



Act Now to Reduce Weeds Next Season



Managing New June-Bearing and Dayneutral Strawberry Plantings



CROP Insights – Observations from the Field and Research-Based Recommendations



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Act Now to Reduce Weeds Next Season

Julie Kikkert, Cornell Cooperative Extension, Cornell Vegetable Program

How is your battle with weeds going this year? Chances are you're doing a good job overall, however, weed escapes at this time of year can mean bigger problems next year. Personally, I was out in my home garden after several weeks of neglect. I had started the year off great but then became too busy to keep up. Spotted spurge and purslane were carpeting the ground. At this late stage, it was tempting to throw up my hands and walk away until next year. A closer look revealed millions of seeds that the spotted spurge was about to drop into the soil, and it prompted me to get out my hand cultivator to loosen up the weed roots. I completely removed the weeds from the garden, so they didn't just drop the seeds which had already formed. Will I still have spotted spurge next year? Absolutely! However, there will be many fewer seedlings to deal with. In fact, over the years I've been able to rid my garden of velvetleaf, common plantain, lambsquarters, and oxalis by keeping at it. The vellow nutsedge is almost gone, but a few pop up yearly and I quickly try to rogue them out. While the scale is different, the principal for commercial farms is the same: reduce the number of weed seeds entering the ground, manage perennial weeds before the next season, and watch for invasive species and herbicide resistance.



Mature foxtail and jimsonweed in a soybean field. Photo by J. Kikkert, Cornell Cooperative Extension

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.

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

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The next issue of VegEdge newsletter will be produced on August 25, 2021.

Accumulated Growing Degree Days, 8/16/21

Julie Kikkert, CCE Cornell Vegetable Program

Accumulated Growing Degree Days (AGDD) Base 50°F: April 1 - August 16, 2021

		2000	2012
Location**	2021	2020	2019
Albion	2052	1975	1752
Arkport	offline	offline	offline
Bergen	1862	1930	1690
Brocton	1892	1897	1730
Buffalo*	2027	2043	1773
Burt	1766	1860	1600
Ceres	1668	1668	1659
Elba	1779	1847	1620
Fairville	1791	1888	1616
Farmington	1835	1908	1642
Fulton*	1795	1949	1622
Geneva	1886	1969	1738
Hammondsport	1777	1900	1655
Hanover	1876	1886	1716
Lodi	1554	2005	1775
Niagara Falls*	1969	1953	1703
Penn Yan*	1973	2036	1818
Rochester*	1912	1972	1866
Sodus	1944	1905	1586
South Bristol	1785	1875	1632
Varick	1983	2070	1831
Versailles	1802	1841	1687
Williamson	1768	1851	1572

Airport stations

^{**} For other locations: http://newa.cornell.edu

REDUCE WEED SEEDS

Annual weed species produce large numbers of seeds (Table 1), most of which drop to the soil near the mother plant. This is often referred to as weed seed rain. These seeds contribute largely to the weed seedbank, the reservoir of viable weed seeds in a field. The density of weed seeds in the weed seedbank is influenced by past farming practices and varies from field to field. Weed control strategies reduce the seedbank. Dr. Vern Grubinger, Univ. of Vermont comments, "If you have a large weed seedbank and you kill 99% of the weeds, the 1% that's left is still enough to create a lot of weed pressure" (from Managing Weed Seed Rain, Univ. of VT factsheet). Some weed species can produce viable seeds as soon as pollination is complete. Anything you can do to prevent weeds from going to seed and dropping seeds on your field is worthwhile. If large weeds are present in a field, some options are mowing them or hand pulling before they go to seed. If weeds seeds have dropped on the soil surface it may be beneficial to leave the soil undisturbed to encourage predation by birds, rodents and insects. Weed seedbank management seeks to minimize seeds entering the seedbank and maximize seeds leaving the seedbank.

MANAGE WINTER ANNUAL AND PERENNIAL WEEDS

Seeds of winter annual weeds were dropped earlier this year and have or will soon germinate. These weeds will overwinter and grow and reproduce in the spring. Some great examples are shepherd's purse and pennycress. You will find them in your fields as small rosettes. Killing them now will prevent seed production next spring and help to break the cycle. Similarly, many perennial weeds are in the vegetative and reproductive stage now. D. Lingenfelter, from Penn State University suggests that one strategy during August is to mow fields with perennial weeds to prevent seed production and allow regrowth to occur. An effective herbicide could be then be applied to fallow fields in late September or early October so that the herbicide will be transported to the roots for more effective control.

WATCH FOR INVASIVE SPECIES AND HERBICIDE RESISTANT WEEDS

Always be on the lookout for unusual weeds in your fields as they may be new to your fields and/or invasive species. Palmer amaranth and waterhemp are herbicide resistant species showing up in many counties in New York. Learn to identify them at the Cornell weed identification website: https://blogs.cornell.edu/weedid/pigweed-identification/. If you have unusual weeds in your fields and you need help with identification and management, please contact one of our team members.

RESOURCES

Managing Weed Seed Rain Factsheet. University of Vermont. https://www.uvm.edu/vtvegandberry/factsheets/weedseedrain.html

Seedbank Management Factsheet. University of Maine.

https://umaine.edu/weedecology/2017/10/31/seedbank-management/

Manage the Weed Seed Bank—Minimize "Deposits" and Maximize "Withdrawals". https://eorganic.org/node/2806

Manipulating Weed Seed Banks to Promote their Decline https://eorganic.org/node/2807

Promoting Weed Seed Predation and Decay https://eorganic.org/node/2852

Keeping New Weedy Invaders Out of the Field https://eorganic.org/node/2835

Stop Weed Seed Set, Plus Burndown Options Before Cover Crops https://extension.psu.edu/stop-weed-seed-set-plus-burndown-options-before-cover-crops

Table 1. Common summer annual weeds, how many seeds the plant produces on average, and how long it takes for half of the seeds in the soil to die out. Table reproduced from "Aim for Zero Seed Rain", University of Minnesota, July 28, 2021. https://extension.umn.edu/yard-and-garden-news/zero-seed-rain

Weed	Average Seeds Produced Per Plant	Time to 50% Depletion of Seeds in Soil
Common Lambsquarters	72,500	12 years
Common Ragweed	3,500	1.5 years
Eastern Black Nightshade	10,000	5 to 8 years
Giant Ragweed	10,300	≤ 2 years
Marestail/Horseweed	200,000	unknown
Velvetleaf	7,800	8 years



Bucket of seed heads from pigweed collected from a field. *Photo by J. Kikkert, Cornell Cooperative Extension*



Purified pigweed seeds (from bucket of seed heads). Photo by J. Kikkert, Cornell Cooperative Extension

Managing New June-Bearing and Dayneutral Strawberry Plantings

Anya Osatuke, Cornell Cooperative Extension, Harvest New York

It is mid-August, and the strawberry harvest has ended for many growers in New York. Here are some ways to care for your strawberries this time of year, if you are tending to a new planting of June-bearers, or if you have a dayneutral planting.

CHECK ON NEW PLANTINGS OF JUNE-BEARERS

At this point in the season, some weeds could have established in the planting holes. Hand-weed as soon as possible to keep populations at bay. Any flowers that weren't pinched off may have turned into fruit. Harvest any ripe berries you see, and remove under-ripe berries to direct the plant's energy into the root system. Any berries left on the plants could become a source of mold spores the next season. If any flowers are present, pinch them off as well. Manage runners by directing them into the rows, or by cutting them off of the plant. Runners can be pinned to the ground using a piece of U-shaped wire to secure them in place.



Establishing Junebearing strawberry plant sending out fruits in August. A Pennsylvania Knotweed is growing in the planting hole. Photo by Anya Osatuke, Cornell Cooperative Extension

HARVEST DAYNEUTRALS

Let dayneutral strawberries ripen fully: only harvest fruit after it has become entirely red. Fruit size may be smaller than June-bearing strawberries, and marketing dayneutrals in pint containers can help compensate for the high labor investment of harvesting.

KEEP PLANTINGS WATERED

In new plantings, keep the root zone well-watered using irrigation to establish a strong root system. Dayneutral varieties also benefit from large water inputs as their root systems are shallow.

SCOUT FOR PESTS

Examine leaves for symptoms of two spotted spider mite.



Two spotted spider mite injury on strawberry leaf. Photo from Berry Diagnostic Tool, Cornell Cooperative Extension

If you see spots and discoloration on leaves, it could be either leaf blight, leaf spot or leaf scorch.



Leaf blight on strawberry. Photo from Berry Diagnostic Tool, Cornell Cooperative Extension



Strawberry leaf displaying leaf scorch on left, and angular leaf spot on right. Photo courtesy of Kathleen Demchak, Penn State University

Examine ripe fruits for <u>sap beetles</u> and rots, including <u>rhizopus</u> and <u>mucor</u> fruit rots, <u>leather rot</u>, and <u>anthracnose fruit rot</u>.



Strawberry sap beetle beside a strawberry decaying from Rhizopus rot. Photo from Berry Diagnostic Tool, Cornell Cooperative Extension





Strawberries affected by leather rot (left). Anthracnose fruit rot on strawberry fruit (right). *Photos from Berry Diagnostic Tool, CCE*

ADDITIONAL RESOURCES

Berry Diagnostic Tool | Cornell University

<u>Strawberry Production Guide | Northeast Regional Agricultural Engineering Service</u>

Strawberry Plant Establishment | CCE

Dayneutral Strawberry Production Guide | CCE

BEETS

NYS DEC recently approved a supplemental label for Cevya fungicide with the active ingredient mefentrifluconazole. The label includes garden beets for the management of Alternaria and Cercospora leaf spots and powdery mildew. Cevya is a DMI fungicide in the same FRAC 3 group as Tilt fungicide. For resistance management, do not make more than two sequential applications of a FRAC 3 fungicide before alternating to a fungicide from a different FRAC group. Cevya has a 7-day PHI. We have not yet tested Cevya in our research trials - JK

COLE CROPS

Keep an eye out for Alternaria and Downy Mildew as the weather is becoming much more favorable for these diseases. Both will begin on lower frame leaves before progressing up the plant and toward the heads. Those raising Brussels sprouts should begin weekly checks for the blue-gray, waxy looking cabbage aphid. Those will move into the sprouts and are difficult to address once they take up residence in the little heads. Cabbage aphids will be present on the undersides of leaves also, so start checking for those while you look for downy mildew.

CANTALOUPES

Vine crops are susceptible to several different viruses; in New York primarily Cucumber Mosaic (CMV) and Watermelon Mosaic (WMV), both of which are spread by aphids or other insects. When the insect feeds on a susceptible plant the virus particles enter and begin to reproduce themselves. This creates the most challenging aspect of viral crop diseases; once in a plant they cannot be removed. The symptoms vary with crop and commonly the virus causes the plant to have mottled, bumpy, distorted leaves. Discoloration of the leaves is also common. Symptoms on the fruit include discolored spots and warts. On some ornamental crops such as pumpkins and gourds this may be desirable! However, affected fruit may have short shelf life, and in the case of edible crops such as cantaloupe, unmarketable as maturity is never reached. Often fruit that was set before the viral infection took place are viable, but later fruit set affected by CMV and WMV are unmarketable. Since the viruses are spread by insects growers may seek to spray insecticides to eliminate the threat. However, this does not appear to stop viruses. The disease has many host plants, including those found in weeds, drive lanes and hedgerows. We can't completely eliminate these host reservoirs but keeping weeds to a minimum within fields is advised. Finally, providing sufficient water and nutrients is the best we can do to nurse a crop through a virus infection. In the case of cantaloupe (or yellow squash), that was infected early in the crop cycle, it may be best to destroy the crop.



Symptoms vary with crop and commonly the virus causes the plant to have mottled, bumpy, distorted leaves. *Photo by J. Reid, CCE*



Affected fruit has discolored sections that never ripen. Photo by J. Reid, CCE

DRY BEANS

Mexican bean beetle larvae are present in some dry bean fields. If left unchecked, they can quickly defoliate dry beans and damage pods. An insecticide application is recommended when 1-1.5 larvae are found per plant, or 15% defoliation during pod-set and podfill is observed. Potato leafhopper nymphs are also in some dry beans. Management should be considered when observing 0.5 nymphs per plant (50 nymphs per 100 plant sample).

Western Bean Cutworm (WBC) trap catch numbers are dying down at all locations. Continue to scout dry bean pods for damage as larvae may still be in the field, especially where WBC has been found in bean pods/seeds in recent years. To scout

for WBC, inspect 50 plants per field (10 stops, 5 plants per stop), looking at all pods present on the plant for holes. WBC chew directly into the pod and eat the seed. It can be difficult to scout dry beans for egg masses or caterpillars, since the caterpillars move from the pods to the soil during the daytime, so looking for signs of damage is the best strategy. European corn borer damage (ECB) may be similar to WBC, but an ECB larva would likely still be present in the pod when inspected. If damage into the pod and seed is found with no larva present, it is possible this is WBC. A spray is recommended if dry bean pod damage is found.- ML

ONIONS

Spray programs are coming to an end with most fields receiving their last pesticide applications at approximately 50% lodging last week, this week or next week. Incidence of Stemphylium leaf blight (SLB) is 100% in most fields now and purple target spot lesions are more common. Generally, the disease appears to be under control and not acting as a primary pathogen. Signs that SLB is acting as a primary pathogen include 1) target spots (often purple) on green tissue (SLB lesion is killing the leaf tissue as opposed to invading necrotic tissue), 2) target lesions and necrotic leaf tips with a lot of dark/black spores, and 3) multiple target spots per plant (Fig. 1). It is hard to pinpoint when SLB is causing leaf dieback when waterlogging damage, IYSV and/or thrips may also be the cause of leaf dieback, but noticeable differences in leaf dieback are showing up in the on-farm fungicide trials, which leads me to believe that SLB may be contributing to leaf dieback. It is not uncommon for purple SLB target lesions to invade necrotic tissue caused by herbicide injury or IYSV lesions, in which case SLB is acting as a secondary pathogen (Fig. 2).

Western bean cutworm (WBC) adult numbers by date for each dry bean trap location. Traps were set on 6/29/21. Numbers in red indicates peak flight.

Dry Bean Location	7/20/21	7/27/21	8/3/21	8/10/21	8/17/21	Cumulative WBC
Avoca Hill (Steuben Co.)	35	269	167	38	15	533
Avoca Valley (Steuben Co.)	17	97	94	9	3	221
Caledonia (Livingston Co.)	27	102	80	21	3	242
Pavilion (Genesee Co.)	22	87	67	36	8	221
Penfield (Monroe Co.)	74	124	278	64	20	570
Penn Yan E (Yates Co.)	8	18	20	11	2	60
Penn Yan N (Yates Co.)	0	12	29	2	7	52
Riga (Monroe Co.)	47	62	42	25	4	182
LeRoy (Genesee Co.)	62	86	35	1	4	204
Wyoming (Wyoming Co.)	25	90	115	73	8	314
Wayland (Steuben Co.)	21	277	231	116	55	711



Figure 1. Stemphylium leaf blight acting as a primary pathogen with tan and purple target spot lesions on green tissue (SLB invaded and killed the plant tissue as opposed to the SLB invading necrotic tissue). Photo by C. Hoepting, CCE



Figure 2. Tan/orange and purplish Stemphylium leaf blight target lesions on necrotic tissue caused by IYSV. When SLB invades necrotic tissue caused by IYSV or herbicide injury it tends to act as a secondary pathogen. *Photo by C. Hoepting, CCE*

Typically, 50% lodging is the timing when sprout inhibitor for storage-bound onions is applied. The rule of thumb is that onions should die down naturally and not from disease of insect damage. If the field is clean, then sprout inhibitor is likely all you need, although most growers opt to include mancozeb for DM protection in their last spray. If necrotic leaf tips and outer leaves have 20% or more leaf dieback, which is infected with SLB, than a final SLB fungicide should be included in the spray with sprout inhibitor. If leaf dieback exceeds 30%, the plant has reached "the point of no return" and even the best fungicides will not make a difference. Similarly, if thrips are greater than 1.0 per leaf, a final insecticide should be included with sprout inhibitor. As long as the roots and foliage are healthy after lodging, bulbs will continue to put on size until the leaves are dry. If the leaves dry up quickly from thrips, disease or poor roots, the bulbs may not reach their full size potential.

Ideal Conditions for Applying Sprout Inhibitor to Storage Bound Onions

Maleic hydrazide (MH) is a growth regulator applied to storage bound onions to prevent sprouting. Ideal conditions include:

- 50% tops down, plants have 5-8 green leaves to ensure adequate translocation into the bulb.
 - If MH is applied too late or when onions have been ravaged by disease or thrips when the onion has less than 3 green leaves, it will not be absorbed properly and the onions will start sprouting in storage.

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- If MH is applied to onion that is still producing new leaves, cell division will be stopped but individual cells will continue to grow in size. This will produce spongy bulbs where the scales pull away from each other.
- Humid weather and temperatures less than 75°F are ideal.
 - Low humidity and high temperatures (i.e. >80-85°F) may cause MH to crystallize on the leaves, thereby inhibiting uptake.
- No rain within 24 hours after application, as this reduces uptake.
- Do not tank mix with sodium hypochlorite (= tradename Surchlor), a sanitizer treatment for bacterial diseases, as this tank mix can cause a severe chemical reaction.

PEPPERS

Peppers are coming along and coloring up. Seeing higher incidence of soft rot in some areas, often in fields that had excessive amounts of rainfall a few weeks ago. Phytophthora blight is doing damage in fields with known histories.

POTATOES

Continue to be on top of fungicide applications in potatoes. Storm systems moving through this week could bring late season disease problems. If you suspect you have late blight on your farm, contact a CVP specialist to collect samples for testing.

Simcast forecasting indicates that Ceres, Fulton, Penn Yan, Rochester, Sodus, and Wellsville have surpassed the 30 blight units (BU) needed to trigger a spray for late blight. Most other sites are expected to surpass 30 BU by the end of the week. The chart assumes use of a susceptible potato variety, Reba, and an application of chlorothanlonil on August 11. For locations that are not close to a weather station, forecast information should only be used as a general indication of how favorable weather has been for late blight. Forecast BUs are subject to changes as the weather forecast changes, so check forecasting tools regularly to see if disease forecasts have changed. Late blight has been reported in Ontario and North Carolina in tomato in the last week in addition to past reports in GA, ME, and WI. - ML

Late Blight Risk Chart, 8/18/21

Location	Blight Units 8/11-8/17 ¹	Blight Units 8/18-8/20 ²	Location	Blight Units 8/11-8/17	Blight Units 8/18-8/20
Albion	11	17	Geneva	24	19
Arkport	-	-	Hammondsport	11	21
Baldwinsville	0	10	Knowlesville	27	19
Bergen	13	19	Lyndonville	22	21
Brant	20	19	Medina	28	19
Buffalo	19	15	Niagara Falls	14	15
Burt	8	19	Penn Yan	30	21
Ceres	34	21	Rochester	33	17
Elba	18	19	Sodus	29	19
Fairville	24	19	Versailles	1	12
Farmington	25	19	Wellsville	45	21
Fulton	38	17	Williamson	5	10

Calculated using a May $26\ \text{crop}$ emergence date. Last fungicide application Aug $11\ \text{on}$ susceptible cultivar Reba.

- 1 Past week Simcast Blight Units (BU)
- 2 Three-day predicted Simcast Blight Units (BU)

SQUASH

Downy mildew is attacking some winter squash plantings in western NY, having been observed as far west as Orleans County. A few cases of anthracnose. Remember that fungicide programs now should also take fruit quality into effect. The big fruit concerns are black rot and anthracnose.

SWEET CORN

Seeing more fungal diseases than feeding damage currently. Northern corn leaf blight, rust, and smut are the main problems.

TOMATOES

For the most part, growers seem to have been able to get ahead of the bacteria infections with the shift back towards drier weather. Saw the first anthracnose of the season yesterday. Seeing a lot of early blight. A handful of varieties react differently to early blight and may not present the characteristic ringed lesion. Instead these varieties tend to have large, early blight colored, dry lesions that have a thin light green proceeding edge. This is not a common trait and there are just a few varieties that respond this way. If you have an overall early blight problem and one variety has this presentation, and every plant in that variety shows these symptoms, then it is likely that variety shows this atypical response to early blight. I recently saw a case in chocolate cocktail tomato variety.

Late blight has been reported in Ontario and North Carolina in tomato in the last week in addition to past reports in GA, ME, and WI.

Update on Pesticide Respiratory Protection Requirements

Mary Centrella, Director, Pesticide Management Education Program (PMEP), Cornell Cooperative Extension

Last year, we discussed that the EPA has issued a temporary guidance on alternatives for respirators, as they were in short supply and there was concern about lack of accessible fit testing. That temporary guidance has been rolled back, as respirators and fit tests have become more available (see announcement below). So, essentially, we are back to "normal" with pesticide respiratory protection requirements.

Washington, D.C., August 10, 2021:

EPA Sunsets Temporary Guidance on Respiratory Protection for Agricultural Pesticide Handlers During COVID-19

In June 2020, the U.S. Environmental Protection Agency (EPA) issued <u>temporary guidance</u> that offered flexibility during the COVID-19 public health emergency to agricultural employers and pesticide handlers regarding respiratory protection requirements related to pesticide uses covered by the Agricultural Worker Protection Standard (WPS). Due to improvements in access to NIOSH-approved respirators, fit testing supplies and related services, EPA is terminating the June 2020 guidance and its May 2021 amendment, effective August 19, 2021.

EPA remains committed to protecting the health and safety of all communities, especially during the COVID-19 public health emergency. The decision to end flexibilities under the memoranda is in alignment with federal agency guidance issued by the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Occupational Safety and Health Administration that entities should no longer use crisis capacity strategies for respirators and should promptly resume conventional practices.

To read the memorandum addressing this termination, visit: https://www.epa.gov/enforcement/covid-19-enforcement-and-compliance-resources#other

NY Sweet Corn Trap Network Report, 8/17/2021

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

Statewide, 28 sites reported this week. European corn borer (ECB)- E was caught at 3 sites and ECB-Z was caught at 3 sites. The hybrid ECB was caught at 4 of the 5 sites trapping for it: Bellona (7), Seneca Castle (4), Penn Yan (1) and Hurley (115). Corn earworm was caught at 22 sites with 20 sites high enough to be on a 4, 5 or 6 day spray schedule (see table). Fall armyworm (FAW) was caught at 23 sites this week. Both FAW and CEW increased greatly from last week (see graph below). Western bean cutworm (WBC) was caught at 21 sites with the average continuing to drop.

Where CEW are being caught in high enough numbers to drive the spray schedule, the other worm pests should also be controlled. Where FAW are being caught, a tassel emergence scout is still a good idea, as some years we see heavy FAW infestations in the emerging tassels in late plantings that may have time to get into developing ears before silk sprays for CEW. At locations where CEW numbers are still low, scout tassel emergence and silk stage fields for ECB and FAW larvae. Use a threshold of 15% infested plants in tassel emergence stage fields and 5% in silk stage fields.

<u>True armyworm larvae</u> were also found this week. The <u>damage</u> looks very similar to <u>FAW</u> but the larva does not have the inverted 'Y' on the head capsule.

One of the fields I scouted this week had aphids near threshold. This is a good time to look for <u>corn leaf</u> <u>aphids</u>, record the number of plants with more than 50 aphids. The threshold for corn leaf aphid at tassel emergence is 50% of plants with more than 50 aphids.

WNY Pheromone Trap Catches: August 17, 2021

Location	ЕСВ-Е	ECB-Z	ECB Hybrid	CEW	FAW	WBC	DD to Date
Batavia (Genesee)	0	0	NA	9	8	6	1922
Bellona (Yates)	0	0	7	7	38	1	1902
Brockport (Monroe)	0	0	NA	0	56	1	1979
Collins (Erie)	NA	NA	NA	0	0	0	1842
Eden (Erie)	0	0	NA	4	2	0	1937
Geneva (Ontario)	0	0	0	13	14	NA	1892
Hamlin (Monroe)	NA	NA	NA	NA	NA	NA	1910
Leroy (Genesee)	0	0	NA	79	7	4	1896
Lyndonville (Orleans)	0	0	NA	1	0	2	1888
Oswego (Oswego)	0	0	NA	4	6	1	1689
Panama (Chautauqua)	0	0	NA	2	10	0	1724
Penn Yan (Yates)	0	10	1	6	49	2	1843
Portville (Cattaraugus)	NA	NA	NA	NA	NA	NA	1713
Ransomville (Niagara)	0	0	NA	10	1	12	2001
Seneca Castle (Ontario)	3	0	4	3	100	2	1861
Williamson (Wayne)	0	0	NA	17	39	2	1741

ECB: European Corn Borer; CEW: Corn Earworm; FAW: Fall Armyworm; WBC: Western Bean Cutworm; NA: not available; DD: Degree Day based on accumulation starting April 1 (base 86/50) to estimate second generation ECB development

Aver	age Corn Earworm		
Per Day	Per Five Days	Per Week	Days Between Sprays
<0.2	<1.0	<1.4	No spray (for CEW)
0.2-0.5	1.0-2.5	1.4-3.5	6 days
0.5-1.0	2.5-5.0	3.5-7.0	5 days
1-13	5-65	7-91	4 days
over 13	over 65	over 91	3 days

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

Upcoming Events

Events are listed at CVP.CCE.CORNELL.EDU

Chautauqua County Soil Health Field Day

August 25, 2021 (Wednesday) | 9:15am - 12:30pm Lesch Farms, 4893 W Main Rd (tent in field), Fredonia, NY

1.5 NYS DEC pesticide recertification credits available (Category 1A and 21). This is a soil health field day with presentations and demonstrations:

- Overview of Lesch Farms tillage and cover crop practices and equipment
- Info on programs available from USDA-Natural Resources Conservation Service and Chautauqua County Soil and Water Conservation District to assist with implementing soil health practices.
- NY Soil Health Trailer demonstrations
- pest challenges with changing tillage practice
- View and discuss soil pits, highlighting soil health indicators and how soil properties influence soil function

FREE to attend; no pre-registration required. QUESTIONS? Contact Lisa Kempisty, Extension Educator in Chautauqua County at 716-664-9502, Ext 203.

Dry Bean Twilight Meeting

September 8, 2021 (Wednesday) | 4:30pm - 6:00pm Duyssen Farms shop, 6861 E Bethany Rd, LeRoy, NY 14482

CCE Cornell Vegetable Program, NYS IPM, and Cornell Faculty will be attending this twilight meeting to share updates on Western bean cutworm trapping, white mold management, soybean cyst nematodes and field mapping, and pigweed identification and resistance screening. 1.5 DEC recertification credits (categories 10, 1a, 21, and 23) and CCA credits will be available. See the full meeting agenda at CVP.CCE.CORNELL.EDU

After the meeting, stick around to enjoy dinner and network with other dry bean growers and industry members. Thank you to New York Bean and Genesee Valley Bean for sponsoring the meal and meeting!

COST AND REGISTRATION: \$5. Pre-registration is required for dinner. Register and pay online at CVP.CCE.CORNELL.EDU or call Margie at 607-377-9109 and pay cash at the door. If you do not pre-register, you are still more than welcome to attend, but dinner is not guaranteed.

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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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Julie Kikkert, Team Leader | 585-313-8160 cell | jrk2@cornell.edu processing crops (table beets, carrots, peas, snap beans, sweet corn)

Margie Lund | 607-377-9109 cell | mel296@cornell.edu potatoes, dry beans, and post-harvest handling and storage

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Cornell Cooperative Extension Cornell Vegetable Program

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