Learn how to prevent late-season nutritional stall in your high tunnel tomatoes and increase your profitability.

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Cool nights and heavy dews or rain have provided the perfect environment for diseases and other problems for pumpkins. Learn more here.

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Late blight continues to reported in more counties. All of WNY continues to be at risk for late blight infection.

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New programs continued to be added to our calendar of events. Check out the offerings.

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VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

Volume 13 | Issue 20 | August 23, 2017

Cornell University
Cooperative Extension
Cornell Vegetable Program

Photo: Cordelia Machanoff

Late Summer Tunnel Tomato Fertility

Judson Reid, CCE Cornell Vegetable Program

High tunnel tomatoes experience higher nutritional demand than field tomatoes as they yield more and earlier during longer, warmer days. These conditions are stressful for the crop as fruit is maturing while more shoots and flowers are being produced. The result is often deficiencies in nitrogen, phosphorus and or potassium which leads to flower loss. This effect is more pronounced in high yielding determinate varieties and heirlooms than hybrid indeterminates.

Wholesale prices for tomatoes can see a late season rebound, particularly in wet years. So how do we prevent this late-season nutritional stall and increase our profitability? Soil testing is the first step, particularly to understand our season-long phosphorus and potassium needs. If our soil tests show greater than 20 lbs P/ac, we don't need to add more. Our current estimated nitrogen budget for high tunnel tomatoes is around 150 lbs/ac. This can be delivered at a rate of 5-10 lbs N/ac/wk with a soluble source such as potassium nitrate (13-0-44). For organic nitrogen approaches see previous

High yielding high tunnel heirloom tomatoes are particularly susceptible to N, P and K deficiencies.
Photo: J. Reid, CVP

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VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 13 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:
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VegEdge is published 25 times per year, parallel to the production schedule of Western New York growers. Enrollees in the Cornell Vegetable Program receive a complimentary electronic subscription to the newsletter. Print copies are available for an additional fee. You must be enrolled in the Cornell Vegetable Program to subscribe to the newsletter. For information about enrolling in our program, visit cvp.cce.cornell.edu. Cornell Cooperative Extension staff, Cornell faculty, and other states' Extension personnel may request to receive a complimentary electronic subscription to VegEdge by emailing Angela Parr at aep63@cornell.edu. Total readership varies but averages 700 readers.

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

Cornell University
Cooperative Extension
Cornell Vegetable Program

Contents

The next issue of VegEdge will be August 30, 2017.

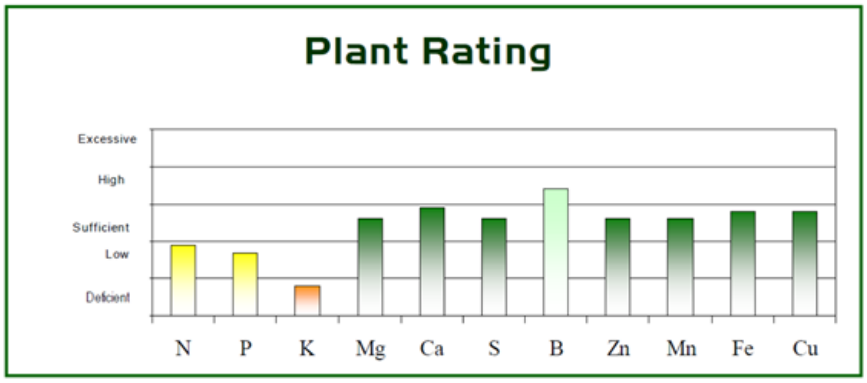
This Tuesday, CVP Onion Specialist, Christy Hoepting, gave Elba onion growers and allied industry representatives a tour of one of her on-farm Stemphylium leaf blight fungicide trials. Growers could see first-hand the relative efficacy of the many choices of fungicides available. Note how healthy the onion foliage is in the treatments in the bottom left of the photo. *Photo: C. Hoepting, CVP.*

continued from cover – Late Summer Tunnel Tomato Fertility

VegEdge article https://rvpadmin.cce.cornell.edu/uploads/doc_570.pdf

The amount of potassium needed is a little more difficult to predict than the other macronutrients. We know that the plant will uptake K at a ratio of 1:3 compared to nitrogen. An excellent source of K is sulfate of potash (0-0-52) for both conventional and organic growers. If it fits with other nutrient demands Sul-Po-Mag is a possibility (0-0-22-22(S)-11(Mg)). However, potassium uptake is often limited by excess soil magnesium, calcium, phosphorus or pH. This is where late season foliar tests are very important. We need to know how well the plant is taking-up potassium and then correct through drip-fertigation as needed. Remember, that as days shorten and nights cool, nitrogen demand will decrease significantly. In our research we have found that farmers commonly increased profitability by decreasing unnecessary amendments.

Flower drop at peak nutritional demand. Low tissue levels of N, P and/or K can result in decreased flower number and dropping of existing flowers.
Photo: J. Reid, CVP



The following Plant nutrient levels are low, deficient or borderline:
Nitrogen-Phosphorus-Potassium-

Potassium deficiency in the upper canopy. Foliar testing can alert us to deficiencies before visuals symptoms present themselves. Thus, corrections can be made before yield loss occurs.
Photo: J. Reid, CVP

Pumpkin Problems

Robert Hadad, CCE Cornell Vegetable Program

The cool nights and heavy dews or rain has provided the perfect environment for many plant and fruit diseases. Despite it being only the middle of August, I have had several pumpkin problems turn up this week. Actually, along with the disease problems, early ripening also seems to be not uncommon. This could pose problems with trying to hold them through October.

The University of Massachusetts had a great article that included the two diseases of pumpkins we don't regularly see. Except this year. I am seeing it quite often. They are Scab and Plectosporium. The cultural management options are listed below. From the chemical tool box, these diseases share Bravo and Dithane. As far as overlap with a disease like Powdery mildew, Plectosporium can be treated with Inspire or Bravo. Flint or Cabrio are also used for Plectosporium but not for Powdery mildew.

Scab. *Photo: T. Zitter, Cornell.*

From: UMass Vegetable Notes (August 10, 2017) by M. Bess Dicklow.
Scab (**Cladosporium cucumerinum**): Scab can affect all parts of cucurbit plants, but is most serious because of the disfiguring lesions that develop on fruit. The disease is favored by heavy fog, heavy dews, or light rains, and temperatures at or below 70F. The spores (conidia) are borne in

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long chains, are easily dislodged, and spread long distances on wind. On foliage, the first sign of the disease is pale-green, water-soaked lesions which turn gray and become angular as they are contained by leaf veins. On fruit, spots first appear as small sunken areas which can be mistaken for insect injury. The spots may ooze a sticky liquid and become crater-like as they darken with age. Dark green, velvety layers of spores may appear in the cavities and secondary soft-rotting bacteria can invade. Severity of symptoms varies with the age of the fruit when it becomes infected. C. cucumerinum overwinters in infected crop debris and soil, and may also be seed-borne. Spores produced in the spring can infect in as little as 9 hours, produce spots within 3 days, and produce a new crop of spores within 4 days.

Management: Start with disease-free seed or use fungicide-treated seed. Do not save your own seed if the disease is present. Select well-drained fields with good air circulation to promote rapid drying of foliage and fruit. Rotate out of cucurbits for 2 or more years. During cool, wet weather fungicide sprays may not be entirely effective because of the rapid disease cycle.

Plectosporium Blight (Plectosporium tabacinum): Like scab, Plectosporium blight is most damaging when it affects cucurbit fruit. Pumpkins, yellow squash, and zucchini are the most susceptible. Lens to diamond shaped, white to tan, lesions occur on stems, leaf veins, petioles, peduncles, while fruit lesions are more rounded. Severe stem and petiole infections can result in death of leaves and defoliation. Infected stems are dry and brittle. On fruit, the pathogen causes white, tan, or silvery russeting; individual lesions can coalesce to form a continuous scabby layer. Plectosporium blight is favored by wet weather; in wet years, crop losses in no-spray and low-spray fields can range from 50 to 100%. No resistant cultivar of pumpkins has been reported and it has not been reported to be seed-borne.

Plectosporium blight on pumpkin. *Photo: T. Zitter, Cornell.*

Management: Plectosporium tabacinum survives in crop debris, so plow deeply immediately after harvest. Rotation with non-cucurbit crops for 2 years can reduce disease. Choose sunny, well-drained sites for cucurbit production.

WNY Sweet Corn Trap Network Report, 8/22/17

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

Only nineteen sites reporting this week. Eight sites trapped European corn borer (ECB)-E and ECB-Z. Corn earworm (CEW) was trapped at ten sites, with seven sites high enough to be on a 4, 5, or 6 day spray schedule (see chart). Fall armyworm (FAW) numbers are up this week with fourteen sites reporting catches. Western Bean cutworm (WBC) numbers peaked two weeks ago and though numbers are down all reporting sites still caught WBC this week.

FAW numbers increased this week. At sites where CEW are being caught in high enough numbers to determine the spray schedule, those applications will be sufficient to take care of other worm pests that are present. Where CEW are not determining the spray schedule, scout to be sure that FAW and other pests are not above threshold.

WNY Pheromone Trap Catches: August 22, 2017

Location	ECB-E	ECB-Z	CEW	FAW	WBC	DD to Date
Baldwinsville (Onondaga)	0	0	4	11	12	1808
Batavia (Genesee)	0	1	4	0	20	1771
Bellona (Yates)	0	0	1	54	23	1913
Eden (Erie)	1	0	0	0	7	1726
Farmersville (Cattaraugus)	NA	NA	NA	NA	NA	1668
Farmington (Ontario)	1	4	0	1	4	1669
Hamlin (Monroe)	4	0	2	2	19	1747
LeRoy (Genesee)	3	0	1	3	12	1727
Pavilion	0	1	1	12	10	1727
Penn Yan (Yates)	0	3	3	52	2	1863
Ransomville (Niagara)	0	1	0	0	3	1841
Seneca Castle (Ontario)	4	0	0	16	6	1754
Williamson (Wayne)	NA	NA	NA	NA	NA	1671

ECB - European Corn Borer
CEW - Corn Earworm
FAW - Fall Armyworm
WBC - Western Bean Cutworm
NA - not available
DD - Degree Day (mod. base 50F) accumulation

Average corn earworm catch and recommended spray interval

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 80°F for the previous 2-3 days.

Fall armyworm egg mass

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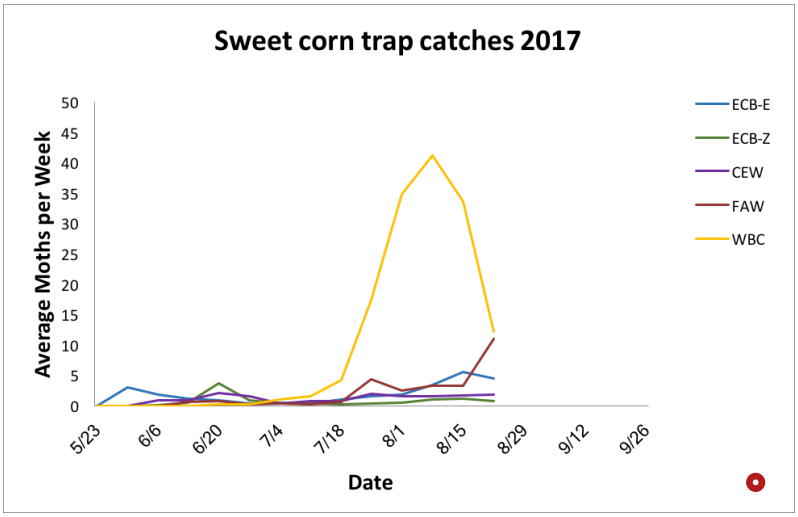
Fall armyworm larva, note the prominent inverted 'Y' on head.

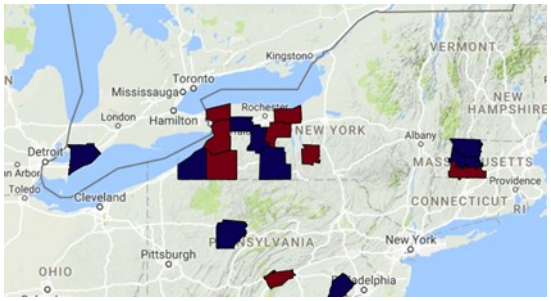
Fall armyworm feeding.
Photo: D. Telenko, CVP.



New Late Blight Reports Continue in New York

Darcy Telenko and John Gibbons, CCE Cornell Vegetable Program

Late blight is quite active in western NY as new outbreaks continue to be reported. Niagara, Erie, Cattaraugus, Wayne and Yates counties have had positive reports recorded this past week. At Some of these locations there were substantial infections of late blight in the fields where they were found. The isolate analysis is still in progress, but so far, all isolates have been US 23 in western NY, which is aggressive on both tomato and potato but generally sensitive to Ridomil.



Current observations of late blight – red counties have had a positive report in the last 7 days. Blue counties the report is >7 days old. Source https://usablight.org/map.

A few Wisconsin samples have come back as US-8. From Amanda Gevens, University of Wisconsin-Madison, *"This genotype was in central Wisconsin potatoes during 2013 and 2014, but has not been detected since that time. As a reminder, US-8 tends to prefer potato hosts over tomato, is of the A2 mating type and is resistant to mefenoxam/metalaxyl fungicides (ie: Ridomil)."*

All of Western NY is still at risk for Late Blight Infection. See the table for the Blight Units (BU) accumulation from around the region. All tomato and potato growers, conventional and organic, should be applying protectant fungicides and monitoring the DSS to determine spray intervals. <u>All sites except Kendall, will go over the 30 BU threshold based on 3-day forecast. Kendall will go over on the fourth day. This triggers the recommendation for an addition fungicide application this week</u>. Remember to rotate fungicide FRAC groups and use contact fungicides in your program to minimize the chances of fungicide resistance.

Continue applying fungicides regularly, even past potato vine-killing, and even if you've abandoned a tomato planting, as long as any green tissue remains, to prevent the production of late blight spores. One late blight lesion can produce 350,000 spores, each of which can produce a new infection. Spores can travel many miles on winds at night or during cloudy days. Wait to harvest until potato foliage and vines are completely dead and dry, to avoid exposing tubers to late blight spores. If you grade on the harvester, don't drop cull potatoes back into the field, or pile culls at the end of the field. Potato tubers that survive overwinter and sprout in the spring, either as field volunteers or culls in a pile, are a major source of late blight for the next year.

Late Blight Risk Chart, 8/22/17

Location[1]	Blight Units[1] 8/16-8/22	Blight Units[2] 8/23-8/25	Location[1]	Blight Units[1] 8/16-8/22	Blight Units[2] 8/23-8/25
Albion	43	19	Lodi	NA	NA
Baldwinsville	29	25	Lyndonville	17	15
Bergen	21	19	Medina	25	18
Buffalo	31	13	Niagara Falls	19	13
Ceres	42	16	Penn Yan	25	20
Elba	NA	NA	Rochester	34	20
Fairville	33	21	Sodus	25	19
Farmington	43	21	Versailles	23	21
Gainesville	NA	NA	Volney	32	14
Geneva	17	13	Wellsville	30	17
Kendall	12	12	Williamson	22	12
Knowlesville	NA	NA	Wolcott	19	14

[1] Past week Simcast Blight Units (BU)
[2] Three day predicted Simcast Blight Units (BUs)

CROP INSIGHTS

BEETS

The risk for leaf diseases remains high. Cercospora leaf spot is becoming more prevalent, but bacterial leaf spot continues to thrive in the rainy weather pattern. Root rot disease is common this year. We are interested in collecting samples of beet roots with rot either in the field or after harvest. This is for a root rot disease survey and to provide isolates of pathogens for our research. Please contact Julie to have samples picked up. - JK

CUCURBITS

Powdery mildew and downy mildew are still pretty active in many cucurbits, keep an eye on second plantings in a number of locations I've found powdery starting down inside the plants on young tissue and it is moving into pumpkins and gourds. Gummy stem blight continues to be found in melons. Symptoms on leaves range from water-soaked margins to individual, circular tan to dark spots; while on stems brown cankers will form and may produce a red to black exudate (gummy), fruit infection causes a black rot phase. A number of fungicides area available and should be used in preventative manner and applied on 7-14 day interval, these include Quadris, Bravo WS or other labelled product (OLP), Champ, Switch, Inspire Super, Sovran, Dithane DF or OLP, Cabrio, Pristine, Topsin. Resistance to Quadris and Topsin has occurred in the United States, but not in New York yet, so make sure products are alternated with different modes of action, combined with other protective fungicides such as Bravo, and limited to one use per season when necessary.—DT

DRY BEANS

White mold is prevalent this year in bean crops. Make a note of white mold incidence in your fields and avoid planting susceptible crops there for 5 or more years.

From M. Zuefle, NYS IPM: All dry bean growers should begin scouting pods for Western Bean Cutworm feeding about 10 days after peak flight regardless of cumulative trap catch, and should continue to scout for three weeks, especially if damage has been seen in recent years. Peak trap catch for each site is given in red in the table to the right. Seven sites reported as of 8/22/17, the table will be updated at http://sweetcorn.nysipm.cornell.edu as reports come in. Geneva and Wayland were the only sites where trap catch numbers increased this week (for reporting sites), most other sites peaked 2-3 weeks ago.

To scout dry bean fields check 10 random spots in a field. Inspect all the pods on the plants looking for holes.

Western Bean Cutworm Trap Counts by Date (in dry bean fields)

Dry Bean Location	7/25/17	8/1/17	8/8/17	8/15/17	8/22/17	Cumulative WBC
Attica 1	54	61	56	30	9	236
Attica 2	4	12	3	1	2	35
Avoca	7	16	8	5	7	48
Caledonia North	4	24	18	89	NA	136
Caledonia South	2	14	11	8	NA	36
Covington	9	6	103	78	47	250
Geneva	7	4	7	9	24	52
Groveland	1	7	4	4	NA	18
Kanona	0	0	4	6	0	10
Pavilion	39	28	18	13	NA	107
Riga	77	107	61	23	NA	303
Stafford	42	29	8	11	NA	107
Wayland	1	6	20	2	50	80

NA means not available.

ONION

Onion thrips finally arrived as pressure jumped this week across the region with several fields exceeding the spray threshold of 1.0 thrips per leaf by far. In addition to feeding in the leaf axils, the thrips are feeding all along the leaves (Fig. 1). Fortunately, in most fields the crop is made as the onions have lodged and already received their final spray. Younger fields that have not begun to lodge or have just started to lodge are still at risk for considerable thrips damage. Thrips move out of harvested fields into the remaining green fields where they become very heavily concentrated. Such explosive pressure can turn onion foliage white; it would be a shame to lose healthy green foliage to thrips in the end. Any fields in this situation should be treated with Radiant this week, as this is the only insecticide with proven ability to significantly knock back thrips pressure greater than 3.0 per leaf. Some growers are also applying Radiant to fields with 50% or more lodging in order to reduce the pressure that will be migrating to their adjacent younger fields. The hope is that up to two applications of Radiant will be all that is needed to finish the spray season.

Fig. 1. Onion thrips larvae (yellow) feeding all along onion leaves. During this time of year populations can be explosive when thrips move from fields being harvested into green fields, and can quickly turn foliage white; this may reduce uptake of sprout inhibitor. *Photo: C. Hoepting.*

More cases of downy mildew (DM) were reported this week in muck-grown onions in both Wayne County and Elba muck. Only the odd lesion about 2-3 weeks old were detected per field (Fig. 2). At this time so late in the season, this disease is not expected to cause significant damage, but as a precaution, mancozeb should be included in the tank mix in every field, and Ridomil Gold Bravo should be considered in younger fields still standing. See last week's Veg Edge for more info on treating for DM.

Typically, onions are sprayed until approximately 50% lodging, at which time sprout inhibitor, maleic hydrazide (MH) is applied to storage bound onions. Plants should have 5-8 green leaves

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to ensure translocation into the bulb. If MH is applied too late when the onion has less than 3 green leaves, it will not be absorbed properly and the onions will start sprouting in storage. Excessive leaf dieback from leaf diseases including Stemphylium leaf blight (SLB), Purple Blotch (PB) and DM, or excessive thrips feeding may reduce green leaf tissue to the extent that MH uptake is reduced. The rule of thumb is that onions should dry down naturally, not from diseases or insects. If diseases and/or onion thrips pressure is high, it would be sensible to include fungicides and/or insecticides with the MH spray. If thrips and diseases are in check, MH alone is all you need. Humid weather and temperatures less than 75 °F are ideal for applying MH. Low humidity and high temperatures (i.e. > 80 – 85 °F) may cause MH to crystallize on the leaves, thereby inhibiting uptake. Rain within 24 hours after application also reduces uptake.

Fig. 2. Downy mildew lesions being invaded by Purple blotch (left) and Stemphylium leaf blight (SLB) about 2-3 weeks old. Note fuzzy sporulation of DM on lesion and in surrounding green leaf tissue. This is diagnostic of DM. *Photos: C. Hoepting, CVP.*

PEPPERS

Fluctuating day and night temperatures along with heavy rainfall and water supply can lead to superficial surface cracking in peppers. Splitting occurs in fruit during stages of rapid growth stress at maturity. Proper irrigation and nutrition management can reduce cracking and some cultivars may be more susceptible.—DT

POTATOES

Many of the earlier potato fields are maturing, growers have initiated vine-killing, and the first mature potatoes have begun harvest. Be sure to continue applying fungicides regularly for late blight, and delay harvest, until foliage and stems are dead and dry.

Vine-Killing Options for 2017: - (Always read and follow the pesticide label)

- Reglone 2L (diquat dibromide) - application rate is 1-2 pts/A
- Vida (pyraflufen-ethyl) - application rate is 2.75 – 5.5 fl oz/A. A second application may be necessary but should not be applied before 7 days from the last application
- Rely (flufosinate-ammonium) (Upstate NY only) – application rate is 3 pt/A, make only 1 application. Do not apply to potatoes for seed. A non-ionic surfactant and anti-foaming agent may be helpful in soft water. There is a plant-back restriction of 30 days for buckwheat and most grasses; 120 days for all other crops except corn and soybeans.
- Aim (cargentrazone-ethyl) – application rate 3.2-5.8 fl oz/A

A previous reminder from Carol MacNeil - "clean up your storages, boxes and handling equipment. Use compressed air and/or a pressure washer to clean off all debris. Check for breaks in insulation and vapor barriers in the storage to avoid cold spots which can result in drip. Air intakes, exhaust vents, air ducts and tubes should be clean and working properly. Take care during harvest to minimize tuber bruising to limit entrance points for Pythium leak, Fusarium dry rot and bacterial soft rot. On the harvester, pad deflectors and sharp points. Reduce drops to no more than 6". Adjust chain speeds to keep them full of potatoes to avoid roll back. Reduce chain bouncing. During potato washing water temperature should be at or above tuber temperature to avoid water, potentially with bacteria, being sucked into the lenticels. Sodium hypochlorite can be used in the wash water to prevent spread of bacteria. Check frequently to maintain 65-125 ppm chlorine, and a pH between 6.0 - 7.5. Use new foam rollers at the end of the wash line to remove as much water as possible from the tubers. Circulate lots of air around boxes of washed potatoes to completely dry tubers. Don't pack until tubers are dry. Holding in a cooled storage can further dry tubers. Don't bring in any air warmer than the tubers, however, or bring the cooled potatoes out into warmer air, to avoid condensation and disease development. Several post-harvest, pre-storage treatments are available to reduce the spread of potato diseases during storage. They all require uniform treatment of tuber surfaces with a very fine, very low volume spray. Note: If there is rot potential in a lot of tubers the extra water required for application of these products may cancel out any benefit from the fungicides. Potatoes should be dry before placing them into storage. Bio-Save is a biological material that research has shown to reduce the spread of Fusarium dry rot (FDR) in storage. Continuous agitation is essential. Phostrol can suppress the spread of late blight (LB) and pink rot to new tubers in storage, but is not recommended for fresh market potatoes, especially if there are enlarged lenticels. The new product Stadium has been shown to reduce the spread of FDR and silver scurf."

PROCESSING CROPS

Harvest of snap beans and sweet corn continue at a strong pace. White mold is being seen in bean fields. Bacterial brown spot was diagnosed in lima beans and while we don't know what effect the disease will have on yield, copper sprays can be used to limit the spread of disease. Leaf diseases are becoming more prevalent in fresh market corn and field corn, so continue scouting for disease as well as insects. Fall armyworm numbers are increasing in traps (see report on pages 4-5). Root diseases are prevalent in beets this year (see beet section above).

TOMATO

Diseases are starting to take their toll on early, susceptible tomato varieties. Now is the time to take note of the diseases that having the most impact and look to selecting resistant varieties for next season if available. Late blight is continuing to spread, so continue to stay on top of your management programs to protect against this disease. - DT

UPCOMING EVENTS

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

Sustainable and Organic Vegetable Pest Management Field Day

August 29, 2017 | 3:00 PM - 9:00 PM
Cornell Lake Erie Research and Extension Laboratory, 6592 West Main Rd, Portland, NY 14769

Join Cornell Vegetable Program Specialists (Telenko, Hadad, Reid) and Cornell University faculty (Wallace, Smart, Reiners, Bjorkman) for an evening of touring Cornell Vegetable Program research sites and answering questions on sustainable and organic pest management options for fresh market vegetable growers. Information will be provided for both conventional and organic growers at all levels of expertise. Network for Environmental and Weather Application (NEWA) will be on-hand to teach growers how they can use the forecasting models for pest management in various crops. Sponsoring industry representatives will have the opportunity to meet with growers to comment on their products.

The full agenda is available at http://tinyurl.com/2017VegFieldDay. 3.0 DEC and CCA credits will be available for portions of the day.

Bejo Seeds Open House and Demonstration Trials 2017

August 29-30, 2017 | 10:00 AM—6:00 PM, lunch served on Tuesday, August 29, RSVP 315-789-4155
Bejo Seeds Research and Demonstration Farm, 4188 Pre-Emption Rd, Geneva, NY 14456

View a wide variety of quality vegetable crops at Bejo's Research and Demonstration Farm. For more info, visit www.bejoseeds.com

2017 Vegetable Pest and Cultural Management Field Meeting for Auction Growers

August 30, 2017 | 6:00 PM
Orleans County – Michael Zimmerman farm, 1272 Morrison Rd, Lyndonville, NY 14098

This course will demonstrate pest management in fresh market vegetables in both field and greenhouse (high tunnel) vegetables; primarily for those growing for wholesale auction. A hands-on demonstration of weed, insect and disease identification in vegetables including management options such as inter-row cover crops, grafting and where appropriate, spray options will be used to educate growers. Judson Reid, Senior Extension Associate with the Cornell Vegetable Program along with CCE associates Telenko and Hadad will instruct participants and facilitate peer-based learning. Details on each topic will focus on field observations at the farm.

This event is FREE! DEC recertification credits will be available. For more information about these events, contact Judson Reid at 585-313-8912 or jer11@cornell.edu.

Hands-on Seminar on Cover Crops, Mulching, and Reduced Tillage by German Organic Vegetable Expert Jan-Hendrik Cropp

September 11, 2017 | 6:00 PM—8:00 PM
Klaas and Mary-Howell Martens Farm, 1443 Ridge Rd, Penn Yan, NY 14527

Jan-Hendrik Cropp is an innovative organic farmer and consultant based in Germany. He has developed a vegetable transplanter that plants through heavy organic mulches and pioneered new ways to use cover crops to improve soil while growing high quality vegetables. This special hands-on seminar will feature innovative European equipment and a presentation by Mr. Cropp.

The registration fee of $20.00 will include seminar and a tour of the Martens' new European equipment. Please have dinner beforehand; light refreshments will be served. For more information and to pre-register (preferred, but not required), contact Brian Caldwell at

Strategic Marketing Conference—Getting Started in Agri-tourism

September 20-21, 2017 | 8:30 AM-9:00 AM registration on September 20,
Becker Farms, 3724 Quaker Rd, Gasport, NY 14067

On Sept 20th, speakers from around the state will provide tips on how to start an agri-tourism business, how to market an agri-tourism enterprise, and will share information from a variety of businesses covering: farm stays, wedding venues, farm-to-table restaurants, and you-pick operations. On Sept 21st , conference attendees will have the choice of joining a bus tour to several agri-toursim businesses in Western New York to hear from the owners and learn about successes and challenges in starting an agri-business.

The cost to register is $60 for 2 full days. Farmer scholarships are available reducing the rate to $20 for two full days. Registration begins at 8:30am on Sept 20th. The cost includes materials, breakfast, lunch and dinner on Sept 20th and the bus tour on Sept 21st. Lunch on Sept 21st as well as hotel accommodations are on your own. Conference attendees are also responsible for their own hotel reservations. A block of rooms is reserved at Hampton by Hilton Lockport-Buffalo, refer to group code: CCE, to get the negotiated rate. Call (716) 625-6900 to reserve your hotel room.

To register for the Strategic Marketing Conference contact Megan Burley at msb347@cornell.edu or 716-652-5400x138, or online at https://reg.cce.cornell.edu/Agritourism_214. The registration deadline is September 17th.

Weather Charts

John Gibbons, CCE Cornell Vegetable Program

Weekly Weather Summary: 8/15 – 8/21/17

Location	Rainfall (inch)		Temp (°F)	
	Week	Month August	Max	Min
Albion	0.48	3.48	85	56
Appleton, North	0.28	1.11	85	56
Baldwinsville	0.64	1.67	85	51
Buffalo*	0.36	2.63	81	61
Ceres	0.13	2.43	84	53
Elba	NA	NA	NA	NA
Fairville	NA	NA	NA	NA
Farmington	NA	NA	84	52
Gainesville	NA	NA	NA	NA
Geneva	0.80	2.77	85	54
Lodi	0.16	0.54	88	53
Niagara Falls*	1.14	3.22	84	61
Ovid	NA	NA	88	53
Penn Yan*	0.24	0.89	85	56
Phelps	0.49	2.33	87	57
Portland	0.98	2.28	84	61
Rochester*	0.78	2.14	85	57
Silver Creek	NA	NA	84	58
Sodus	NA	NA	85	53
Versailles	NA	NA	84	57
Volney	0.07	1.98	87	49
Williamson	0.49	2.18	87	53

Accumulated Growing Degree Days (AGDD) Base 50°F: April 1 – August 21, 2017

Location	2017	2016	2015
Albion	1904	2123	1969
Appleton, North	1738	1873	1707
Baldwinsville	1937	2084	1974
Buffalo	1933	2170	2009
Ceres	1699	1704	1728
Elba	NA	NA	NA
Fairville	NA	1914	NA
Farmington	1789	1965	1874
Gainesville	NA	NA	NA
Geneva	1880	2022	1914
Lodi	2064	2215	2084
Niagara Falls	2121	2306	1879
Ovid	1994	2110	2030
Penn Yan	2003	2144	2029
Phelps	NA	2022	1938
Portland	1966	2027	1883
Rochester	1998	2194	2073
Silver Creek	1921	1983	1844
Sodus	1906	2008	1854
Versailles	1871	1925	1838
Volney	1791	NA	NA
Williamson	1864	1976	1798

* Airport stations

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

Cornell University
Cooperative Extension
Cornell Vegetable Program

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VEGEdge

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

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