Important dates:

See the flyers for more information on the following events:

August 11, 2016 Craft Beverage Summit at CLEREL - Registration closes this weekend!!
August 31, 2016- Cornell Vegetable Program Field Day at CLEREL
September 1, 2016- Cover Crop Conference at CLEREL

Building Strong and Vibrant New York Communities

Diversity and Inclusion are a part of Cornell University’s heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.
Chautauqua Industrial Development Agency, Chautauqua County Department of Planning and Economic Development, Cornell Lake Erie Regional Grape Program, and Cornell Cooperative Extension of Chautauqua County proudly present the inaugural Chautauqua County Craft Beverage Summit.

Malting barley, cooperatives, hops production and the potential for the craft beverage industry in NYS will be discussed with all aspects covered from producing the raw materials, producing a craft beverage, marketing the finished product and working together to bring a craft beverage operation to fruition in Chautauqua County.

Thursday, August 11, 2016
8:00 AM - 3:00 PM
CLEREL
6592 West Main Road
Portland, NY 14769
And
21 Brix Winery

Space is LIMITED for this FREE Event
Don't Delay - Register today at:
https://lergp.cce.cornell.edu/event.php?id=270

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The Cornell Vegetable Program is hosting a Sustainable and Organic Vegetable Pest Management Field Day on August 31, 2016 at the Cornell Lake Erie Research and Extension Laboratory in Portland, NY. Extension Vegetable Specialists, Darcy Telenko, Judson Reid, and Robert Hadad along with Abby Seaman, Vegetable IPM Coordinator, and Cornell faculty Prof. Christine Smart and Prof. Stephen Reiners will be leading research site tours and answering questions on sustainable and organic pest management options for fresh market vegetable growers. Information will be provided for both conventional and organic growers at all levels of expertise. Industry representatives will have the opportunity to meet with growers to comment on their products. DEC and CCA credits have been applied for to be available for this field day.

Topics:
- Weed Management in Sweet Corn, Pumpkin, Winter Squash and Root Crops
- Disease Management in Organic Cucumber and Tomato Production
- Vegetable Disease Control Update
- Insect management and Specialty Crop Vegetable Variety Demonstration
- Improving Fertility Management in Vegetable Crops
- Updates on Ongoing Research Projects in the Region

Research trials comparing conventional and zone-tillage weed management options in pumpkin and winter squash will be on display. The peculiarities in regards to weed management for each tillage system will be discussed including the practice of a stale-seed bed technique using a herbicide or flame-weeder burn-down treatment as effective weed management tools. In addition, the stale-seed bed technique will be presented for use in beet and parsnip. Growers will be able to view the different weed management tools, look at the economics of utilizing each system, and ask questions. This
A key component of this event is the support provided by industry organizations. Contributing organizations will be recognized as an integral part of this dynamic event. Sponsorships are available for both the Vegetable Field Day and Cover Crop Field contact Darcy Telenko at 716-697-4965 or dep10@cornell.edu for more details.

About Cornell Cooperative Extension Cornell Vegetable Program
The Cornell Vegetable Program is one of the premier regional agricultural Cornell Cooperative Extension programs in New York, serving a large multi-county region in the Western part of the state. The team’s Vegetable Specialists work together with Cornell faculty and extension educators statewide to address the issues that impact the industry. The Cornell Vegetable Program provides educational programs and information to growers, processors and agri-business professionals, arming them with the knowledge to profitably produce and market safe and healthful vegetable crops, contributing to the viability of farms and the economic wellbeing of New York State. Specifically, our program focuses on food safety, variety evaluation, market development, pest management, and cultural practices.
The Cornell Vegetable Program is supported, in part, by twelve county Cornell Cooperative Extensions of Western New York: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne and Yates Counties.

_Cucumber and tomato variety trials at Cornell Lake Erie Research and Extension Laboratory. Photo Credit Darcy Telenko, CVP._
Cover Crop Workshop and Field Day

September 1, 2016 @ CLEREL
9:00am-4:00pm
6592 West Main Rd.
Portland, NY 14769

Join the Lake Erie Regional Grape Program for a full day of education surrounding cover crops in Concord vineyards.

- Current research
- Leading scientists in cover crop research
- Tour demonstration plots
- Hear local growers sharing their experience

Fee: $10; includes morning refreshments and lunch

Register by August 25, 2016 at the LERGP web-site Registration or call Kate at 716-792-2800, e-mail: kjr45@cornell.edu
Dry Weather Keeps Costs Down but Will Begin to Impact Revenue

As is often the case the 2016 grape crop is on a precipice. On one hand, dry weather has made production relatively simple. Insect pressure seems to be at historically average levels, while disease pressure is historically low. Input costs were reduced dramatically. We have seen some disease where growers got very aggressive with their spray intervals. For the most part, many growers have eliminated the most expensive mid-summer spray and have seen no impact. In general, most growers were able to save $50 - $75 on material costs compared with prior years and were able to get better control.

The precipice of course, is the real unknown that could result from further drought stress. At this point in the season there is an increasing probability that drought stress will have significant economic impact. Berry size reductions will reduce potential crop. Though, berry size does have the ability to catch-up as long as rains occur over the next 30 days. The larger concern is the impact on vine size for next year. At this point the economic impact is not something we can assess. Observations of drought stress do indicate that some vineyards will be impacted. Their ability to ripen an average to above average crop next year is questionable. The amount of acreage impacted in that way will really depend on rainfall this month.

A reduction in vine size in vineyards with marginal (2.0 lbs.) or small (1.5 lbs.) will not only reduce potential ripening, it is also likely to create management challenges in controlling crop size. Aggressive thinning and pruning practices necessary to allow vine size recovery are not widely adopted in these kinds of vineyards. The cyclical cropping that can result from weather events that impact vine size complicates the processing and marketing of juice and creates a significant threat to industry sustainability.

I am not sure anyone can say we are there yet. The probability of these challenges arising in 2017 is something to start strategically planning for as a grower. We are approaching a point in the growing season where at least some economically significant impact on vine size is becoming inevitable. Unfortunately, our best mechanical tool for overcoming these challenges is likely to be shoot thinning. Without this tool in the toolbox, growers will be forced to aggressively prune. This expensive practice occurring during winter and before frost is fading quickly as growers try to compensate for lower prices.

In the event that vine size shrinks dramatically growers need to ensure access to one of these tools for the 2017 crop year. The only silver lining is that early fall observations will be a key indicator if this planning is necessary for individual operations. That gives growers time to change pruning practices or obtain access to a shoot thinner.
Continued Drought Stress

We are getting to a point where finding water stressed vines is not difficult. This past week all NEWA stations within the belt received measurable amounts of rain. However, 0.2 inches of rain is not what most of us were hoping for.

There seems to be many vineyard blocks where the vines are able to pull up adequate moisture, and these sites are doing well considering the conditions. On the flip side, small vines and blocks with shallow roots have not been able to pull up the moisture they need causing them to shut down early in order to conserve moisture. Being able to conserve moisture is a great function for a grape vine to have, but when this happens, the vine is unable to photosynthesize and produce carbohydrates. A prolonged reduction of carbohydrates can affect fruit quality, vine size, and the reserves that vines rely on from bud break to bloom.

Following the berry curve, we can see the continued effects water stress has on berry size. Samples this week came in 30% below average. Samples for the berry curve are taken off vines on gravel soils and have shown water stress symptoms for a couple of weeks. This is why the berries are small. Like I mentioned earlier, there are sites that are faring better under the current conditions. Berry sizes on these sites are closer to average.

Currently, here at CLEREL, we are 8 inches below average for rainfall. However, depending on your location
this amount may change. I have included two columns in the NEWA table on the next page to include weekly precipitation and accumulated precipitation totals for May, June and July. Niagara County is noticeably drier than the immediate belt with areas only receiving 3 inches in the past three months.

The NOAA ‘Drought Monitor’ has maintained the status of “Severe Drought” (two pages ahead) for most of the region. Growers in PA are still in “Moderate Drought”.

![Graph of precipitation over months]

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<th>Location</th>
<th>Past week Precip</th>
<th>Precip. July total</th>
<th>Precip. June total</th>
<th>Precip May total</th>
<th>May, Jun &amp; July total</th>
<th>Total March CDD</th>
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Note: All Weather data reported as of 8/3/2016. NA-Sensor Malfunction. Precip in inches.
Grape Berry Moth
The table below shows most areas of the belt will be at 1620 DD or higher by this weekend or early next week, signaling the next time to make an insecticide application for grape berry moth. We are seeing less grape berry moth damage this year, but as Andy Muza said in the meeting today, less damage in a severe risk vineyard is still a lot of damage. Make sure to get out and scout your vineyard blocks for grape berry moth if you have not already done so. Any time after 1470 DD will be a good time to scout. Make sure to scout both the interior and exterior of vineyards to avoid surprises. Threshold at this scouting time is 15% damaged clusters. Remember that it only takes one berry with GBM damage to qualify as a damaged cluster.
Continue to access the grape berry moth model for the station(s) nearest you on the NEWA website http://newa.cornell.edu to get a “heads-up” on when you should start scouting for the next generation of grape berry moth. Accessing the GBM model page on NEWA also provides you with information on the pest status and what pest management measures should be taken as shown in the figure below.
Diseases

**Powdery mildew** – Throughout the region powdery mildew remains at low – moderate levels in most Concord vineyards. At this point, the most noticeable symptoms caused by powdery mildew are some yellowing and cupping of leaves near the ends of Concord shoots (Figure 1).

Insects

**Grape Berry Moth** – it’s that time again when growers should be gearing up for applying an insecticide for the third generation of GBM in their high pressure areas (i.e., High – Severe Risk sites). According to the GBM Degree Day Model in NEWA [http://newa.cornell.edu/index.php?page=berry-moth](http://newa.cornell.edu/index.php?page=berry-moth) the majority of vineyard blocks in our region from Lake City, PA – Ransomville, New York will be reaching 1620 degree days this Saturday – Monday. However, check the NEWA site closest to your blocks to determine when 1620 degree days are expected to occur.

If you are planning to use Intrepid (PA only), Altacor or Belt then these materials should be applied as close as possible to 1620 degree days. Other insecticides (e.g., Mustang Max, Leverage 360, etc.) should be applied approximately 100 degree days later.

As I mentioned in the Crop Update two weeks ago, consider applying 2 insecticide applications (7 – 10 days apart) in problem areas that have had consistently high injury levels. Since GBM injury usually decreases in rows/post lengths the farther they get from the woods an entire block may not need an insecticide application. The amount of area needing to be sprayed will depend on the history of GBM injury at your site and your scouting information.

If you have not scouted yet for GBM then do it NOW for all blocks to determine if an application will also be needed in traditionally Low or Moderate Risk sites (Figure 2).

**Grape leafhopper** – while you are scouting for grape berry moth also check for grape leafhopper feeding injury (Figure 3) to determine if treatment may be needed for this pest. The combination of dry weather, high crop load and high GLH populations in a block indicate the need for an insecticide application. So far, in areas that I have checked, no sites had population levels high enough for an insecticide application.
Weather: At our site, July rainfall totaled 2.68 inches, which was down by about 30% from our long term average. Most of the rain in July fell during the last 10 days of the month, helping to keep vines at our site from going into stress. Currently, our season rainfall total (April 1-July 31) is about 37% below our long term average. Growing degree day accumulations in July were above average, but only by about 10%, placing us slightly ahead of average for the season (starting April 1st). There is rain in the forecast: according to Accuweather, there is potential for rain late Friday afternoon and early Saturday morning, whereas Skybit forecasts rain only during the early morning hours on Saturday.

There’s not much to add regarding diseases. Fruit of Concord and Niagara should no longer by susceptible to black rot and the dry weather has pretty much shut down downy mildew so far this season. Powdery mildew is building on leaves, but this is nothing unusual for early August. The need to keep leaves clean and fully functional for as long as possible is dependent on crop load and variety. We all know the drill by now: heavier crops will require more functional leaf area to ripen and Concord will need to hang longer than Niagara. Also, Niagara may be slightly less susceptible to powdery mildew than Concord. The wild card is the weather. Wet, cloudy weather from here on (seems unlikely at this point, but it’s always possible) will make keeping leaves clean, more critical for large crops. As for concerns regarding overwintering inoculum and powdery mildew pressure next year; according to research at Cornell, powdery mildew that develops after about labor day, will likely not have time to mature to the point of leaving overwintering inoculum. Of course, this is much more critical for susceptible wine varieties. In other words, controlling mildew on leaves up to about labor day, can greatly reduce (but not eliminate) overwintering inoculum of powdery mildew for next season.

For wine grape growers of bunch rot susceptible varieties, a spray at veraison for Botrytis is coming up and it is an important one, especially if the weather turns wet. Varieties with excessively compact clusters (Pinot Gris, Vignoles) are already showing damage from berries being pushed off their stems. In some cases, whole branches of the cluster are ripped off, or cluster rachises split up the middle, as berries have no room to expand in overcrowded clusters. Often this material just dries up when it occurs before sugar has started to accumulate, but this kind of damage can generate Botrytis sporulation before veraison that exacerbates bunch rot problems later. Unfortunately, berry damage during ripening opens the way for Botrytis and sour rot development that is difficult, at best, to try and spray your way out of, especially in tight clusters that are nearly impossible to penetrate.
The IPM Climate & Weather Conference – August 15, 2016 at Albany CCE, Voorheesville, NY

Climate, Weather, Data: Protecting Our Crops and Landscapes will be held August 15, 2016 at the Albany County Cornell Cooperative Extension Office, 24 Martin Rd., Voorheesville, NY 12186. Because space is limited, pre-register on the Registration page. Pre-registration closes on August 10. The Climate, Weather, Data portal has maps, an agenda and registration details. If you have questions, call Amanda Grace at arw245@cornell.edu or 315-787-2208. The program will run from 9:00-4:15 and costs $45 – which includes lunch, breaks and materials. Yes, get DEC credits, too!

With all the talk about climate change you might be wondering how it will affect food production, pests, and even landscapes—and what you can do about it. This is definitely a year when weather changes have affected our crops – from the Valentine’s Day massacre winter freeze to plant life gasping for water. Come and learn how gathering information on weather and climate can help growers, gardeners and landscapers plan for changes. Find details on The Climate and Weather Conference webpage.

We are honored that Richard Ball, the Commissioner of the New York State (NYS) Department of Agriculture and Markets, will kick off the conference with opening remarks. A wide variety of speakers from NYS and the Northeast will provide background information on the current state of knowledge on climate change and changes in our weather patterns, and how collecting climate and weather data can help us predict and manage pests. Open discussion sessions are included so you can ask your own questions. Join us to learn and discuss!

Agenda below or access it on the Climate and Weather Conference webpage!

Climate, Weather, Data: Protecting Our Crops and Landscapes
The 2nd Annual IPM Conference – August 15, 2016 at Albany CCE, Voorheesville NY
Organized and hosted by the New York State Integrated Pest Management Program (NYS IPM)
Supported in part with funding from Cornell Cooperative Extension.

8:30-9:00 Pick up registration materials. Sign up for DEC credits.

Welcome
9:00-9:15 Introduction - Elizabeth Lamb, Ornamentals IPM Coordinator, NYS IPM
Welcome - Richard Ball, NYS Commissioner of Agriculture

Collecting weather data and predicting pests
9:20-9:40 The New York State Mesonet - Jerry Brotzge, Program Manager, NYS Mesonet
9:45-10:05 The Suffolk County Network & how we use it - Becky Wiseman and Laurie McBride, Agricultural Stewardship Program, Suffolk County Cornell Cooperative Extension

10:05-10:15 Break

10:15-10:35 Exploiting the vagaries of weather with open access tools on the Network for Environment and Weather Apps (NEWA) - Julie Carroll, Leader NEWA, NYS IPM

10:40-11:00 Weather forecasting and modeling for diversified vegetable growers - Katie Campbell-Nelson, Vegetable Extension Educator, UMass Extension

11:05-11:25 Ag-Radar: A low cost system to integrate weather into farm management decisions - Glen Koehler, Associate Scientist IPM, UMaine Cooperative Extension
11:30-12:00  Discussion, with the speaker panel
12:00-12:45  Lunch

Climate change and its impact on pests
12:45-1:05  Climate Change: Challenges and opportunities for all of us - Mike Hoffmann, Executive Director, Cornell Institute for Climate Change and Agriculture (CICCA)
1:10-1:30  Climate change and pests: A Northeastern IPM Center Signature Program - Steve Young, Director, Northeastern IPM Center
1:35-1:55  USDA Northeast Climate Hub - David Hollinger, Director, USDA Northeast Regional Climate Hub
1:55-2:05  Break
2:05-2:25  Cornell’s Climate Smart Farming Program: Training, decision tools and extension support for farmers - Allison Chatrchyan, Director, CICCA
2:30-2:50  Arthropod-borne diseases and climate in New York - Bryon Backenson, NYS Dept of Health, Bureau of Communicable Disease Control
2:55-3:15  Cornell Plantations’ Climate Change Garden - Elizabeth Lamb
3:20-3:50  Discussion, with the speaker panel
3:55-4:15  Evaluation and wrap up - Elizabeth Lamb
4:15  Adjourn. Safe travels!
Save the Date!

**When:** August 15, 2016, 9:00 – 4:15

**Where:** Cornell Cooperative Extension Albany County, Voorheesville, NY

With all the talk about climate change you might be wondering how it will affect food production, pests, and even landscapes - and what you can do about it. The Second Annual NYS Integrated Pest Management conference can help!

A wide variety of speakers from NYS and the Northeast will provide information on the current state of knowledge on climate change, changes in our weather patterns, and how collecting climate and weather data can help us predict and manage pests. Join us to learn and discuss!

$45 includes materials, lunch, and breaks.

The draft agenda, registration information, and map can be found at: tinyurl.com/hq8tbm2

If you have questions, please contact Amanda Grace at arw245@cornell.edu or 315-787-2208.
2016 eNEWA Grape Project Subscription Sign-Up

Subscriber information

Name______________________________________________________________

Email address _______________________________________________________

City_______________________________________________________________

Select Location(s) (circle as many as you like, or write in below)

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Select eNEWA Delivery Times (write in times below) Delivery requests should be on the hour.

Mail to: Tim Weigle, CLEREL, 6592 West Main Road, Portland, NY or scan and email to thw4@cornell.edu
LERGP Website Links of Interest:

Check out our new Facebook page!!
Cornell Lake Erie Research & Extension Laboratory Facebook page

Table for: Insecticides for use in NY and PA:
http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipmipm

Crop Estimation and Thinning Table:

Appellation Cornell Newsletter Index:
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/

Veraison to Harvest newsletters:
http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm

Go to http://lergp.cce.cornell.edu/ for a detailed calendar of events, registration, membership, and to view past and current Crop Updates and Newsletters.

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CCE does not endorse or recommend any specific product or service.

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