Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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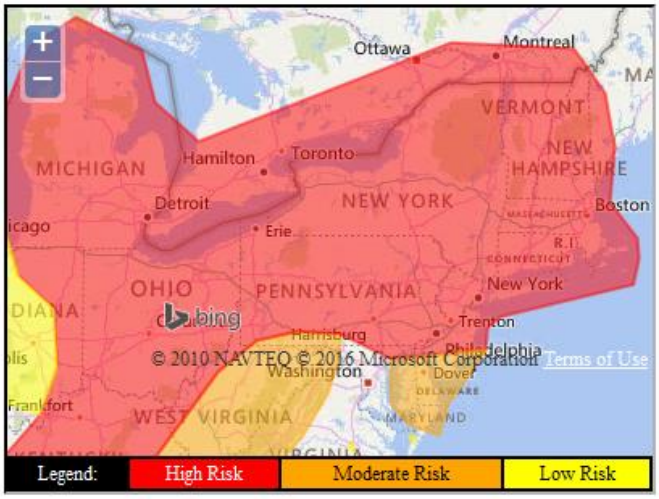
Vegetable News

Cucurbit Downy Mildew Found in the Region!

Chuck Bornt, ENYCHP

As reported the last couple of weeks, Cucurbit Downy Mildew has been found all around us and as I said it was only a matter of time before we found it locally! On Monday in Columbia County, I saw the beginning symptoms of what appeared to be CDM on cucumbers and later confirmed it with the dissecting microscope. That goes along with new reports this week from **Chittenden County, VT; Lee County, Clinton, Montgomery, and Columbia Counties, PA and Chautauqua County, NY; Jessamine County, KY;** and **Holmes County, OH**.



HIGH Risk for cucurbits in southeast TX, central and eastern KY, eastern IN, OH, lower MI, southern ON, PA, NY, NJ, Long Island, and all of New England except central and eastern ME. Moderate Risk for northern FL, the FL panhandle, GA, AL, eastern MS, south-central TN, northwest NC, western and southwest VA, WV, far western and far eastern MD, DE, and deep south TX. Low risk for cucurbits in far southern FL, central and western IN, northeast IL, southeast WI. Minimal Risk to cucurbits elsewhere.

Early this week cucurbits are at high risk for infection and this coupled with the fact we now know the pathogen is in the region means you need to be including one of the systemic materials plus a protectant listed in the last couple of newsletters. The conventional fungicides recommended are Ranman and Zampro. At this point adding Curzate for some kickback activity to either Ranman or Zampro would also be a good idea. Review the last several issues of this newsletter for more information on fungicide choices. And remember that all stages of cucurbits are at risk, especially those recently or just planted for a late market!

Organic options for DM: There are a number of organic materials labeled for Downy mildew, but for the most part many of them have not shown very good efficacy in most trials. If applied before the disease is started copper remains one of the better choices. Other options include: Double Nickel 55 Biofungicide, Regalia Biofungicide, Actinovate AG and OxiDate 2.0.

Please note: Do not tank mix Oxidate with copper! The label says "OxiDate 2.0 is a strong oxidizing agent and may react with residues of metal-based fungicides or supplements. Do not apply OxiDate 2.0 as a foliar spray immediately following foliar applications of metal-based products. **Allow at least 24 hrs. after application of metal-based products before applying OxiDate 2.0** as a foliar spray. Check the label of the metal-based product prior to application for specific instructions for use with other fungicide products".

This is important to note because Oxidate has no residual effects, you need to apply another fungicide that does and my first choice would be copper. You will need to wait the 24 hours after the Oxidate application to use copper or

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In this issue of Vegetable News:

mix it with one of the other materials mentioned. Unfortunately, I don't have a lot of experience mixing with the other materials so be sure to read the labels and apply cautiously. The Oxidate label also says "Before tank mixing OxiDate 2.0 with other fertilizers, fungicides, or bactericides, conduct a compatibility test for each combination. Make a test solution and shake or stir vigorously. Excessive bubbling and/or pressure are an indication of incompatibility." If applying Oxidate alone, the label indicates that use of a non-ionic surfactant may aid in better coverage, especially on crops with vertical plant architecture or waxy cuticles like the brassicas!

For all growers I also remind you and highly recommend that if you have plantings that you are no longer harvesting on, please either destroy them or continue to spray them with your fungicide program. These only serve as great places for the disease to start and infect younger plantings. I know it's not always easy, but truly is worth the time it takes to destroy them.

Are Your Cucurbits Stressed Out?

Teresa Rusinek, ENYCHP

Excessive heat and droughty conditions can take a toll on veg crops, and over the past few weeks we've been seeing some problems in cucurbits likely caused by these environmental factors. Several growers have been asking about poor or no fruit set in pumpkins. At this point temperatures and soil moisture levels are more favorable for good pollination, but there may be other factors playing into poor fruit set such as excessive fertility, high plant populations and lack of pollinators. Fruit setting now can mature for the fall market window though it may not be as large as fruit set earlier. It's important to keep the vines healthy (keep disease and insects under control) through harvest in order to get quality fruit and good size. Below are two articles by Gordon Johnson that give a detailed explanation of how various factors play into cucurbit pollination.

Malformed cucumbers as a result of incomplete pollination- Photo Teresa Rusinek

Pollination Disorders in Cucurbits

Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Each year, we see pollination problems with vine crop fruits, especially when weather conditions are unfavorable. Signs of incomplete pollination in cucurbits include bottlenecked fruit or fruit with a pinched end, crooked or lopsided fruit, fruit small in size or nub-like; and fruits with prominent lobes or that are triangular in shape. Causes of incomplete pollination may be inadequate pollen transfer by pollinating insects; inadequate pollen sources (pollenizers); or hot, dry weather that reduces pollen viability or that desiccates flower parts during pollination. Research has shown that a minimum of 1,000 grains of pollen are required to be distributed over the three lobes of the stigma of the female flower of a watermelon to produce a uniformly shaped fruit.

Hollow cavities in fruit and vacant seed cavities are related to lack of seed formation, again traced back to poor pollination. Fruit tissue separation, such as hollow heart in watermelon, may also be due to inadequate pollination and may be worsened by rapid fluctuation in environmental conditions affecting fruit development.

Poor Fruit Set in Pumpkin

Gordon Johnson, Extension Ag Agent, Kent Co.; gcjohn@udel.edu

Poor fruit set can be a major problem in pumpkin production, especially with large jack-o-lantern types, and may have a number of causes. Pumpkins produce both male and female flowers and require insect pollinators, primarily bees (honey bees, bumble bees, squash bees, and other native bee pollinators). The first nodes will produce all male flowers and then female flowers will be produced some time later on (commonly after the eighth node). This early male flower production attracts bees, initiates bee flights to the field prior to female flowers opening, and insures that an adequate supply of pollen will be available for pollination to occur. Jack-o-lantern types will carry only 1-2 pumpkin per plant so anything that affects fruit set will reduce the total crop yield dramatically. Poor crops occur when 1) female flowers or small fruits are aborted or 2) when production of female flowers is delayed and late sets do not have time to develop before shorter days and colder weather set in.

In the first case, female flowers can be aborted due to stresses before pollination occurs, can abort due to lack of pollination or incomplete pollination, or small fruits can abort after pollination due to stress or injury. High temperature is the most common problem causing these abortions. Day temperatures in the 90s and night temperatures in the mid to high 70s (F) can lead to loss of these female flowers or small fruits. High respiratory demand will limit photosynthates so the plant cannot support the production of both fruits and new growth (leaves and stems) – fruit set is sacrificed until growing conditions improve. This can be very variety dependent; however, recommended varieties

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for this region have proven to be well adapted even at relatively high temperatures. High temperatures also have an effect on the seed set due to reduced pollen viability and poor pollen germination leading to early fruit abortions or deformed and unmarketable pumpkins.

Drought stress can also cause problems with fruit set and cause abortions. Dry weather during early growth will cause plants to develop a high male to female flower ratio. Severe drought and wilt will reduce photosynthesis and limit the number of fruits that are carried. Flooded soils or soils that stay saturated for long periods will cause pumpkin roots to shut down and can lead to temporary wilting that will also cause some flower or fruit abortion.

Male blossoms (at each node) do not form fruit, female blossom (far left) has been pollinated and is forming fruit. Photo- Ontario Ministry of agriculture

Planting at too high of a density (closer spacings), especially with high nitrogen, can cause excessive foliage and increased shading that will limit early fruit sets. This can also occur when fields are seeded heavily (more than one seed per hole) and then are not properly thinned. As a guideline for jack-o-lantern sizes (15-25 lbs), semi-vining varieties need 15-30 square feet per plant, full vining types 20-35 square feet per plant. Some varieties will handle higher densities better than others (check with your seed company for recommendations). Excessive foliage and high densities can also limit the ability of bees to effectively move between flowers and complete pollination.

As stated, pollination depends on bees. Even though native pollinators are present, we have reduced numbers due to loss of habitat and use of insecticides. We therefore recommend 1-2 strong colonies (hives) of honeybees per acre of pumpkin field, the higher the planting density, the higher the number. Inadequate number of hives or weak hives can limit fruit set. Colonies should be placed as first male flowers are produced. Delays in hive placement can delay fruit set. Pumpkin flowers are open for about 6 hours starting at daybreak and pollination must be completed during that 6 hour period for fruit to set. Bees must move pollen from male to female flowers and multiple visits to the female flower are needed to complete pollination (one visit every 15 minutes). Bee flights are reduced in cold conditions (below 60°F) and are most active above 70°F. Windy weather (more than 12 mph) will also reduce bee flights. Windy, stormy, weather will reduce fruits set during those periods. Hive placement and management, length of rows, alternative flower sources, and improper insecticide use can also impact bee pollination effectiveness.

Insect feeding on flowers or very young fruit can cause abortions directly. Heavy squash bug and cucumber beetle infestations cause stress by feeding on plants or can stunt plants so much that flowers are aborted.

Poor crops can also be a result of delayed female flower production. This occurs in two opposite conditions. As previously stated, drought during early growth will favor male flower production and delay female flower production. In contrast, heavy nitrogen application and ample water will often lead to vines remaining vegetative for longer periods of time, producing female flowers only later in the season (too late to mature in time). This is likely to occur on heavier ground, high organic matter soils, fields with heavy manure application (more than 3 tons of poultry manure for example) and where more than 100 lbs of nitrogen are applied with fertilizers.

Due to the many factors mentioned above, planting date can also be important in achieving good pumpkin crops. As planting is delayed into early June or later, the risks associated with poor early fruit sets become greater. If first sets are lost, later sets may not have enough time to make a crop or may mature out of the main marketing window. To reduce these risks, plant at least a portion of the crop by mid June. In addition, consider using multiple varieties in case one is more sensitive to a particular stress. Consider spitting N applications and assess whether or not the second N application is needed according to vine growth and tissue tests.

Farmers' Market Pricing Project Survey & Evaluation

As August nears its end, our Farmers Market's Research Project is concluding. For the past few months, various staff members have traveled to markets attended by yourself, your friends, and neighboring farmers to collect the prices of specific products. These prices were aggregated each week according to region to create price summaries for your viewing.

The individual offices and dedicated staff of Cornell Cooperative Extension strive to provide valuable educative material and research to farmers just like you each and every day. Help us ensure that we continue to succeed at this goal by taking our brief online survey.

Follow this link to take the survey online
Or go to: https://cornell.qualtrics.com/jfe/form/SV_57ivb2VrwD5cWRD

Mexican Truffles- Huitlacoche (weet-lah-COH-chay)

Jesse Strzok and Ethan Grundber, ENYCHP

Last week while scouting fields we stumbled upon what some farmers might consider a blight (commonly referred to as "corn smut") and others might consider an opportunity (as the name "Mexican truffle" may imply). Although it goes by many names, perhaps "corn truffles" is the most descriptive. The "truffles" appear as swelling from the end of an ear of corn were firm, shiny, silvery-blue-grey masses or galls. These swellings are a young fungal growth which will darken with time, eventually rupturing and exposing spores. However, if harvested at the right time these galls are a delicacy. With sweet, savory, smoky and earthy flavors, the taste is often described as a corn flavored mushroom (which would make sense), and when fresh the texture is soft and velvety.

Identification: Because the fungal pathogen responsible for corn smut, *Ustilago maydis*, can infect the entire corn plant, proper identification is dependent on the stage of crop development. Though smut can develop under a broad range of environmental conditions, galls often develop after heavy rains and hail events that cause physical damage to silking ears and simultaneously splash soil onto the plant to cause inoculation. However, inoculation is also common in hot, dry years where wind will carry spore-harboring dust onto the silk. There are no established action thresholds or effective prophylactic management strategies, so scouting and identification are done primarily to assess the quality for specialty markets. Look for slight bulging around the top half of the ear while still in the husk to catch the *huitlacoche* during its very short marketable harvest window. When to harvest: The galls need to be harvested while still immature. "Pick it when it feels like a pear starting to ripen, when there's a little give to it. Too firm and it will be bitter. Too late, when the thin skin of the gall breaks if you rub it, and it will taste really muddy," states well-known chef and author Rick Bayless.

Markets: Inquire at ethnic markets and restaurants. Although your yield of corn will be decreased, *huitlacoche* may command many times more than the ear of corn would regularly. *Huitlacoche* is frequently used as a filling in tortilla-based foods along-side meats and seafoods and in soups.

If, like most sweet corn growers, you'd rather avoid smut and forego the corn truffles, the use of resistant varieties is your best bet. Xtra Tender 277 (tr), Silverado, and Lancelot are commonly recommended varieties for New York that have demonstrated high tolerance to corn smut. If you're looking for an earlier maturing variety, both Sweet Rhythm and Candy Corner have a medium level of tolerance to the fungus. Otherwise, the only suggested management practice to help abate the spread of the disease is to cut off immature galls and destroying them either through burial or burning. But, if you're going to harvest the truffles anyway, you may as well try to find a market for them!

Aspergillus Update

Crystal Stewart, ENYCHP

Warm, moist conditions leading to black mold on garlic and onions
The hot, humid weather we are having is causing some drying issues on allium crops, most notably black mold, or *Aspergillus niger*. The good news is that this disease is entirely cosmetic the vast majority of the time. It may penetrate dead wrapper leaves of garlic and onion, but rarely ever penetrates living tissue or affects storage. The bad news is it affects marketability of both crops.

Aspergillus growth is stopped by removing the crop from conditions favoring growth. This can be tricky to do this time of year, especially if the crop is not fully dry yet. If it is dry, moving it to a space where you can maintain the environment below 75 degrees and 75% RH will stop additional development. An interior room of a barn or outbuilding with a dehumidifier or air conditioner generally works great.

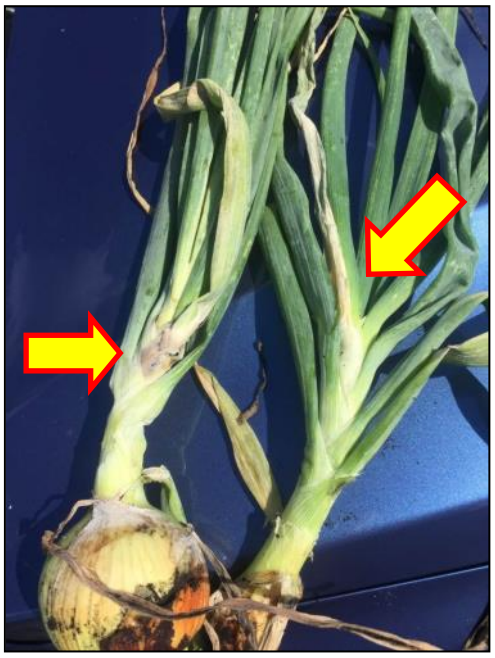
Black mold on garlic. Note the distinct, black lesions. Image courtesy of a grower.

Bacteria This Week

Maire Ullrich, ENYCHP

Several vegetable crops are showing increasing infections with bacteria this week. The intermittent, and sometimes hard, rain followed by high temperatures and high humidity provided perfect conditions for splashing of dirt and bacteria and then environment to multiply. Bacterial diseases seem tough to control because there are fewer products and they are all (as far as I know) preventative, not curative so they need to be there when the populations are low to keep the populations low. None are curative. Once an infection has started the best you can hope for is holding it down and reducing further infection. And, since most all are also topical, the intermittent rains regularly wash off the protectant you have applied leaving tissue open for infection.

Last week I noticed bacterial infections in onions. Fortunately, many onions have begun to senesce and are laying down so that, hopefully, even if bacteria started on a leaf and headed to the neck, it will dry and stop progressing. The onions to be concerned about are ones which are still mostly standing. Those have allowed the last few rains to continue to wash bacteria into the neck. For these fields (and any other you suspect may have higher infection rates whether by your experience or what you see or smell), you should do a sampling of bulbs. Collect as many bulbs as you can. A multiple of 10 makes the math easy. Select them randomly through the field and cut them to see what the internal infection rates are. Anything below 10% will be good to normal on a year such as this. For anything between 10% and 30%, you may want to consider harvesting, handling, storing these onions differently. Above 30% and you should consider the value in harvesting and if you harvest them, how to market them so as not to hold onto infected onions that risk soiling the uninfected ones or spoiling your ability to sell onions if you market some with waste too early.



Beginning signs of bacterial neck rot. Arrows highlight symptoms. Photo: Maire Ullrich

Common Physiological Disorders of Celery

Ethan Grundberg, ENYCHP

Photo by TA Zitter

According to the 2012 Ag Census, 40 farms in New York harvested a combined 23 acres of celery for fresh market. Many smaller, diversified vegetable growers in the region are adding small plantings of celery into their mix to add diversity to market displays and CSA shares. However, most of the production in-state is concentrated on the muck soils of Orange County. Celery is susceptible to a number of insect-vectored diseases (primarily cucumber mosaic virus, celery mosaic virus, aster yellows) and soil-borne pathogens (primarily anthracnose-leaf curl and crater spot). However, there are three common disorders of the crop that are often confused with fungal or viral pathogens.

Black Streak disorder is still being studied, but research has shown that the disorder is seen in years with very high temperatures during exponential growth periods (usually July). Plants looks healthy in the field, but are found to have black streaks mostly on the lower interior petioles when harvested. Brown check is another physiological disorder likely caused by excessive potassium and/or low levels of boron in the soil. Look for cracks running perpendicular to the vascular system combined with stiff or brittle stems. The variety Utah 52-70 has superior resistance to brown check. Finally, blackheart of celery is primarily caused by a calcium deficiency in the plant. Similar to blossom end rot in tomatoes, calcium deficiencies are often caused by irregular soil moisture levels over the growing season and not a deficiency of calcium in the soil. Brown spots develop near the tip of internal leaves and eventually turn black. Blackheart tends to become more severe as plants approach maturity, so be on the lookout for symptoms, check your soil tests for calcium levels, and make sure to schedule irrigations to allow for consistent availability of soluble calcium throughout the crop's long growing season.

Update on Summer Cover Crops

Amy Ivy ENYCHP

This summer we have been doing a demonstration on summer cover crops at the Cornell research farm in Willsboro with farm manager, Mike Davis. One planting is in a sandy loam field and a duplicate planting is in a clay loam field. On July 1, the following warm season summer crops were planted: sun hemp, cowpea, sorghum sudangrass, buckwheat, soybean, tillage radish, crimson clover, and teff. We also planted 5 mixes.

At our grower field meeting at the farm on August 4 we visited the 2 plots to compare their progress, and we could already see a remarkable difference between the 2 plots. Sorghum sudan grass was clearly the most dominant crop, easily out-competing the heavy annual weed pressure. We also planted a few seeds of each of the crops into 40" long, 4" diameter PVC tubes on July 1 and grew them in the high tunnel. Before planting, the tubes were split lengthwise and then held together with clamps. At the field meeting we opened the tubes to get a good look at the root growth the plants produced in those 5 weeks.

Here are 3 of the tubes opened up, 5 weeks after sowing. From left to right: sorghum sudangrass filled the tube with large roots, sun hemp also filled the tube but with finer roots, and teff, a warm-season grass at first look didn't seem to have produced much root mass, but if you look closely you can see the fine, white roots reach all the way to the bottom of the tube.

Vegetable Growers Twilight Meeting

Wednesday August 31, 2016
5:00– 7:00 pm.
Hudson Valley Farm Hub, 1875 Hurley Mountain Road, Hurley, NY 12443

This program includes: an update and recap of vegetable disease management (bring samples from your farm in tightly sealed, see through, plastic bags), discussion of the Cornell tomato disease resistance breeding program, tour of disease resistant tomato trial of 15 varieties that includes new Brandywine crosses as well as the newly released variety Stellar, followed by a tomato tasting. Guest speaker- Margaret MgGrath from the Long Island Research and Extension Center, Cornell University. Also, Ken Greene from the Hudson Valley Seed Company will be joining us to showcase some breeding work he's conducting at the Farm Hub and will have a new local "Stone Ridge" tomato variety for tasting.

Registration is not required, but is appreciated. Click here to register:
http://enych.cce.cornell.edu/event.php?id=605

This meeting will be held rain or shine. English-Spanish translation will be provided. 1.5 DEC pesticide applicator credits are available. For more information, contact Teresa Rusinek at 845 389-3562 or tr28@cornell.edu

New Virus of Concern for Serval Crops. See It?? Report it!!

Margaret Tuttle McGrath
Plant Pathology and Plant--Microbe Biology Section, SIPS, Cornell University

There is a new virus to be on the outlook for: *Tomato Chlorotic Spot Virus* (TCSV). While it has primarily been affecting tomatoes in south Florida, it has the potential to be moved elsewhere, it has a wide host range, and it can be very destructive.

Florida growers have sustained great losses, thus this is an important disease to be aware of. TCSV was confirmed on tomato in a high tunnel in Ohio in 2013, documenting its ability to affect crops outside of Florida.

Symptoms: TCSV causes symptoms that are similar to those caused by TSWV. Both viruses cause upper leaves to develop brown (necrotic) tissue often in patterns as is typical with viruses. Chlorotic spots and ringspots as well as mosaic also develop sometimes with TCSV. This disease can progress rapidly causing bronzing , wilting, and deformation of leaves, and death of terminal leaves and stems. Necrotic rings develop on fruit rendering them unmarketable. When infection occurs before flowering, plants can be severely stunted and produce few if any flowers, and eventually die. Only fruit developed symptoms during the outbreak in Ohio in 2013.

Other Susceptible Plants: The name suggests TCSV is a disease of tomato; however, when a plant is specified in a virus name it is designating the first host identified for the virus. TCSV has been detected in pepper (bell and chili), lettuce, long bean (Vignaun guiculata), weeds (jimsonweed), and ornamental plants including lisianthus, annual vinca (Catharanthus roseus), hoya (Hoya wayetii), and Christmas cactus (Schlumbergera truncate). Tomatillo, tobacco, petunia, eggplant, escarole, beans, peanut, and impatiens were found to be susceptible as well when inoculated as part of a host range study.

See Virus Symptoms?? Report It!!. If you see symptoms that could be TCSV or TSWV, please report to Meg at mtm3@cornell.edu or 631--727--3595 or to your local extension specialist. There is funding for testing samples as part of a project underway through 2018. Knowledge about occurrence of a new virus is critical.

Photograph courtesy from: Dr. Shouan Zhang, Tropical Research & Education Center, University of Florida

Site	2016 Weekly Total 8/10-8/16	2016 Season Total 3/1-8/16	2015 Season Total 3/1-8/16	2016 Weekly Rainfall (inches) 8/10-8/16	2016 Total Rainfall (inches) 3/1-8/16	2015 Total Rainfall (inches) 3/1-8/16
Albany	203.5	2125.4	2148.5	1.57	16.74	17.52
Castleton	199.7	2054.4	2653.2	1.39	17.71	17.17
Glens Falls	185.2	1911.2	1839.0	0.97	21.93	16.56
Griffiss	186.9	1791.0	1719.5	4.38	26.13	24.66
Guilderland	190.5	1923.0	1933.5	0.27	18.02	22.02
Highland	211.4	2237.6	NA	1.61	18.34	NA
Hudson	207.5	2211.7	2149.9	2.03	24.66	20.20
Marlboro	206.8	2135.9	2076.9	0.98	17.77	15.15
Montgomery	213.6	2151.2	2126.5	0.9	17.12	16.17
Peru	162.1	1768.7	1730.3	1.02	10.37	19.09
Red Hook	207.6	2109.2	2046.9	1.48	15.29	16.51
Willsboro	166	1749.6	1688.8	2.03	14.72	23.02
N. Adams, MA	183.1	1723.6	1666.0	2.27	19.43	19.53

Average Farmers Market Prices

Product (NC = nonconventional)	Unit	Mid-Hudson	Capital	Saratoga - Lake George
Beeftsteak Tomatoes	1 lbs.	$3.00	$3.00	$4.33
Beeftsteak Tomatoes NC	1 lbs.	$2.38	$3.58	$3.00
Blueberries	pint	$4.00	$4.50	$4.00
Blueberries NC	pint	$4.50	$3.96	$4.17
Carrots	bunch	$2.00	$2.25	
Carrots NC	bunch	$2.75	$2.92	$3.38
Cherry Tomatoes	1 lbs.	$2.75	$3.38	$3.00
Cherry Tomatoes NC	1 lbs.	$3.42	$3.92	$3.40
Heirloom Tomatoes	1 lbs.	$3.50	$3.00	$3.00
Heirloom Tomatoes NC	1 lbs.	$4.13	$3.88	$3.67
Honey	1 lbs.	$7.50	$9.06	$8.13
Honey NC	1 lbs.	$7.00	$8.50	$6.00
Raspberries	1/2 pint		$3.75	
Raspberries NC	1/2 pint	$4.00		
Red Potatoes	1 lbs.	$4.50	$2.80	$2.63
Red Potatoes NC	1 lbs.	$3.33	$3.61	$3.75
Russet Potatoes	1 lbs.		$5.00	
Russet Potatoes NC	1 lbs.			$3.00
Salad Mix	1/2 lbs.		$3.00	$3.00
Salad Mix NC	1/2 lbs.	$6.00	$4.97	$5.67
Shelled Peas	pint			
Shelled Peas NC	pint			
Strawberries	pint	$4.00	$3.00	
Strawberries NC	pint		$3.75	$5.00
Sugar Snap Peas	pint			
Sugar Snap Peas NC	pint			
Sweet Corn	dozen	$5.76	$6.44	$6.14
Sweet Corn NC	dozen	$6.50	$5.94	$6.75
Yellow Potatoes	1 lbs.	$4.50	$3.00	$3.00
Yellow Potatoes NC	1 lbs.	$3.33	$3.78	$3.75

Sweet Corn Pest Chart (week ending 8/17)

Location	CEW	ECBZ	ECBE	FAW	WBC
C. Clinton	0	0	5	11	28
S. Clinton	0	0	3	0	4
N. Washington	1	0	0	0	2
S. Washington	0	0	3	4	2
Albany	1	0	2	0	4
Rensselaer	2	0	0	14	2
Schoharie	NA	3	2	0	3
Fulton	NA	2	4	0	0
Greene	0	0	0	0	1
Orange	0	2	0	0	0
N. Ulster	3	0	3	0	0
S. Ulster	0	1	0	0	0
Dutchess	1	0	2	0	0

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