Cornell University
Cooperative Extension

Eastern NY Commercial Horticulture Program

Vol. 3, Issue 4
May 14, 2015

Weekly Vegetable Update

ENYCH Program Educators:

Vegetables
Chuck Bornt
Cell: 518-859-6213
Email: cdb13@cornell.edu

Amy Ivy
Phone: 518-561-7450
Email: adi2@cornell.edu

Teresa Rusinek
Phone: 845-691-7117
Email: tr28@cornell.edu

Crystal Stewart
Cell: 518-775-0018
Email: cls263@cornell.edu

Maire Ullrich
Phone: 845-344-1234
Email: mru2@cornell.edu

Kevin Besler
Phone: 845-344-1234
Email: krb98@cornell.edu

Fruit
Laura McDermott
Cell: 518-791-5038
Email: lgm4@cornell.edu
Berries

James O'Connell
Phone: 845-691-7117
Email: jmo98@cornell.edu
Berries & Grapes

Dan Donahue
Phone: 845-691-7117
Email: djd13@cornell.edu
Tree Fruit

Anna Wallis
Phone: 443-421-7970
Email: aew232@cornell.edu
Grapes & Tree Fruit

Business and Marketing
Bob Weybright
Phone: 845-797-8878
Email: rw74@cornell.edu

Jesse Strzok
Phone: 608-556-4365
Email: js3234@cornell.edu

Layout: Carrie Anne Doyle

Content Editor: Teresa Rusinek

Regional Updates:

North

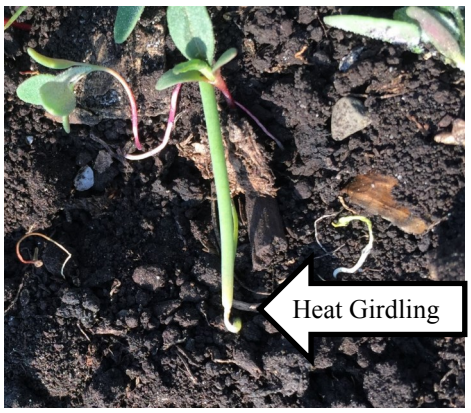
Last week's stretch of sunny, dry and downright hot weather has accelerated spring conditions. It had been extremely dry until a soaking rain last Monday evening and now everything is moving along quickly under ideal conditions. The short term forecast is for more moderate temperatures and partly cloudy weather for the next several days.

Weeds will be exploding after the recent rain; try to get them as early as possible with shallow cultivation before they can get established. Leek moth adults continue to emerge and are likely laying eggs on garlic and young onion plants. Please contact Amy Ivy adi2@cornell.edu if you suspect leek moth in any of your alliums. Orange Update 5/11/15

Capital District

The thunderstorms hitting parts of the Capital District this week have been a welcomed change from the hot, dry weather pattern. No reports of hail have come with the rain, which is also great news. Many growers are planting out some warm season crops even though we are two weeks from the last average frost date, and we'll see if that gamble pays off or if people will be replanting and/or moving a lot of row covers around! The warm weather had consumers getting excited about spring, and greenhouses are finally starting to move plants. This is good news for the vegetable transplants that were being squeezed by ornamentals in many areas.

Some routine maintenance items this time of year include staking tomatoes, protecting cole crops from flea beetles, setting up and starting irrigation systems, and keeping an eye on rowcover and plastic so that covered crops are not cooked.



Hudson Valley

In the muck: Seedlings of various types of vegetable crops continue to "burn-off". Thundershowers are expected over the next couple of days but will they be too late? Or not enough? Onions planted the earliest seem to be fairing OK in what stands remain. It's not just the dry conditions but the soil temperatures that are doing the majority of the damage. Almost all seedlings, and even transplants, can be susceptible to this regardless of whether they are "warm weather" crops or not. Cucumber seedlings are particularly sensitive to scalding from high soil

Continued on next page

Regional Updates, continued from previous page

temperatures. And of course, muck, on the same day will have much higher surface temperatures than mineral soils. Please see the important information from Farm Service Agency on Acreage and Loss Reporting in this issue.

On mineral soils we are not seeing the same extent of damage though the dry and hot conditions are certainly causing stress in some plantings. In greenhouse and HT production I have seen some flea beetles on Asian greens and small eggplants. I also saw some downy mildew on lower leaves of lettuces. High media/soil pH has become a common issue for many greenhouse/HT growers in the region. Often the issue is with high water Alkalinity which raises soil pH over time. Transplants in cells with small volumes of soil are more likely to see a rise in pH and subsequent nutritional deficiencies. If you haven't had your irrigation water checked for alkalinity contact one of the ENYCHP educators, most of us have alkalinity test kits we can use to help you remedy the situation.

Keeping Your Crops Irrigated

According to the National Weather Service, the majority of eastern New York has received between 0.01 and 0.10 inches of rain in the last 14 days (as of May 12th) with daily temperatures well above the seasonal norms. It is unusual to be dealing with drought-like conditions this early in the season and imperative that plants receive adequate moisture to achieve proper germination and healthy stand establishment. Below are some methods for efficient water use as well as a table detailing the water requirements for several vegetable crops.

- Water plants frequently for shorter durations (e.g., 2-3 times per week for a few hours) **not** once per week for 10 to 12 hours. Long periods of constant water can reduce the availability of oxygen in the soil and also create conditions that favor the development and spread of soilborne pathogens. Letting plants dry out too much before inundating them with water can also cause fruits and roots to become misshapen or split.
- Consider your soil type. Sandy soils drain very efficiently and therefore require more frequent applications than clay or silty soils.
- Apply water early in the morning to reduce evaporative losses.
- Reduce runoff and erosion by not applying water at a faster rate than your soil can absorb.
- Properly space your sprinkler heads to avoid overlap.
- Install a rain gauge to monitor precipitation amounts and adjust your watering schedule accordingly.
- Use timers, automatic shut off valves, and pressure regulators to avoid overwatering.
- Replace overhead irrigation with micro-irrigation, such as drip tape, whenever possible. Reduce evaporative losses further by installing plastic or organic mulch. –KB

CROP	CRITICAL PERIOD	WATER REQUIREMENTS (INCLUDING PRECIPITION)
Asparagus	During establishment During harvest	1 inch every 7 days after planting 2 inches after harvest Mature plantings can be irrigated less frequently
Beans	During flowering and pod set	1 inch per week during flowering and pod set can increase yields significantly during droughts
Carrots	General growth and root fill	1 inch per week Post-establishment irrigation usually only necessary during drought
Cole Crops (Broccoli, Cabbage, Cauliflower)	Head formation and enlargement	1 to 1.5 inches per week Require 15 to 20 inches during growing season

Continued on next page

Keeping Your Crops Irrigated, continued from previous page

CROP	CRITICAL PERIOD	WATER REQUIREMENTS (INCLUDING PRECIPITION)
Corn	Tasseling, pollination and ear filling	0.5 to 1.0 inches per week prior to critical period 1.5 inches per week during critical period
Cucurbits (Cucumbers, Melons, Squash, Pumpkins)	Flowering, fruit set and development During rapid growth and fruit sizing	1 inch per week after seeding/transplanting Up to 1.5 inches per week during critical period Don't allow to dry out during critical period
Eggplant	Flowering, fruit set and enlargement	1 inch per week
Garlic	Bulb formation and enlargement	1 inch per week through mid-June Stop irrigating when garlic becomes mature and ready to harvest
Lettuce	Germination and throughout growth; especially during head formation	0.5 to 0.75 inches per week Don't allow soil profile to dry out
Onions	Bulb formation and enlargement	1 to 1.5 inches per week Require 14 to 20 inches during the season
Peas	Flowering, pod set and fill	0.5 to 1 inch per week prior to critical period 1.0 to 1.5 inches per week during critical period
Peppers	Flowering, fruit set and enlargement	1.0 inches per week prior to critical period 1.5 inches per week during critical period
Potatoes	Tuber initiation and sizing	Require 1.5 to 1.75 inches per week during critical period
Radishes	Root fill	Don't allow soil to dry out Post-establishment irrigation usually only necessary during drought
Tomatoes	Flowering, fruit set and enlargement	1 to 1.2 inches per week
Sources: CCE Vegetable Production Handbook & http://www.agric.gov.ab.ca/		

Crooked Asparagus

The late spring meant a slow start to the asparagus season but the recent blast of temperatures in the 80's has gotten things moving, and asparagus spears are shooting from the ground. If you notice any spears that are crooked or twisted, take a closer look.

Asparagus beetles overwinter as adults and become active as the spears emerge in spring. There are two types – the common asparagus beetle and the spotted asparagus beetle. Their feeding damage causes the spears to bend in a shepherd's crook and can cause scarring along the spear. The adults and eggs are easy to spot. The adults of the common asparagus beetle are dark with 4 yellow patches on its back and a band of red along its side. The eggs stand up along the spear, as if balanced on their ends (see photos). Later, the larvae feed on the ferns and can partially defoliate and weaken the plant. There are usually 2 generations a year.

The spotted asparagus beetle is red with black spots and it emerges later in the spring. This beetle feeds pri-

Characteristic shepherd's crook damage to emerging spear caused by feeding from asparagus beetles.

Photo by: *Bugwood.org Clemson University*

Continued on next page

Crooked Asparagus, continued from previous page

marily on the berries of the female plants and is a less serious pest than the common form.

Small scale growers may keep ahead of asparagus beetles by handpicking the adults and eggs as the spears emerge. On a larger scale, Sevin XLR Plus, Lannate LV and Ambush* 25WP and Perm-Up* 3.2EC all have a 1 day PHI. Entrust SC and Radiant SC can only be used on the ferns, not the spears, and have a 60 day PHI.

For bio-control options there is a parasitic wasp *Tetrastichus asparagi* that parasitizes the eggs, and lady beetles feed on eggs and larvae that might help keep populations in check.

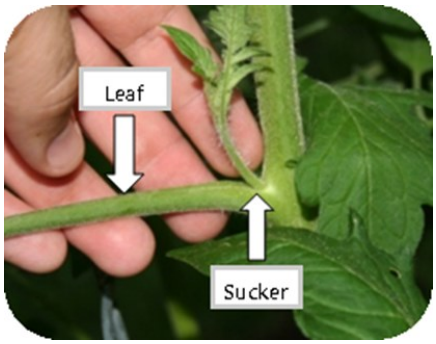
Another cause of twisted spears can be a late season frost. The recent heat has caused a surge in growth that could be vulnerable if nights turn cold in the next week or so. This is not unheard of in the northern region. Typically, frost-damaged spears are twisted and become soft. Subsequent spears will emerge undamaged once night temperatures stay above freezing.

Common asparagus beetle eggs and adult.

Photo by: *Bugwood.org*
Clemson University

This is a good time for one more thorough weeding. It's difficult to cultivate closely without damaging the emerging spears, but weeds left unchecked will be difficult to control later. Next year try to get weeds under control before spears begin to emerge. In plantings that include female, berry-producing plants, pull volunteer asparagus seedlings as they first emerge or they will become weeds themselves, competing with the main crop. –AI

Pruning Tomato Plants Increases Earliness, Fruit Size



Many high tunnel plantings and even some protected outdoor plantings are reaching the point where they need to be pruned now. It's easy to miss the window when suckers should be removed (pruned), particularly when warm weather causes plants to put on tremendous amounts of growth very quickly and there are a million other things to do. However, the benefits of pruning make it worth taking the time, especially if you are looking to get early tomatoes. Pruning all suckers except one below the first flower cluster (see illustration below) will cause energy to go into the first fruit more quickly than it would if the plant continued to make more flowers and fruit on lower branches. This energy will help the early fruit mature quickly and size up nicely. Additionally, the reduced "bushiness" of the plant might help reduce disease incidence later in the season by allowing better air flow through the plant.

The key to pruning suckers is timing. Ideally, you want to remove the suckers when they are less than 4 inches long. You can go a little bigger, but the larger the suckers are the more stressful it is for the plant to have them removed. At some point the stress of removal will outweigh the benefits of pruning. This is why taking the time to prune when the plants are ready is important.

When pruning, do not use a knife or shears. Doing so increases the probability that you will spread diseases from plant to plant. Remove suckers by snapping them by hand. In the morning when plants are not at all wilted but after the dew has burnt off is an ideal time for this task. Just remove the sucker, not the leaf that is right beneath it. The leaves are already mature and won't take more energy from the plant.

If it's time to prune, it's probably also time to start staking, if you haven't already. For those of you doing this for the first time, one sturdy stake every other plant will keep the plants upright in all but the worst weather. When selecting a twine, make sure to get one that will not stretch out on you, or you will be staking the plants again! Synthetic baling twine works well. If you are re-using stakes, make sure to sanitize them first so you do not infect plants with disease.

–CLS

Flea Beetles Attacking Cole Crops

I saw my first crucifer flea beetles on Friday and I'm not surprised with the hot, dry conditions in the last two weeks. Remember that young plants (cotyledons or young transplants) are very susceptible to flea beetle feeding and are at the highest risk for being stunted or even killed if flea beetle populations are not controlled. Be sure to regularly scout established plantings; treatment threshold are 1 beetle per plant at cotyledon or recently transplanted. Most flea beetles overwinter as adults, sheltering under plant debris in the field, in field margins, and in adjacent areas. The adults emerge in spring and may feed on weeds and less-desirable vegetation until crop plants become available. As soon as suitable crop plants are set out, the beetles will enter the field, often in large numbers. Flea beetles do best in stable warm spring weather and seedlings of crops are most vulnerable to flea beetle feeding when stressed, particularly by inadequate moisture. In other words, our crops are currently very vulnerable!

Organic control: Small-scale and organic growers can often exclude flea beetles by immediately covering transplants with light-weight row cover. It is important to cover the edges with soil to prevent gaps that flea beetles will find. Larger growers and those not able to immediately cover transplants may need to rely on sprays to protect small transplants. There are several organic insecticides labeled for the suppression of flea beetles including Mycotrol O (Beauveria bassiana at 1/4—1.0 quarts per acre), Entrust (spinosad at 1.25—2.50 fluid ounces per acre), azadirachtin (various products including Aza-Direct, Aza-Gaurd, Neemix, Molt-X and other brands—please read label for proper rates depending on product used) and Pyganic (see label for rates). Frequent scouting and retreatment will be required and under heavy flea beetle pressure and even then you may only get some suppression with these materials. Some growers have also gone to tank mixing the above mentioned materials with Surround (kaolin clay) for added control. The Surround WP (at 25 –50 pounds per 100 gallons of water) helps as a feeding and moving around on the plant deterrent. There are also several plant oils that are labeled for repulsion.

Conventional insecticides options for flea beetle include carbaryl (Sevin XLR Plus, 0.5 quarts per acre), pyrethroids (Baythroid XL at 2.4—3.2 fluid ounces per acre, Brigade 2EC or OLF at 2.1-6.4 fluid ounces per acre,

Flea beetles feeding on radish cotyledons. Photo by: fieldcropnews.com

Mustang MAXX a2.24—4.0 flu9id ounces per acre) or Warrior II (lambda-cyhalothrin at 1.28-1.92 fluid ounces per acre). For quick knockdown and some residual you could try some of the pre-mix materials such as Voliam Xpress (chlorantraniliprole + lambda-cyhalothrin at 6.0-9.0 fluid ounces per acre) or Endigo ZC (lambda-cyhalothrin + thiamethoxam at 4.0-4.5 fluid ounces) or Leverage (imidacloprid + cyfluthrin at 3.8 ounces per acre). However, please note that if you used Coragen (chlorantraniliprole) at planting the label states you cannot use more then 15.4 fluid ounces of cholorotraniliprole containing products per acre per crop. (CB & CLS)

Post Emergent Sweet Corn Herbicides

The last couple weeks have been great for getting crops in the ground including sweet corn. However, as with most things that are to good to be true, the dry weather may cause some issues with our pre-emergent herbicide programs. Remember that most of the pre-emergent herbicides we use are seed germination inhibitors and require moisture to work, something that we haven't had that much of in the last couple of weeks. And, usually moisture is required within a week of application, otherwise the herbicide activity may be reduced.

The good news is we have some post-emergent materials to choose from. There are a couple of other things you will need to know before making your selection. First, you need to know what weeds you are going after. Second, you will need to know the stage of your sweet corn in order to know if you can broadcast the materials or use drop tubes to keep the herbicides out of the whorl in order to reduce the chance of injury to the crop. And, you need to really pay attention to the labels of these materials. In order for these herbicides to perform their best and have the best crop safety, you need to know which are the right adjuvants required and other additives such as a nitrogen source. Those could be either a UAN (urea ammonium nitrate or more commonly called 32% liquid nitrogen) or a sprayable grade

Continued on next page

Worker Training, continued from previous page

AMS (ammonium sulfate) . Keeping all of the different active ingredients or chemicals straight is almost as hard as determining which adjuvants and nitrogen additives you need to add to achieve the best performance. I've tried to give you some indications for the different materials recommended by the labels and the company representatives, but I highly encourage you to read the labels! And if you are going to be tank mixing more then one herbicide, I **highly recommend** that you read the labels and make sure that the chemicals and almost as important, the additives are compatible. This is not only for crop safety, but efficacy of the materials used too! For example, Accent Q requires a Non Ionic Surfactant (NIS) or Crop Oil Concentrate (COC). If you want to use it with Impact/Armezon, you would have to choose the COC instead of the Methylated seed oil (MSO) in order to be sure the combination would be safe and effective. See Table 1 to help determine which additives are recommended for the different herbicides, but this is no substitute for reading the product labels!

Impact (made by AMVAC) or **Armezon** (made by BASF). Both with the active ingredient topramezone should be used at a rate of 0.75 fluid ounces plus MSO (methylated seed oil) or COC (crop oil concentrate) and a sprayable grade nitrogen such as AMS or UAN are recommended adjuvants (see label for rates). The active ingredient in these herbicides control several species of grasses including barn-yard grass, fall panicum, foxtails ,crabgrass and several broadleaves such as lambsquarter, ragweed and velvetleaf. Best control will also occur if broadleaf weeds are less then 4" tall and grass weeds are less then 3" tall. It is also recommended that 0.25—0.5 lbs active ingredient of atrazine be added to improve weed control and residual. Please be mindful that there is a 45 pre-harvest interval for sweet corn and an 18 month rotational restriction for most vegetable crops with atrazine. Key for this material is to make sure the weeds are growing to take up the herbicide and to minimize injury to the corn. I have seen in some cases where slightly larger grasses will turn white, be stunted for a couple weeks but then turn green again and continue to grow. However, it is usually enough time for the sweet corn to get ahead of the grass. Coverage is essential and if you are using this on taller corn, I recommend drop nozzle's be used in order to get the spray material down through the canopy and onto the weeds.

More about Impact/Armezon: If you actually read the label you will notice that under the "RESISTANCE MANAGEMENT" section of the label, it states "To reduce the risk of weeds developing resistance to HPPD inhibitors, do not apply solo post emergence HPPD inhibitor herbicides (Callisto, Impact, or Laudis) in the same season or on the same field where Lumax or Lexar has been applied. A good weed resistance management strategy includes a herbicide program that contains two or more modes of action." The key word in this statement is "solo" in my opinion. In other words, If you used Lumax or Lexar pre-emergent, you will need to add either atrazine or one of the other labeled materials found on the Impact/Armezon labels.

Callisto (mesotrione) is also labeled for post emergent sweet corn applications **but,** because it is one of the active ingredients in Lumax/Lexar (applied pre-ermergent) you should not use Callisto post emergent. Why, because at those rates you have basically reached the maximum Callisto or mesotrione rates per acre per season for this product. Likewise, if you used Callisto by itself in a pre-ermergent application you should not use it post emergent. But, if you didn't use any mesotrione containing products pre-emergent, then Callisto can be used at 3.0 ounces per acre post emergent. It is very good on many different broadleaves including pigweeds, velvetleaf, lambsquarter and wild mustard but does not control grasses post emergent with exception of large crab grass (if it is small when used). There are also a fair amount of "Don'ts" with Callisto: do not apply Callisto to white popcorn or ornamental (Indian) corn, do not apply to post emergence to corn that was treated with Counter or Lorsban or severe injury can result. Do not tank mix Callisto with any organophosphate or carbamate insecticides or apply Callisto to any corn that has had a foliar application of any organophosphate or carbamate insecticide applied postemergence within 7 days before or 7 days after Callisto application or severe injury may occur. Callisto may be applied with pyrethroid type insecticides (i.e Warrior). The label also recommends the use of a non-ionic surfactant (NIS) but a crop oil concentrate can also be used but may increase the chance of injury. And lastly, due to increased activity, Callisto mat not be applied with nitrogen based fertilizer.

Option is another choice, especially if Quackgrass is a problem, but will also control several different broadleaves and grass species post emergent in sweet corn. Unfortunately, Option is no longer being made by Bayer Crop Science but is still labeled in NYS until the end of the year so please be sure to use up existing stocks. Again, there is a 45 pre-harvest interval with sweet corn and it should be tanked mixed with MSO and either UAN or AMS and at least 0.25 lbs of atrazine for improved weed control. Like Impact/Armezon, it's not recommended that Option be applied to corn that is drought stressed, in saturated soils or experiencing other poor growing conditions. Option can be broadcast sprayed on corn in the V1—V6 growth stage (see note below about growth stages) or applied using drop nozzles to corn in the V6—V8 stage. Do not broadcast apply to corn with more then 6 leaves as concentrating sprays in the whorl will increase crop injury (ear malformation). It works best if most broadleaves are less then 4" tall and grasses are 2-4" tall. It is also effective on Quackgrass up to 10" in height. Please pay attention to the mixing order: fill tank with 25% of the total water volume and begin agitation. Add Option and make sure it is thoroughly mixed; add in other herbicides such

Continued on next page

as atrazine followed by the MSO and UAN. If your using AMS, this should be added and mixed thoroughly first, before Option is added. Do not leave mixed product in the tank for more than an hour without agitation as it will settle out.

Accent Q, the newer version of Accent, is also labeled in NY and the main difference between the two is Accent Q has an added safener. Accent Q will provide post emergent control of most annual grasses (limited crabgrass control) and if applied alone has very little broadleaf control (Redroot pigweed). If additional broadleaf control is also needed, consider tank mixing Accent Q with another herbicide listed in the label. Rate of application varies from 0.45 ounces to 0.9 ounces depending on size of weeds and should be mixed with a crop oil concentrate (COC) or Non-Ionic Surfactant (NIS) plus a sprayable grade ammonium nitrogen such as UAN or AMS. See label for specific rates and uses. Applications of ACCENT® Q may be applied broadcast or with drop nozzles (post-directed) on sweet corn up to 12 inches tall or up to and including 5 leaf-collars (V5) . For sweet corn 12 - 18 inches tall, apply only with drop nozzles. Do not apply to sweet corn taller than 18 inches or those which exhibit 6 or more leaf-collars (V6), and make only one application of ACCENT® Q per year. DO NOT APPLY ACCENT® Q to corn previously treated with "Counter" 15G or to corn treated with "Counter" 20CR in-furrow or over the row at cultivation. Applications of ACCENT® Q to corn previously treated with "Counter" 20 CR, "Lorsban", or "Thimet" may cause unacceptable crop injury, especially on soils of less than 4% organic matter.

There are several other post emergent herbicides labeled for sweet corn, but they are fairly specific in the weeds they control. Permit or Sandea (halosulfuron) work great on Yellow nutsedge, especially if it can be applied just when the seed stalk of the nutsedge is starting to emerge. It will also control Redroot pigweed, Ragweed and Velvetleaf when they are small. If these weeds are a problem, Permit at .67 ounces per acre plus a non-ionic surfactant (NIS) and a nitrogen additive may work. Laudis is another post-emergent material that can be applied to sweet corn up to V7 or 12" tall, once per season at 3.0 ounces per acre. The use of 0.5 lbs active ingredient of atrazine plus a methylated seed oil (MSO) and a nitrogen source is recommended. It is related to Impact/Armezon, but has less activity on grasses.

Stinger is another material that is highly effective, but on a very narrow range of weeds. It is effective on Ragweed, certain nightshades and Canada thistle. I have also seen it hurt wild buckwheat, but not completely kill it. You are allowed 2 applications of Stinger per season not to exceed 2/3 of a pint total per acre per season. The recommended rate is 0.33—0.66 pints per acre. If you use the highest rate of 0.66 pints, you have used the maximum amount allowed for the season (2/3 of a pint). See the label for more specific information on this material and if you are thinking of using any of these products with the ones mentioned earlier, please consult the labels to determine if they are compatible.

Notes about Atrazine: Many of the products mentioned will benefit from the addition of 0.25—0.5 pounds of active ingredient of atrazine. As atrazine has been one of the key materials used in our pre-emergent programs, it has been recommended that vegetable growers not use more then 1.5 lbs of active ingredient of atrazine per acre per season. This is so that other vegetables can be planted the following season without worrying about atrazine carryover and injury issues on those crops. Lumax/Lexar has become a popular pre-mix pre-emergent herbicide (atrazine, Dual and Callisto) for sweet corn growers at a rate of 2.5 quarts per acre. At this rate there is 0.78 lbs. of actual atrazine (active ingredient) in that Lumax which means you can still use some atrazine in your post-emergent applications. For example, if you have in your shed AAtrex 4L (4 pounds atrazine per gallon) and you want to add 0.25 pounds as part of your post emergent mix, you would add 1/2 pint of AAtrex 4L. Also, the label states that atrazine should not be used on corn taller than 12" in height. For other calculations with other formulations contact Chuck Bornt at 518-859-6213.– *CB*

Table 1: Comparison of adjuvants and other additives used in post-emergent sweet corn herbicides. This is not a substitute for reading the herbicide labels.

Herbicide	Crop Oil Concentrate (COC)	Non Ionic Surfactant (NIS)	Methylated seed oil (MSO)	Nitrogen (UAN or AMS)
Impact/Armezon	**X**		**X**	**X**
Option			**X**	**X**
Accent Q	**X**	**X**		**X**
Permit		**X**		**X**
Callisto	**X**	**X**		
Laudis			**X**	**X**

Acreage and Loss Reporting-From Farm Service Agency

In order to comply with FSA program eligibility requirements, all producers are encouraged to visit the Orange County FSA office to file an accurate crop certification report by the applicable deadline.

The following acreage reporting dates are applicable for Orange County:

May 15, 2015:	Spring forage seeding, onions
July 15, 2015:	CRP, Beans (black turtle, cranberry, dark red kidney, light red kidney, white kidney, pea, pinto), all other crops.
August 15, 2015:	Cabbage, beans (all other types)

The following exceptions apply to the above acreage reporting dates:

- If the crop has not been planted by the above acreage reporting date, then the acreage must be reported no later than 15 calendar days after planting is completed.
- If a producer acquires additional acreage after the above acreage reporting date, then the acreage must be reported no later than 30 calendars days after purchase or acquiring the lease. Appropriate documentation must be provided to the county office.
- If a perennial forage crop is reported with the intended use of "cover only," "green manure," "left standing," or "seed," then the acreage must be reported by July 15th.

Noninsured Crop Disaster Assistance Program (NAP) policy holders should note that the acreage reporting date for NAP covered crops is the earlier of the dates listed above or 15 calendar days before grazing or harvesting of the crop begins.

For questions regarding crop certification and crop loss reports, please contact the Orange County FSA office at 845-343-1872 extension 2.

FILING A NOTICE OF LOSS

The CCC-576, Notice of Loss, is used to report failed acreage and prevented planting and may be completed by any producer with an interest in the crop. Timely filing a Notice of Loss is required for all crops including grasses. For losses on crops covered by the Non-Insured Crop Disaster Assistance Program (NAP) and crop insurance, you must file a CCC-576, Notice of Loss, in the FSA County Office within 15 days of the occurrence of the disaster or when losses become apparent.

If filing for prevented planting, an acreage report and CCC-576 must be filed within 15 calendar days of the final planting date for the crop.

Eastern NY Commercial Horticulture Website

For event announcements and registrations, previous issues of our newsletters and more, please visit the Eastern NY Commercial Horticulture Team's website at http://enych.cce.cornell.edu/. We hope you bookmark it on your computer and begin using it as your 'go to' website for production and marketing information.

Email or call any of the educators with questions or comments on the website – we want to make it work for YOU!

Pesticide Updates

(Source Dan Gilrein, Long Island Fruit and Vegetable Update, No. 6, May 7, 2015)

- **Sevin XLR Plus** (from Bayer,EPA# 264-333) is listed as 'discontinued' in NY with end use date of Dec 31, 2015. The same brand name product is also marketed by Tessenderlo Kerley under EPA# 61842-37 and is registered.
- **Supracide 2E** is being discontinued; after 12/31/2014 it can no longer be sold, but growers can continue to use remaining stocks providing registrations are active.
- **MSR (Metasystox-R)** is also in phase-out; last retail sale date is 12/31/16.

Worker Training for Health and Hygiene

With transplanting in full swing and most of the workforce already on site it's time for the annual worker training for health and hygiene. If you have already done worker safety training, then the health and hygiene training can be separate. If you haven't yet done worker training, then you can combine them to save time. While worker safety training is mainly about knowing about the dangers of farm work, health and hygiene training is about getting workers to understand how their actions directly affect the risk of contamination of fresh fruit and produce. They need to understand that the viability of the farm and their own employment are contingent upon the quality of the produce not only from aesthetic and taste perspectives, but also from a food safety perspective.

There are many aspects of health and hygiene, some of which are obvious such as washing hands and some of which may not be so obvious such as how to deal with worker illness. The Cornell GAPS program has a training video available in English and Spanish that can serve as the basis of your health and hygiene education. Be sure to play the video in front of all farm workers including management, office workers, and laborers so that everyone feels they are being treated as equal. It is extremely important for managers and owners to set a good example with hygiene practices. If they do not, the workers will not respect the guidelines either. http://www.gaps.cornell.edu/videoclips.html

Farm workers can be a source of contamination if they are sick. Even during the busy harvest season, workers should not be allowed to work if they show signs of sickness such as frequent trips to the bathroom, vomiting, fever, jaundice, or undue fatigue. Even when not sick, farm workers can contaminate produce if they have not cleaned their hands after using the restroom or have touched their mouth as hepatitis A can be transmitted through saliva. Workers should be instructed that urinating and defecating in the field is prohibited. Restrooms must be provided for workers in the field at appropriated locations and used toilet paper should go into the toilet and not the waste can.

Many farms have worker housing. Living conditions and lifestyle of the workers in their homes is also important. They should maintain a regular cleaning schedule, good cleanliness in the kitchen, and have access to washing machines so that they can keep their work clothes clean and free of contaminants. Our food safety coordinator is available to do on-farm health and hygiene trainings for a small fee. Please contact Erik Schellenberg, 845-344-1234.- ES

Greenhouse Veg Update and More

Excerpted From: Elizabeth Lamb, NYS IPM Program, Greenhouse Veg Update 5-11-15

- You can check out where **cucurbit downy mildew** has been identified and watch it crawl up the eastern coast. This website can help you plan your fungicide applications so they are effective! http://cdm.ipmpipe.org/current-forecast
- You can do the same for **late blight** at http://www.usablight.org/
- Want to know which variety did best in **high tunnel tomato trials** in Northern New England? Find out in this HortTechnology article http://horttech.ashspublications.org/content/25/1/139.abstract
- Rutgers had a post on **septoria leaf spot in parsley** as a field pest. How about in greenhouses? http://www.growingproduce.com/uncategorized/pest-of-the-month-septoria-leaf-spot-of-parsley/
- Greenhouse Grower has started a series on **food safety in greenhouse grown veggies** http://tinyurl.com/qdl22vf
- A bit more on **cucurbit disease management** http://www.growingproduce.com/crop-protection/disease-control/sustainable-disease-control-in-cucurbits/
- And for **transplants in greenhouses**, too http://extension.udel.edu/weeklycropupdate/?p=7872
- **Basil downy mildew** has been found in potted greenhouse grown basil. Although I don't know where, it was reported in Rutgers update. For information on management in the greenhouse, Meg McGrath created a fact sheet. http://tinyurl.com/og5hl9z Pictures at: http://livegpath.cals.cornell.edu/gallery/basil/downy-mildew/

2015 Weather Table—The weather information contained in this chart is compiled using the data collected by Network for Environment and Weather Applications (NEWA) weather stations and is available for free for all to use. 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.

2015 Weekly and Seasonal Weather Information

	Growing Degree Information Base 50^{O} F			Rainfall Accumulations		
Site	**2015 Weekly Total** 5/4 - 5/10	**2015 Season Total** 3/1 - 5/10	**2014 Season Total** 3/1 - 5/10	**2015 Weekly Rainfall** 5/4 - 5/10 (inches)	**2015 Season Rainfall** 3/1 –5/10 (inches)	**2014 Total Rainfall** 3/1 - 5/10 (inches)
Albany	**142.9**	**236.4**	**119.0**	**0**	**2.45**	**4.82**
Castleton	**131.9**	**222.1**	**117.4**	**0**	**2.35**	**4.62**
Clifton Park	**139.5**	**232.1**	**99.7**	**0.02**	**1.70**	**5.52**
Fishkill	**122.7**	**224.3**	**Na[1]**	**0.03**	**2.71**	**Na[1]**
Glens Falls	**115.5**	**158.6**	**118.5**	**0**	**1.44**	**8.70**
Griffiss	**109.2**	**144.2**	**86.0**	**0.52**	**5.43**	**10.02**
Guilderland	**121.0**	**198.5**	**103.5**	**0.13**	**2.81**	**Na[3]**
Highland	**131.7**	**256.8**	**152.1**	**0.01**	**4.60**	**9.32**
Hudson	**137.5**	**242.3**	**139.1**	**0**	**3.39**	**6.24**
Marlboro	**122.6**	**228.5**	**122.5**	**0.01**	**3.81**	**7.64**
Montgomery	**112.6**	**225.7**	**128.5**	**0**	**4.12**	**8.41**
Monticello	**106.2**	**149.4**	**69.5**	**Na[2]**	**Na[2]**	**5.24**
Peru	**106.8**	**162.0**	**75.1**	**0.01**	**1.98**	**5.24**
Red Hook	**130.9**	**227.1**	**151.5**	**0**	**4.53**	**0.87***
Shoreham, VT	**117.6**	**175.0**	**80.6**	**0.01**	**2.33**	**5.46**
Wilsboro	**102.3**	**145.7**	**68.0**	**0.66**	**3.05**	**3.64**
South Hero,	**110.2**	**160.4**	**57.8**	**0**	**3.12**	**5.82**
N. Adams, MA	**104.0**	**127.5**	**80.0**	**0**	**2.95**	**6.39**
Danbury, CT	**99.1**	**170.6**	**104.0**	**0.01**	**3.65**	**9.48**

Na[1]: The Fishkill site is new for 2015 so there is no historical data to report.
Na[2]: The Monticello station is not properly recording data at this time.
Na[3]: The Guilderland weather station was not properly reporting precipitation data in 2014 so no data will be shown for this site.
*: Precipitation data for this site did not began until May of 2014.