



# VEGEEdge

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## Monitor Root-Zone Electrical Conductivity to Avoid Salt Injury in the Roots of Transplants

Judson Reid, Cornell Cooperative Extension, Cornell Vegetable Program

We have seen several cases of high salt injury to transplant roots this spring. The damage to the roots is a browning, or burning back of the roots (Figure 1). Above ground symptoms can include foliar nutrient deficiencies or marginal necrosis (Figure 2). Salts enter the root zone through several sources:

- Potting media
- Irrigation water
- Fertilizers or other amendments

In a cloudy spring, salt injury can be more common as growers logically hold back on water, not giving enough to run through the bottom of the tray. However, the continual addition of dissolved salts from water or fertilizer without leaching causes Electrical Conductivity (EC) to rise. Solving the problem is generally straight forward; leach water through flats and pots weekly to keep fertilizer salts from building up.



Figure 1. High salt levels (measured by electrical conductivity) can burn roots, interfering with nutrient uptake and increasing susceptibility to disease. Photo by Judson Reid, CCE CVP



Figure 2. Marginal necrosis on tomato seedlings from elevated Electrical Conductivity. Photo by Judson Reid, CCE Cornell Vegetable Program

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## About VegEdge

VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension partnership between Cornell University and CCE Associations in 14 counties.



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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## Upcoming Events

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*This next issue of VegEdge newsletter will be produced on April 29, 2020.*

## 'Office Hours' for Commercial Vegetable Growers

Got Commercial Vegetable Questions?  
Get Live Answers every Thursday Night, 7-8pm, starting April 16!

*What to expect?*

- ✓ Dynamic troubleshooting with CCE Specialists
- ✓ Quality, farmer-driven production conversations
- ✓ Photo diagnostics/ID lessons

Join us each week at: <https://cornell.zoom.us/j/450507028>  
or by calling 1-646-518-9805, meeting ID: 450 507 028

Accepting pre-submitted photos and questions at [vegofficehours@gmail.com](mailto:vegofficehours@gmail.com)

Cornell Cooperative Extension  
Eastern New York Commercial Horticulture

Cornell Cooperative Extension  
Cornell Vegetable Program

### MONITORING ELECTRICAL CONDUCTIVITY

How do we keep from reaching this point? Monitoring root-zone EC with a digital meter is one tool. The common approach is called a 'pour-through, where water EC is sampled before being added to the container, and then again once it

has leached through the root zone. Most vegetables can grow well with EC values of 2.0-3.5 mS/cm. Potting media can also be submitted for lab analysis using a saturated media test (acceptable values here range from 1.5-3.0 mS/cm). ●

## Three Flies that are Early Pests

Robert Hadad, Cornell Cooperative Extension, Cornell Vegetable Program

### ALLIUM LEAFMINER

This is a heads up on being on alert for this pest. It was reported in last week's edition of the Long Island Fruit and Vegetable Update that Allium Leafminer adults (tiny flies) are actively flying in NJ. It has become established in several areas of Eastern NY and Long Island. With easterly winds, the threat of it moving westward is concerning. Garlic, onion sets, chives, and scallions could offer egg-laying sites in the coming weeks. Females lay eggs on allium leaves. The oviposition activity creates very small whitish scars in lines on the leaves.

#### Treatment

Exclusion netting or row cover for newly set out transplants, emerging seedlings or overwintering crops can be useful. For chemical management, Entrust, Radiant, and Exirel are allowed in NY. Check the Cornell Vegetable Crop Production Guidelines for more information and be sure to read all pesticide labels thoroughly.



Leaf scars on onion from allium leafminer. The scars appear as small whitish dots in a line up the allium leaf. *Photo from Pennsylvania Department of Ag, USDA Pest Alert, 9/16*



Adult allium leafminer fly, with distinctive yellow head, alongside diagnostic line of pale green oviposition scars near tip of scallion leaf. *Photo by Ethan Grundberg, CCE Eastern NY Commercial Horticulture Program*

### SEEDCORN MAGGOT

Seedcorn maggot is one of the early pests in spring. Adult female flies lay eggs on soil surface close to emerging seedlings. Soils with heavier crop residues, high organic matter soils, and wetter soils seem to be preferred. Larvae are small, less than 1/5" long and hatch within 2-4 days. They burrow down into the soil then bore into the seed. With a heavy infestation seed stand counts can be greatly reduced.

#### Treatment

Capture LFR, Ethos XB or Force CS are labelled in NY. Direct seeding later when soils dry out or seeding in soils with less organic matter can also help.

### CABBAGE MAGGOT

This is another small bland looking fly. The adults emerge in early spring after only a few warm days. After mating the females prefer to lay eggs when there is cool wet conditions and the cole crops are newly transplanted. The eggs are laid near the stems on the soil. The eggs hatch in 3-7 days. Maggots burrow down and feed on roots. With the wet cool weather, root rot diseases can easily occur further damaging the crop.

#### Treatment

Prevention and mitigation is best defense. Planting out later to miss hatching time will reduce large-scale feeding damage. Plant in fields rotated out of brassicas for several years. Exclusion netting or row cover is useful. Avoid planting when soils are cold and wet. For sprays, Coragen and diazinon are labelled in NY.



Damaged roots from cabbage maggot feeding. Roots are severely chewed back to the stem. *Photo by Wilsey, Weeden, and Shelton, Cornell University* ●

# Are You Prepared to Manage Nightshades in Processing Peas in 2020?

Julie Kikkert, Cornell Cooperative Extension, Cornell Vegetable Program

My tree fruit and grape colleagues have been reporting an earlier spring this year. With the start of green pea planting and some days with air temperatures in the 60-70 degree range in March and April, my mind has reminded me of nightshade issues in past warm springs such as 2010 and 2018. In reality, soil temperatures over the next several weeks of planting and crop growth will determine nightshade germination potential, but it is better to have a management plan in advance. The two common species in New York are hairy nightshade (*Solanum sarrachoides*) and eastern black nightshade (*S. ptycanthum*). Berries from these species are a contaminant in peas and processors have a zero tolerance policy. Furthermore, nightshades are attractive to Colorado potato beetles, which can also contaminate peas at harvest.

## GERMINATION AND EMERGENCE

Both hairy and eastern black nightshade germinate in the field, at soil temperatures between 68° and 115°F with 86°F being optimum. They generally will not germinate below 68°F. Species differ in their emergence patterns. Eastern black nightshade appears to emerge early and then cease by late June to early July. Hairy nightshade, on the other hand, has several emergence peaks throughout the season. Shallow tillage enhances germination and emergence of eastern black but has little effect on emergence of hairy nightshade. Neither species will generally emerge from depths greater than 2.5 in, and maximum emergence occurs in the top 1-2 in of soil.

Earlier emergence and growth of nightshades correlates with the plants reaching the fruiting stage sooner, thus increasing the risk of nightshade berries in the field at the same time as pea harvest. The year 2010 was particularly troublesome for nightshades in peas and Dr. Robin Bellinder, Cornell provided soil temperature data to indicate the number of days suitable for germination (Table 1). The exact location of her data was not specified. I similarly report the data from the Bergen, NY weather station for 2015-2020 to date (Table 1). Data from 2010 is not available for Bergen. I recall 2018 also being a troublesome year for nightshades in peas.

**Table 1. Number of days suitable for nightshade germination (with soil temperatures within the range of 68°F and 115°F) and the maximum daily recorded soil temperature for the month. Soil temperatures were recorded at Bergen, NY (2015-2020) and 2010 (Bellinder, unspecified location).** Earlier germination increases the risk for nightshade berries in the field at pea harvest.

Month	Number of Days Suitable for Nightshade Germination (Max Recorded Daily Soil Temperature)						
	2020 <sup>x</sup>	2019 <sup>x</sup>	2018 <sup>x</sup>	2017 <sup>x</sup>	2016 <sup>x</sup>	2015 <sup>x</sup>	2010 <sup>y</sup>
April	0 <sup>z</sup>	0	0	0	0	0	7 (80°)
May	ND	1 (68°)	9 (82°)	0	5 (70°)	7 (79°)	18 (85°)
June	ND	16 (78°)	24 (84°)	18 (78°)	15 (81°)	19 (76°)	17 (80°)
July	ND	31 (84°)	31 (90°)	30 (80°)	31 (83°)	24 (81°)	26 (94°)

<sup>x</sup> Data from Bergen, NY weather station, <http://newa.cornell.edu/>

<sup>y</sup> Data from Dr. Robin Bellinder, Cornell. Weather station unspecified.

<sup>z</sup> As of 4/14/2020

ND = no data

## WHICH SPECIES DO YOU HAVE?

Nightshades species differ in their sensitivity to herbicides, so it is important to know which species you have. Scouting at the seedling stage is a must. Hairy nightshade is green on the underside of the leaves and the leaf surface and stems are moderately to densely hairy. Immature leaves of eastern black nightshade are purple on the underside and the stems are smooth. For a more detailed description with photos, please refer to the fact sheet available on our website at [https://cvp.cce.cornell.edu/submission.php?id=16&crumb=crops|crops|peas|crop\\*22](https://cvp.cce.cornell.edu/submission.php?id=16&crumb=crops|crops|peas|crop*22)

## MANAGEMENT

Avoid planting in a field with a history of nightshade problems. Organic growers should NOT plant in a field with ANY history of nightshade as you will be unlikely to cultivate or hand weed this out of your crop, risking crop rejection by the processor. Late March or early April plantings have a lower risk of nightshade at harvest. Conventional growers may want to consider a pre-plant (PreP), pre-plant incorporated (PPI) or pre-emergence (PreE) herbicide (Table 2), especially as soil temperatures increase. Regardless of whether or not a PreP, PPI, or PreE herbicide is used, it is critical to SCOUT fields on a regular basis, again taking into consideration the extent that soil temperatures are favorable to nightshade germination. Basagran is one of the most commonly used herbicides for peas in general, and it does appear to control hairy nightshade fairly well. It is important to note that Basagran does not have any soil residual and will not control later flushes of hairy nightshade or other weeds. If eastern black nightshade is present, then you should consider post-emergence applications of Raptor + Basagran.

**Table 2. Relative effectiveness of herbicides labeled for peas in New York that have activity against nightshade species.**

Herbicide	Timing <sup>x</sup>	Eastern Black	Hairy	Pre Harvest Interval
Optill	PreP, PPI or PreE	Excellent	Excellent	---
Dual Magnum	PreE	Good	Poor	---
Reflex	PreE	Excellent	Fair	46 d
Basagran	PostE	Poor	Good	10 d
Raptor	PostE	Excellent	Excellent	30 d
Pursuit	PPI, PreE or PostE	Excellent	Excellent	30 d

<sup>x</sup> Timing Key: PreP = pre-plant; PPI = pre-plant incorporated; PreE = pre-emergent; PostE = post-emergence. ●



# Early April Berry Observations and Recommendations

Esther Kibbe, Cornell Cooperative Extension, Harvest NY

## STRAWBERRIES

Good leaf development, especially in warmer areas. Southern Tier (Wyoming County) is a bit behind locations closer to Lake Ontario and Lake Erie. Time to think about fungicides for leaf diseases (leaf spot, leaf scorch, leaf blight), as young leaves are most susceptible, especially if older leaves have lesions. Seeing overwintering two-spot spider mites (reddish) and aphid eggs (black) on undersides of leaves in some fields. There's still time to get herbicides out if you haven't already. In Eastern NY, many growers never applied straw this winter and are still reporting good winter survival due to reasonable snow cover and mild temperatures. Some growers didn't cover berries until mid-January. For all growers, straw should be removed by now – even in colder areas straw should come off as plants are growing underneath. New growth that appears yellow or has marginal die back is suffering from lack of sunlight. Overall, the berries coming out of the winter look very good.



Overwintering spider mites appear as red specks on the backs of leaves. *Photo by Esther Kibbe, CCE Harvest NY*

## BLUEBERRIES

In most varieties, buds are moving to green tip. In cooler areas buds are still at bud swell and copper or fungicide sprays for canker would be appropriate. Cuprofix, Kocide and Badge are three different copper formulations that provide protection from canker diseases. Quilt Xcel, Pristine and Quash are also labelled for this delayed dormant time period. More growers have canker building in fields – so it's important to try and get a cover spray on especially if lime sulfur did not get applied. This is the time to start fungicides for mummyberry. Consider raking under the plants to disturb apothecia, especially if you had mummies last year.

Herbicide options for blueberries at these stages include: Sinbar, Callisto, Chateau, Devrinol, Princep etc. Ideally these should be applied before bud break, so the window is closed or closing, depending on location. In early May apply Gramoxone, Firestorm, Prowl H2O, or Scythe depending on weed problem – all should be applied before new cane emergence. Problem weeds like nutsedge can be controlled by Sandea and Stinger can be used all summer for composites and other problem weeds. Many growers are seeing increased pressure from blueberry stem gall wasps. Pruning out and burning galls is still the best method of control. Gall pressure appears to be limited to certain varieties. It's time to apply nitrogen fertilizer to blueberries if you use dry granular sources. Rates depend on the age of the plants – see the great resources on the Cornell Fruit website for details.



Blueberries at green tip. This is the stage to protect against mummyberry. *Photo by Esther Kibbe, CCE Harvest NY*



Stem galls on blueberries should be pruned out and burned. *Photo by Esther Kibbe, CCE Harvest NY*

## BRAMBLES

Some varieties are breaking bud and showing tiny leaves. Lime sulfur and some copper products can still be used for anthracnose, cane blight and spur blight. This is the best time to apply fertilizer to brambles, rates depend on the age of the plants. See table from 2020 Cornell Berry Guidelines:

Plant Age	Fertilizer Rate and Timing	Product Recommendation	Comments
0	25-35 lb/A, 4 weeks after planting	calcium nitrate	Avoid touching plants with fertilizers after planting.
1	35-55 lb/A, in May or split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used.
2+	40-80 lb/A, in May or split between May and June	urea or ammonium nitrate	Use higher amount on sandier soils or if irrigation is used. ●

# Symptoms of Coronavirus (COVID-19)

Your symptoms can include the following:

## Fever



If you have COVID-19, you may have mild (or no symptoms) to severe illness.

Symptoms can appear 2-14 days after you are exposed to the virus that causes COVID-19.

## Cough



Seek medical attention immediately if you or someone you love has **emergency warning signs**, including:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or not able to be woken
- Bluish lips or face

## Shortness of breath



This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.



[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

# Stop the Spread of Germs

Help prevent the spread of respiratory diseases like COVID-19.

Avoid close contact with people who are sick.



Cover your cough or sneeze with a tissue, then throw the tissue in the trash.



Avoid touching your eyes, nose, and mouth.

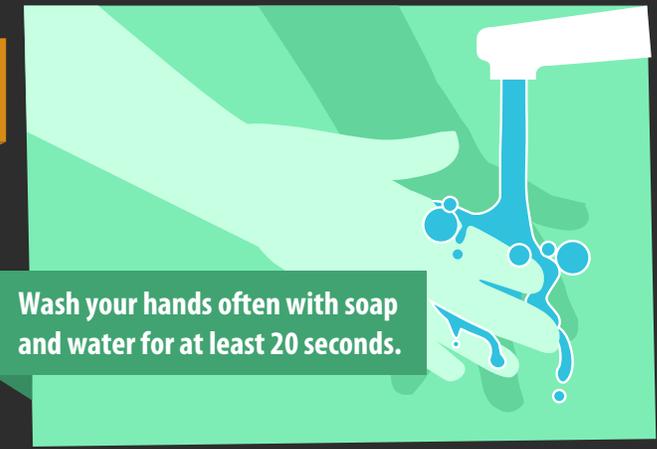


When in public, wear a cloth face covering over your nose and mouth.

Clean and disinfect frequently touched objects and surfaces.



Stay home when you are sick, except to get medical care.



Wash your hands often with soap and water for at least 20 seconds.



[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

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# Unraveling the Intricacies of Outlook Herbicide Injury in Direct Seeded Onion

Christy Hoepting, Sarah Vande Brake and Emma van der Heide, CCE Cornell Vegetable Program

In 2018, growers reported observing more Outlook herbicide injury than usual in direct-seeded fields of the variety Montclair. Outlook is a WSSA group 15 herbicide used in onion for pre-emergent control of grasses, yellow nutsedge and select broadleaf weeds including common groundsel. As a shoot inhibitor, it interferes with the unfurling of newly developing leaves. In onion, the first true leaf gets stuck inside the dying flag leaf and forms a loop (Fig. 1). To determine whether Montclair is really more susceptible to Outlook injury, or whether other factors such as cold soil temperatures, planting depth, rate of Outlook, or interaction with Prowl herbicide were at play, we conducted a greenhouse seedling bioassay in spring 2019. Results were intriguing: **variety, soil temperature, and the interaction between herbicide and planting depth were all significant factors related to Outlook looping injury.**

## GREENHOUSE SEEDLING BIOASSAY

Treatments included:

- **3 onion varieties:** Montclair (110 day, vigorous), Braddock (107 day, vigorous), and Catskill (107 days, not vigorous)
- **2 soil temperatures:** cold (planted Apr 14) and warmer (planted May 4)
- **2 planting depths:** shallow (0.25 inches) and deep (1 inch)
- **6 pre-emergent herbicide treatments:** 1) Untreated; 2) Prowl EC 2 pt, 3) Outlook 21 fl oz; 4) Outlook 21 fl oz + Prowl EC 2 pt; 5) Outlook split; 6) Outlook split + Prowl EC 2 pt.



Figure 1. Outlook herbicide looping injury where the first leaf does not properly unfurl and gets caught in dying flag leaf. Photo by C. Hoepting, CCE CVP

The bioassay was set up in an open-sided high tunnel using 200-cell plug trays and muck soil. Sixty plants were seeded for each treatment; treatments were replicated three times. Pre-emergent herbicide treatments were applied 8 days after planting and just prior to onion emergence (PRE). For the split application of Outlook, 11 fl oz was applied at PRE and flag+ stages. Seedling vigor was assessed at the flag-, 1- and 2-leaf stages. Outlook injury was assessed at 1- and 2-leaf stages. Notably, **water dynamics associated with this trial were quite artificial compared to field conditions**, since the seedlings were in plugs and hand-watering resulted in more extreme drying and re-hydrating conditions. Nonetheless, the results shed light on the intricacies of Outlook injury.

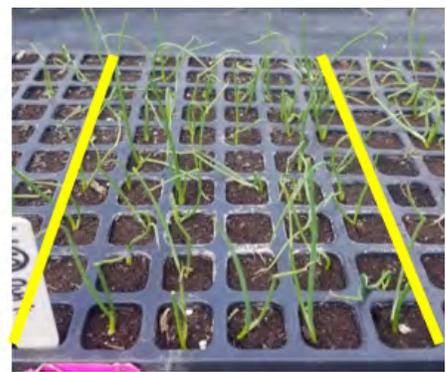
## VARIETY MAKES A DIFFERENCE!

Onion growers were right! We saw more Outlook injury in the Montclair variety. At 1-leaf, **Montclair suffered significantly 1.5 times more Outlook looping injury** than Braddock in both cold (32%) and warm (21%) soils (Fig. 2), and numerically more injury than Catskill. In 15 out of the 16 comparisons of the three varieties across the two soil temperatures, two planting depths and four Outlook treatments, Montclair had the highest incidence of Outlook looping injury.

### COLD shallow planting - Outlook split 11 fl oz PRE, 1-leaf stage



Montclair 112 vigorous



Braddock 107 vigorous

Figure 2. Variety Montclair had significantly more Outlook looping injury than Braddock variety in seedling bioassay. Photo comparison by C. Hoepting, CCE CVP

## SHALLOW PLANTING INCREASED OUTLOOK LOOPING INJURY

Shallow planting had the greatest impact on Outlook looping injury, which **compared to deep planting, resulted in injury levels three times as high (34%) in cold soil and twice as high (25%) in warm soil.** Because Outlook is applied to the soil surface, shallow planted onion seedlings are essentially immersed in the herbicide zone, whereas they are buffered from herbicides when planted deeper.

## COLD SOILS INCREASED OUTLOOK LOOPING INJURY

Compared to warmer soils, cold soil temperature resulted in twice as much Outlook looping injury when planted deep and 37% more injury when planted shallow. Onion seedlings protect themselves from herbicide injury by metabolizing any herbicide that they take up into inactive molecules. When temperatures are cold, metabolism is slowed down and the plants suffer more herbicide injury.

*continued on next page*

### HERBICIDE BY PLANTING DEPTH INTERACTION

The effect of herbicide was different in shallow and deep plantings. When onions were planted shallow in cold soil, Outlook 11 fl oz resulted in 37% looping injury, which was not significantly different than Outlook 21 fl oz. Co-application of both of these rates of Outlook with Prowl numerically almost doubled Outlook looping injury to 63%. However, in the deep planted onions, there were no significant differences among these herbicide treatments, and levels of injury were less (range: 17-29%). When onions were planted deep in warm soil, Outlook injury was not significantly different than the untreated. These results suggest that **planting deeper could avoid Outlook injury, especially in cold soil.**

In our bioassay, however, deep planting was a double-edged sword because it also reduced plant vigor. The extra soil between the seed and the herbicides buffered the effects of Outlook injury, but the deep-planted seeds had to work harder to reach the sunlight, making them weak and thin. It was a wash in the end: **the reduction in plant vigor from deep planting was no different than the reduced vigor from Outlook + Prowl injury in shallow planting.**

COLD soil - Outlook split (11 fl oz PRE, flag+), c.v. Braddock, 2-leaf stage

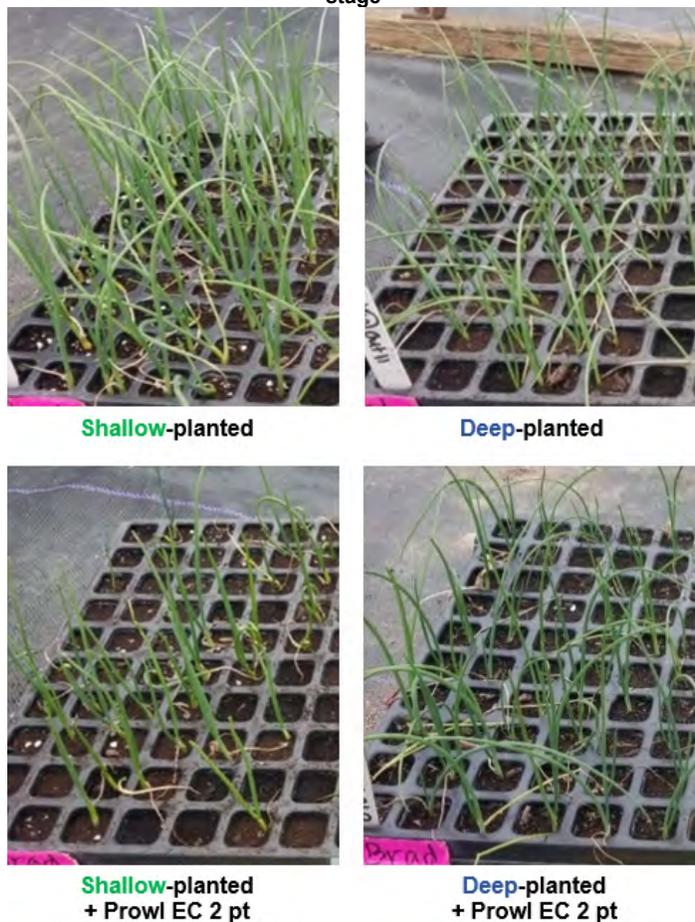


Figure 3. Effect of planting depth and co-application of Outlook with Prowl on plant vigor and stand in seedling bioassay. In shallow planting, co-application of Outlook split with Prowl EC 2 pt reduced stand. Deep planting buffered against herbicide injury (=good stand), but reduced plant vigor (thin plants). Photo comparison by C. Hoeping, CCE CVP

### DOES OUTLOOK LOOPING INJURY EVEN MATTER?

In the seedling bioassay, when soil temperatures were warm, all of the varieties grew out of the Outlook looping injury by the 2-leaf stage (all less than 5% injury). No matter the herbicide treatment or planting depth, there were no significant differences among varieties in fresh biomass at the 2-leaf stage, which suggests that Outlook looping injury does not matter. We further explored this in commercial fields of Montclair, where we tagged 500 seedlings with Outlook looping injury paired with 500 seedlings without injury across five fields. At harvest, **there was no difference in yield or bulb size distribution between Outlook-injured plants and healthy plants.** Although these results suggest that Outlook looping injury is inconsequential, it is important to note that Montclair is a very vigorous variety. In fact, in our bioassay, Montclair was head-and-shoulders more advanced in growth stage than Braddock and Catskill. **It is unknown whether a non-vigorous variety prone to Outlook injury would be as forgiving. Additionally, looping injury can predispose onion seedlings to compounded injury from subsequent contact herbicides.**

### DEEP PLANTING TO AVOID STAND REDUCTION

In our seedling bioassay, shallow-planted onions treated with Outlook 21 fl oz with and without Prowl EC 2 pt, and Outlook 11 fl oz + Prowl EC 2 pt all suffered significant stand reductions that ranged from 15 to 50% (Fig. 3). Prowl is a shoot inhibitor and when combined with Outlook; the combination of the two herbicides overwhelmed many shallow-planted onion seedlings. Under the difficult conditions of the shallow planting in cold soil, only 32% of stand remained after Outlook 21 fl oz + Prowl EC 2 pt. Planting deep increased stand to 72%, planting in warm soils increased stand to 80%, and planting deep in warm soils increased stand to 93%. **Warm soil temperatures and planting deeper clearly buffered against stand reduction caused by heavy herbicide applications.**

### GROWERS SHOULD CONSIDER:

- Avoiding co-application of Outlook and Prowl when soils are cold, especially when higher rates of either herbicide are used. For example, application of Prowl may be delayed a week until loop stage.
- Planting slightly deeper when soil temperatures are cold to buffer against herbicide injury from Outlook and Prowl. Somewhere, there is a sweet spot that is just deep enough to buffer against herbicide injury that does not come at the expense of vigor.
- Delaying applications of post-emergent contact herbicides Goal and Chateau until 2-leaf stage when seedlings have outgrown Outlook looping injury.

### FOR MORE INFORMATION:

Go to [http://www.hort.cornell.edu/expo/pdf/Hoeping\\_Hoeping\\_Outlook\\_Injury.pdf](http://www.hort.cornell.edu/expo/pdf/Hoeping_Hoeping_Outlook_Injury.pdf) for copy of presentation given at 2020 Empire Expo. ●

# COVID-19 Essential Business Update

Judson Reid, Cornell Cooperative Extension, Cornell Vegetable Program

During the COVID-19 pandemic NYS Department of Agriculture and Markets has made it clear that food producing farms, farmers' markets, grocery stores, retail food stores, food pantries, food banks, and food and beverage manufacturing facilities are not restricted from being open. These operations are exempt under the mass gatherings and workforce reduction guidance as essential food supply chain industries. Businesses and vendors supplying goods and services to these essential industries are also exempt. However, these businesses must implement measures to reduce the spread of COVID-19 (see last issue of VegEdge for details).

## UPDATES

- One important announcement this week from the Governor's office is the requirement of essential businesses to provide facemasks for their employees, free of charge, to wear when interacting with the public.
- Hand sanitizer can be sourced locally from New York State distillers. Contact CCE for one close to you.
- [Posters and signs](https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/infographics-and-posters/) are required on COVID-19 symptoms, handwashing, glove removal and prevention. These are available online <https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/infographics-and-posters/> or we are willing to print and mail for those without internet access. ●

# COVID-19 Resources for Vegetable Farms

Cornell Cooperative Extension

## COVID-19 AND YOUR PRODUCE FARM WEBINAR RECORDING

This [pre-recorded webinar](#) (or a [PDF of the slide presentation from the webinar](#)) covers the steps that produce farm managers and individuals working with fruit and vegetable farms should consider to protect their workforce, their business, and their markets. Topics: why prevention of the coronavirus/COVID-19 is important, steps that employers should take to protect employees, how to manage cleaning and disinfection in the workplace and employee housing, state and federal sick leave and workforce reduction policies, and disaster contingency planning to manage and prevent the spread of COVID-19 on-farm. Access the recorded webinar and other resources from the Cornell Agricultural Workforce Development team at <http://agworkforce.cals.cornell.edu/novel-coronavirus-covid-19/>

## NY FARMNET RESOURCES FOR UNDERSTANDING AND MITIGATING ANXIETY AND STRESS

It goes without saying the uncertain times we are in due to the COVID-19 Pandemic are stressful. Anxiety and stress are normal reactions to uncertainty. When these feelings ramp up, sometimes it is difficult to think clearly, make decisions and cope with all that is going on in our lives right now. Access NY FarmNet resources at <https://www.nyfarmnet.org/farm-stress> to help us understand and mitigate stress in our lives.

## PESTICIDE CERTIFICATION DURING PAUSE-NY

At this time, DEC will allow any applicator (private or commercial) whose certification lapsed on or after November 1, 2019, to continue to operate until 60 days after the expiration of Executive Order 202 (set to expire on Sept. 7) and any extensions issued to it. Penalty training credits that would otherwise be required for these applicators will be waived. Certified applicators for whom this extension applies can carry a copy of the enforcement discretion letter, available at [https://www.dec.ny.gov/docs/materials\\_minerals\\_pdf/enfdiscretion.pdf](https://www.dec.ny.gov/docs/materials_minerals_pdf/enfdiscretion.pdf), along with their expired ID card to show they are allowed to possess, purchase and apply restricted use pesticides. Visit the DEC's webpage for continued updates: <https://www.dec.ny.gov/chemical/298.html>.

## RELIABLE RESOURCES FOR SPANISH & ENGLISH SPEAKING FARMWORKERS ABOUT COVID-19

Agriculture is an essential business, so many of us will continue to go to work. However, we all need to take precautions to stay safe and help prevent further spread of the disease. The key things to do are limit contact with other people and keep everything very clean. CCE/NWNY Team member, Libby Eiholzer, and Rich Stup from the Cornell Agricultural Workforce Development, have prepared a new resource to help Spanish- and English-speaking farm employees access credible, multi-lingual information that they can use right away. The document appears in English and Spanish and the content is the same, we will keep both documents up to date during the present COVID-19 crisis. Access these and other resources here (<http://agworkforce.cals.cornell.edu/novel-coronavirus-covid-19/>) or link directly below.

- [COVID-19 Reliable Resources for Farmworkers – Spanish](#)
- [COVID-19 Reliable Resources for Farmworkers – English](#)
- [COVID-19 Resource Video for Farmworkers – Spanish](#)

*continued on next page*

## H-2A UPDATE: EMERGENCY JOB ORDERS AND RESOURCES FOR NEW EMPLOYER APPLICANTS

Also from Ag Workforce Development, "Given the current agricultural workforce challenge presented by COVID-19, many farmers are scrambling to find employees. The federal and state agencies involved with H-2A recognize the problem and are allowing farm employers to file emergency applications to participate in the program." Find more information at <https://agworkforce.cals.cornell.edu/2020/03/26/h-2a-update-emergency-job-orders-and-resources-for-new-employer-applicants/>

## PAYCHECK PROTECTION PLAN

The [Paycheck Protection Plan](#) is available to farms that are experiencing market disruptions from COVID-19. Agricultural producers and food processors are eligible to participate in the program and should reach out to their bankers and/or agricultural lenders to apply immediately. ●

## COVID-19 Information Websites

Need information? View the following Cornell CALS and Cornell Cooperative Extension Resource Pages are updated regularly.

### General Questions & Links

<https://eden.cce.cornell.edu/>

### Food Production, Processing & Safety Questions

<https://instituteoffoodsafety.cornell.edu/coronavirus-covid-19/>

### Employment & Agricultural Workforce Questions

<http://agworkforce.cals.cornell.edu/>

### Cornell Small Farms Resiliency Resources

<https://smallfarms.cornell.edu/resources/farm-resilience/>

### Financial & Mental Health Resources for Farmers

<https://www.nyfarmnet.org/>

### Cornell Farmworker Program

[www.farmworkers.cornell.edu](http://www.farmworkers.cornell.edu)

[www.trabajadores.cornell.edu](http://www.trabajadores.cornell.edu) (en español)

If any ag business needs help accessing or printing online signage documents, please reach out to Judson Reid, CCE Cornell Vegetable Program, at 585-313-8912.

We are only a phone call away and happy to help!

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# Cornell Cooperative Extension Cornell Vegetable Program

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# VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

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VegEdge is the highly regarded newsletter produced by the Cornell Vegetable Program. It provides readers with information on upcoming meetings, pesticide updates, pest management strategies, cultural practices, marketing ideas and research results from Cornell University 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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# Cornell Cooperative Extension Cornell Vegetable Program

For more information about our program, email [cce-cvp@cornell.edu](mailto:cce-cvp@cornell.edu) or visit [CVP.CCE.CORNELL.EDU](http://CVP.CCE.CORNELL.EDU)



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