

Chuck Bornt, ENYCHP

On Friday of last week we received notification of a positive confirmation of Cucurbit Downy mildew on cucumbers in Western NY (Cattaraugus County) and this morning (Wednesday) in New Jersey in Hunterton County. **So I don't think it is a question of if it will be here but when will get here!** And as my colleague Teresa Rusinek pointed out, we've had cool nights with a fair amount of leaf dew which makes for great conditions for DM to get started. Remember that cucumbers tend to be the crop most affected by this particu-

lar strain. Look for yellow spots on the upper leaf sides on new growth (Figure 1) and a grey/purple fuzz on the underside of the leaf where those yellow spots are located (Figure 2) – early morning under dewy conditions is the best time to find the fuzz on the undersides. For symptoms on other cucurbits go to <u>http://cdm.ipmpipe.org/node/22</u>

Over the last couple of years the Cucurbit Downy Mildew Forecasting program has been pretty accurate in predicting outbreaks of CDM. The following information comes from this site, <u>http://cdm.ipmpipe.org/current-forecast</u>:

July 25 Overview: Epidemic spread likely in the lower Great Lakes and near the KY source. The most notable transport events occur today in the northern areas, where airborne spores are moving east under mixed or favorable conditions for epidemic spread. Epidemic spread is also possible near and east of the KY source each day, and near some of the sources in the Southeast.

Risk Prediction: HIGH Risk for cucurbits in western and west-central NY. Moderate Risk in southern Ontario, northeast OH, PA except the Southeast, northeast KY, and southwest OH. Low Risk for cucurbits in southeast PA, NJ, east-central and eastern NY, Long Island, all of southern New England, southern VT and NH, central and southern WV, southern AL, far southern GA, northern FL, the FL panhandle, far southern FL, and near the SC source. Minimal Risk to cucurbits otherwise.



Figure 1: Downy mildew on cucumber. Note the yellow angular spots. These will eventually turn necrotic as seen near the center of the photo.



Figure 2: Downy mildew on the underside of a cucumber leaf. Here sporulation is visible to the naked eye in the lesion near the center of the photo.

If you haven't started your DM fungicide program its definently time to start!





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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, Putnam, Rensselaer, Saratoga, Schoharie, Schenectady, Ulster, Warren and Washington Counties

2016 Downy Mildew Fungicides for Cucumbers, Pumpkins, Winter Squash and Gourds Chuck Bornt. ENYCHP

2016 Downy Mildew Fungicides for Cucumbers, Pumpkins, Winter Squash and Gourds: Here is the table with Downy mildew specific fungicides that can be used in combination with the above Powdery mildew materials on pumpkins, winter squash etc. I thought it would be useful to include this table of Downy mildew fungicides seeing that Downy mildew is pretty much all around us! Please note we are no longer recommending using Previcur Flex or Presidio for Downy mildew control as the pathogen has become fairly resistant to these 2 materials.

Table 2: Fungicides labeled for Downy Mildew Control in cucurbits.						
Fungicide	FRAC Code	Recommended Rate/Acre	REI	РНІ	Seasonal Limits	Adjuvant Recommendations
Ranman ^{1, 2}	21	2.75 fluid ounces	12 hours	0 days	6 sprays	Organosilicone or non-ionic surfac- tant
Zampro ^{1, 2}	40 + 45	14 fluid ounces	12 hours	0 days	3 sprays	
Revus ^{1,3}	40	8 fl ounces	12 hours	0 days	4 sprays	spreading/penetrating type adjuvant
Tanos ^{1, 2}	27 + 11	8 ounces	12 hours	3 days	4 sprays	
Zing!	22 + M	36 fluid ounces	12 hours	0 days	8 sprays	
Curzate ^{1,4}	27	3.2 ounces	12 hours	3 days	9 sprays	
Phostrol, ProPhyt, Fosphite or other phos- phorus acid containing products	33	2.5-5.0 pints (vary depending on prod- uct used)	4 hours	0 days	7 sprays	

¹ Should mix with a protectant partner such as chlorothalonil.

² Also labeled for Phytophthora blight.

³ Not recommended for cucumber as it has demonstrated reduced efficacy – therefore recommended for pumpkins, squash and gourds.

 4 Has a short residual of 3 days so it needs to either be tank mixed with another systemic plus protectant or another application of a different material should be made 3-5 days later. Reports also indicate less effective under hot conditions (80^oF). Does have some curative action so best used when CDM is first detected.

None of the above fungicides will control Powdery Mildew.

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.

2016 Powdery Mildew Fungicides for Cucumbers, Pumpkins, Winter Squash and Gourds Chuck Bornt, ENYCHP

Last week we talked a lot about Powdery mildew fungicides and this week I wanted to give you a little more condensed version of what you should actually be doing. Below is a fungicide schedule that I discussed with Cornell Plant Pathologist Meg McGrath. I also repeated Table 1 from a few weeks ago that gives you some additional information about the products (number of maximum applications, usage rates etc.). And now that Downy mildew is all around us (nothing found here yet). I think it's time to start also adding one of the fungicides in Table 2 that is specific for this disease(see more below about Downy mildew).

Week 1: Vivando at 15.4 fl oz/acre (o days PHI, 12 hour REI) plus Bravo or other chlorothalonil product (0 days

PHI, 12 hour REI) at 2.0 pints per acre, sulfur (rates vary according to product selected) or copper (rates also vary according to product selected) when bacterial diseases are a concern. Notes about Vivando: this material has no curative action so best results will occur when used prior to disease development. It may be applied a maximum of 3 times, but do not apply more than 2 sequential applications before rotating to another FRAC group. Recommended spray interval is 7 days with a maximum usage rate is 46.2 fluid ounces per season. DO NOT Mix Vivando with horticultural oils when making applications to crops in the cucurbit vegetables group. The full label and Supplemental Label for Vivando must be in the users possession when applying.

For an electronic version of the full label to print, click the following link: http://132.236.168.99/ppds/540424.pdf and for a copy of the supplemental label go to: http://132.236.168.99/ppds/541253.pdf

Week 2: Torino at 3.4 ounces per acre (PHI = 0 days with a 4 hour re-entry interval for cucurbits) plus a protectant. Notes about Torino: Maximum of 2 applications per acre per year and they should NOT be back-to-back for best resistance management. Minimum finished spray volume should be 20 gallons per acre. Plantback Restrictions:

0 days for all crops listed on label, 30 days for all crops NOT listed on label. There are also specific mixing and application Instructions for Torino Fungicide: 1. Plan ahead. Prepare only enough spray mixture as can be applied on the day of mixing. 2. Fill tank 1/4 - 1/2 full with the required amount of total spray volume of water. 3. Shake the product container well before using. Begin agitation and add product.

4. Continue to fill tank. 5. Allow mixing in tank for 2 minutes after filling or until thoroughly mixed before applying. 6. Maintain continuous agitation during mixing and application to assure uniform suspension. If mixture sits without agitation for extended periods, agitate the mixture for at least 10 minutes before use. 7. Equip spray system with a 50 mesh inline filter, which will protect nozzles that are typically used. Nozzles may also be equipped with 50-mesh nozzle filters or 25 to 50 mesh (equivalent) slotted nozzle filters. 8. Torino Fungicide may be unstable in water pH below 4 and above 9. If necessary, buffer water to obtain optimum pH range. Special Instructions for Tank Mixing Torino Fungicide: When tank mixing Torino Fungicide with other products, introduce the products into the tank in the following order: (1) water soluble packets (2) wettable powders (3) water dispersible granules (4) flowable liquids (such as Torino Fungicide) (5) emulsifiable concentrates (6) adjuvants and/or oils. Always allow each product to fully disperse before adding the next product.

Week 3: Quintec at 6 ounces per acre (3 day PHI, 12 hour REI) plus a protectant. Special note about Quintec: DO NOT USE on edible peel cucurbits such as cucumbers and summer squash.

Week 4: Proline at 5.7 fluid ounces (PHI 7 days, 12 hour REI) or Procure 480 SC at 8 fluid ounces per acre (PHI = Up to day of harvest, 12 hour REI) plus protectant. You could also use Rhyme at 5.0 - 7.0 fl ounces per acre (0 days PHI, 12 hour REI) in place of Procure. They are in the same FRAC Group so should not be used back to back with each other. Week 5: Repeat above schedule.

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The above program is just a guideline for you to use and to
help you organize your fungicide resistance program on
your farm. Each week above represents a different FRAC
group or different mode of action to help slow down dis-
ease resistance. If you've already started your fungicide
program, feel free to change the order around to include
what you've already used. And remember that the above
program is only for Powdery Mildew! When Downy
Mildew is found on your farm or near you, fungicides
specific for DM will need to be added to the tank.
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 Table 1: Partial list of conventional and organic fungicides labeled for

 Powdery Mildew Control in Pumpkins, Winter Squash and Gourds.

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Fungicide	FR AC Cod e	Recom- mended Rate/Acre	REI	PHI	Seasonal Limits	Adjuvant Recommen- dations
Vivando	U6	15 fluid oz	12 hrs	0 days	3 applications	
Torino	U8	3.4 oz	4 hrs	0 days	2 applications	Organosili- cone or non- ionic surfac- tant
Procure 480 SC	3	8 fluid oz	12 hrs	0 days	40 fluid ounces total	
Proline	3	5.5 fluid oz	12 hrs	0 days	2 sprays	
Rhyme	3	5.0-7.0 fluid oz	12 hrs	0 days	4 applica- tions or 28 fluid ounces	
Quintec ¹	13	6 oz	12 hrs	3 days	4 applica- tions or 32 fluid ounces	
Chlorotha- lonil (Bravo or other la- beled formula- tion)	М5	See specif- ic label	12 hrs	0 days		
Regalia ²	Р5	1—4 quarts	4 hrs	0 days		
Trilogy ²	NC	0.5—1%	4 hrs	0 days		
JMS Stylet Oil ²	NC	3—6 quarts per 100 gallons water	4 hrs	0 days		
Potassium Bicarbonate (MilStop, Armicarb etc.) ²	NC	2.5—5.0 lbs	Varies by product			
Actinovate AG2	NC	3—12 ounces	1 hr	0		
¹ Do not use on edible peel cucurbits (summer squash, cucumbers). ² A provide for experience, but he sure to double about with your estimates						

²Approved for organic use, but be sure to double check with your certifying organization.

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Plenty of plants are showing signs of heat and or drought stress this week. The spotty storms of Monday may have relived some of the drought stress but we have another 3-4 more days of 90+ predicted this week.

Onions and other base 40°F crops (cooler season crops) will show signs first. For the most part, they will stop growing at 85-90°F, depending on variety and other stresses. Warmer season crops will stop growing at 90-95°F and up and will visibly "go downhill" once it gets much above that. The reason for this is that the plant is working so hard staying cool that it is expending all of its energy moving water from the roots through the plant. Photosynthesis may cease all together and that, in turn, stops the production that you plan on selling.

Heat injury in plants includes scalding and scorching of leaves and stems, sunburn on fruits and stems, leaf drop, rapid leaf death, and reduction in growth. Wilting is the major sign of water loss which can lead to heat damage. If it gets so hot and dry that the plant can't keep up with leaf water loss, it will shut down respiration entirely. Dry soil conditions start a process that can also lead to excess heating in plants. In dry soils, roots signal the leaves to close stomates, to decrease water loss. As stomates close, transpiration is reduced. Without water available for transpiration, plants cannot dissipate much of the heat in their tissues. This will cause internal leaf temperatures to rise. Without transpiration, the only way that plants can lose heat is by heat radiation back into the air or wind cooling. Under high temperatures, radiated heat builds up in the atmosphere around leaves, limiting further heat dissipation. This will be exacerbated with hot, windy days (which we have had) because transpiration in increased due to increases water evaporation over the leaf on those days.

Another factor can be black plastic mulch where surface temperatures can exceed 150°F. This heat can be radiated and reflected onto vegetables causing tremendous heat loading. This is particularly a problem in young plants that have limited shading of the plastic. This can cause heat lesions just above the plastic. Heat lesions are usually first seen on the south or southwest side of stems. However, other mulches can be helpful in this situation. You can increase reflection and dissipation of light and heat using reflective mulches or using low density, organic mulches such as straw to reduce temperature build-up and conserve moisture. Photosynthesis rapidly decreases above 94°F so high temperatures will limit yields in many vegetables. While daytime temperatures can cause major heat related problems in plants, high night temperatures have great effects on vegetables, especially fruiting vegetables. The warmer the night temperature, the faster respiration pro-

cesses. This limits the amount of sugars and other storage products that can go into fruits and developing seeds.

Flower-drop may be the first heat-related symptom you see. Again, at temperatures above 90°F, cool weather crops like peas can drop blossoms but so can sub-tropical crops like peppers. Types and varieties can play a big role in the effect heat will have on fruit set. Bell peppers are more susceptible to heat-related blossom drop than jalapenos. Corn can even be impacted by high temperatures; at around 100°F or higher, silks can burn. Pollination can be impacted in squash and other plants that rely on pollinators, even if flowers remain on the plant. Pollinators do not like to leave the hive/tunnel when temperatures are in the 90's so fertilization can be decreased causing fruit abort or asymmetrical fruit swelling. And, lack of water leads to decreased calcium translocation which manifests itself as tip-burn on leaves and blossom-end rot in a variety of fruits, most notably, tomatoes and peppers.

Adding insult to injury may be ozone. Ozone damage is common on hot days (more common when air is stagnant and humidity is high). Ozone damage causes a variety of symptoms in plants. It can cause leaf burn or bleaching of the upper surface. Ozone causes irregular-shaped lesions in a leaf that may be tan, white, red or brown. Symptoms generally start at the vein of the leaf but may spread over entire leaves. Summer squashes are the most susceptible to ozone damage. Tomatoes, potatoes, string beans, snap beans, dry beans, soybeans, alfalfa, beets, sun-flower, carrots, sweet corn, gourds, green peas and turnips are also highly sensitive to air pollution damage.

Because all of these factors can create spots on the leaves, be sure to diagnose properly before you plan to treat for any disease. Damaged tissue is more susceptible to some pathogens so keep an eye out.

Sources: University of Delaware, University of Maryland, & University of Georgia.



Missing Broccoli Heads Amy Ivy, ENYCHP

It's July - do you know where your broccoli heads are?

Is anyone having a problem with their broccoli as in the picture below (picture 1)? The plants look fine with full, healthy leaves. But when you get up close to see if the heads are getting ready to harvest, is there only cupped, distorted tissue where the head ought to have been? If so, you might have swede midge. This tiny pest causes big problems to all the crucifers and it's beginning to move

into our eastern New York region.

The adult is a tiny fly, or midge, and its larvae feed on the grow-



ing points of crucifers (broccoli, cabbage, etc) causing distorted growth and 'blind' heads, where no head forms. Infested cabbage may form several small heads instead of a single head in response to the damage, and often brown, corky tissue will be noticeable as well. Swede midge is native to Europe and Asia and was first found in Canada in 2000, and then in the United States, in western NY, in 2004. It is now common in western and north/central New York and northern Vermont. It was first seen in 2013 on one farm in Essex County, NY across Lake Champlain from Burlington, and a year later on two more farms in Essex and Clinton Counties. This pest feeds on the growing points of brassicas and in 2015 one grower here



lost every sprout on his Brussels sprouts to damage from this pest (picture 2).

We are very interested to know of any new locations where this pest is

occurring. Please contact Amy Ivy if you suspect you have it. Swede midge feeds on all crucifers including broccoli, cabbage, Brussels sprouts, cauliflower, kale and collards. For more information on swede midge visit: <u>http://</u> web.entomology.cornell.edu/shelton/swede-midge/

Overwintering Onions *Crystal Stewart, ENYCHP*

Amy and I spent Monday and Tuesday of this week at a conference called Frozen Ground, for experienced winter growers and Extension folks. We both learned a tremendous amount and were very inspired. Winter growing is not for everyone, but some of the tidbits from the meeting will apply to growers looking to increase their offerings very early in the season. One example is the overwintering onions information presented by Kaitlyn Orde, a graduate student working with Dr. Becky Sideman of UNH. Becky has done two years of trialing on overwintering onions, and has great information on an expanded list of varieties as well as planting dates.

According to the research, "[t]he following varieties all showed excellent survival and very little bolting, the yellow varieties Bridger, Gatekeeper High Keeper, Keepsake, Tough Ball, T440 and T448, and the red varieties Desert Sunrise and Electric. Of these varieties, Electric was the latest to mature, with most tops not falling by the end of June.

Planting dates:

Also according to Dr. Sideman, "In 2014, the highest yields came from onions seeded mid-August and transplanted into low tunnels in mid-September, and from onions seeded Sept 1 and transplanted into high tunnels on

Oct 1. Because fall weather is unpredictable, it may be wise to do multiple planting dates, aiming to transplant between Sept 15-Oct 1 in low tunnels and between Oct 1-Oct 15 in high tunnels. Our research farm is located in zone 5B; you will want to adjust these if you are in very different climate."

Growing under Low Tunnels:

Much of Becky's research takes place under low tunnels which are constructed from 10' sections of conduit bent over rebar anchors in the ground. She has also conducted this work in a high tunnel, resulting in increased earliness of up to two weeks. However, most growers would probably consider using the low tunnel system. She covered the hoops with 1.25oz row cover and later with a layer of plastic over this for additional protection.

Some growers are experimenting with planting outside and leaving the onions unhooped, just covered with a few layers of row cover. This worked well for some people last year, but it was a mild winter, so this is not a uniformly recommended practice yet. You could always try planting one row on your farm this way, to do your own mini-trial. The complete research report for this work is available here: <u>https://extension.unh.edu/resources/files/</u>

Resource005477_Rep7652.pdf

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- At Veg Pro Interna-1. tional they cover their field lettuce with low hoops and rowcover 12 days before harvest to protect the crop from wind and hail. Here we are watch ing the hoops being set with the tractor on the left and then the cover will be rolled over the hoops with the trac tor on the right.
- 2. At van Winden's farm we saw a robotic weeder at work in his head lettuce.
- 3. We saw a soil blocker assembly line for their head lettuce production
- 4. At Jardins Vinet we are looking at a tunnel full of broccoli plugs that will be transplanted to the field soon. He grows 310 acres of broccoli on his 860 acre farm.

A look at Our Trip to Canada

Our bus trip to southern Quebec on June 28 was jaw dropping! Although they grow on a scale we will never see in eastern New York the growers and Extension folks who came saw familiar crops and pest challenges grown and managed with care and precision.



Is That Ozone Damage?

Selections from: <u>http://www.ars.usda.gov/Main/docs.htm?</u> <u>docid=12462</u>

Description of Ozone Injury

Ozone enters leaves through stomata during normal gas exchange. As a strong oxidant, ozone (or secondary products resulting from oxidation by ozone such as reactive oxygen species) causes several types of symptoms including chlorosis and necrosis. It is almost impossible to tell whether foliar chlorosis or necrosis in the field is caused by ozone or normal senescence. Several additional symptom types are commonly associated with ozone exposure, however. These include flecks (tiny light-tan irregular spots less than 1 mm diameter), stipples (small darkly pigmented areas approximately 2-4 mm diameter), bronzing, and reddening.

Ozone symptoms usually occur between the veins on the upper leaf surface of older and middle-aged leaves, but may also involve both leaf surfaces (bifacial) for some species. The type and severity of injury is dependent on several factors including duration and concentration of ozone exposure, weather conditions and plant genetics. One or all of these symptoms can occur on some species under some conditions, and specific symptoms on one

species can differ from symptoms on another. With continuing daily ozone exposure, classical symptoms (stippling, flecking, bronzing, and reddening) are gradually obscured by chlorosis and necrosis. Studies in open-top field chambers have repeatedly verified that flecking,



Ambient ozone injury to sensitive and tolerant snap beans



Ozone injury in a pumpkin leaf

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stippling, bronzing and reddening on plant leaves are classical responses to ambient levels of ozone. Plants grown in chambers receiving air filtered with activated charcoal to reduce ozone concentrations do not develop symptoms that occur on plants grown in nonfiltered air at ambient ozone concentrations. Foliar symptoms shown on this web site mainly occurred on plants exposed to ambient concentrations of ozone.

Yield Loss Caused by Ozone

Field research to measure effects of seasonal exposure to ozone on crop yield has been in progress for more than 40 years. Most of this research utilized open-top field chambers in which growth condi-

tions are similar to outside conditions. The most extensive research on crop loss was performed from 1980 to 1987 at five locations in the USA as part of the National Crop Loss Assessment Network (NCLAN). At each location. numerous chambers were used to expose plants to ozone treatments spanning the range of concentrations that occur in different areas of the world. The NCLAN focused on the most important agronomic crops nationally.

The strongest evidence for significant effects of ozone on crop yield comes from NCLAN studies (Heagle 1989). The results show that dicot species (soybean, cotton and peanut) are more sensitive to yield loss caused by ozone than monocot species (sorghum, field corn and winter wheat). For references, please refer to

the article at: <u>http://</u> <u>www.ars.usda.gov/Main/</u> docs.htm?docid=12462



Effect of O₃ on Yield of Crops



Seasonal Mean Ozone (ppb) (Heck et al. 1983. Environ Sci Tech 17: 572A)

Average Weekly Farmers' Market Prices

t i	Product (NC = nonconvention- al)	Unit	Mid- Hudson	Capital	Saratoga - Lake	Northern
	Reeftsteak Tomatoes	1 lhs		\$3.99	George	\$3.00
ľ	Beeftsteak Tomatoes NC	1 lbs.	\$2.50	\$4.41	\$4.49	<i>\</i> 0100
ľ	Blueberries	pint	\$3.25	\$4.25	\$4.25	\$3.00
ľ	Blueberries NC	pint	\$5.00	\$4.44	\$5.67	\$3.88
	Carrots	bunch	\$2.00	\$2.75	\$3.00	\$2.38
	Carrots NC	bunch	\$2.81	\$2.83	\$3.64	
	Cherry Tomatoes	pint	\$3.00	\$3.54	\$4.00	\$2.67
	Cherry Tomatoes NC	pint	\$3.81	\$4.45		
Ī	Heirloom Tomatoes	1 lbs.	\$3.75		\$4.33	
	Heirloom Tomatoes NC	1 lbs.	\$4.46	\$4.33	\$3.00	
	Honey	1 lbs.	\$7.67	\$8.92	\$8.00	\$4.50
	Honey NC	1 lbs.	\$7.33	\$8.31	\$6.00	\$6.50
	Raspberries	1/2 pint	\$4.50	\$5.06		\$4.25
	Raspberries NC	1/2 pint	\$4.00	\$4.75		
	Red Potatoes	quart	\$3.33	\$3.50	\$3.00	\$3.50
1	Red Potatoes NC	quart	\$3.50	\$3.67	\$3.92	
I	Russet Potatoes	quart		\$3.00		
	Russet Potatoes NC	quart			\$3.00	
•	Salad Mix	1/2 lbs.		\$3.00	\$3.00	\$3.00
•	Salad Mix NC	1/2 lbs.	\$12.00	\$5.25	\$5.09	
•	Shelled Peas	pint			\$3.75	\$3.00
	Shelled Peas NC	pint		\$4.00	\$4.00	
ŀ	Strawberries	pint	\$4.00	\$3.00		
ŀ	Strawberries NC	pint		\$3.58		
ŀ	Sugar Snap Peas	pint	\$2.50			\$3.00
	Sugar Snap Peas NC	pint	\$2.50	\$3.75	\$4.00	
	Sweet Corn	dozen	\$5.92	\$5.33	\$6.25	
ŀ	Sweet Corn NC	dozen	\$7.25	\$9.00	\$7.00	
ľ	Yellow Potatoes	quart	\$3.75	\$3.13	\$3.00	\$3.50
ľ	Yellow Potatoes NC	quart	\$3.00	\$4.50	\$4.67	

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Site	2016 Weekly Total 7/19- 7/26	2016 Season Total 3/1-7/26	2015 Season Total 3/1-7/26	2016 Weekly Rainfall (inches) 7/19-7/26	2016 Total Rainfall (inches) 3/1-7/19	2015 Total Rainfall (inches) 3/1-7/26
Albany	197.2	1596.7	1638.5	0.05	10.05	14.31
Castleton	191.6	1541.9	1530.3	0.17	12.71	14.73
Glens Falls	177.2	1419.4	1398.0	0.46	19.77	14.26
Griffiss	169.5	1298.9	1306.0	1.56	20.48	22.35
Guilderland	181.5	1436.0	1306.0	0.41	14.41	20.27
Highland	214.6	1694.0	NA	0.43	13.75	18.04
Hudson	206.9	1672.5	1653.0	0.57	16.81	17.68
Marlboro	204.5	1610.2	1586.5	0.55	13.51	14.0
Montgomery	212.2	1612.1	1631.5	0.77	11.36	15.64
Peru	469.7	1612.1	1312.3	0.57	9.0	17.4
Red Hook	194.7	1587.7	1566.9	0.28	11.54	14.5
Willsboro	167.3	1290.9	1274.0	0.28	11.62	21.86
N. Adams, MA	159.6	1267.2	1258.5	0.07	13.33	16.47

2016 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.

Sweet Corn Pest Chart (week ending 7/25)							
Location	CEW	ECBZ	ECBE	FAW	WBC		
C. Clinton	0	0	0	4	36		
S. Clinton	0	0	0	1	2		
N. Washington	0	0	1	1	3		
S. Washington	0	0	3	0	4		
Albany	0	0	3	0	3		
Rensselaer	1	0	0	20	7		
Saratoga	NA	0	3	NA	2		
Fulton	0	0	3	0	3		
Schoharie	0	2	0	1	8		
Greene	0	0	1	2	0		
Orange	0	0	1	2	0		
N. Ulster	0	1	6	0	0		
S. Ulster							
Dutchess							

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