Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Weekly Vegetable Update

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Regional Updates

North Country – Clinton, Essex, northern Warren and Washington Counties: The rain and all its associated problems continued this week, with more in the forecast. Field are saturated and most are impossible to work. Nitrogen is leaching from the soil and weeds are flourishing. Some good news is that many growers report lighter populations of cucumber beetles and flea beetles so far. Crops develop shallow roots in saturated soil which will make them more vulnerable to dry periods yet to come. Be ready to irrigate when the inevitable dry spell occurs to avoid stressing the crop even further. Cole crops are doing well in many locations under these cooler, wetter conditions. Onions need plenty of water so as long as drainage is decent and weed control is excellent, they should size up well. Watch out for botrytis leaf blight http://www.omafra.gov.on.ca/IPM/english/onions/diseases/botrytis_leaf_blight.html and onion downy mildew http://vegetablemdonline.ppath.cornell.edu/factsheets/Onions_Downy.htm Pelting rain can damage onion leaf tissue and create white lesions that look very much like botrytis leaf blight (see photo)

Photo credit: www.omafra.gov.on.ca

Capital District – Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, southern Warren and Washington Counties: The wet weather has led to many growers falling further behind in weeding, but otherwise crops are looking pretty good. Powdery mildew is moving in on early summer squash, and a little botrytis is moving into onions. Thrips are also at threshold in some onion fields. On the research side of extension, trials of melon, summer squash, potatoes, pumpkins, carrots, beets, and parsnips are all planted!

Mid-Hudson Valley- Columbia, Dutchess, Greene, Orange, Putnam, and Ulster Counties: The first official week of summer was characterized by two large storm systems that dumped significant amounts of rain throughout NY, with much of the mid-Hudson Valley seeing rainfall totals between 2 -3 inches. These recent cool, wet conditions have led to development of disease in some areas. Brassica downy mildew was found infecting radish, while a severe outbreak of basil downy mildew was identified in a greenhouse in Orange County. Botrytis leaf blight of onions has been increasing at some locations. Bacterial wilt, caused by the bacterium *Erwinia tracheiphila*, was found infecting winter squash. The bacterium is transmitted by striped and spotted cucumber beetles, so disease control is achieved through effective beetle control.

Downy Mildew Outbreaks

The recent period of wet, humid weather combined with relatively cool temperatures has caused conditions favorable for the development of several diseases. Downy mildew can be especially aggressive under these conditions. Be on the lookout for this disease on both Brassicas and cucurbits.

Yellow to orange angular downy mildew spots on radish progressing to leaf necrosis. Photo: KB

Brassica downy mildew

Downy mildew has recently been identified on radish in the mid-Hudson Valley. Downy mildew of cruciferous crops is caused by the water mold *Hyaloperonospora brassicae* and is a different type of downy mildew than those that infect cucurbits, lettuce, or basil. Susceptible hosts include cabbage, Chinese cabbage (including napa and bok choy) broccoli, cauliflower, radish, turnips, Brussel sprouts, mustard, collard, rutabagas, kohlrabi, kale as well as cruciferous weed species. It is particularly destructive if plants are infected at the seedling stage. On more mature plants such as the radish in the picture below, it causes poor growth and reduces yield and quality.

This disease can be identified by the angular lesions that develop on leaves and inflorescences. The lesions enlarge and become irregular, yellow to orange necrotic patches. Under moist conditions, sporulation on the underside of the leaf may be seen as a gray to purple fuzz. Affected tissues become susceptible to attack by secondary rotting organisms. Downy mildew also attacks the taproots of turnip and radish and infected organs develop a black, epidermal blotch and an internal discoloration. The pathogen overwinters on winter-sown host crops or cruciferous weeds. Sporangia are spread by wind and splashing water. Oospores, if produced, survive in crop residues and in the soil.

Heavy sporulation gives leaf undersides a gray to purple, downy appearance. Photo: UMass Extension

Manage Brassica downy mildew by planting resistant varieties, removing crop debris/weed hosts, rotating with non-hosts, and applying fungicides as recommended by the Cornell Integrated Crop and Pest Management Guidelines.-KB

Cucurbit downy mildew (CDM) found in Erie county

Last week we reported CDM in Michigan, this week it has spread over to NY where it was reported on Tuesday morning in Erie County. This disease has the potential for rapid spread with short incubation periods. It is likely we will see it in eastern NY soon. You can keep an eye on the progression of CDM by logging onto http://cdm.ipmpipe.org/current-forecast. As of Tuesday afternoon the CDM forecasting website has ENY under a low risk designation, but this can change quickly so check in often, scout your fields and be prepared to initiate a spray program. For organic production, there are a number of labeled copper based products as well as bio pesticides such as Double Nickel or Serenade Opti that can be used in combination or alternation. More details on management strategies in Margaret's articles below.-TR

From Margaret Tuttle McGrath, Cornell University
Long Island Horticultural Research and Extension Center

Manage downy mildew by planting resistant varieties, monitoring disease occurrence and weather forecasts, inspecting crops for symptoms weekly, and applying broad-spectrum protective fungicides before detection and systemic narrow-spectrum fungicides when downy mildew occurs early in crop production.

Most cucumber varieties and a few melons have resistance to downy mildew. Although with the new race of CDM, cucumber varieties do not exhibit the very high level of resistance that they did to previous races, resistant varieties are still a valuable component of downy mildew management.

This disease has become more difficult to manage due to fungicides (in particular Presidio and Previcur Flex) not performing as well as they have in the past likely because of fungicide resistance. Below are fungicides remaining on the list for growers to consider. All should be used tank-mixed with a protectant fungicide (mancozeb or chlorothalonil) and in an alternating program to manage development of resistance to additional fungicides.

Ranman. Can be applied at most 6 times. Alternate with other fungicides such that no more than 50% of the applications are Ranman. Ranman can be applied 3 times consecutively but these need to be followed by 3 applications of other fungicides. Use with an organosilicone surfactant.

Curzate or Tanos. These have some curative activity (up to 2 days under cool temperatures) but limited residual activity (about 3-5 days). They can be a good choice when it was not possible to apply fungicide at the start of a high risk period when temperature is below 80 F. Both must be tank-mixed with a protectant. Apply another targeted fungicide 3-5 days later. Apply no more than

4 times in a season (6-9 for Curzate depending on rate); no consecutive applications of Tanos are permitted. REI is 12 hr. PHI is 3 days.

Forum. Apply no more than 3 times in a season with no more than 2 consecutive applications. REI is 12 hr. PHI is 0 day.

Gavel (now labeled for use on all cucurbits). This is the only product that consists of a targeted fungicide and a protectant fungicide (mancozeb). Apply no more than 8 times in a season. Some cantaloupe varieties are sensitive to Gavel. Workers must be notified that a dermal sensitizer was applied both orally and by posting at entrance to treated area for 4 days. REI is 48 hr. PHI is 5 days.

Phosphorous acid fungicides are labeled but are not as effective inherently as for other downy mildews.

Angular, necrotic, downy mildew pots on cucumber leaf.

Note that Ridomil and QoI fungicides have not been recommended for several years because of resistance.

Organic fungicides labeled for managing downy mildew in cucurbit crops:

Several different types of organic fungicides are labeled for managing downy mildew in cucurbit crops. See the list below. Timing of applications is critical. Fungicides affect pathogens before infection. There is a latent period of about one week between infection and symptom appearance. Thus symptoms present at the time of the first application, plus those appearing a few days afterwards, will not be affected by the fungicide. The cucurbit downy mildew forecast web site is an important tool for determining when first infection likely will occur and thus when fungicide application is warranted.

Actinovate AG. 0.0371% *Streptomyces lydicus* strain WYEC 108. For best results with applications to foliage, label indicates to use a non-ionic spreader-sticker. OMRI-listed. EPA Reg. No. 73314-1. Monsanto BioAg (formerly Natural Industries, Inc.).

BacStop. 2.0% thyme, 2.0% clove & clove oil, 1.5% cinnamon, 1.0% peppermint & peppermint oil, and 1.0% garlic oil. Recommended used with EF400 for these and some other diseases. Exempt from EPA registration. USAgriTech, Inc.

Companion. 0.03% *Bacillus subtilis* strain GB03. EPA Reg. No. 71065-3. Growth Products, Ltd.

Copper. Several formulations available.

Double Nickel 55 LC and WDG. *Bacillus amyloliquefacinens* strain D747, 98.8% and 25%, respectively. OMRI-listed. EPA Reg No. 70051-107 and 108, respectively. Certis USA, LLC.

EF400. 8.2% clove, 8.1% rosemary, and 6.7% peppermint. Exempt from EPA registration. No Ag Label. USAgriTech, Inc.

MilStop. 85% potassium bicarbonate. OMRI-listed. EPA Reg. No. 70870-1-68539. BioWorks, Inc.

Organocide. 5% sesame oil. Labeled broadly for several fungal diseases and insects. OMRI-listed. Exempt from EPA registration. No Ag Label. Organic Laboratories, Inc.

OxiDate. 27% hydrogen dioxide. OMRI-listed. EPA Reg. No. 70299-2. BioSafe Systems, LLC.

Regalia. 5% Extract of *Reynoutria sachalinensis.* Boosts the plant's natural defense mechanisms against certain fungal and bacterial diseases. OMRI-listed. EPA Reg. No. 84059-2. Marrone Bio Innovations, Inc.

Serenade Max and Serenade ASO. 14.6% *Bacillus subtilis* strain QST 713. Bayer CropScience (formerly AgraQuest).

Serenade Opti. 26.2% *Bacillus subtilis* strain QST 713. New formulation. OMRI-listed. EPA Reg. No.264-1160. Bayer CropScience (formerly AgraQuest).

Sonata. 1.38% *Bacillus pumilus* strain QST 2808. OMRI-listed. EPA Reg. No. 69592-13. Bayer CropScience (formerly AgraQuest).

Trilogy. 70% clarified hydrophobic extract of neem oil. OMRI-listed. EPA Reg. No. 70051-2. Certis USA, LLC. (use before flowers open as it is toxic to bees)

Zonix biofungicide. 8.5% Rhamnolipid Biosurfactant. OMRI-listed. EPA Reg. No. 72431-1. PropTera, LLC.

Please Note: The specific directions on fungicide labels must be adhered to -- they supersede these recommendations, if there is a conflict. Before purchase, make sure product is registered in your state and approved by your certifier. Any reference to commercial products, trade or brand names is for information only; no endorsement is intended.

Dark purplish-gray spores of the downy mildew fungus only develop on lower surfaces of leaves. These spores are diagnostic but not

What's FRAC?

In many of our articles you will find us referring to FRAC groups when we talk about fungicide resistance management. Understanding FRAC codes is important when choosing products in a rotation. The following is compiled from an article written by Andy Wyenandt, Assistant Extension Specialist in Vegetable Pathology, Rutgers University and the Cornell 2014 Vegetable Production Guidelines. -TR

FRAC, or the Fungicide Resistance Action Committee, was developed to help provide resistance management guidelines for fungicide use. Fungicides have been arranged by Group Names or *Chemical Groups* and assigned a Group Code Number or Letter. "At-risk" fungicides have a high probability of resistance development because of their modes-of-action (MOA). Those fungicides with chemistries that have a specific target site against fungal pathogens, unfortunately, will have a higher risk for losing efficacy because of resistance development in the pathogen. Importantly, fungicides with similar chemistries and MOAs that belong to the same FRAC code may also be prone to cross-resistance, where a fungus that develops resistance to one fungicide in the FRAC group may also develop resistance to other fungicides in the group, even if those other fungicides haven't been used.

Great lengths have been taken to reduce the risk of fungicide resistance development for many fungi where 'at risk' fungicides are used. There are currently 43 numbered FRAC groupings and 7 lettered groups. As new fungicides with new MOAs are released on the market, new numbered groups will be added to the list. For many vegetable crops many of the most common fungicides used fall into a few of these groupings, most notably:

Resistance problems generally not recognized for these groups:

Group 33 phosphonates- such as Aliette and Phostrol
Group 40 *carboxcylic acid amides*- Forum and Revus
Group 43 *pyridinylmethly-benzamides*- Presidio

Multi-Sites (M)

Group M1 *inorganics*- coppers such as Kocide, Champion
Group M2 *inorganics*- sulfurs such as Microthiol or Disperss
Group M3 *dithiocarbamates* - Maneb or Mancozeb
Group M5 *chlorothalonil* - such as Bravo

Host Plant Defense Induction (P)

Group P1 *benzo-thiadiazole*- such as Actigard

Biologicals (B)

Group B Fungal/Bacterial species– eg. Contans or Serenade

Not Classified: Mineral oils, organic oils, potassium bicarbonate

Some "At Risk" FRAC Groups :

Group 1 *benzimadazoles /thiophanates* such as Mertect
Group 3 DeMethylation Inhibitors (DMIs) such as Procure, Rally, Quilt, Tilt
Group 4 phenylamides- such as Ridomil
Group 11 Quinone outside Inhibitors (QoI)- such as Quardris, Flint, Cabrio

Knowing which fungicides belong to which FRAC code will have an impact on spray schedules, disease control, and resistance management. Protectant fungicides, such as those in the FRAC code M, have a low risk for fungicide resistance development and have less stringent restrictions. However, for those chemicals with a higher risk of fungicide resistance development the product labels are more stringent and labels should be followed precisely. Labels often require that high-risk fungicides be tank-mixed with protectant fungicides to reduce the chances for fungicide resistance development. In general, tank mixing high-risk fungicides with protectant fungicides is always a good resistance management strategy. For example , the strobilurin fungicides in FRAC code 11 should not be sprayed consecutively. Such that, if Quadris (azoxystrobin, 11) is sprayed one week, it should not be followed the next week with another Group 11 compound such as Flint (trifloxystrobin, 11) or Cabrio (pyraclostrobin, 11) or a compound containing a Group 11 fungicide (Pristine, pyraclostrobin + boscalid, 11 + 7). A simple way to remember what to use next in your fungicide rotation is to use a labeled fungicide with a different FRAC number or letter.

Also, do not use " at risk" fungicides as a rescue treatment for disease control. Applying " at risk" fungicide after disease is present will increase the chances for development of resistant populations of plant pathogenic fungi.

FRAC codes for specific fungicides registered by crop can be found in Table 2.3.1 in the 2014 Cornell Commercial Vegetable Production Guidelines. The Guidelines are a great resource to help you chose fungicides for use in rotations. Also, FRAC codes typically appear in a text box on the upper right corner of the first page of fungicide labels.

Efforts in learning and using new chemistries with new modes of action along with knowing their FRAC grouping will ultimately pay off in the long run by reducing the chances for fungicide resistance development.-TR

Rotating Chemical Classes vs. Label Names

This past week a couple of growers called for specific chemical recommendations as they had a quickly moving disease or had insect damage they didn't seem to be able to get under control. The bottom line in both cases, to make a recommendation or to make a change is to review what has been applied to the crop to evaluate the issue. Was it just the wrong chemical for that disease or insect or has the problem become resistant to what would be expected to work?

For fast moving/reproducing pests we really need to look at the types of chemicals applied. This means that for that 'just right" pesticide you look at the GROUP of chemicals (sometimes the word CLASS is used for insecticides, same idea), this comes with a number. Sometimes brand names have two active ingredients in them and both GROUPS need to be accounted for. Sometimes the GROUP is followed by a letter. The letter is a subgrouping saying that they are similar chemistries, but not exactly the same. You should consider everything with the same number the same chemical.

When I look at insecticides for Striped Cucumber Beetle on cucurbits listed in the Cornell Guidelines the GROUPings look like this down the list: (they are already somewhat displayed by active ingredients)*

Assail - 4A	Baythroid - 3A	Sevin - 1A	Volaim - 28+3A
Asana – 3A	Admire – 4A	Warrior – 3A	Endigo – 3A + 4A
Pounce – 3A	Perm-Up – 3A	Platinum – 4A	Actara – 4A
Gladiator – 3+6			

As you can see there are 13 chemicals, in terms of brand names but there are really only 3 different GROUPs of chemicals represented when we look at overlap. OK, Gladiator adds GROUP 6 but if you have already used several applications with a group 3 chemical, it's not going to be as effective. Same is the case for Volaim and its combination.

It is critical that you look at groups and not just label names as you may be applying he same thing over and over and over, building resistance. Several of the chemicals have notations that tell you "no more than 2 applications before you rotate chemical GROUP". That requires more research to ensure the next spray will be efficacious and not a waste of your time, money and possibly crop.

*for brevity this may not be the full name/formulation listed in the Guidelines.

-Maire Ullrich

Weather and Microbes

We have been seeing a lot of wet weather recently, and it's good to know how the weather affects food safety risks. Remember first off that bacteria are to blame for a great many food safety risks, including pathogenic strains of E. coli, Salmonella, Listeria, and campylobacter to name a few. All of these bacteria require food, some amount of warmth, and water to grow and multiply. Out in the field drying winds and UV rays make for a harsh environment in which bacteria have difficulty surviving. For this reason, the new Produce Rule under the food safety modernization act (FSMA) will allow for a .5 log reduction per day when calculating the bacterial load in irrigation water. In plain English that means that roughly 2/3 of the population of bacteria in the irrigation water will die after each day in the field. Although regulations may come with simple numerical guidelines, nature is always a little bit more complicated than that.

On a very hot and dry day in mid-summer, the bacterial die-off might be much higher than 66%. However, the die-off rate on days like we've been having recently with the cool and wet weather might actually be very low. When placed in a very humid environment, these bacteria probably will have a die-off rate of near zero. That means that any contamination of your produce in this wet weather is probably going to survive and persist on your crop very well. It is a good practice to assume that produce that is harvested after a few days of cool wet weather might have a higher-than-average level of contamination.

We know that you can't actually sterilize produce, but it's important to take any steps possible to prevent cross-contamination. With all of this wet produce, there is bound to be some that has a bacterial contaminant on it and if you aren't using proper washing techniques, you could be cross-contaminating and putting yourself at risk. Be aware that standing water in your fields can be a source of contamination and are therefore a risk. It would not be advisable to harvest produce out of these extremely wet conditions.

Written by Erik-John Schellenberg- Cornell Cooperative Extension, GAPS/Post Harvest Resource Educator

Enemy #1 - Grassy Annual Weeds

Ask any vegetable grower what their biggest pest is, and they'll probably say weeds. And the worst type for most growers are the grassy annuals. They are prolific seed producers and most soils have a seed bank, a supply of weed seeds that have accumulated over the years. Every the soil is turned, seeds are redistributed and sprout. Annual weeds keep coming back, year after year

Grasses are notoriously difficult to identify as seedlings but they each have characteristic flower/seed stalks. You want to get them out of your fields before they have a chance to flower of course, but every grower has experienced them getting out of hand, especially this year where much of the soil has remained too wet to work for days on end.

There are a variety of herbicide options, for pre-plant and pre-emergent, with fewer options for post-emergent grassy weeds. The labels are specific for different crops so check carefully to be sure your crop is listed. Here are some of the more common culprits in the annual grassy weed category. (Source of information and all photos: http://extension.psu.edu/pests/weeds/weed-id)

Barnyardgrass - Echinochloa crusgalli. Grows in a clump up to 30 inches in diameter and is aggressively competitive with the crop for nutrients. It geminates best in moist, compact soils with plenty of light. Germination slows in late summer as the crops become tall enough to shade the soil which inhibits germination. It tolerates wet soil and growth is slowed during periods of drought.

Foxtail –Three species: Green (Setaria veridis), Yellow (S. glauca or S. lutescens) and Giant (S. faberii), all notable for their bushy, foxtail-like seed heads. Germinate in late spring under warmer conditions. Often confused with fall panicum during the seedling stage. Mature seeds germinate quickly the same year and need just 40 days to maturity so this weed remains a challenge all season long.

Large or Hairy Crabgrass – Digitaria sanguinalis. Very hairy leaves and sheaths, sprawling growth. Seed heads are distinctive and resemble fingers. Aggressive growth and prolific seed producers. The website referenced says a single plant can produce 700 tillers and 150,000 seeds. Grows best during warm temperatures in mid-summer and tolerates hot, dry, compacted soil.

Fall panicum - Panicum dichotomiflorum varies in height from 1-3 feet. In the seedling stage it closely resembles foxtail. Later, the bulging nodes along the stem give it a zigzag look. It thrives in wet conditions and tolerates flooding. It germinates earlier than the other grassy weeds and is most aggressive in early summer. Seeds do not mature until late summer and then need a winter chilling. Witchgrass (P. capillare) is a smaller relative with a looser, delicate seedhead. Both types do well in wet soils but tolerate all soil types. Witchgrass is not as aggressive as fall panicum.

Resource: http://extension.psu.edu/pests/weeds/weed-id

What does "direct supervision" mean for pesticide applications on the farm?

Just last week, someone asked me what constituted "direct supervision" when it comes to applying pesticides and the kind of contact one might maintain with workers applying in fields. Of course, the best is visual contact so that you can see that the worker is safe and the pesticides are on-target. However, that is not necessary, by law in all cases. Primarily, as you will see below, the label is the biggest determining factor. If it is a skull-and-crossbones or DANGER label (likely restricted use too) it will have the highest level of contact required. Note that federal labeling of restricted use triggers on-site presence for NYS regulations but for WPS is less stringent. The stricter regulation is what you must follow. And, above all, the label is the law. So, if a label states that direct on-site supervision must be maintained, regardless of that chemical's restricted use status, you must maintain that level of supervision. -MU

EPA Worker Protection Standard has this to say:

SPECIFIC DUTIES

Restrictions During Applications: Both handler employers and pesticide handlers must make sure that each pesticide is applied so that it does not contact, either directly or through drift, anyone except appropriately trained and equipped handlers.

Monitoring Handlers : Pesticides with skull and crossbones At least once every 2 hours, someone must check on — by sight or by voice communication — any handler who is handling a pesticide that has a skull and crossbones symbol on its label. (For monitoring the handling of fumigants in greenhouses, see immediately below.)

Source: http://www.epa.gov/agriculture/twor.html#htc

Feel free to review the entire document at: http://www.dec.ny.gov/regs/4424.html#14558

Sweet Corn Pest Trap Catches

(Last Week ending 6/23/15, This Week ending 6/29/15)

Location	ECB-E Last Week	ECB-E This Week	ECB-Z Last Week	ECB-Z This Week	CEW Last Week	CEW This Week	FAW	WBC
Central Clinton	0	0	0	0	0	0	0	0
South Clinton	0	0	0	0	0	0	N/A	N/A
Orange	1	2	6	4	0	3	N/A	N/A
C. Ulster	2	0	1	3	3	0	0	0
N. Ulster	8	7	7	6	3	1	N/A	N/A

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** 6/22- 6/28	**2015 Season Total** 3/1 –6/28	**2014 Season Total** 3/1 - 6/28	**2015 Weekly Rainfall** 6/22- 6/28 (inches)	**2015 Season Rainfall** 3/1 –6/28 (inches)	**2014 Total Rainfall** 3/1 - 6/28 (inches)
Albany	**133.7**	**1030.8**	**903.0**	**1.08**	**10.18**	**11.63**
Castleton	**121.4**	**968.5**	**856.2**	**1.15**	**10.63**	**11.65**
Clifton Park	**126.0**	**984.6**	**816.4**	**1.11**	**11.03**	**11.46**
Fishkill	**121.2**	**983.3**	**Na[1]**	**0.42**	**4.96**	**Na[1]**
Glens Falls	**119.5**	**851.1**	**817.5**	**1.28**	**9.84**	**15.29**
Griffiss	**108.0**	**808.6**	**757.5**	**1.94**	**16.55**	**19.64**
Guilderland	**115.5**	**916.6**	**828.5**	**1.21**	**11.27**	**Na[2]**
Highland	**126.5**	**1049.3**	**934.5**	**1.43**	**14.98**	**13.65**
Hudson	**126.3**	**1042.4**	**929.0**	**1.23**	**11.53**	**18.0**
Marlboro	**126.5**	**990.6**	**879.5**	**1.04**	**11.13**	**13.27**
Montgomery	**129.9**	**1026.6**	**897.0**	**1.13**	**12.99**	**14.37**
Monticello	**97.9**	**770.9**	**663.5**	**0.00**	**7.78**	**6.72**
Peru	**112.2**	**781.7**	**753.7**	**2.09**	**11.81**	**13.09**
Red Hook	**117.2**	**984.0**	**906.5**	**1.63**	**12.88**	**5.42[3]**
Shoreham, VT	**101.7**	**839.7**	**774.8**	**Na[4]**	**Na[4]**	**11.12**
Wilsboro	**111.4**	**754.2**	**709.7**	**1.85**	**14.84**	**9.74**
South Hero, VT	**120.5**	**799.6**	**750.0**	**1.58**	**13.99**	**13.45**
N. Adams, MA	**106.2**	**796.2**	**701.5**	**1.05**	**10.59**	**13.55**
Danbury, CT	**125.6**	**898.9**	**792.5**	**0.00**	**10.41**	**14.66**

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.