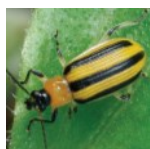




Abiotic disorders will not spread from the initial damage site on the plant but do have the potential to reduce plant growth or even kill plants.

**PAGE 1**



Due to the mild winter, we're seeing many cucumber beetles on summer squash, cucumbers, and some melons. Learn how to control this pest.

**PAGE 4**



Fall armyworm larva have a prominent inverted 'Y' on their heads. See where the moths are being caught in the Sweet Corn Trap Network Report.

**PAGE 5**



The new Dual Magnum SLN label now includes transplanted Brussel sprouts and cauliflower. It provides excellent control of yellow nutsedge!

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# VEGEEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

● Volume 12 | ● Issue 09 | ● June 15, 2016



**Cornell University**  
Cooperative Extension  
Cornell Vegetable Program

*Photo: Darcy Telenko*

## Abiotic Disorders Widespread in Vegetables

*Darcy Telenko, CCE Cornell Vegetable Program*

Abiotic disorders are caused by noninfectious factors, verses biotic which are caused by an infectious organism. Biotic issues can multiply and spread and include plant disorders caused by fungi, bacteria, viruses, nematodes and insects, whereas abiotic disorders will not spread from the initial damage site on the plant. **Abiotic disorders that affect all crops include unfavorable soil properties (crusting/water logged), fertility imbalance, moisture extremes, temperature extremes, chemical toxicity (herbicide drift), physical injuries.** These all have the potential to reduce plant growth and even kill plants.

Unlike isolating a pathogen from a plant or identifying an insect, abiotic issues are much harder to diagnosis as many may result from more than one factor. This week I have had many calls on issues in cucumbers, squash, peppers, cabbage, eggplant and many others that we have come to determine are caused by abiotic issues vs. a disease or insect.



Plastic burn on pepper transplant. *Photo: Judson Reid, CVP*

*continued on page 3*



**VegEdge** newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 12 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.

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Information provided is general and educational in nature. Employees and staff of the Cornell Vegetable Program, Cornell Cooperative Extension, and Cornell University do not endorse or recommend any specific product or service.

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Help us serve you better by telling us what you think. Email us at [cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu) or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.



**Cornell University**  
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Cornell Vegetable Program

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*The next issue of VegEdge will be produced on June 22, 2016.*



Cooperating with Cornell Lake Erie Research & Extension Center for several vegetable trials. (Photo of CVP Specialist Judson Reid and CVP Intern Gretchen Seigworth, 6/2/16.) Photo: Darcy Telenko, CVP

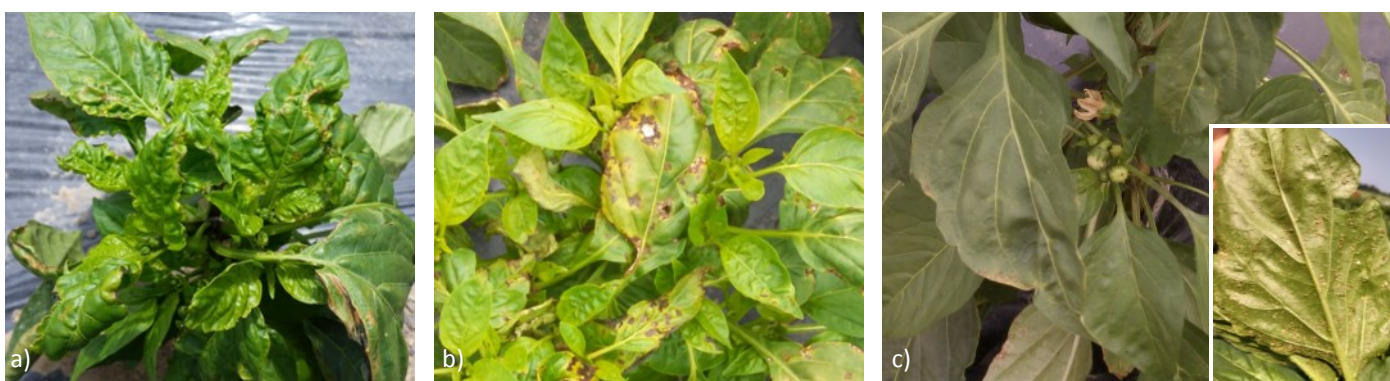


Unfortunately there's no treatment, but the good news is that if it is an abiotic issue there's no worry about further spread and if normal growing conditions are provided (adequate moisture and nutrients) most plants should resume normal growth and outgrow the injury.

Here are a few examples of abiotic disorders in vegetables captured this season.



**Sand blasting injury on cabbage head, cucumber leaf, romaine lettuce leaf.** In each of these small tears or injury has occurred and then the plant has healed over the wound causing the brown spotting. *Photos: Darcy Telenko, CVP*



**Sand blasting in pepper compared to bacteria spot and aphid damage.** a) Pepper experiencing cupping and misshapen leaves from sand blasting. As the plants are healing from the injury the scar tissue causes the leaves to cup. Upon close examination you can see holes, shredded leaf edges and brown scars left from the small sand/soil particles striking the succulent tissues. b) Bacteria spot of pepper – a distinction is the yellow halos surrounding the dark sunken lesions (spots). c) Aphid damage on pepper – the distinction would be distortion and aphids found on underside of leaves. *Photos: Cornell Vegetable Program*



**Wind damage to onion.**  
*Photo: Darcy Telenko, CVP*



**Cucumber leaf burn from hot black plastic.**  
*Photo: Darcy Telenko, CVP*



**Hot and dry conditions post-transplant of sweet potato.** 🔴  
*Photo: Darcy Telenko, CVP*

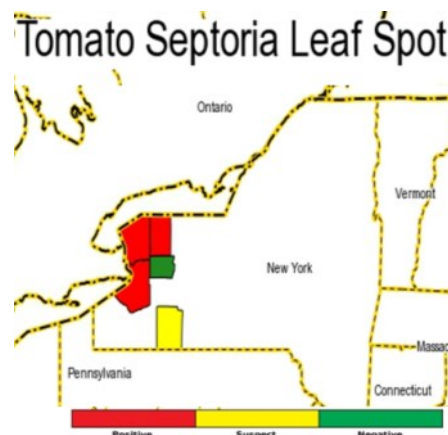
# Revolutionary Pest Observation Tool to be Available for Fresh Market Growers

Darcy Telenko and Gretchen Seigworth, CCE Cornell Vegetable Program

A new resource focusing on the distribution of pests (pathogens, insects, weeds) throughout New York and the United States will be available to growers within the next year. The Integrated Pest Information Platform for Extension and Education, or “iPIPE CAP”, is a national program working to enhance integrated pest management (IPM) and food security by progress thru sharing. The main idea of this platform is to recruit growers and their consultants to submit pest sightings into a database for local and national historical data for a variety of pests. These records can then be used for forecasting future pest occurrences, thus aiding researchers, extension agents, growers and their consultants.

Think about it this way: in the past, farmers have utilized methods such as meeting for coffee in the early mornings or assembling on rainy days to talk about the progress and problems they have encountered on their farms. iPIPE CAP’s goal is to catalyze this communication strategy into a program to promote collaboration amongst a wider spread of agriculturists, both locally and nationally, to help vital observation information about pests travel faster. With the help of our neighbors in NY and across the country, we can take proactive steps to control pests now and in the future.

Currently our CVP student interns, Gretchen Seigworth and Jodi Callwood, are out scouting fresh market vegetable crops to contribute to the development of a vegetable crop pest portion of the iPIPE program. We are creating interactive tools to share pest observations, risk maps, and commentary from extension professionals so stay tuned as program takes shape. Once the fresh market vegetable portion is officially online, vegetable growers in our region can sign-up to receive customized summaries, maps, and pest alerts sent directly to your computer or mobile devices.



Maps will be available to growers and their consultants on a variety of pests. They will be able to see pests both in their area, and in the surrounding states.



To learn more about iPIPE, or to sign up as a participant, please visit [ipipe.org](http://ipipe.org). ●

## Pest Patrol: Cucumber Beetle

Gretchen Seigworth, CCE Cornell Vegetable Program

Due to our mild winter, this year we are seeing large amounts of cucumber beetles on summer squash, cucumbers, and some melon plants. There are two species of cucumber beetles: Striped cucumber beetle (*Aclymma vittatum*) and Spotted cucumber beetle (*Diabrotica undecimpunctata howardi*). Although the striped cucumber beetle is most common (see photo), we have seen several spotted beetles this year as well. If a population of cucumber beetles remains uncontrolled, they are able to strip an entire plant down to its midribs, scar fruit, or transmit bacteria wilt disease (*Erwinia tracheiphila*). Insecticide-based control for the beetle is based on two criteria: densities of beetles at various plant growth stages and plant susceptibility of the crop to bacterial wilt (i.e. plants in the greenhouse or a high-tunnel can incubate bacteria quicker than a hardened off plants in the field.) Plants with less than 4 leaves and more than 5 beetles per plant should be treated within 24 hours to prevent a reduction in plant stands from beetle feeding. Plants beyond the 4-leaf stage should be protected with an insecticide when beetle densities meet or exceed 1 per plant. If a population of beetles is infesting plants on the outer edges of the field only, boarder sprays may be an option. Assail (acetamiprid), Baythroid XL (beta-cyfluthrin), Sevin XLR Plus (carbaryl), Asana XL (esfenvalerate), Admire Pro Systematic Protectant (imadacloprid), Pounce 25 WP or OLP (permethrin), Warrior II (lambda-cyhalothrin) and others are commonly used to treat for this this pest. Cucumber beetles are also susceptible to a variety of natural predators, including tachinid flies, parasitoid wasps, and predacious nematodes. Organic growers may also want to consider planting a perimeter trap crop, such as Blue Hubbard and buttercup



winter squash. Adding yellow sticky tape or yellow mulch to the trap crop makes it even more attractive to the cucumber beetles. Intercropping with broccoli or corn has shown to reduce numbers as well. Planting the crop on reflective plastic can also deter the beetles. To help prevent beetle overwintering, a deep plow, clean cultivation after harvest, and crop rotation are viable options. ●



# WNY Sweet Corn Trap Network Report, 6/14/16

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

Fourteen sites reporting this week. European corn borer (ECB) numbers remain low for the season. ECB-E was caught at only two sites, Baldwinsville and Seneca Castle and ECB-Z was caught at Spencerport all in the low single digits. One corn earworm (CEW) was caught at Spencerport which is low enough to not require a spray (see table at bottom of post). Fall armyworm (FAW) was caught at four sites, Avon, Baldwinsville, Eden, and Ransomville. No reports yet of Western bean cutworm (WBC).

Fall armyworm (FAW) were caught each week since the first blog posting of the season. This week, while scouting a field, I observed FAW feeding damage and frass. The larva was found feeding in the whorl (see photos). To identify FAW larva look for the inverted 'Y' on the head.

Degree day accumulations are based on the nearest NEWA weather station to each trapping site. Most sites are now above the degree days needed for first ECB eggs. ECB eggs require 100 degree days (base 50) from oviposition to hatch. Scout tassel emergence stage fields for larvae and feeding damage in the emerging tassel. The treatment threshold at tassel emergence is 15% infested plants. ●

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

European corn borer (bivoltine) development estimated using a modified base 50F degree day calculation. From J. W. Apple, Department of Entomology, University of Wisconsin-Madison

## WNY Pheromone Trap Catches: June 14, 2016

Location	ECB -E	ECB -Z	CEW	FAW	WBC	WBC to Date
Baldwinsville (Onondaga)	1	0	0	2	0	520
Batavia (Genesee)	NA	NA	NA	NA	NA	343
Belfast	NA	NA	NA	NA	NA	470
Bellona (Yates)	NA	NA	NA	NA	NA	575
Eden (Erie)	0	0	0	9	0	508
Farmington (Ontario)	0	0	0	0	0	477
Hamlin (Monroe)	0	0	0	0	0	454
LeRoy (Genesee)	0	0	0	0	0	540
Pavilion	NA	NA	NA	NA	NA	450
Penn Yan (Yates)	NA	0	0	0	0	533
Ransomville (Niagara)	0	0	0	1	0	482
Seneca Castle (Ontario)	1	NA	0	0	0	506
Spencerport (Monroe)	0	4	1	0	0	541
Waterport (Orleans)	NA	NA	NA	NA	NA	454
Williamson (Wayne)	0	0	0	0	0	440

ECB - European Corn Borer

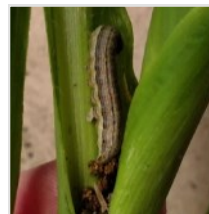
CEW - Corn Earworm

FAW - Fall Armyworm

WBC - Western Bean Cutworm

NA - not available

DD - Degree Day (modified base 50F) accumulation



Fall armyworm.



Fall armyworm feeding damage and frass.



Fall armyworm larva. Note the prominent inverted 'Y' on head.

## Late Blight Risk - Cool Weather Lowers Risk

Carol MacNeil, CCE Cornell Vegetable Program

Frequent very light rains in Gainesville have resulted in severity value (SV) and blight unit (BU) accumulations justifying a second fungicide spray. Very few to no SVs have accumulated at other weather stations this past, cool week. Only Wellsville has exceeded 18 SV and needs a spray.

Before "blight weather" arrives destroy all potato culls and volunteers, so they don't serve as a source of LB for your potato or tomato crop!

There are no new late blight confirmations in the Eastern US or Canada.

For the current early blight (EB) risk on potatoes see Crop Insights - Potatoes in this issue of *VegEdge*. Tomato growers may also refer to the TomCast EB forecast at: <http://newa.cornell.edu/index.php?page=tomato-diseases-tomcast>

## Late Blight Severity Values\* 6/14/16

Location*	Total	Forecast 6/15-6/17	Location*	Total	Forecast 6/15-6/17
Appleton N	0	1	Lodi	6	1
Baldwinsville	4	1	Lyndonville	0	3
Bergen	0	1	Medina	0	1
Buffalo	9	0	Niagara Falls	3	1
Ceres	9	4	Penn Yan	10	1
Elba	4	2	Rochester	10	1
Fairville	3	0	Sodus	5	0
Farmington	3	0	Versailles	1	3
Gainesville	36	1	Wellsville	20	3
Geneva	2	0	Williamson	5	0
Kendall	0	2	Wolcott	4	0

\* Severity value accumulations start 5/12/2016 ●

# CROP INSIGHTS

Abiotic disorders have been an issue this week. Hot temperatures and high wind have caused sand blasting and scorching of succulent tissues in numerous vegetables – *see cover article for more examples*.

Watch your weeds – if pre-emergence herbicides were not activated by rain a post application might be needed to catch those weeds that are breaking through. Don't let them too large before controlling.

## COLE CROPS

Yellow nutsedge is a perennial weed that seems to be thriving this year. Dual Magnum is the only herbicide (pre-emergent activity only) labeled in Cole crops with activity against this aggressive weed. Its label has recently expanded to include transplanted Brussels sprouts and cauliflower for more convenient use in mixed brassicas. *See article, page 7*.

## CUCURBITS

Downy mildew forecast – so far the Duplin County, North Carolina is the farthest site with a positive confirmation of downy mildew. And the risk is minimal for all sites outside of Florida, Georgia. Hot spots of cucumber beetle are still being reported.

## ONIONS

Despite a dip in temperature and high winds, onion thrips populations continued to build this week with the majority of transplants to be getting their first insecticide sprays this week as well as some direct seeded onions that are in hot spots. Movento is recommended for the first insecticide spray – see last week's article. Botrytis leaf blight is slow to get started this year in this dry windy weather, and there was not much change from last week where lesions are very hard to find. In fact, during this week's scouting, we inspected 453 plants and only found 54 that had 1-2 BLB lesions (=12%) – that's pretty low! No fungicides are needed at this time.

The **Oswego Onion Weed Twilight Meeting** will be held at John Dunsmoor's this Thursday, June 16, 2016, 777½ County Rte. 53, Oswego; 5:00 - 7:00 PM. Contact CCE Oswego 315-963-7286 for more information. All are welcome. DEC credits available.

**During/following Muck Donut hour next Tuesday, June 21<sup>st</sup> we will conduct an informal tour of our herbicide trial: post emergent control of ragweed.** The trial features timing, stages, and programs for controlling ragweed with labeled and pipeline products with some very promising treatments to see (Fig. 1). All are welcome. Show up at donut hour (8:30 - 9:30 AM, corner Transit and Spoilbank, Elba muck).



Excellent post-emergent control of ragweed in herbicide trial that will be featured during/following next week's muck donut hour. Photo: C. Hoepting, CVP

## POTATOES

Fields continue to emerge. Many fields have uneven growth, with everything from emerging sprouts to 6" tall plants. The earliest potatoes are setting tubers and beginning to flower. Hill before plants reach 8" to avoid root injury. Some soft rot of seed is being seen. Few late blight severity values have accumulated in the past week due to the cool weather. See info on early blight below. Colorado potato beetles continue to emerge. Egg-laying, hatch and growth have slowed due to the cool weather but a few larger larvae have been seen.

**Dickeya blackleg now widespread on Long Island, Meg McGrath, Cornell Plant Pathology, Long Island** - IPM scouts are reporting blackleg present in many of the fields being examined. Several varieties are affected. Wilting, diseased plants are easy to spot now. Last year flowering was when many plants dropped out. (ed. CRM, CVP - *Most affected Eastern US fields in the past have been Reba, Superior or Norwis from Maine seed. One field of Reba in the CVP region lost about 25% of stems at flowering last year. Contact Carol MacNeil at [crm6@cornell.edu](mailto:crm6@cornell.edu) or 585-313-8796 cell/text if you see significant wilting of plants or stems*).

For fields where potatoes follow a potato or tomato crop, or where there's a history of serious early blight (EB), for the earliest emerging fields in mid-May, the Physiological Days (P-Days) EB forecast has exceeded the 200 P-Day threshold indicating the need for a fungicide spray especially for early varieties. For rotated fields where there's no history of serious EB the threshold is 300 P-Days. For later potato crop emergence dates see the P-Day EB forecast at: <http://newa.cornell.edu/index.php?page=potato-early-blight>

Organic growers can see all suggested cultural and organic chemical controls for potato insect pests and diseases, as well as organic production information at the *Organic Production and IPM Guide for Potatoes* at: <http://hdl.handle.net/1813/42897>

## SWEET CORN

Early silks are out on the first planting, trap catches are low, but keep in mind that the usual scouting and threshold recommendations do not apply for row cover, plastic, or transplanted sweet corn that is close to tassel emergence during the first generation flight of European corn borer (ECB). In these early plantings, larvae don't feed in the whorl and emerge in the tassel as they do in bare ground corn.

Moths will be most attracted to, and deposit the most egg masses in, the most advanced corn, especially fields started under plastic or row cover. Corn that is in late whorl to tassel emergence stage when egg masses are being laid does not show the typical larval feeding in the emerging tassel that we see in bare ground corn that is in the whorl stage during the flight. For this reason, tassel emergence scouting and thresholds have not been successful in plastic and row cover corn. 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. Information from: [http://sweetcorn.nysipm.cornell.edu/information-for-trap-network-cooperators/season\\_ext/](http://sweetcorn.nysipm.cornell.edu/information-for-trap-network-cooperators/season_ext/)

# Dual Magnum Herbicide Expands Label for Cole Crops

Christy Hoepting, CCE Cornell Vegetable Program

The new Dual Magnum Special Local Needs label (EPA No. 100-816/SLN No. NY-110004; a.i. metolachlor; Syngenta) **now includes transplanted Brussels sprouts and cauliflower**, which make use of this product more convenient in mixed brassica plantings.

Dual Magnum provides excellent pre-emergence control of annual grasses, as well as some broadleaves like pigweed, hairy galingsoga, Shepherd's purse and nightshades. Generally, Dual Magnum provides better control of broadleaf weeds than Treflan. **And, unlike any other herbicide labeled in Cole crops, it provides excellent control of yellow nutsedge.** Table 1 includes a summary of the rates and uses for Dual Magnum in the various Cole crops. The full label is available is at <http://132.236.168.99/ppds/543435.pdf>.

Table 1. Summary of Dual Magnum supplemental label uses in Cole crops in New York.

Cole Crop	Rate (per acre)	Timing		Crop Stage for Direct-seeded	PHI
		Prior to transplanting	After transplanting		
<b>CABBAGE Transplanted &amp; Direct Seeded</b>	0.5 to 1.33 pt* Single app nonincorporated	allowed	Within 48 hours**	4-leaf	60 days
<b>BROCCOLI Transplanted &amp; Direct Seeded</b>	0.5 to 1.33 pt* Single app nonincorporated	allowed	Within 72 hours**	4-leaf	60 days
<b>MUSTARD GREENS, Broccoli (raab), Chinese cabbage (bok choy), collards, kale, mizuna, mustard greens, mustard spinach, and rape greens</b>	0.67 to 1.33 pt* Single app nonincorporated	prior to crop emergence	n/a	At least 1 true leaf	30 days
<b>New in 2016! BRUSSELS SPROUT Transplanted</b>	0.5 to 1.33 pt* Single app nonincorporated	allowed	Within 48 hours**	n/a	60 days
<b>New in 2016! CAULIFLOWER Transplanted</b>	0.5 to 1.33 pt* Single app nonincorporated	allowed	Within 48 hours**	n/a	60 days

\* Use lower rates on soils relatively coarse-textured and higher rates on fine-textured soils.

\*\* Less injurious than prior to transplanting.

**Restrictions for all Cole crops:** 1) Make only one application per crop. 2) Do not apply more than 1.33 pt/A per crop. 3) Do not incorporate. 4) Do not use in combination with Goal.

**Caution on injury for all Cole crops:** 1) Weed control may be reduced on muck soils. 2) Crop maturity may be delayed. 3) May cause reduced yields in broccoli. 4) The risk of crop injury increases when nitrogen sources (e.g. AMS, UAN), fertilizers or other pesticides are applied with Dual Magnum.

**The use of Dual Magnum under Special Local Needs labeling requires users to sign a waiver which releases Syngenta Crop Protection, Inc. from all liability** and indemnification by the user and/or grower for failure to perform and crop injury, crop yield reduction, and/or crop loss from use of the product in accordance with the SLN labeling. Visit [https://cvp.cce.cornell.edu/submission.php?id=369&crumb=crops|crops|cabbage|crop\\*8](https://cvp.cce.cornell.edu/submission.php?id=369&crumb=crops|crops|cabbage|crop*8) for directions.

**Other vegetable crops included on Dual Magnum SLN** are asparagus, transplanted bell pepper, carrots, garden beets, dry bulb and green onions, spinach, Swiss chard, pumpkins and winter squash, melon crop subgroup 9a (cantaloupe, muskmelon and watermelon), cucumber, and **other new additions for 2016 including lettuce (head and stem) and summer squash.**

Dual Magnum does not control emerged weeds. Goaltender and Stinger are labeled in select Cole crops for control of broadleaf weeds (see side-bar), while Poast (a.i. sethoydim) and Select Max (a.i. clethodim) and generic versions of these active ingredients are available to control emerged grasses. Go to the CVP website for "Relative Effectiveness of Herbicides Available for Use in Cabbage in New York for 2015" chart at [http://rvpadmin.cce.cornell.edu/uploads/doc\\_289.pdf](http://rvpadmin.cce.cornell.edu/uploads/doc_289.pdf).

## GOALTENDER and STINGER for Post-Emergent Broadleaf Weeds in Cole Crops

**Goaltender 4F (a.i. oxyflufen):**

**Crops:** broccoli, cabbage and cauliflower

**Weeds controlled:** Provides excellent control of pigweed, good control of lambsquarters, smartweed, purslane, galingsoga, nightshade, Shepherd's purse, Canada thistle and annual sowthistle, and fair control of ragweed.

**Crop Stage:** Apply to a transplanted crop after a minimum of 2 weeks after planting, and to direct seeded crops with at least 4 true leaves.

**Rates:** 4 to 6 fl oz per acre per application. Do not apply more than 8 fl oz per acre per season. If a pre-transplant treatment has previously been made, the combination of pre-plant and post-transplant treatments must not exceed 16 fl oz per acre per season.

**Pre-harvest interval (PHI):** 35 days

**Notes:** Do not add any adjuvant, liquid fertilizer or pesticides to the spray mixture. Avoid application if heavy rainfall is predicted to occur within 24 hours after planned application.

**Stinger 3EC (a.i. clopyralid):**

**Crops:** Broccoli, Brussels sprouts, cabbage, cauliflower, cavalo broccoli, Chinese broccoli (gai lon), Chinese cabbage (napa), Chinese mustard cabbage (gai choy) and kohlrabi.

**Weeds controlled:** Provides excellent control of ragweed and galingsoga and good control of nightshade.

**Crop Stage:** not specified

**Rates:** 4 to 8 fl oz per acre per application. Do not apply more than 8 fl oz per acre per season.

**Pre-harvest interval (PHI):** 30 days

**Notes:** Be aware of crop rotation restrictions – see label. 🍅

## UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)*

### Muck Donut Hour

Every Tuesday through August 9 | 8:30 AM - 9:30 AM  
Elba Muck, corner of Transit and Spoilbank, Elba, NY



Meet with Cornell Vegetable Program Specialist Christy Hoepting every Tuesday morning to ask questions and share your observations. Grower experience is combined with research and scouting information for a whole lot of talk about growing ONIONS!

### Soil Health & Cover Crop Workshop

June 30, 2016 | 9:00 AM - Noon  
Elba Firemen's Recreation Hall, 7143 Oak Orchard Rd, Elba, NY 14058



Topics include **Soil health basics and why to start cover cropping**, Jeff Rasaweher, crop farmer and owner of Centerseeds, Celina, Ohio, **A Local Farmer Panel** with cover crop advice for the beginner, **The Cornell Climate Smart Farming Program**, Darcy Telenko, Cornell Vegetable Program, and an introduction to the **Western New York Soil Health Alliance**. Sponsored by: Western New York Soil Health Alliance, a Farmer-to-Farmer Network.

To pre-register for this FREE event, contact Orleans County SWCD at [Dennis.Kirby@ny.nacdnet.net](mailto:Dennis.Kirby@ny.nacdnet.net) or 585-589-5959, or Genesee County SWCD at [Molly.Stetz@ny.nacdnet.net](mailto:Molly.Stetz@ny.nacdnet.net) or 585-343-2362

### Fresh Market Vegetable Field Day: Early Disease Detection & Weed Management Options

July 6, 2016 | 9:00 AM - 3:30 PM

CVP Fresh Market Demo Site at Partridge's on the Farm Market, 4924 Ellicott St Rd (Rt 63), Batavia, NY 14020



View demonstration plots to exemplify early disease detection and weed management options for fresh market vegetable production. In addition to the demonstration plots, sessions will be offered throughout the day on weed and disease identification and biology, soil health and resistance management by CVP team members and county agriculture Educators. Regional equipment dealers and industry representatives will be invited to display equipment and new technology. CCA and DEC credits will be available.



- Tomato varieties and organic spray programs for disease management
- Cucumber varieties and organic spray programs for downy mildew
- Specialty crop vegetable varieties for viewing
- Pesticide tank mixing 101
- Weed identification and biology
- Stale seedbed techniques for weed management in pumpkin, winter squash, and root crops
- Improving soil health through the use of cover crops
- Herbicide options in sweet corn

\$20 per person before June 30th includes lunch and information packet / \$30 per person at the door (lunch cannot be guaranteed unless you have pre-registered). Please contact us for special food accommodations. Pay online at <https://cvp.cce.cornell.edu/event/preregistration.php?event=564> or contact Eva McKendry at 716-652-5400.

### High Tunnel Pest and Disease Management: Organic Control Strategies

August 2, 2016 | 4:30 PM - 7:30 PM

Fellenz Family Farm, 1919 Lester Rd, Phelps, NY 14532

How can you manage your tunnel to limit losses due to pests and disease? This field day will start with identification of common high tunnel pests and diseases and effective organic control strategies, including spraying. Andy Fellenz, with support from NE-SARE, has developed and will demonstrate a boom-style high tunnel sprayer, as well as discuss the proper use of backpack and other relatively low pressure, low flow single-tip sprayers. Variety selection, rotation, cultural practices and spraying all have a place in the overall farm strategy. Fellenz Family Farm received its certification for growing organic vegetables and fruits in Phelps, NY in 2005, and has been growing in high tunnels for more than 10 years.

Cost: FREE! Email Angela Parr at [aep63@cornell.edu](mailto:aep63@cornell.edu) to register or call 585-394-3977 x426. *This event is sponsored by NE-SARE through a Farmer Grant. The Cornell Vegetable Program is cooperating with Fellenz Family Farm to bring you this event.*

### Vegetable Walk and Cut Flowers

August 15, 2016 | 5:30 PM

Werner's Farm, 8427 West Henrietta Rd, Rush, NY 14543

A discussion and field walk for cut flower growers. Topics will be production considerations, and disease and insect management. The vegetable field walk will be conducted by Cornell Vegetable Program Specialists Judson Reid and Robert Hadad and will cover identification and management of insects, diseases, and weeds. FREE! Contact Robert Hadad for more information at 585-739-4065.



## Weather Charts

John Gibbons, CCE Cornell Vegetable Program

### Weekly Weather Summary: 6/07 – 6/13/16

Location	Rainfall (inch)		Temp (°F)	
	Week	Month June	Max	Min
Albion	0.27	0.51	86	43
Appleton, North	0.19	0.94	83	41
Baldwinsville	0.63	1.89	79	45
Buffalo*	0.25	0.49	77	44
Butler	0.75	1.51	79	45
Ceres	0.50	1.95	84	33
Elba	0.07	0.60	81	38
Farmington	0.13	0.43	85	41
Gainesville	0.28	0.82	79	37
Geneva	0.12	0.37	84	46
Lodi	0.04	0.39	85	47
Niagara Falls*	0.07	0.59	89	44
Penn Yan*	0.12	0.39	87	47
Rochester*	0.13	0.75	87	44
Romulus	0.03	0.31	85	45
Silver Creek	0.42	2.38	82	46
Sodus	1.80	2.50	84	44
Versailles	0.14	0.51	83	41
Williamson	1.82	2.80	83	45

### Accumulated Growing Degree Days (AGDD) Base 50°F: April 1 – June 13, 2016

Location	2016	2015	2014
Albion	486	608	509
Appleton, North	390	466	392
Baldwinsville	498	633	603
Buffalo	522	629	514
Butler	494	649	584
Ceres	378	540	473
Elba	331	465	407
Farmington	452	600	546
Gainesville	335	487	417
Geneva	481	611	561
Lodi	537	703	630
Niagara Falls	554	561	479
Penn Yan	501	668	592
Rochester	513	674	596
Romulus	468	623	566
Silver Creek	455	556	478
Sodus	415	528	525
Versailles	459	584	507
Williamson	421	542	502

\* Airport stations

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

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# VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

## VEGEdge

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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.

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