



Cabbage maggot emergence currently ranges from 50-75%. Cole crops

should be protected by an insecticide or with row covers.

PAGE 1



All good things must come to an end. It's time to kill off your barley windbreaks in

direct seeded onions before they get too aggressive.

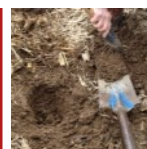
PAGE 5



If left unchecked, weeds in pepper can reduce yield by as much as 75%, while typical losses are

estimated at 1-5%. Learn more about your control options.

PAGE 6



Presence of earthworms is a good indicator of soil health and crop yield potential. Make

sure you "feed" them by planting a cover crop after your harvest.

PAGE 6

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Photo: Elizabeth Buck

 **Cornell University**
Cooperative Extension
Cornell Vegetable Program

Peak Flight of Cabbage Maggot Occurring Now – Cole Crops Should be Protected Preventatively

Christy Hoepting, CCE Cornell Vegetable Program

Cabbage maggot can be sporadic, but is favored by cool temperatures and moist soil conditions. Cabbage maggot larvae feed on and tunnel their way into the roots of young plants, resulting in death, severe stunting or unmarketable feeding damage in radish (Fig. 1). Broccoli and cauliflower are more susceptible than cabbage and Brussels sprouts.

Protection from cabbage maggot is often needed in earliest plantings in the field and transplant beds. Unfortunately, once plants are established, there is nothing that can be done to control this pest. Particularly at sites with a history of cabbage maggot and during favorable conditions, preventative measures should be considered, especially during peak flight. Emergence of cabbage maggot adults (flies) can be predicted based on degree-day (base 40°F) accumulations, which is readily available at the NEWA web-site (Network for Environment and Weather Applications; <http://newa.cornell.edu/>); from the top menu, click on "pest forecasts" and then "cabbage maggot", and simply select the location that you are interested in. **Highest risk of infestation is typically during peak emergence (50%) from the first and second adult flights**, though later generations can also be damaging. Peak flights are indicated by the "50%" red dotted lines on the degree-day accumulation chart (Fig. 2). Seedlings, transplants or



Figure 1. Cabbage maggot feeding damage on radish. Photo: University of Saskatchewan

continued on page 3



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
Web address: cvp.cce.cornell.edu

Editor

Carol MacNeil

Contributing Writers

Robert Hadad
Christy Hoepting
Julie Kikkert
Carol MacNeil
Judson Reid
Darcy E. P. Telenko

Publishing Specialist/Distribution/Sponsors

Angela Parr

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Contents

Contact Us

Cornell Vegetable Program10

Crops

Crop Insights.....07
Cole Crops: Peak Flight of Cabbage Maggot Occurring Now01
Onion: WANTED! Weed Escapes to Conduct Herbicide Research Trial02
Onion: Pre-Emergent Weed Control for Transplants Grown on Mineral Soil04
Onion: Killing Barley Windbreaks in Direct Seeded Onions05
Pepper: Weed Management in 201506

General Interest

Copper Fungicides for Managing Diseases on Veg Seedlings in Greenhouse04
Early Results of Cornell Soil Health Test on CVP Farms.....06

Events

From Tillage to Drainage: Working with Your Farm's Diverse Soils08
Webinar for Farmers Markets Using a Token System for SNAP08
Fresh Market Vegetable Weed Management Field Days: Cultivation Options...08
Fresh Market Veg Weed Management Field Days: Vegetable Production08
Crop Quality Control on Small-Scale Organic Farms & High Tunnels.....08

Weather.....09

WANTED! Weed Escapes to Conduct POST-Emergent Herbicide Research Trials in Direct Seeded Onions

Christy Hoepting, CCE Cornell Vegetable Program

This year I am planning on conducting a series of POST-emergent herbicide trials to improve control of weed escapes in direct seeded onions. I am looking for muck fields that have a good selection of weed species (pigweed, lamb's quarters, ragweed, purslane, smartweed, etc.) but also sites with certain problematic weed escapes such as ragweed and mustards (Fig. 1). I'd like to make the first sprays at the flag leaf stage. If you have any good sites and would be interested in hosting a research trial, please contact Christy Hoepting at 585-721-6953 or cah59@cornell.edu. 📍



Figure 1. Yellow nutsedge in direct seeded onions in the flag leaf stage: this site is perfect to conduct a POST-emergent herbicide research trial for this difficult weed escape.
Photo: Christy Hoepting, CVP

root crops present around the time of peak flights should be protected by an insecticide treatment or with row covers. Insecticides are applied just prior to planting; row covers must be in place well before adults begin to emerge. According to the models on NEWA, cabbage maggot emergence currently ranges from 50 to 75%. Peak flight also coincides with blooming of the mustard weed species, Yellow rocket.

CONTROL OPTIONS:

Lorsban (15G, 4E, 75WG and Advanced) and its generics (e.g. Warhawk), an OP insecticide, can be used at transplanting as an in-furrow application or immediately after seeding or transplanting as a directed banded spray (rates based on 4-inch band) on most Cole crops. A minimum of 40 gpa should be used when Lorsban is applied as a band over the row. Do not add any adjuvants, surfactants or spreader stickers.

Check the pH of your tank-mix with Lorsban, it should not be greater than 7, or else it will not work properly. Note, transplant water treatments of Lorsban may result in stand reduction due to plant stress at time of transplanting. Lorsban is also labeled as a band treatment for direct seeding where the band placement should be behind the planter shoe and in front of the press wheel to achieve shallow incorporation. Make sure that the proper rate of Lorsban and depth of incorporation is used, or else the product will be diluted and off-target, leading to control failures.

Diazinon (AG500, 50W and AG600 WBC), another OP insecticide, can be used in the same manner as described for Lorsban except for the band treatment with direct seeding. In addition, diazinon can also be used on seedbeds, broadcast and incorporated just before planting. It is only labeled on broccoli, Brussels sprouts, cauliflower, cabbage and rutabagas.

Lorsban and Diazinon are federally-restricted organophosphate materials and require oral warnings and signs to be posted at the entrances of treated areas.

Coragen, a diamide insecticide, has a 2(ee) label to be used as a transplant water treatment for control of cabbage maggot in cabbage only. Apply 5 fl oz per acre as a transplant water treatment at planting. Apply a minimum of 2 fl oz of treatment solution per plant. **It is critical that transplants be watered before transplanting and that the root zone is adequately treated or poor performance will result.** Coragen is systemic and needs to be taken up by the roots and get into the plant to be effective. It does not move well in soil. **Therefore, it does not work**

well as a directed spray to the base of plants after planting and is not labeled for CM in this manner. Do not apply more than 10 fl oz of Coragen per acre per crop by any combination of soil and foliar applications. In a preliminary Cornell study, Coragen performed statistically as good as Lorsban 4E for CM control. The 2(ee) label must be in the possession of the user and is available at <http://128.253.223.36/ppds/529807.pdf>.

Verimark (new in 2015!), another diamide group 28 insecticide similar to Coragen with active ingredient cyantraniliprole is now labeled for cabbage maggot. It can be used similarly to Coragen as an in-furrow application or in the transplant water (minimum 2 fluid ounces of water per plant) **but** one of the main differences between Verimark and the other labeled products is that it can be used as a transplant drench “by growers or commercial transplant producers no earlier than 72 hours prior to planting in the field. Use only on transplants grown in soil/potting media.” The rate for cabbage maggot is 10 to 13.5 fl oz. See label for additional guidance on converting rate per acre to per 1000 linear feet and per tray. It must be applied uniformly in the root zone to ensure effective control. The pH of the application solution should be between pH 4 and 6. Generally, Verimark provides improved control over Coragen.

Advantages of using Coragen and Verimark over Lorsban include:

- 1) Coragen and Verimark also provides excellent control of worms and flea beetles; There are no risks of phytotoxicity to the crop with Coragen or Verimark;
- 2) Coragen and Verimark belong to a different chemical class (group 28) than Lorsban and Diazinon (group 1) for resistance management;
- 3) Coragen and Verimark are not a restricted use insecticides.

Capture LFR, a pyrethroid insecticide, is labeled for CM control as a band over the row on the soil surface, or over the furrow (T-band), or in-furrow with the seed. In Cornell studies, Lorsban performed much better (compare 100% clean plants with Lorsban to 55% with Capture LFR) than Capture LFR for control of CM.

Floating row covers provide an effective barrier against this pest. Place the cover as soon as the transplants are set. Do not use where Cole crops were grown last year, as flies left in soil could emerge under the cover. Replace cover after weeding operations. As soil temperatures rise, first flight ends and crops grow large, covers can be safely removed.

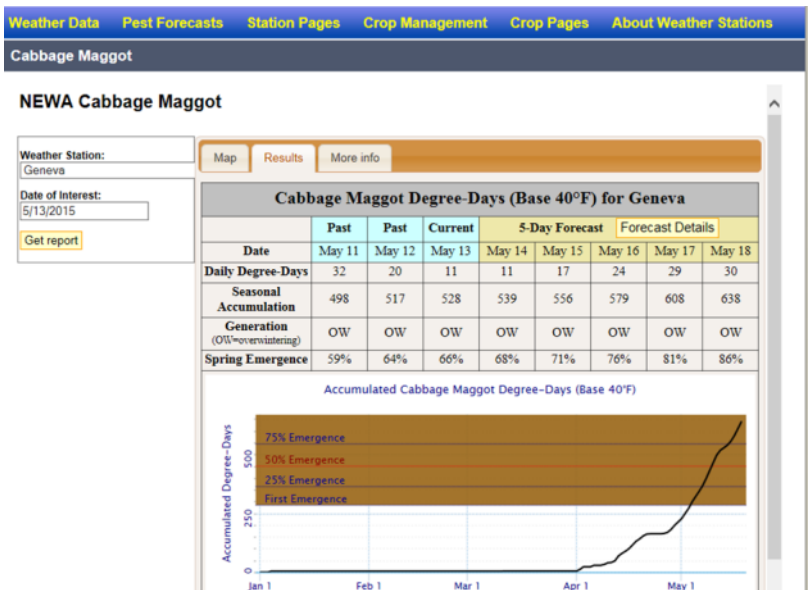


Figure 2. Peak flight prediction of cabbage maggot using degree day model available at NEWA (<http://newa.cornell.edu>)

Copper Fungicides for Managing Diseases on Vegetable Seedlings in the Greenhouse

Margaret McGrath, Long Island Fruit and Vegetable Update, No. 5, April 30, 2015

Copper fungicides provide broad-spectrum control of several fungal and bacterial pathogens, thus they are often selected for general disease management. Note that young seedlings growing in a greenhouse can be more sensitive to pesticides than field-grown plants. There are many copper products available differing in active ingredient, use directions, and REI (see list below). REI ranges from 4 to 48 hr. Since seedlings need to be checked and watered at least once a day while growing in a greenhouse, workers need to have the following PPE if they might contact anything that has been treated (plants, soil, or water):

Coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, chemical resistant footwear plus socks, chemical-resistant headgear if overhead exposure, and protective eye-wear. It is also an agricultural use re-

quirement to notify workers of the application by warning them orally. With some products (ex. Badge) there are additional requirements for greenhouse use reflecting the fact copper causes moderate eye irritation: See label for more details.

Some copper fungicides ingredients, REI, and greenhouse use information:

- **Badge SC.** 17% copper oxychloride + 15% copper hydroxide. 48 hr. Greenhouse use section has rate for some crops, range is 1-2.5 tablespoon per 1,000 sq ft.
- **Badge X2.** 24% copper oxychloride + 21% copper hydroxide. 48 hr. Greenhouse use section has rate for some crops, range is 0.5-1.5 tablespoon per 1,000 sq ft
- **Camelot.** 58% copper salts of fatty and rosin acids. 12 hr.
- **Champ WG.** 77% copper hydroxide. 24 hr. For greenhouse use, follow

rates for field use. One level tablespoon per gal water is equivalent to 1 lb per 100 gallons.

- **Cueva.** 10% copper octanoate. 4 hr. 1 fl oz per gal water is a lower label rate (label range is 0.5 – 2 gal per 100 gal water).
- **Cuprofix Ultra 40 Disperss.** 71% basic copper sulfate. 48 hr. Rate on label for greenhouse use: One level teaspoon per 1,000 sq ft (equivalent to 0.5 lb/A).
- **Kocide 3000.** 46% copper hydroxide. 24 or 48 hr. One level tablespoon per 1,000 sq is equivalent to 1 lb/A.

General

Endosulfan (Thionex, Drexel Endosulfan) Phase-Out Reminder: Endosulfan is being phased out and can no longer be used on many crops. Uses end on apple, blueberry, peppers, potatoes, pumpkins, sweet corn, tomato & winter squash by 7/31/15. ●

Pre-Emergent Weed Control for Onion Transplants Grown on Mineral Soil

Christy Hoepting, CCE Cornell Vegetable Program

BARE ROOT TRANSPLANTS

The beauty of growing onions from bare root transplants is that excellent weed control can be achieved by applying high rates of herbicides within days of transplanting, because the onions are in a dormant stage and much more tolerant to herbicide injury compared to actively growing plants. Seasoned onion growers are generally aggressive with weed control, because onions are very poor competitors with weeds. Often, the decision is made to control weeds at the risk of some herbicide injury, with stunting being the most common injury of PRE-emergent herbicides used in onions. Outlook, Prowl and Goal are the most commonly used PRE-emergent herbicides in bare root transplanted onions. They are applied to dormant plants after the soil has settled, preferably after rainfall or irrigation. Risk for injury is higher when

conditions are cold and wet, because herbicides can be washed into the root zone, and the onions are not as actively growing to metabolize the herbicide into non-toxic metabolites.

Outlook: a.i. dimethenamide. Controls annual and perennial grasses, and nutsedge. May be applied as a single application of 21 fl oz (maximum of 18 fl oz on coarse soil) or as a split application of 10.5 to 14 fl oz first and 10.5 to 7 oz 14 days later. Maximum 21 fl oz per season.

Dual Magnum: a.i. metalochlor. Control of annual grasses, yellow nutsedge, and some broadleaf weeds such as galinsoga, nightshade species and red-root pigweed. Onions must have at least 2 true leaves. Use the lower rate on light, sandy soils and where a general weed spectrum is targeted. The higher rate will provide improved yield

low nutsedge control, but comes with an increased risk of crop injury. Onion tolerance to Dual Magnum increases with increasing onion size. This is a New York Special Local Needs label that requires indemnification, which can only be obtained through the “special labels” link found at www.farmassist.com. Tank mixes with Goal can increase injury.

Prowl 3.3EC and Prowl H2O: a.i. pendamethalin. Controls annual and perennial grasses, and selected broadleaf weeds. H₂O is a safer formulation with respect to crop injury and tank mix compatibility and is applied at slightly lower rates. Apply rates according to soil type.

Goal 2XL and GoalTender: a.i. oxyfluorfen. For broad spectrum broadleaf weed control. GoalTender is a saf-

continued on next page

er formulation with respect to crop safety and tank mix compatibility and is applied at half the rates of Goal 2XL. Apply up to 1 pint (Goal 2XL) and 0.5 pt (GoalTender) per acre. Can be tank mixed with Outlook and/or Prowl. Use Prowl H₂O and GoalTender for improved crop safety.

Chateau SW or WDG: a.i. flumioxazin. For broad spectrum broadleaf weed

control including some mustards species, pigweed and chickweed. Apply Chateau to transplanted onions between the 2 and 6-leaf stages. Apply 1 to 2 oz when onions are between the 2 and 6 leaf stages. A second application may be made 14 days later for a maximum of 3 oz. *Chateau* may result in necrotic spotting of onion leaves that come in contact with the spray.

PLUG TRANSPLANTS

For plug transplants, Outlook, Dual Magnum and Prowl may be applied in the same manner as for bare root transplants (i.e. within days of transplanting), but do not use Goal 2XL. High rates of Goal 2XL can be injurious to actively growing plants. ●

All Good Things Must Come to an End: Killing Barley Windbreaks in Direct Seeded Onions

Christy Hoepting, CCE Cornell Vegetable Program

Planting barley as a living mulch reduces soil erosion and protects the onions from wind damage. This spring, barley windbreaks performed very well achieving enough biomass in time to provide adequate protection, but also did not grow too quickly to compete with the crop (Fig. 1). When barley windbreaks get too aggressive, they can trap air between the rows and increase the chances of seedling burn-off, and the barley can compete for moisture and nutrients, and stunt the onions. Thus, all good things must come to an end, and it is time to kill off the barley windbreaks.

Studies have shown that onion bulb size is reduced if barley windbreaks are killed once the barley exceeds 7 inches in height. Most growers apply herbicides to kill barley windbreaks when the onions are in the flag leaf stage once the first true leaf has begun to emerge; before the barley reaches 7 inches in height (Fig. 2). Fusilade, Select Max (quicker control than Fusilade by 3-4 days) and Poast work best when the barley is actively growing. If barley has been nipped by

frost or wind, it will be stressed, and these herbicides will work better after waiting a few days. Select Max also reportedly works better than Fusilade when barley is stressed. Typically, Prowl is applied along with the graminicide to kill the barley windbreaks. Since Prowl EC contains petroleum distillates in its formulation, the amount of crop oil concentrates (COC) required when using Fusilade can be reduced (Table 1). Fortunately, Prowl does not break down in sunlight, so it will remain on the barley while it is dry, and when it rains, it will wash off onto the soil surface and still be effective.

Table 1. Rate of crop oil concentrate (COC) may be reduced when Fusilade is tank mixed with Prowl EC.

Rate of Prowl EC (per acre):	Rate of COC with Fusilade:
2 quarts or more	None
1-2 quarts	Half rate: 0.5% v/v
No Prowl EC or Prowl H ₂ O	Full rate: 1.0% v/v



Figure 1. Barley wind breaks protecting vulnerable young onion seedlings from potentially ravaging 30 mph winds. Photo: Christy Hoepting, Cornell Vegetable Program



Figure 2. It's best to wait until the first leaf has started to emerge before applying herbicide to kill barley windbreaks to direct seeded onions in the flag leaf stage to ensure that the onions are large enough to withstand wind damage once the barley begins to die. Photo: Christy Hoepting, Cornell Vegetable Program ●

Weed Management for Pepper

Darcy Telenko, CCE Cornell Vegetable Program

Weed management in pepper begins with proper site selection and identification of the weed species in a field. The major weeds that impact pepper production in western NY include ragweed, lambsquarters, redroot pigweed, galinsoga, hairy and black nightshade, yellow nutsedge, annual and perennial grasses, and mustards. When weeds are left unchecked, pepper yield can be reduced as much as 75%, while typical losses are estimated to range from 1-5%. Transplanted peppers will have a slight advantage as long as they

are planted in a clean, weed-free bed. Unfortunately, peppers are poor competitors and the first 6 to 8 weeks after transplanting is the most critical weed-free period. Late emerging weeds will have limited effect on yield, but can interfere with harvest. If left to produce seed, these weeds will contribute to the weed seed bank and future management issues. Planting on plastic-mulched beds will aid in weed control, and hand weeding can be used to clean up weed escapes, especially those that grow up through the planting holes of

plastic mulch. Cultivation between the beds is an option and there are new tools available for cleaning along plastic mulch, but be cautioned that aggressive cultivation can pull up the edges of the mulch.

There are a number of herbicides available for use in pepper. Weed species and cultural practices will determine herbicide selection. The table below is provided as a guide on the relative effectiveness of each herbicide on the most common weed species in NY.

Relative Effectiveness of Herbicides Available for Use in Pepper in New York for 2015

<div><div><div>●</div><div>◐</div><div>◑</div><div>◒</div><div>○</div><div>Y</div></div><div>Excellent</div><div>Very Good</div><div>Good</div><div>Fair</div><div>Poor</div><div>Labeled, not rated</div></div>				Relative effectiveness on weed species															
				Broadleaf annual ³									Annual grasses				Perennials		
				common lambsquarter	common purslane	common ragweed	pigweed	smart weed	galinsoga	mustard	nightshade	velvetleaf	barnyardgrass	crabgrass	fall panicum	foxtail spp.	quackgrass	yellow nutsedge	
Herbicide	Trade name	Common name	Timing ¹	MOA ¹															
Preemergence Surface-applied																			
Command 3ME	clomazone	PreE	13	do not apply to banana peppers or on soil that will be under plastic									Y	Y	Y	Y	Y		
*†Dual Magnum	metolachlor	PreT; PostT	15	○	◐	○	◐	◐	●	○	◐	○	●	●	●	●	○	◐	
Prefar	bensulide	PPI; PreE	8	○	◐	○	◐	○	○	○	○	○	●	●	●	●	○	○	
Prowl H2O	pendimethalin	PreT; PostT	3	◐	◐	○	◐	◐	○	◐	○	◐	●	●	●	●	◐	○	
Sandea	halosulfuron	PreE	2	◐	○	◐	●	◐	◐	◐	○	◐	○	○	○	○	○	◐	
Preplant-incorporated																			
Devrinol	napropamide	PPI	15	◐	◐	○	◐	○	◐	○	○	○	●	●	●	●	○	○	
Prefar	bensulide	PPI; PreE	8	○	◐	○	◐	○	○	○	○	○	●	●	●	●	○	○	
Treflan	trifluralin	PPI	3	◐	◐	○	◐	○	○	○	○	○	●	●	◐	●	○	○	
Postemergence activity																			
Aim EC	carfentrazone	PostE	14	◐	-	○	●	◐	○	◐	◐	●	○	○	○	○	○	○	
*Gramoxone	paraquat	PreE;PostE	22	●	●	●	●	●	●	●	◐	◐	●	●	●	●	◐ ³	◐ ³	
Poast	sethoxydim	PreE;PostE	1	○	○	○	○	○	○	○	○	○	◐	◐	◐	◐	◐	○	
Reflex	fomesafen	PreT	14	◐	●	●	●	◐	○	●	◐	○	◓	◐	○	○	○	◐	
Roundup WM	glyphosate	PostE	9	●	●	●	●	●	●	●	●	●	●	●	●	●	◐	◐	
Sandea	halosulfuron	PostE	2	○	○	◐	●	◐	◐	◐	○	◐	○	○	○	○	○	●	
*Select Max	clethodim	PreE;PostE	1	○	○	○	○	○	○	○	○	○	○	◐	●	●	◐	○	

Effectiveness may vary with method of application, rate, use of adjuvant, size of weed, and soil and climate factors. See 2015 Cornell Commercial Vegetable Production Guidelines for more details. Always read and follow label directions.

¹ Timing: PPI = pre-plant incorporated; PreE= pre-emergent; PreT=pre-transplant; PostT=post-transplant; PostE=post-emergence. ² MOA = Mechanism of Action number as a guide for resistance management.

³ Top kill. * Restricted-use pesticide. † Not for use in Nassau/Suffolk Counties. ●

Early Results of Cornell Soil Health Test on CVP Farms

Carol MacNeil, CCE Cornell Vegetable Program

This spring 26 fields on vegetable or veg/field crop farms in the Cornell Vegetable Program area, from Niagara to Yates Counties, have had soil sampled, and compaction tested, for the Cornell Soil Health Test. While it will be a few weeks until all the results are back from the lab, there was one outstanding measure of soil health that stood out. The number of earthworms in the ten soil sampling holes dug per field varied dramatically. In order to

collect a relatively undisturbed soil sample an 8" hole is first dug. Then a 2" thick slab of soil is dug from the hole's edge, and trimmed to 2" wide. The soil from the hole and sample was examined for earthworms.

In six fields with good soil management (aggressive use of cover crops, good crop rotation including soil-building crops, and/or reduced tillage)

continued on next page

there was an average of 8 to 20 earthworms per hole! In eight fields where few cover crops were used, only row crops were grown, and/or conventional tillage was done, an average of no more than 1 earthworm per hole was observed. More soil management info is needed from the growers to determine more precisely the reasons for the presence or absence of earthworms in their fields.

Earthworms create channels for root growth and water percolation, and are a good indicator of soil health, and crop yield potential. Earthworms cannot survive, however, if they don't have anything to eat. Regular use of cover crops, soil-building crops,

manure, etc. (fresh organic matter), and reducing tillage to avoid “burning up” fresh organic matter too quickly, can ensure that earthworms will be well fed and ready to “till” your soil. When crops are harvested, from July into October, take some time to get a cover crop established. There are grasses, legumes, crucifers, and more, for every open niche in your rotation. Check out the Cover Crop Decision Tool at <http://covercrops.cals.cornell.edu/> or contact Carol MacNeil at crm6@cornell.edu, 585-394-3977 x406. *This project is supported by an NRCS Conservation Innovation Grant on soil health.* ●

CROP INSIGHTS

GENERAL OBSERVATIONS

Covered and bare ground corn is coming on decently in most locations. Some weed pressure due to lack of water for herbicides to effectively work has also been seen. Corn flea beetle numbers are higher than what would have been imagined considering the cold winter. The long-term snow cover had helped insulate the flea beetles apparently, much the same as last year.

Flea beetles in brassicas are moderate to heavy in most locations scouted. Cabbage looper butterflies are becoming active. Yellow mustard weed has started blooming. Cabbage maggot activity should be watched for.

Cutworms are a nuisance and are causing damage in new transplants. Soils with high organic matter and soils with plant residue/stubble provide habitat for cutworms. Plasticulture use can also offer daytime hiding places for these pests. The worms don't last long in the field but enough of them can cause plenty of damage to a wide range of vegetable transplants. Better incorporation of plant stubble and residue before transplanting out can help bury the worms.



Photo: Iowa State Univ. Dept. Entomology

ONIONS

Direct seeding is complete and transplanting is almost finished. The 2015 planting season was one of the driest onion growers in this region have seen in a while with several irrigating to stimulate even emergence and to prevent wind damage from blowing muck. Fortunately, enough rain fell Monday night just in time before Tuesday's 50 mph winds got a chance to cause any substantial wind damage – a narrow escape indeed! The direct seeded crop is looking really good with the majority in the flag leaf stage. Early transplanted fields have 3-4 leaves and are looking very good, especially where they have been irrigated (Fig. 1). Fields that were transplanted later into hot dry soil and exposed to temps into the 80s are suffering; fortunately, the change in weather to cooler temps and more rainfall will be a cool reprise and stimulate root growth. Rainfall came just in time to activate pre-emergent herbicides; keep your eye out for new flushes of weed escapes – see my “Wanted” ad (pg 2). Killing barley windbreaks is on the agenda this week – see article (pg 5).



Figure 1. Early transplanted onions (bareroots) looking good with 3-4 leaves on 5/11. Photo: C. Hoepting, CVP

PROCESSING VEGETABLES

Good progress has been made in the planting of peas, beets, carrots, sweet corn and spinach over the last few weeks and the earliest plantings are emerging. Updated herbicide charts for many of the crops can be found on our team website under the individual crops, or you can contact our office for a copy. Keeping wheat and small grains out of processing fields is important because of the gluten-free issue (see article in the last issue of VegEdge). The pre-plant incorporated herbicides, Treflan and Eptam will suppress small grains. Similarly, Dual Magnum applied pre-emergence, will provide suppression. Post emergence applications of Select Max (12 fl. oz) and As-sure II (8 fl. oz) will control wheat that is 2 – 6 inches tall, while Poast (1.5 pt) will control wheat up to 4 inches tall.

SWEET CORN

Sweet corn is jumping up, especially after this last round of rain. Corn under plastic is about 4-6 leaves (6-8 inches) and early bare ground 1-2 leaf (2-3 inches tall) around the region.



Photos: D. Telenko, CVP

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

From Tillage to Drainage: Working with Your Farm's Diverse Soils

May 14, 2015 | 4:00 - 7:00 PM

Mud Creek Farm, Cherry St, Victor, NY 14564 (just off Route 44, past Ganondagan and The Apple Farm)



Unlock the long-term potential in the soil on your farm! Whether bringing new acres into production or renovating your existing fields, there is plenty to be done to provide for optimum soil fertility and to properly incorporate infrastructure like irrigation and drainage. Hear from Ruth Blackwell about Mud Creek Farm's existing soil health management as Cornell Cooperative Extension's Crystal Stewart adds insight about techniques for making most of the soil and land. Farmers of all experience ranges and land situations will be able to apply the day's lessons about creative cover cropping, testing soil health, management practices based on soil type, fertility practices, soil microbiology, conservation practices, and infrastructure back to their own soils.

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 5/12/15. *This event is produced by NOFA-NY, in partnership with Cornell Cooperative Extension, and with support from USDA-Risk Management Agency.*

Webinar for Farmers Markets Using a Token System for SNAP

May 21, 2015 | Noon - 1:30 PM

The Farmers Market Federation of NY will be holding free webinars for farmers markets who will be using a token system for SNAP (Supplemental Nutrition Assistance Program). The webinar training is mandatory for all markets using this system that have not previously participated in training. For all others, the webinar is a refresher course. To register for the webinar, click [here](#) for the registration information. For more information, contact the Farmers Market Federation of NY at 315-400-1447 or email deggert@nyfarmersmarket.com.

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:

- 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-to-consumer 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: 5/5 – 5/11/15

Location	Rainfall (inch)		Temp (°F)	
	Week	Month	Max	Min
Albion	0.54	0.55	89	45
Appleton, North	0.73	0.76	85	41
Baldwinsville	0.78	0.78	89	43
Buffalo*	0.54	0.62	89	47
Butler	0.93	0.93	91	44
Ceres	0.67	0.69	86	48
Elba	0.85	0.85	88	43
Farmington	0.93	0.93	90	46
Gainesville	0.39	0.39	87	46
Geneva	0.84	0.84	88	49
Lockport	0.14	0.14	87	44
Lodi	1.29	1.29	93	49
Penn Yan*	1.56	1.56	88	48
Rochester*	0.30	0.30	92	50
Romulus	0.87	0.87	87	49
Silver Creek	0.83	0.83	84	46
Sodus	1.46	1.46	88	42
Versailles	NA	NA	86	49
Williamson	0.72	0.72	89	40

Accumulated Growing Degree Days (AGDD)

Base 50°F: April 1 – May 11, 2015

Location	2015	2014	2013
Albion	198	79	194
Appleton, North	143	57	128
Baldwinsville	206	121	189
Buffalo	215	98	233
Butler	229	121	194
Ceres	163	102	126
Elba	146	59	170
Farmington	222	112	179
Gainesville	162	76	154
Geneva	216	117	189
Lockport	186	74	NA
Lodi	248	143	218
Penn Yan	231	116	189
Rochester	240	123	231
Romulus	204	120	190
Silver Creek	165	84	197
Sodus	168	102	167
Versailles	185	109	221
Williamson	166	88	181

* Airport stations

** Data from other station/airport sites is at: <http://newa.cornell.edu/> 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

Robert Hadad | 585-739-4065 cell | rgh26@cornell.edu
food safety & quality, organic, business & marketing, and fresh market vegetables

Christy Hoepting | 585-721-6953 cell | 585-798-4265 x38 office | cah59@cornell.edu
onions, cabbage and pesticide management

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

PROGRAM ASSISTANTS

Elizabeth Buck | 607-425-3494 cell | emb273@cornell.edu

John Gibbons | 716-474-5238 cell | jpg10@cornell.edu

Cordelia Hall | ch776@cornell.edu

Nelson Hoover

ADMINISTRATION

Angela Parr | 585-394-3977 x426 office | aep63@cornell.edu

Steve Reiners | sr43@cornell.edu

Mark Giles | fmg4@cornell.edu

For more information about our program, email
cce-cvp@cornell.edu or visit us at CVP.CCE.CORNELL.EDU



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