergent pumpkin trials that did well and were reasonably priced including Sandea plus Dual Magnum plus Reflex; Sandea plus Command ME or Sandea plus Dual Magnum plus Reflex. As always, please read the label carefully and if you have questions about what you read below, please do not hesitate to call me at 518-859-6213 and I will do my best to answer them.

Sandea (Profine generic version): Labeled on all cucurbits at a rate of 0.5 – 1.0 ozs (I recommend the 0.5 oz/acre rate) and controls most broadleaves pre-emergent—does not control grasses so it needs to be tank mixed with grass material for pre-emergent applications. Best control happens when used post-plant, pre-emergent (crop and weeds). I have seen stunting when used at the higher rate and some yellowing and stunting when used post-emergent. Maximum rate per season is 1.0 oz. (2.0 ozs. if using in row middles only). Another reason for using 0.5 oz rate is it allows you to come in later in the season with a post-emergent application of another 0.5 oz. This is important because Sandea has a fairly short residual of about 4 weeks and we typically see some weed species breaking through around the 4th of July. Therefore, using a 0.5 oz. once pre-emergent followed by another 0.5oz. once post emergent (prior to female flower development) should result in good weed control and keeps you within the legal limits of the product. It's very good on Pigweed and Velvetleaf when used pre-emergent and very good against Yellow Nutsedge when used post emergent. Weakness – short residual of about 4 weeks, Common Lambsquarters breaks through as does Eastern Black Nightshade and grasses.

Dual Magnum: There is a lot of confusion out there about this label and how it can be used and I will try to explain it the best I can as I think it is an important tool to have. First, this is a 24 c Special Local Needs (SLN) label which means you need to obtain a copy of the correct 24 (c) label and have it in your possession at the time of

application. Second, this is an indemnified label which means that you accept the risk of using this material and any injury or crop loss is not the responsibility of the company. In order to obtain the correct label, you will need to register with Syngenta and indicate that you are using this product on those specific crops. The good news is, this process is simple and can be done via the internet. (More to follow below). If you have Dual Magnum or Dual II Magnum, you will note that “Pumpkins” are on those labels. However, if you read the Dual II Magnum label, you will see it stated clearly that it is labeled only as a banded application and the applicator must leave a 12 inch area over the seed row untreated. The SLN label for Dual Magnum does not have this restriction and it can be used as a broadcast application. And as far as I know, the use of generic “Dual” products is not legal to use on pumpkins or winter squash.

Registering with Syngenta and obtaining the 24 c SLN:

First, go to www.farmassist.com where you will need to create a user name and password. Once logged in, select “Products” where a dropdown menu will appear. Under that, select “Indemnified Labels”. Next, select “New York” under the state and “Dual Magnum” under the “product”. It is very important to note here that *only the Dual Magnum formulation is labeled on pumpkins and winter squash and not Dual II Magnum*. Then the list of Dual Magnum indemnified labels comes up and you need to find the appropriate one (should be the one that included pumpkins and winter squash). Click the crop you are applying it to and the “submit” button. You will then be navigated to a “WAIVER OF LIABILITY AND INDEMNIFICATION AGREEMENT” page where you will either accept or decline the special instructions for using this product on the selected crops. If you accept it, the label you need to print will appear as a pdf file and you can then print it and you are ready to go. If you decline it, the labels will not appear and you legally cannot apply Dual Magnum to the selected crop. The good news is that Farmassist will save all of the indemnified labels you have agreed to in case you lose your label and need another one. If you need assistance you can call the Syngenta Customer Resource Center at 866-796-4368. Remember, you need to have a copy of the 24 (c) label in your possession when using this material.

So, once you have obtained the SLN label, the rates labeled on pumpkins and winter squash is 2/3 – 1.33 pints (depending on soil type) and controls most annual grasses with some broadleaf suppression. I have seen very good results and limited injury using the 1.0 pints per acre rate. Do not incorporate as this increases the risk of severe injury! Best if used as a post plant pre-emergent and can be used post transplant within 72 hours of planting (weed seed germination issues). It may also be used post

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Herbicide Options-Pumpkins/Winter Squash, continued from p. 6
emergent as a broadcast application (4 true leaves required) following a cultivation or post emergent to row middles (has no effect on emerged weeds which is why I would recommend it post cultivation). Strong points: Many of the annual grasses and Galinsoga but should not be used alone.

Command ME: Labeled on all cucurbits (Label actually says “Do not use on Jack-O-Lantern pumpkins”) at a rate of 2/3 – 1.33 pints per acre depending on soil type (lower rates on light soils, higher rates on heavier soil types). It is labeled up to 2 pints on winter squash. However, I find that the 1.0 pint per acre rate is used and provides good control. **Do not incorporate!** The new ME (micro-encapsulated) formulation does not need to be incorporated! May be used pre-plant, post plant, pre-emergent or pre-transplant (make sure plants are planted below the chemical barrier). Strong points: Many of the annual grasses, Galinsoga, Common Lambsquarters, Velvetleaf (rate dependent) and fairly long residual. Weakness: Pigweed, Ragweed (esp. at lower rate) and the potential for fall grass cover crop injury (wheat and rye). Also, do not let it FREEZE in storage and the label specifically says do not apply to soils that will be covered with plastic. If this product was frozen it could potentially settle out and clog your sprayer screens, tips etc.

Curbit EC: Labeled on all cucurbits at a rate of 3 – 4.5 pints per acre depending on soil texture and organic matter content. **Do not incorporate!** Controls most annual grasses and some broadleaf suppression (Pigweed, Lambsquarter, Purslane) and is recommended as a post plant pre-emergent application only within 2 days of planting or banded application between rows after crop emergence or transplanting (be very careful of drifting onto the crop). Strong points: Many of the annual grasses, Velvetleaf, Pigweed and Lambsquarters with fairly long residual. Weakness: Ragweed and Smartweeds, soil texture and organic matter levels really impact efficacy. Do not use under plastic mulches or rowcovers. Cold, wet soils can increase injury or even result in crop failure! Label recommends using a minimum of 20 gals/acre fixed spray volume.

Strategy: Pre-mix of Command and Curbit and is labeled on all cucurbits at a rate of 2.0 - 6.0 pints depending on soil texture (**Do not incorporate!**). Controls most annual grasses and some broadleaves (purslane, LBQ, Pigweed, Velvetleaf) but still weak on Common ragweed and

Smartweeds. Recommended as a post plant pre-emergent or banded application between rows after emergence or transplanting. Do not broadcast apply and then transplant into treated soil as severe injury will occur. It can also be banded to row middles after a cultivation. Again, do not let this material freeze in storage as it could potentially settle out and clog your sprayer screens, tips etc. If it has frozen, be sure to contact the manufacturer for recommendations of how to proceed. Label also recommends to use 10 to 30 gallons per acre finished spray volume. Be sure to check the label as there are crop rotational restrictions that are rate dependent.

Reflex: We have been waiting for several years now and I am happy to report that we finally have Reflex as a 24 c Special Local Needs label on pumpkins, summer squash and most varieties of winter squash, however the label is again a little tricky to understand. **It is not labeled for use on butternut squash which is very important to note.** It is an “indemnified” label like Dual Magnum which means you accept any crop losses associated with using this material. You will also need to register with Syngenta in order to print a copy of the label. See the “Registering with Syngenta and obtaining the 24 c SLN” section under Dual Magnum.

However, there are some labeling restrictions that you need to be aware of if you want to use Reflex this year. First, you cannot use it as a broadcast application on direct seeded pumpkins or squash! For direct seeded crops you need to apply to the row middles only or in other words leave the area over the seed furrow untreated. However, for transplants you can use it as a pre-transplant non-incorporated pre-emergence (weed seeds) broadcast application up to 7 days prior to transplanting. Apply Reflex at a rate of 0.5—1.0 pints per acre. Do not exceed 1 pint per acre of Reflex on pumpkins, winter or summer squash per season and do not harvest any of these crops within 32 days of the Reflex application. –Strong points: Improves efficacy of other materials and excellent on Eastern Black Nightshade, Common Purslane, Lambquarters and Pigweed species. It also helps suppress some annual grasses and Yellow Nutsedge. Weakness: Potential for some crop injury, especially in cold, wet soils and long crop rotation restrictions for sweet corn (18 months). Potatoes and beans can be replanted immediately and tomatoes and peppers can be transplanted 4 months after last treatment as can most small grains. Do not use Reflex alone. -CDB

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.

Farmer's Market Looking for Vendors

Held on Thursdays from 2pm to 7pm.

June 19th thru October 2nd.

Located on 1 Municipal Square in the Village of Walden (Orange County).

Contact: Kerri-Ann Lynch, phone 845-476-6241

email waldenfarmersmarket@yahoo.com

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.

2014 Weekly and Seasonal Weather Information						
	Growing Degree Information Base 50 ^o F			Rainfall Accumulations		
Site	2014 Weekly Total 5/5-5/11	2014 Season Total 3/1 - 5/11	2013 Total 3/1 - 5/11	2014 Weekly Rainfall 5/5-5/11 (inches)	2014 Season Rainfall 3/1 - 5/11 (inches)	2013 Total Rainfall 3/1 - 5/11 (inches)
Albany	61.1	134.2	180.5	.28	5.64	5.85
Castleton	58.1	132.2	178.4	.21	5.98	1.26
Clifton Park	57.1	112.8	167.2	.27	6.28	6.21
Clintondale	67.1	167.7	188.8	.69	9.48	5.22
Glens Falls	64.0	133.5	156.5	.25	6.40	6.24
Guilderland	17.5²	71.5²	144.0	.03¹	.50¹	.67¹
Highland	73.4	171.8	202.4	.87	9.46	3.14
Hudson	70.4	156.7	195.6	.49	6.31	4.12
Marlboro	59.9	138.8	170.5	.32	8.00	4.50
Montgomery	64.2	144.2	154.5	.77	9.50	5.96
Monticello	37.8	79.7	111.5	1.17	5.40	0.08¹
North Easton	56.6	112.3	197.6	N/A	N/A	1.79
Peru	39.3	88.0	177.2	.21	5.09	1.72
Shoreham, VT	44.5	94.2	190.8	.37	5.46	4.81
Wilsboro	42.2	82.5	173.0	.19	3.64	2.44

¹—These units were not properly working in 2013.

²— Data available through 5/8 only

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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