

Post-emergent herbicides in onions must be timed to target the susceptible stage of the

weeds and the most tolerant stage of the onions.

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manage risks to their farms.

New team of CCE and Cornell specialists formed to provide research-based info on climate



Ten corn earworm were caught in Eden which puts this site on a 4-day spray interval.



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Several reference tools for weed management have been assembled by the Cornell Vegetable

Program - now available for sweet corn and pepper.

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## **POST-Emergent Broadleaf Weed Control in Onions**

#### Christy Hoepting, CCE Cornell Vegetable Program

This is the time of year when post-emergent weed control is important in onions; to be effective, herbicides must be timed to

target the susceptible stage of the weeds and the most tolerant stage of the onions. Most of the herbicides labeled for this use are only labeled between the 2- and 6-leaf stage and work best only when the weed seedlings are small (Fig. 1). See Table 1 for details about control options.

Chateau appears to be the new most popular choice for post emergent broadleaf weed control in muck grown onions in New York. Growers report consistent success with this herbicide. Although it is labeled for pre-emergent control of broadleaf weeds in onions, it also has post-emergent activity, and has become the material of choice for pigweed, smartweed and mustards, which can be challenging to control with Goal. Best results are achieved when Chateau 2.0 oz is applied to broadleaf weeds that are 2" or less in size, followed by 1.0 oz 1 week later. Growers have also had success following the first application of Chateau with Goal 2XL 4 fl



Figure 1. Broadleaf weed escapes including milk pusley (A), lambsquarters (B), pigweed (C) and nutsedge (D) that are in the best stage (2" or less) to best be controlled with post-emergent herbicides in onions. Photo: Christy Hoepting, Cornell Vegetable Program



VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 11 counties in Western New York.

The newsletter is a service to our enrollees and is intended for educational purposes, strengthening the relationship between our enrollees, the Cornell Vegetable Program team, and Cornell University.

We're interested in your comments. Contact us at: CCE Cornell Vegetable Program 480 North Main Street, Canandaigua, NY 14224 Email: cce-cvp@cornell.edu

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Help us serve you better by telling us what you think. Email us at cce-cvp@cornell.edu or write to us at

Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.

Cornell University Cooperative Extension Cornell Vegetable Program

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The next issue of VegEdge will be produced June 10, 2015.

## <<< BREAKING NEWS >>>

**Experts on Climate Change and Agriculture Offer New Resource to New York Farmers through Climate Smart Farming Extension Team** *Melissa Osgood, Cornell Media Relations Office; ed. D. Telenko, CVP* 

New York farmers coping with extreme weather and climate variability now have a new resource at their disposal: Cornell University's Climate Smart Farming Extension Team. Organized by Cornell University's Institute for Climate Change and Agriculture (CICCA), in cooperation with Cornell Cooperative Extension (CCE), the cross-state team will provide growers with assistance and access to the latest in management practices that improve farm resiliency. "The Climate Smart Farming Team pulls together top farm specialists from Cornell and Cornell Cooperative Extension (CCE) to provide new research and decision-making tools that can help farmers reduce the risks climate change presents to their operations," says Dr. Allison Chatrchyan, CICCA director. "We will offer solid research-based information on climate change that farmers can use to manage risks to their farms and to take advantage of new opportunities. Our ultimate goal is to strengthen New York agriculture's capacity to face a changing climate."

Quicker access to new research findings will come through new extension materials, increased outreach efforts, guidance and training programs,

oz, especially if some of the weeds were initially too big for Chateau. Generally, when Chateau is applied between the 2 and 4-leaf stage, onion tolerance is very good; in research studies, earlier applications (e.g. 1-leaf with  $2^{nd}$  leaf beginning to emerge) were more risky, but when conditions favored waxy cuticle buildup (warm/hot, low humidity), injury to the onions was minor, and was outweighed by excellent weed control (Fig. 2). Chateau cannot be tank mixed with anything except Prowl H<sub>2</sub>O, no other pesticides, adjuvants or fertilizers.

Weeds should be controlled between row middles of onions on plastic, because heavy weed pressure between plastic rows can compete with onions for nutrients reducing yield and ventilation creating conditions more favorable for leaf diseases to develop. Typically, growers apply Prowl and/or Dual Magnum for PRE-emergent weed control. For the broadleaves that escape, Roundup is a common choice. Of course, Goal, Buctril and Chateau can also be used. In addition to field crops, all of these herbicides are labeled on garlic, and Goal is labeled on broccoli, cabbage, cauliflower and horse radish, while Chateau is labeled on asparagus, strawberries and bushberries. Do not use herbicides that are not labeled for onions or for row middles, and follow label directions to use spray shields, etc. as drift may be harmful to onions. Do not apply herbicide before laying plastic, because transplanting into the herbicide layer may



Figure 2. Weed seedlings dead or dying in onion seedlings after a timely application of Chateau 2.0 oz. *Photo: Christy Hoepting, Cornell Vegetable Program* 

cause injury to the onions. Straw mulch and cultivation are also options. The Cornell Vegetable Program has been studying living mulches between plastic beds, but so far an option has not been identified that does not compete with onion yield. To control weed escapes through the holes in the plastic, some growers have tried Goal with some success, but seems that hand weeding is the best option. Applying herbicides over plastic runs the risk of the herbicides concentrating into the holes and injuring the onion plants.

Herbicide	Goal 2XL	Goaltender	Buctril and generics (e.g. Broclean)	Chateau SW & WDG (and generic Warfox)	
Active ingredient	Oxy	luorfen	bromoxynil	flum	iozazin
Onion leaf stage (labeled)	At least 3 leaves 2-4 leaf most tolerant		2-5 leaf 4-leaf most tolerant	Transplants: 2-6 leaf; Direct seeded: 3-6 leaf	
Rates per app (product/ acre)	2 – 4 fl oz	1 – 2 fl oz	8 - 12 fl oz* 4 – 7 fl oz**	1.0 -2.0 oz	<i>Micro-rate:</i> 0.5 – 1.0 oz (2-6 leaf)
Multiple applications		Yes Yes	No	2 apps 14-day interval	2 apps 7-day interval
Maximum rate per season	2 pt	1 pt	12 fl oz	3.	0 oz
РНІ	45	days	30 days	45 days	
Weeds control strengths	Most broa	adleaf weeds	ragweed, smartweed, common groundsil and some species of mustards including Shepherd's purse, yellow rocket & field pennycress	Exceptional control of pigweed, chickweed, better control of smart- weed, marsh yellowcress than Buc- tril or Goal, decent burn back of yellow nutsedge	
Weed control weaknesses	Weak on mustards, smartweed and common groundsil		Pigweed, marsh yellowcress	Weeds should be 2" or less, the smaller the better	
Crop safety	Necrotic lesions, twisting, pig-tailing and stunting are more likely to occur when Goal is applied after cool wet weather or when the plants are under stress.		See footnotes. Wait until foliage and soil surface are dry before applying. Use 50- 70 gal per acre of water.	May cause necrotic specking	
Other comments		Goaltender is safer on onions and in tank- mixes than Goal 2XL.	When used at labeled rates also provides some pre-emergent activity	Labeled for pre control, but also activity at th	e-emergent weed has post-emergent ne same rates.
Tank mixes	Buctril can be tank-mixed with Goal when the onions have thick waxy cuticles: For exa ple, 4 fl oz Buctril + 1 fl oz Goal 2XL, or 6 fl oz Buctril + 2 fl oz Goal, 4 fl oz Buctril + 4 fl Goal or 8 fl oz Buctril + 2-4 fl oz Goal. Adjust your tank-mixes according to the weeds y are targeting.			The only thing a with Chateau is F vants or oth	llowed in the tank Prowl H₂O; no adju- her herbicides

**Table 1.** Post-emergent herbicide options for broadleaf weed control in onion.

\* The labeled rates (8 to 12 fl oz) can be used during sunny and dry weather, which is conducive to building up a thick waxy cuticle that helps protect the onion leaves from the contact burner activity of Buctril.

\*\* When onion leaves are very tender, lower than label rates are recommended (4 to 7 fl oz).

## Herbicide Effectiveness is Dependent on Weed Size

Darcy Telenko, CCE Cornell Vegetable Program

When choosing herbicides for management of weeds that have escaped your preemergence program keep in mind herbicides have been designed to control weeds at an optimum range. Once weeds have grown past that range herbicide effectiveness will be reduced. It is critical to follow herbicide label recommendations on crop, rate and timing, weed species, and use of spray additives. Optimum efficacy will be based on rate and timing of application, the weed size, and environmental conditions.



Table 1. Post-emergent herbicides available in vegetables and the general size range of weeds they control.

Trade name	Common name	Optimum weed size for post-emergence control
AAtrex + Oil	atrazine	broadleaf weeds up to 4 inches tall and pigweed and lambsquarters up to 6 inches tall
Aim EC	carfentrazone	selective broadleaves up to 4 inches tall
Assure II	quizalofop	annual grasses 2-6 inches tall depending on species; perennial grasses 3-24 inches with split applications depending on species.
Basagran	bentazon	2 to 10 leaf stages and 1-10 inches tall depending on species
Callisto	mesotrione	when applied alone weeds < 5 inches
Clarity	dicamba	annual weeds less than 6 inches tall, biennial weeds in rosette stage and perennial weed regrowth in late summer for following mowing or tillage treatment
Fusilade	fluazifop- <i>p</i> -butyl	grasses from 1 to 6 inches and not to exceed 3 to 6 leaves depending on species
Goal	oxyfluorfen	weed seedlings up to 4 to 6 true-leaf stage
Gramoxone	paraquat	small annual weeds (broadleaf and grasses); suppresses perennial weeds by destroying green foliage; grasses prior to tillering or after boot stage
Impact	topramezone	maximum weed size range from 4 to 8 inches for broadleaf weeds and 3 to 5 for grasses depending on species
Laudis	tembotrione	broadleaf weeds less than 6 inches and actively growing and grasses prior to tillering and when actively growing
Lorox	linuron	broadleaf weeds up to 6 inches and annual grasses 2 inches tall
Matrix	rimsulfuron	grasses 1 to 2 inches and broadleaves 1 to 3 inches
Poast	sethoxydim	maximum heights 4 to 8 inches depending on species
Raptor	imazamox	maximum size 3 inches
Reflex	fomesafen	maximum growth stages 2 to 8 leaves depending on species
Roundup	glyphosate	low rate weeds up to 6 inches; high rate weeds greater than 6 inches
Sandea/Permit	halosulfuron	actively growing broadleaf weeds 1-3 inches, nutsedge at 3 to 5 leaf stage
Select	clethodim	grass height 2 to 10 inches depending on species
Stinger	clopyralid	most broadleaf weeds up to 5 leaf; wild buckwheat 1-3 leaf; nightshades 2-4 leaf; perennials rosette to bud stage
2,4-D	2, 4-D	young and actively growing weeds

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## WNY Sweet Corn Trap Network Report, 6/2/15

Marion Zuefle, NYS IPM Program; http://sweetcorn.nysipm.cornell.edu

Eight sites reporting this week with European corn borer (ECB)-E caught at 5 of the sites, Eden, Farmington, Owego, Penn Yan and Seneca Castle and ECB-Z caught at 2 site, Penn Yan and Seneca Castle. Ten corn earworm (CEW) were caught at Eden which puts this site on a 4 day spray interval (see table below). This is very early for CEW but not unusual for this site. Accumulated degree days for the 25 trap network sites range from 334 to 514 with an average of 438.6 modified base 50F.

ECB in early sweet corn, which was started under row cover, plastic or transplanted, does not feed in the whorl and emerge in the tassel as they do in bare ground corn and therefore the usual scouting and threshold recommendations do not apply. Target newly hatching larvae using the moth trap catches or scout for egg masses to determine when sprays are needed. Growers have had good results when pheromone trap catches were used to time sprays for the first generation ECB in row cover or plastic corn. Growers waited until there was a significant increase in the ECB trap catches in their area and then timed sprays to coincide with egg hatch. ECB eggs require 100 degree days (base 50) from oviposition to hatch. Two to three applications bracketing the peak moth flight are generally effective. See table to the right for accumulated degree days for each site.

Average corn earworm catch							
Per Day Per Five Days Per Week Days Between Spra							
<0.2	<1.0	<1.4	No Spray (for CEW)				
0.2-0.5	1.0-2.5	1.4-3.5	6 days				
0.5-1.0	2.5-5.0	3.5-7.0	5 days				
1-13	5-65	7-91	4 days				
over 13	over 65	over 91	3 days				

Add one day to the recommended spray interval if daily maximum temperatures are less than 80°F for the previous 2-3 days

European corn borer (bivoltine) development estimated using a modified base 50F degree day calculation.

Development Stage	Accumulated Degree Days					
First Generation						
First spring moths	374					
First eggs	450					
Peak spring moths	631					
First generation treatment period	800-1000					
Second Gene	eration					
First summer moths	1400					
First eggs	1450					
First egg hatch	1550					
Peak summer moths	1733					
Second generation treatment period	1550-2100					

From J. W. Apple. Department of Entomology. University of Wisconsin-Madison

#### WNY Pheromone Trap Catches: June 2, 2015

Location	ECB-E	ECB-Z	CEW	FAW	WBC	DD to Date
Baldwinsville (Onondaga)	NA	NA	NA	NA	NA	464
Batavia (Genesee)	NA	NA	NA	NA	NA	334
Bellona (Yates)	NA	NA	NA	NA	NA	514
Eden (Erie)	1	0	10	NA	NA	405
Farmington (Ontario)	5	0	0	0	0	446
Hamlin (Monroe)	NA	NA	NA	NA	NA	431
LeRoy (Genesee)	NA	NA	NA	NA	NA	393
Lockport (Niagara)	0	0	0	0	NA	404
Pavilion	NA	NA	NA	NA	NA	NA
Penn Yan (Yates)	4	3	0	0	NA	494
Seneca Castle (Ontario)	2	1	0	0	NA	450
Spencerport (Monroe)	0	0	0	0	NA	499
Waterport (Orleans)	NA	NA	NA	NA	NA	443
Williamson (Wayne)	NA	NA	NA	NA	NA	397
ECB - European Corn Borer WBC - Western Bean Cutworm						

CEW - Corn Earworm FAW -

NA not available

Fall Armyworm

Degree Day (modified base 50F) accumulation

## New Guideline Tools for Weed Management in Sweet Corn and Pepper

Darcy Telenko, CCE Cornell Vegetable Program

Are you looking for a quick easy way to determine how to manage weeds? Reference tools for weed management in sweet corn and pepper are now available. These include a table on the relative effectiveness of herbicides labeled in New York for each vegetable.

Pepper: http://goo.gl/gP55a7

Sweet corn: http://goo.gl/wRuJDi

Print copies will be available at the upcoming Fresh Market Weed Management Field Days (see upcoming events) or contact Darcy Telenko dep10@cornell.edu /716-697-4965 to have one mailed to you.





[The Cornell Vegetable Program has compiled herbicide charts for control of weeds in the following crops in New York in 2015: beans (snap & dry beans), beans (lima), beets, cabbage, carrots, peas, peppers, and sweet corn. While these reference charts are handy, it is critical to read the labels thoroughly. ed. A. Parr, CVP]

DD -

#### **GENERAL OBSERVATIONS**

Flea beetles very active on everything from eggplant, to squash, and brassicas. Black cutworms are busy across crops on stubbled soils and from under plastic mulch.

#### DRY BEANS

Planting began last week before the rains. Be sure to take the weed history of each of your fields into account when deciding what weed control program should be used. For a chart rating the effectiveness of many bean herbicides against common, trouble-some weed species, see 2015 Herbicides for Weed Control in Snap and Dry Beans at http://goo.gl/6GaxyS

#### ONIONS

A long awaited rainfall finally came on Sunday/Monday after one of the driest springs in a long time, and the onions are soaking it up (Fig. 1). Now that the barley has died in the direct seeded onions, we can see the actual stand, which in several fields is thinner than originally thought due to losses mostly from heat and wind damage, and in some cases, due to poor initial emergence. Seems that the earliest and the latest planted fields escaped the worst of heat and wind damage and have better stands. There also seems to be a lot variability in the efficacy of PRE-emergent herbicides, where more escapes are showing up in fields that were not irrigated or did not catch a timely rain following application. Also much more evident this week is the injury from the frost on May 23 (Fig. 2) where temperatures dropped to 25°F in Elba and Sodus; it appears that transplants were most affected, seedlings seem unharmed. Following this week's rain, a surge in onion growth is expected - can't wait to see what the crop will look like next week! Unfortunately, what favors the onion growth also favors weed growth - see cover article.

NSIGHTS

This week's rainfall has also helped to relieve onion thrips pressure that was approaching the spray threshold in transplanted onions last week, although the number of nymphs have notably increased since last week. Thrips counts remain below thresholds and sprays will be delayed until at least next week. Except on some upland sites where thrips levels have reached threshold and will need to be sprayed, if they haven't been already - see article in last week's issue of VegEdge. Despite the last couple of days being favorable for Botrytis leaf blight (BLB), only a handful of lesions can be detected at this time; it is expected that BLB will increase over this week and we can consider spraying fungicides for BLB next week.

# Sunday/ pected.

Figure 1. Onion transplants doused in rain drops. Monday's rain provided much relief to a very dry spring; a surge in onion growth is ex-Photo: Christy Hoepting, CVP



#### POTATOES

The earliest potatoes are about 10" tall, and the crop is emerging in many other fields. There are still some fields to be planted. The soil took the recent rain well in many locations, but in some areas where heavy rain fell over a short period of time there will be potato losses. Some of the

Figure 2. Yellowing and leaf dieback of outer leaves of transplanted onions injured by May 23rd frost. Injury looks similar to herbicide burn from Chateau or Buctril. Photo: Christy Hoepting, CVF

very earliest potatoes were significantly burned back by the frost/freeze events of later May, but there's lots of new growth now. Where early potatoes were irrigated through the freezing temps the foliage was protected. <u>Colorado potato beetles (CPB)</u> emerged rapidly during last week's hot weather. See the May 27 VegEdge for control suggestions if CPBs exceed 1 adult/plant or there's 30% defoliation of small or emerging plants.

#### PROCESSING CROPS

Rain and cool temperatures early this week have put a halt to most field work throughout the region. Probably the biggest concern is not being able to get timely post-emergence herbicide applications on. As soon as fields are workable, make sure to get out and scout for weed escapes and plan for herbicide sprays as soon as equipment can get into the field. Weeds are easier to kill when they are small. A handy link to herbicide charts for the different crops can be found on the homepage of our website http://cvp.cce.cornell.edu, including a new chart for sweet corn. A review of herbicides for processing peas can be found on pages 6-7 of the April 1, 2015 issue of VegEdge.

#### TOMATOES

Be on the lookout for Septoria leaf spot and Early blight. After the heavy rains, a lot of muddy splashing occurred which opens up the plants to infection. Early blight is not only a problem with tomato but potato as well. Be on top of your fungicide program with the current wet conditions. Increasing temperatures will also kick up the incidence of the disease if left untreated.



Septoria leaf spot on tomato leaves, early incidence and later infection. Photos: Tom Zitter, Cornell

continued - CROP insights



Early blight on tomato stem and leaves. *Photo: Tom Zitter, Cornell* 



Early blight on potato.

#### **VINE CROPS**

Striped cucumber beetles have been active with a few spots having a heavy infestation. If seedlings or transplants aren't protected with row cover, treatment will be necessary. Despite insecticide usage, the cucumber beetles still can pass Bacterial wilt as they feed on the treated plants. Using a trap crop of earlier planted cucurbits, like Hubbard squash, can focus the beetles on these plants where they can be treated. With this approach, the overwintered adult cucumber beetle numbers can be reduced hopefully reducing the numbers of offspring of the next generation.

For more information on trap cropping, go to <u>http://www.uvm.edu/vtvegandberry/</u><u>factsheets/PerimeterTC.html</u> a website article posted by Vern Grubinger, Vegetable and Fruit Specialist with Univ. of VT.

## Late Blight Risk

#### Carol MacNeil and John Gibbons, CCE Cornell Vegetable Program

Late blight (LB) severity values (SV) have jumped in the past week due to the wet weather. Five weather stations are now at or above the 18 SV threshold alerting growers to apply a fungicide within a week. Another four stations will reach 18 SVs in the next week. First potato/tomato foliage (plants, or sprouts from potato culls/volunteers) occurred May 13. Some areas may have had potato/tomato foliage even earlier. We start counting SVs from the date of first foliage emergence within 30 miles even if most

potatoes/tomatoes aren't up yet/aren't transplanted. LB spores from those early plants could blow 30 miles to reach later crops when they emerge/ have been set. Within a week of reaching 18 SVs all field tomatoes and all potatoes 4+ inches tall should be sprayed with a fungicide. (For LB SV accumulations for other sites, or for a

#### Late Blight Severity Values\* 6/02/15

Location**	Week	Total	Location	Week	Total
Appleton	1	2	Lockport	NA	NA
Arkport	17	34	Lodi	9	12
Baldwinsville	9	10	Lyndonville	5	7
Bergen	5	9	Medina	5	8
Buffalo	6	16	Penn Yan	10	18
Butler	10	13	Romulus	NA	NA
Ceres	6	14	Rochester	10	14
Elba	11	27	Silver Creek	5	8
Farmington	8	9	Sodus	10	13
Gainesville	10	18	Versailles	NA	NA
Geneva	9	11	Wellsville	12	20
Kendall	7	8	Williamson	7	10

\* Severity value accumulations start 5/13/2015

different 1<sup>st</sup> foliage emergence date, see: <u>http://newa.cornell.edu/</u> <u>index.php?page=potato-late-blight</u> Select the closest weather station, a first foliage emergence date, and click on Get Report.)

For a review of <u>late blight identification</u> go to: <u>http://</u> <u>www.longislandhort.cornell.edu/vegpath/photos/index.htm</u> Click on Potato or Tomato, then Late Blight.

The Late Blight <u>Decision Support System (DSS)</u> is a much more accurate way of timing fungicide sprays for LB control. It takes into account the weather forecast for the specific location of your farm/fields, the LB susceptibility of your varieties, and the residual activity of the fungicides you choose. It also provides early warning for when the next spray is likely to be needed on your farm. For those interested in more info about the DSS contact Carol MacNeil at <u>crm6@cornell.edu</u> or 585-313-8796.

<u>For those using the DSS</u>, if you haven't set up your 2015 fields yet, do so now at: <u>http://blight.eas.cornell.edu/blight/</u>. If you've forgotten your log in name/password contact Ian Small at: <u>ims56@cornell.edu</u> DSS users should be sure to <u>input and submit the first fungicide applied</u>, from the office or your mobile device. Simcast, the custom forecast for your farm, your crops, and your spray practices, will then automatically begin. Set up email/text Alerts and you'll get early warning of when <u>blight units</u> or <u>fungicide loss</u> <u>units</u> will reach thresholds for the next fungicide spray. If you have questions or comments regarding the use of the DSS contact Carol MacNeil at 585-313-8796 or <u>crm6@cornell.edu</u>.

Check your <u>potato cull piles</u> NOW to be sure they're covered with at least 2 ft. of soil! Culls need to be buried, fed to livestock, etc. ASAP so they don't serve as a source of LB for your potato or tomato crop.

Chatrchyan said. "The pilot team is the first in the nation devoted to climate change resiliency, and can serve as a model for extension across the United States," said Chris Watkins, Director of Cornell Cooperative Extension. "The specialists on the team cover many key sectors in New York agriculture, and many regions of the state, from western and northern New York, to the Hudson Valley, helping it reach a broad audience of farmers."

The line-up of extension team members includes a diverse group of agriculture specialists from around the state. Expertise on the Cornell campus will come from Dr. Toby Ault, assistant professor and expert on climate change modeling and seasonal forecasts; Dr. Art DeGaetano, professor of earth and atmospheric sciences, and expert on climate data and decision tools; Deb Grantham, senior extension associate in the soil and crop sciences section, and CCE administration; Dr. Mike Hoffmann, professor of entomology and Cornell College of Agriculture and Life Science associate dean; Dr. Dave Wolfe, professor of horticulture and climate change expert; Chatrchyan, and other faculty. Experts located throughout New York's counties include: Luke Haggerty, viticulture extension specialist; Laura McDermott, extension small fruits specialist; Dr. Kim Morrill, regional dairy specialist; Dr. Kitty O'Neil, regional field crops and soil specialist; Dr. Darcy Telenko, extension vegetable specialist; and Bob Weybright, a specialist in agricultural marketing and development. O

## UPCOMING EVENTS view all Cornell Vegetable Program upcoming events at cvp.cce.cornell.edu

Post-Harvest Handling of Vegetables for Market June 11, 2015 | 10:00 AM - 12:30 PM Jonas Hershberger's Farm, 7468 Albro Rd, Gainsville, NY 14886

Join Cornell Cooperative Extension and the Cornell Vegetable Program's Robert Hadad to learn how to design, build, and operate a smallscale, DIY post-harvest handling system! DIY system will be set up alongside manufactured system for those looking to purchase rather than build a system. This great workshop will focus on the trifecta of good washing and handling – food safety, maintaining high quality and efficiency, and affordability for new and small growers. \$10/CVP enrollee; \$15 non-enrollees. Contact Lynn Bliven at 585-268-7644 x18 or lao3@cornell.edu to pre-register by June 5. For more info, contact Robert Hadad at 585-739-4065.

### Fresh Market Vegetable Weed Management Field Days: Cultivation Options

June 22, 2015 | 4:00 - 7:45 PM Fenton's Produce LLC, 3323 Pratt Rd, Batavia, NY 14020

Research and Extension Educators will be leading demonstrations and answering questions on cultural and mechanical weed management options for fresh market vegetable growers. Attendees will see demos of new cultivation equipment in vine crops, beans, cabbage, and lettuce. Growers will learn what equipment is right for their farm and how to set-up (common equipment sweeps/shanks). CCA and DEC credits will be available. Register and pay online, or 716-652-5400 and pay at the door. For more info, call Darcy Telenko at 716-697-4965.

#### Fresh Market Vegetable Weed Management Field Days: Weed Management in Vegetable Production

June 23, 2015 | 8:30 AM - 3:30 PM CVP Weed Management Demo Site at Partridge's on the Farm Market, 4924 Ellicott St Rd (Rt 63), Batavia, NY 14020

Research and Extension Educators will be leading demonstration site tours and answering questions on cultural and mechanical weed management options for fresh market vegetable growers. Equipment options and considerations will be discussed and industry representatives will be on-hand to comment on their products. Topics include:

- Weed Management Between the Rows
- Weed Identification and Biology
- Tillage Options for Weed Management
- Essential Weed Management Equipment for the Beginning Farmer
- Herbicide Options in Sweet Corn
- Herbicide Injury Demo
- Perennial Bed Row Cover

CCA and DEC credits will be available for portions of the day. Register and pay online, or call 716-652-5400 and pay at the door. We request pre-registering for the event so that we have a lunch count. For more info, contact Darcy Telenko at 716-697-4965.

#### Crop Quality Control on Small-Scale Organic Farms & High Tunnels July 8, 2015 | 3:00 - 6:00 PM

Falkimmer Farms Organic Growers, 8595 E Eden Rd, Eden, NY 14057



Tour several acres of cultivated fields to learn how the Falkowskis produce quality organic produce, and market it through direct-toconsumer opportunities. Cornell Vegetable Program Specialist Judson Reid will lead a demonstration and discussion of tomato pruning and other high tunnel production practices that improve quality, especially in organic systems. There will be time to network and ask questions, and bring a dish to pass for the potluck at the end of the event! To pre-register and pay, shop online or call Stephanie at 585-271-1979 ext. 509. The fees are \$15/person or \$25 for two or more people/farm. Pre-registration is encouraged and closes at 4pm on 7/6/15. This event is produced by NOFA-NY, in partnership with Cornell Cooperative Extension, and with support from USDA-Risk Management Agency.





## Weather Charts

John Gibbons, CCE Cornell Vegetable Program

#### Weekly Weather Summary: 5/26 - 6/01/15

	Rainfa	ll (inch)	Tem	p (°F)
Location	Week	Month May	Мах	Min
Albion	4.06	4.20	85	44
Appleton, North	1.24	2.27	83	43
Baldwinsville	1.76	2.90	87	49
Buffalo*	2.48	3.17	84	45
Butler	2.17	3.35	84	47
Ceres	1.24	2.69	83	46
Elba	3.82	4.45	83	42
Farmington	1.46	2.88	83	45
Gainesville	2.14	2.84	83	42
Geneva	1.77	2.96	85	46
Lockport	NA	NA	85	43
Lodi	1.04	2.49	85	48
Penn Yan*	1.42	3.25	84	47
Rochester*	2.53	2.81	85	46
Romulus	0.72	1.35	84	49
Silver Creek	2.54	3.96	83	46
Sodus	3.89	5.77	85	45
Versailles	NA	NA	NA	NA
Williamson	2.77	4.05	84	44

## Accumulated Growing Degree Days (AGDD) Base 50°F: April 1 – June 1, 2015

Location	2015	2014	2013
Albion	443	314	424
Appleton, North	348	225	327
Baldwinsville	464	392	423
Buffalo	446	317	487
Butler	483	378	428
Ceres	375	302	339
Elba	334	247	387
Farmington	446	353	398
Gainesville	351	260	NA
Geneva	450	362	436
Lockport	404	289	NA
Lodi	521	411	486
Penn Yan	494	379	446
Rochester	499	382	494
Romulus	456	362	NA
Silver Creek	388	289	441
Sodus	385	333	NA
Versailles	NA	319	472
Williamson	397	315	396

\* Airport stations
 \*\* Data from other station/airport sites is at: <u>http://newa.cornell.edu/</u> Weather Data, Daily Summary and Degree Days.

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VegEdge is the award-winning newsletter produced by the Cornell Vegetable Program in Western New York. It provides readers with information on upcoming meetings, pesticide updates, pest management strategies, cultural practices, marketing ideas and research results from Cornell and Cornell Cooperative Extension. VegEdge is produced every few weeks, with frequency increasing leading up to and during the growing season.

#### VEGETABLE SPECIALISTS

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Julie Kikkert | 585-313-8160 cell | 585-394-3977 x404 office | jrk2@cornell.edu processing crops (sweet corn, snap beans, lima beans, peas, beets, and carrots)

Carol MacNeil | 585-313-8796 cell | 585-394-3977 x406 office | crm6@cornell.edu potatoes, dry beans, and soil health

Judson Reid | 585-313-8912 cell | 315-536-5123 office | jer11@cornell.edu greenhouse production, small farming operations, and fresh market vegetables

Darcy Telenko | 716-697-4965 cell | 716-652-5400 x178 office | dep10@cornell.edu soil health, weed management, plant pathology

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Cornell University Cooperative Extension Cornell Vegetable Program

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.