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The 2024 Blueberry Season and Projections for 2025



Thomas J. Vilsack, Secretary, USDA, 8/13/2024

On July 30, 2024, the New York State Executive Director of the Farm Service Agency (FSA), U.S. Department of Agriculture (USDA), requested a primary county disaster designation for seven counties in New York, due to damage and losses caused by a **tornado**, **hurricane**, **high winds**, **flash floods**, **excessive rain**, **and hail** that occurred from July 10 through July 16, 2024.

USDA reviewed the Loss Assessment Reports and determined that there were sufficient production losses to warrant a Secretarial natural disaster designation; therefore, I am designating all seven New York counties as primary natural disaster areas. A list of all primary and contiguous counties impacted by this disaster is provided.

A Secretarial disaster designation makes farm operators in primary counties and those counties contiguous to such primary counties eligible to be considered for FSA emergency loans, provided eligibility requirements are met. Farmers in eligible counties have 8 months from the date of a Secretarial disaster declaration to apply for emergency loans. FSA considers each emergency loan application on its own merits, taking into account the extent of production losses on the farm and the security and repayment ability of the operator. Local FSA offices can provide affected farmers with further information.

Designated Natural Disaster Areas in New York

Primary Counties: New York (7):	Contiguous Counties: New York (23)						
Cortland	Allegany	Genesee	Oneida	Wayne			
Erie	Broome	Herkimer	Onondaga	Yates 🔴			
Lewis	Cattaraugus	Jefferson	Oswego				
Ontario	Cayuga	Livingston	St. Lawrence				
Seneca	Chautauqua	Madison	Schuyler				
Tompkins	Chemung	Monroe	Steuben				
Wyoming	Chenango	Niagara	Tioga				

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 will be produced on August 28, 2024.

Downy Mildew Found on Pumpkin (in NJ)

compiled by Robert Hadad, CCE Cornell Vegetable Program [This information first came out of Rutgers with their report of DM having been found moving onto pumpkins in Morristown, NJ. UMass Extension then picked it up

and added a bit more info and pictures from Meg McGrath. ed. R. Hadad, CVP]

Cucurbit downy mildew (CDM) was confirmed on Sunday on pumpkin in New Jersey. It is now possible that CDM will develop in any cucurbit crop in Massachusetts. Winter squash growers should now regularly apply both broad-spectrum and downy mildew-targeted fungicides to their crops. Recommended broad-spectrum materials are chlorothalonil or copper, both of which are effective against both CDM and cucurbit powdery mildew. Recommended CDM-targeted materials include Zing!, Gavel, Orondis, Zampro, Omega, Previcur Flex, and Ranman. Rotate between 2 targeted materials for resistance management. Bravo and coppers can be used as protectants.

There are 2 clades of CDM that affect different cucurbit crops. Clade 1 isolates preferentially infect watermelon, kabocha squash and giant pumpkin (both *Cucurbita maxima*), butternut squash, and summer squashes, acorn squash, and Halloween pumpkin (all *Cucurbita pepo*). Clade 2 isolates preferentially infect cucumber and cantaloupe. Clade 2 usually arrives in New England first, and has been present in Massachusetts on both cucumber and cantaloupe since at least early August. This is the first report of Clade 2 north of Virginia this year.

For <u>pictures of CDM on different cucurbit crops</u>, visit https://blogs.cornell.edu/ livegpath/gallery/cucurbits/downy-mildew-o-cucurbits-early-symptoms/.



Cucurbit downy mildew on pumpkin. Symptoms include angular yellow lesions showing fuzzy gray sporulation on the undersides. *Photos: M. T. McGrath, Cornell*

CR P Insights

Observations from the Field and Research-Based Recommendations

GENERAL

Green Stink Bugs are a native Stink Bug that will feed on a wide number of vegetable crops (Fig. 1). Common victims include tomato, pepper and sweet corn. These insects will often cause damage before they are observed visually as they hide deep within the canopy and avoid detection. Their population may be higher near overwintering sites such as tree lines. *From Cornell Guidelines:* "Reduce potential overwintering sites such as harvest crates, woodpiles and temporary greenhouses near fields to reduce localized population presence." – JR

BEETS

Leaf wetness from rain, high humidity, and dense plant canopies favor disease development. Rain splash can spread Cercospora leaf spot. Processing growers should apply fungicides to plantings that have a long way until harvest. – JK



Figure 1. Green Stink Bugs are a native tink Bug that will feed on a wide number of vegetable crops, their presence does not always warrant a reaction. *Photo: J. Reid, CVP*

CARROTS

Recent high humidity and prolonged periods of leaf wetness are favorable for infection. <u>Bacterial lesions</u> are small yellow areas on the leaflets with brown, dry centers often surrounded by a yellow halo. Copper is labeled for Bacterial leaf blight. <u>Cercospora leaf spot</u>, caused by the fungus *Cercospora carotae*, is prevalent during hot and humid weather. Cercospora lesions are small, circular, tan, or gray spots with a dead center which appear along the leaf margins causing them to curl. The Cercospora fungus attacks younger leaves. <u>Alternaria leaf blight</u> caused by the fungus *Alternaria dauci*, first appears as deep brown to black irregular spots on the margins of the leaflets. Lesions on petioles and stems are deep brown and girdle the stems, killing them. As the disease progresses, entire leaflets may shrivel and die. Lesions are more prevalent on older foliage. There are several fungicides labeled for carrots as outlined in the 2024 Cornell Vegetable Guidelines. Choices should be based on which disease(s) you are trying to control, cost, and PHI. – JK

COLE CROPS

Seeing white mold and downy mildew in cole crop plantings. The arrival of fall-like conditions also worsens alternaria issues and heralds the arrival of the dreaded cabbage aphids. Cabbage aphids are blue-gray and waxy and they pile in by the thousands on cole crops. These are especially terrible in Brussels sprouts where they bury deep inside each little sprout. Be on the lookout and treat early. – EB

CUCUMBERS AND CANTALOUPES

Cantaloupes and other vine crops will experience aphid outbreaks (Fig. 2) if pyrethroid insecticides (group 3A) are applied too often. Growers report that aphid populations are spiking in as few as two weekly pyrethroid applications. Target pests for these applications are usually Striped Cucumber Beetle and Squash Bug, however pyrethroids are notorious for not controlling aphids, so we recommend a rotation between 3A insecticides and other groups such as 4A (Assail or Actara) and/or 29 (Beleaf). Remember that aphid are vectors of several damaging viruses including Cucumber Mosaic. – JR

These last two cold nights could kick off a sudden wilt in cantaloupes. Plants with sudden wilt will collapse in a couple days. Sudden wilt is a complex caused by the co-occurance of 3 conditions: a heavy fruit load close to/at maturity, a simmering root rot problem (low-moderate levels of fusarium, usually), and an environmental stress which is usually a suddenly cold night or two. There is little to be done to correct for sudden wilt. If a cold night is predicted, you can try to throw some row cover out on top of small plantings to add a little heat retention. Again, plantings with latent root rots (issues in the spring, perhaps struggling with low vigor and fighting through infection during the summer) and those with heaviest fruit load are at highest risk. – EB



Figure 2. The underside of a cantaloupe leaf with excess levels of aphids. The damage has caused the foliage to be stunted. *Photo: J. Reid, CVP*

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DRY BEANS

White mold is present in most fields and will likely continue to be a problem with all the wet weather that has moved across NYS. Aphids are being found in some dry bean fields as well as Mexican bean beetle. In high numbers MBB can defoliate plants quickly, as well as cause direct damage to bean pods, so it is important to monitor and treat fields if numbers get too high. Thresholds for MBB are >15% defoliation during pod-fill, and >25% defoliation during full-pod to harvest. – ML

ONIONS

After 3 days of rain and drizzle, the sun finally came out on Tuesday. Apparently, parts of Oswego and eastern Wayne Counties got ~5 inches of rain last week, which were followed by 1-2 inches of rain Friday through Monday. **Since the most susceptible stage for bacterial diseases of onion are from 5% to 50% lodging, these may have been "rot rain" events, because many onion fields are in this crop stage range and foliar symptoms of bacterial diseases increased substantially last week.** This week, we are assessing incidence of bacterial diseases in the onion scouting program. Knowing your onion rot situation, even it is too much is better than getting a bulb rot surprise later. **There are no silver bullets to make bulb rot go away, but there are a few things than can be done to not make the problem worse or to "win the rot race":**

- 1. Do not top onions with green necks,
- 2. Do not store for long,
- 3. Roll onions that are upright and not putting on new leaves or dying standing up,
- 4. Do not artificially cure with heated air onions topped with green necks that have foliar symptoms of bacterial disease,
- 5. Pull early.
 - See article on page 6.
 - See videos on <u>diagnosing foliar symptoms of bacterial diseases</u> and <u>bulb rot</u> of onion on the Cornell Vegetable Program's YouTube channel: https://www.youtube.com/user/ccecvp

The crop is on the home-stretch with spout inhibitor applied to storage bound onions in most fields either last week or this week. **Thrips exploded in parts of Oswego and Wayne last week, just as Elba finally got them under control** after a very long battle during most of the spray season. Also following the rain, **some fields progressed to accelerated leaf dieback**, a likely combination of SLB (maybe BLB necrotic spots), IYSV and thrips, and especially in fields that had sustained high thrips pressure during the spray season. In Elba this week, there was only a slight increase in primary SLB, which appears to still be mostly secondary. We'll soon learn the disease situation in Wayne and Oswego (scouted on Wednesday), which had more rain than Elba. At this time of year, I suspect that primary SLB presents more as leaf dieback, which is tricky to pinpoint in grower fields, but we certainly see differences among treatments in the fungicide trial. – CH

PEPPERS

Several cases of fruit anthracnose in peppers. Anthracnose should cause sunken, dark, softening spots on the shoulders and upper portions of mature fruit, typically 1-3 lesions per fruit. Please reach out if you have anthracnose that is more aggressive and causes many lesions per fruit or if it is attacking many ages of fruit. Anthracnose can be treated with Quadris. – EB

POTATOES

Colorado potato beetles remain active in low numbers in most fields. Late blight continues to move through western NY and has been confirmed in Allegany County in tomato. Past confirmations include Cattaraugus County, NY and nearby PA. As we continue to see storms move through, we expect to see more late blight. It is important to stay consistent with fungicide applications as we move into the end of the season. Please monitor fields and <u>report any suspecting late blight to a CVP Specialist</u> for confirmation and to identify genotype. – ML

PUMPKIN

Plectosporium spreading—Cornell Guidelines note that zucchini and pumpkin are most susceptible to Plectosporium Blight, and CVP Specialists have found damaging levels of the disease in both these crops this past week. Plectosporium produces tan, spindle-shaped lesions on stems and fruit (Fig. 3). A minor infection level will not affect the marketability of some ornamental crops, but high levels will reduce yield and marketability. Management of Plectosporium parallels that of Powdery Mildew, although resistant varieties are not available for Plectosporium. Once on-farm, rotation away from cucurbits for at least two years is critical. – JR



Figure 3. Plectosporium Blight produces tan lesions on zucchini foliage (left). Plectosporium lesions covering a pumpkin fruit (right). *Photos: J. Reid, CVP*

SNAP BEANS

Several processing fields suffered from hail damage on August 11th along Lake Ontario, particularly northern Orleans Co. <u>White mold</u> is being found in susceptible crops including snap, dry, and soybeans. Fungicide applications are meant to target early bloom because that is the susceptible stage for infection. Currently, we do not have any recommendations to halt or cure white mold once it has developed. Keep a record of the history of white mold in a field. A rotation of at least 2 years between susceptible crops is required to reduce primary inoculum. However, given that a small number of sclerotia (hard black structures that overwinter in the soil) are sufficient to initiate a white mold outbreak, a longer rotation (3+ years) may be beneficial. Timely tillage of crop residue to bury sclerotia after harvest to promote degradation is also encouraged. – JK

SQUASH

Fusarium fruit rot is appearing. Spaghetti and delicata make good canaries in the coal mine for indicators of what fruit rot issues are active. As in pumpkin, seeing plectosporium and a lot of powdery mildew. Some P.cap on farms with known histories. Continuing to see bacterial wilt. – EB

SWEET CORN

Processing sweet corn harvest is on schedule with average yields overall. Some fields along Lake Ontario were damaged by hail on August 11th, particularly in northern Orleans Co. – JK

Tar spot has been reported in Chautauqua, Erie, Wyoming, and Niagara Counties. Tar spot thrives in this kind of weather and is likely active in other areas, as well. Please let us know if you see tar spot. – EB

TOMATOES

Late blight continues to spread through the southern tier and there is real risk that it will travel elsewhere.

Portions of the CVP region have received over 10 inches of rain this month. Heavy rains can leach nutrients from the soil leading to deficiencies in vegetable crops. Leaching of potassium in well drained soils can deplete potassium supplies at peak crop demand. In tomatoes this can contribute to the disorder known as Yellow Shoulders (Fig. 4). Regular foliar testing can help monitor potassium trends in the crop, but a pre-season soil test is even more important to have an idea of the total potential potassium available to the crop. Many growers will front-load potassium (with a goal of at least 500 lbs/ac), while other prefer a weekly injection in a soluble form such as sulfate of potash. In sandy soils, the weekly in-season injection approach to potassium is preferred to avoid the potential leaching we have seen this August. Bear in mind that potassium uptake is also influenced by pH, calcium, magnesium, phosphorus and soil biology. – JR



Figure 4. Yellow Shoulder in tomato is linked to potassium deficiency. Heavy rains can leach potassium in well drained soils. *Photo: J. Reid, CVP*

NYS Ag Society "Century Farm Program"

The New York State Agricultural Society prides itself on recognizing the best in agriculture. The Century Farm Program is one of the premier programs that recognizes farms when they reach the centennial mark. To date the Ag Society has recognized 408 Century farms, 59 Bi-Centennial farms, and 2 Tri-Centennial farms.

The program rules are simple – the farm needs to have hit the centennial mark prior to the convening of the New York State Agricultural Society's annual meeting on January 9, 2025. If your farm has hit this mark, we would love to recognize this amazing achievement! To register your farm as a Century Farm, go to the following link <u>https://www.nysagsociety.org/century-bicenten-</u><u>nial-farm-award</u> and fill out the information requested. The information you provide documents the farm's journey to 100 years. The deadline is coming fast – October 15, 2024. If interested, please send in your information – we would love to see you and recognize you at our upcoming annual meeting.

How Much Rot You Got?

Pre-Harvest Assessment of Bacterial Bulb Rot in Onion and Rot Management Options Christy Hoepting, Cornell Cooperative Extension, Cornell Vegetable Program

Basics of Bacterial Diseases of Onion

- Onion plants are most susceptible to infection of bacterial diseases from 5% to 50% lodging when the neck tissue is soft.
- Most of the bacterial diseases that cause bulb rot in onion infect the inner green leaf/leaves of an onion plant and then move down through the neck and into the corresponding bulb scale(s).
- Bacterial diseases are thought to infect and spread in green leaf tissue, while infection and movement is halted in necrotic or dry tissue, which is an important consideration for management.
- In general, hot temperatures and moist conditions favor bacterial diseases.

Foliar Symptoms of Bacterial Diseases Less Concerning in July

- Foliar symptoms of bacterial diseases of onion usually first appear just after bulbing begins. Typically, a single middle-aged leaf turns yellowish or white and collapses, which progresses to multiple leaves.
- There is often no relationship between incidence of foliar symptoms of bacterial diseases and incidence of bacterial bulb rot.
 - It is common for a single infected leaf to dry up before the disease enters into the neck and bulb.
 - In fact, some strains of bacteria cannot even survive inside the hostile environment (e.g. antimicrobial properties) of an onion bulb.
- Although, I take note of my observations of foliar symptoms of bacterial diseases when scouting onions in July, I do not get serious about bacterial diseases until closer to harvest when onions are well into lodging.

Pre-harvest Assessment of Bacterial Bulb Rot During Lodging

Step 1: Inventory incidence of foliar symptoms of bacterial diseases.

- When scouting, once you find a plant with foliar symptoms of bacterial disease (Fig. 1), inspect the next adjacent 9 plants in the row for symptoms of bacterial disease. Include plants where most/all of the leaves have collapsed (not pictured in Figure). Tally the number with bacterial disease.
- Repeat this step at about 10 sites in the field. The more samples you take from throughout the field, the more accurate your results will be.
- Calculate incidence. E.g. out of 10 consecutive plants: 3, 5, 4, 1, 0, 4, 3, 4, 0, 1. Average = 2.5/10 x 100 = <u>25%</u>.
- Note, incidence of foliar symptoms of bacterial disease may continue to increase in time.



Figure 1. Foliar symptoms of bacterial diseases of onion during lodging. Look for bleaching or yellowing/ browning and collapse of inner and middleaged leaves. *Photo: C. Hoepting, CCE Cornell Vegetable Program*

Step 2: Inventory incidence of bulb rot in plants with foliar symptoms.

- Cut plants with foliar symptoms of rot longitudinally through the neck and bulb (Fig. 2).
- Tally the number of bulbs with rot out of the number of bulbs that you cut.
- If incidence of foliar symptoms of bacterial disease is low and you did not have many plants to cut, you should find additional plants with foliar symptoms to cut. Ideally, 25-50 bulbs should be cut per field. The more samples you take from throughout the field, the more accurate your results will be.
- Calculate incidence of bulb rot per foliar symptomatic plants: E.g. 10 out of 41 bulbs = 0.238. This number may increase in time.

Single leaf

Multiple leaves



Figure 2. To determine if onion plants exhibiting foliar symptoms of bacterial disease (purple arrows) have bulb rot, cut the plant longitudinally through the neck and bulb. Look for macerated (squishy) brownish tissue in the neck (yellow arrows) and bulb rot (right). *Photos: C. Hoepting, CCE Cornell Vegetable Program*

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Step 3: Calculate incidence of bulb rot per field

- Incidence of foliar symptoms of bacterial disease (e.g. 25%) x incidence of bulb rot of plants with foliar symptoms (e.g. 0.238) = <u>6%</u>.
- This is the incidence of plants in the field that currently have bulb rot. This number may increase in time.
- If all the plants with foliar symptoms eventually progress to bulb rot, the potential incidence of bulb rot in this field would be 25%.
- Is there anything that can be done to prevent the (25% 6%) **<u>19%</u>** of foliar symptomatic plants from progressing into bulb rot?

Your Rot Management Options

1. Pull Early to Encourage Rapid Dry-down to "Win the Rot Race"

The "rot race" is the race to get the neck tissue dried down (and impassable to bacteria) before the bacterial infection reaches the bulb.

- A disadvantage of pulling early is that yield may be reduced from not letting the bulbs finish sizing up. Ideally, the reduction in bulb rot by pulling early would outweigh any yield reduction. The more green foliage at pulling, the greater the potential yield reduction.
- If onion roots are "holding on" and green foliage is 60-75%, pulling early may win the rot race. Although, I'd like to test this theory a bit more to be sure.
- If onion roots are "holding on" (i.e. require a tug to pull out of ground) and green foliage is >75%, pulling early will likely result in a yield/bulb size reduction that may not outweigh any reduction in bulb rot. Do not put these early pulled onions on a drying wall with artificially heated forced air for quick curing, because it will increase bulb rot (according to an experiment I did last year) see next section.
- If onion roots are "letting go" (i.e. plants come right out of ground when pulled and do not require a tug) and green foliage is < 50%, bulbs are ready to be pulled anyway and foliage will dry down at a similar rate whether pulled early or not. Harvest as soon as the necks are dry and get them out of the field, if possible.
- 2. Do Not Top Onions When Neck Tissue is Green
 - Bacterial disease only infects and moves through green neck tissue, not dry tissue.
 - Especially in fields that have high incidence of foliar symptoms of bacterial disease, there will be bacterial disease in the neck tissue that may easily contaminate knives that could introduce new infections to other green-necked bulbs during topping/harvest operations.
 - Wait until neck tissue is completely dry before topping. Dry neck tissue does not roll between your fingers.
 - Leave a neck length of 2-3 inch when topping. This increases the distance that a new bacterial infection must travel before it reaches the bulb. Theoretically, the green neck tissue will dry down and become impassable to a new bacterial infection that occurred at the end of the neck during topping.
 - If onions must be topped when necks are green, they should be cured indoors on a drying wall to ensure optimum curing conditions (68-86°F and 70% relative humidity until neck tissue is dry and sealed). Do not do a 1-3 day rapid cure with high temperature when there is a high incidence of foliar symptoms of bacterial diseases, as this could increase bulb rot. A slow cure with low temperature over 1-2 weeks may be okay.
- 3. Sell Onions Out of Field/Do Not Store for Long
 - If you know that a field has >10% bulb rot (or whatever your cut-off rate to deal with is), you do not want to store these onions for long, as incidence of bulb rot generally only increases in storage.
 - Grade such onions aggressively to ensure that the bulb rot is detected and culled prior to shipping.

Rolling Onions is Not an Option for Plants with Bulb Rot

- Once rot is in the bulb, it is there to stay. There is no way to shove it back up into the neck.
- Upright onion plants that are not putting on new leaves have their leaf axils exposed to rain and bacteria-contaminated splashing soil (Fig. 3) that can result in new bacterial infections that may progress to bulb rot.
- Rolling onions gently lays down an upright onion plant down so that its leaf axils are protected from new bacterial infections.
- Rolling onions will not reduce yield, because the roots are left intact and the bulbs will continue to put on size.
- Once bacterial disease is in the neck, it will generally continue to progress into the bulb whether the onion plant is upright or lodged.
- Theoretically, **if an onion plant with foliar symptoms of bacterial disease is upright or dying standing up** and water pools in the leaf axil, this may create a condition that is more favorable for progression of bacterial disease, increasing the risk of bulb rot. **In this case, rolling onions may help to reduce bulb rot.**

- Do not injure the onion plants when rolling them.
- Rolling onions is most beneficial prior to a "bacterial inoculation event(s)" such as splashing rain followed by warm temperatures when onion foliage still has a decent amount of green in it (e.g. 50-70% green or more). In fields where the onions died standing up and only have 5% green foliage left, the damage has already been done, and rolling will not make any difference to bulb rot.
- We know 1) that onions are at greater risk for bulb rot when they die standing up, and; 2) that rolling prevents bulb rot. What we do not know is whether there will be an inoculation event that will increase bulb rot. If there is rain in the forecast, it may be worth it to roll. At \$1000 to build a roller and \$10/A to roll, it is a relatively "light lift" for the potential benefits (e.g. 35-57% reduction in rot in on-farm studies).



Figure 3. When upright onion plants are not putting on new leaves, water and bacteria-contaminated splashing soil may enter into the neck tissue at the leaf axils (left), which may favor infection and progression of bacterial diseases. When onions lodge, the leaf axil is protected from water and bacteria-contaminated soil. Rolling onions is a way of gently laying down plants that are dying standing up (right). *Photos: C. Hoepting, CCE Cornell Vegetable Program*

Insight for this article was acquired from experiments conducted as part of the Specialty Crops Research Initiative Award 2019-51181-30013 of the USDA National Institute of Food and Agriculture. •

New Opportunities for Farmers Through USDA's Farm Loan Programs

USDA Farm Service Agency

We are happy to announce the most significant changes to USDA's farm loan programs since 2007. These updates from the Farm Service Agency (FSA) are set to enhance financial opportunities for farmers and ranchers, ensuring their long-term viability.

As part of a comprehensive modernization initiative, the <u>Enhancing Program Access and Delivery for Farm Loans rule</u> aims to revitalize our farm loan programs. These programs are vital in helping agricultural producers start, expand, and sustain their operations through various challenges.

The Enhancing Program Access and Delivery for Farm Loans rule introduces several critical changes:

- 1. Low-Interest Installment Set-Aside Program: This new program assists financially distressed borrowers by allowing them to set aside low-interest installments.
- 2. Flexible Repayment Terms: These terms offer equitable access to repayment options, increasing farmer profitability and enabling the building of working capital reserves and savings.
- 3. Reduced Loan Security Requirements: By lowering loan security requirements, borrowers can leverage their financial equity more effectively.

These changes provide borrowers with the financial freedom and flexibility needed to improve profitability and resilience. They create opportunities for saving towards long-term needs and making strategic investments.

Since 2022, the FSA team has been dedicated to streamlining business processes for both customers and employees. By automating operations, they have improved the overall customer experience, making farm loan programs more accessible, equitable, and user-friendly. This modernization effort includes replacing outdated, paper-based processes with efficient, automated systems. They are phasing out over 20 obsolete IT systems that support Farm Loans delivery, integrating new end-to-end functions to enhance the online customer experience. This shift promises more efficient and effective loan origination and servicing.

Fungicides for Late Blight Control in Tomato and Select Other Uses *Elizabeth Buck, Cornell Cooperative Extension, Cornell Vegetable Program*

When rotating fungicides pick a product with completely different FRAC group(s). Systemic activity > translaminar > contact. Protectants do not effectively treat infected tissue, they protect healthy tissue from disease. Note that Group 11 products struggle to control late blight.

Name	FRAC Group	Activity Type	REI hr	PHI day	Tomato Rate/A	Tomato Rate/1000 ft ²	Potato Late Blight**	P.cap in Pepper**	P.cap in Cucurbits**	Other Tomato Diseases**^
Orondis Opti	49 + M5	Systemic + protectant	12	0	1.75 - 2.5 pt	0.77 - 1.10 fl oz	Y	Y	Y	none
Orondis Ultra	49 + 40	Systemic + translaminar	4	1	5.5 - 8 fl oz	0.13 - 0.18 fl oz	Y	Y	Y	none
Champ or OLP	M1	Protectant	48	0	1.3 pt	0.48 fl oz	Y	Y	Y	EB, AN, S, BO
Kocide 3000-O	M1	Protectant	48	0	0.75 - 1.5 pt	0.33 - 0.66 fl oz	Y	NA	NA	EB, AN, S, BO
ManKocide	M1 + M3	Protectant	48	5	1-3 lb	0.37 - 1.1 oz	Y	Y	NA	EB, AN, S, BO
Bravo Weather Stik	M5	Protectant	12	0	1.375 – 2.75 pt	0.51 - 1 fl oz	Y	NA	NA	EB, AN, S, BO
Catamaran	P07 + M5	Contact + protectant	12	0	5 - 7 pt	2.2 - 3.08 fl oz	Y	N	Ν	EB, AN, S, BO
Prophyt or OLP	P07	Contact	4	0	4 pt	1.47 fl oz	Y	Y	Y	none
Ridomil Gold Bravo	4 + M5	Systemic + protectant. LB strains can be resistant.	48	5	2.5 pt	0.92 oz	Y	Resistance	Resistance	none
Ranman 400 SC	21	Contact	12	0	2.1 - 2.75 fl oz	0.048 - 0.063 fl oz	Y	Y	Y	none
*Zoxium	22	Contact	48	5	2.5 - 4 oz	0.057 - 0.092 oz	Y	Y	Ν	none
*Gavel 75 DF	22 + M3	Contact + protectant	48	5	1.5 - 2 lb	0.55 - 0.73 oz	Y	N	Y	EB, S
*Zing!	22 + M5	Contact + protectant	12	5	36 fl oz	0.826 fl oz	Y	N	Ν	EB, S
Tanos 50 DF	27 + 11	Translaminar	12	3	8 oz	0.18 oz	Y	Y	Y	EB, AN, S, BO
Cymbol Advance	27 + M5	Translaminar + protectant	12	3	1.9 - 3 pt	0.7 - 1.1 fl oz	Y	N	Ν	none
*Cymbol Balance	27 + 28	Translaminar + systemic	12	3	21 fl oz	0.48 fl oz	N	N	Ν	EB, AN, S, BO
*Previcur Flex	28	Systemic + protectant	12	5	0.7 - 1.5 pt	0.26 - 0.55 fl oz	Y	N	Ν	EB
Revus Top	40 + 3	Translaminar. Grp 3 no LB activity.	12	1	5.5 - 7 fl oz	0.13 - 0.16 fl oz	Y	N	Ν	EB, AN, S, BO
Forum	40	Translaminar	12	4	6.0 fl oz	0.138 fl oz	Y	Y	Y	none
*Zampro	40 + 45	Systemic + translaminar	12	4	14 fl oz	0.32 fl oz	Y	Y	Y	none
*Presidio	43	Systemic	12	2	3 - 4 fl oz	0.068 - 0.092 oz	N	Y	Y	none
Cabrio	11	Translaminar. Weak on LB.	12	0	8 - 16 oz	0.18 - 0.36 fl oz	N	NA	NA	EB, AN, S, BO
Quadris Flowable or OLP	11	Translaminar. Weak on LB. <u>Quadris Top is</u> <u>NOT labeled</u> .	4	0	6.2 fl oz	0.14 fl oz	Y	Y	NA	EB, AN, S
Flint	11	Translaminar. Weak on LB.	12	3	2 - 4 oz	0.046 - 0.092 oz	Y	NA	NA	EB, AN, S
*Reason 500 SC	11	Translaminar. Weak on LB.	12	14	4.0 - 8.2 fl oz	0.09 - 0.18 fl oz	Y	Y	NA	EB, S
*Priaxor	11 + 7	Translaminar. Grp 7 no LB activity.	12	0	8 fl oz	0.18 fl oz	Y	NA	NA	AN, S

Common fungicides used for late blight (LB) control in tomato and select other uses

* Restricted-use pesticide.

** See label for rate, PHI and instructions.

* EB: early blight; AN: anthracnose; S: septoria; BO: botrytis in open fields.

Conversions for small plantings: 1 fl oz = 2 tbsp or 6 tsp or 29.57 mL. Do NOT use pesticide measuring devices for any other purpose.

The 2024 Blueberry Season and Projections for 2025

Anya Stansell, Small Fruit Specialist, CCE Harvest NY

This year's blueberry season started and ended early. In our region, the 2024 crop was widely characterized by an abundant fruit set. Fruit sizing was occasionally hampered by a lack of leaves on the branches with the heaviest fruit set. We had a very mild frost on April 25th, when bushes were just starting to push flowers, but this did not cause damage to the crop. Blueberries ripened early—for most, about 2 weeks earlier than usual. Some growers noticed an issue with uneven or stalled ripening during the hottest days and nights of June.

The warm, wet spring was conducive to the early arrival and rapid spread of the Spotted Wing Drosophila. This pest typically appears in our region around mid-June but had showed up as early as mid-May in several sites in 2024. Spraying insecticides was challenging due to the abundant rainfall in many parts of our state.

The heat during the days and the nights pushed many berries into over-ripeness around the end of July. Touring closed patches, I saw a mix of over-ripe and under-ripe berries on the same branches.



A mix of ripening and over-ripe berries in a blueberry planting closed for the season. *Photo: Anya Stansell, CCE*

What can we anticipate for 2025?

The slow, mild fall and winter of 2023 created optimal conditions for flower bud generation on the hardening blueberry canes. Typically, leaf buds in blueberries are created during the long days of summer, and as the days grow shorter, flower buds are created on the tips of the branches. As the long-day period in fall and winter was prolonged and plants took longer to enter dormancy, the number of flower buds was greater than in typical years. Blueberries do not undergo biennial beaning, so if we have another mild fall in 2024, we can expect similar flower bud set in 2025.

Regarding pests and diseases, the high amount of fruit drop this season can promote fungal and insect pathogens in the following year. Some sort of sanitation spray once the leaves drop from the bushes can help reduce the inoculum. Two options are a spray of Oxidate 2.0 (hydrogen peroxide and peroxyacetic acid) or a 5% solution of feed grade urea dissolved in water (granular urea is slower to dissolve in water). In late winter or early spring right at bud swell, a delayed dormant application of lime sulfur will serve the same purpose.

Weed control will be a priority for 2025. In fall, update of systemic herbicides such as Roundup (glyphosate) can be very effective to control perennial weeds, but blueberries are extremely likely to take up the herbicides too. Shielded or wick applications onto troublesome weeds, especially when using at higher rates, can prevent any crop damage that could show up in the spring.

Resources and further reading:

2024 Insecticide Quick Guide for Spotted Wing Drosophila | Greg Loeb, Anna Wallis, Laura McDermott, Peter Jentsch, and Juliet Carroll, Cornell University. https://bpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/f/7312/files/2024/05/Quick-Guide-SWD.pdf

<u>Herbicide Injury in Blueberries</u> | Berry Diagnostic Tool, Cornell University. https://blogs.cornell.edu/berrytool/herbicide-injury-blueberries/

Sweet Corn Pheromone Trap Network Report

Marion Zuefle, NYS IPM, <u>8/20/24</u>

Statewide, 30 sites reporting this week (see trap count table). European corn borer (ECB)-E was trapped at 4 sites and ECB-Z was trapped at 7 sites. Corn earworm (CEW) was trapped at 26 sites, with 25 sites high enough to be on a 3, 4, 5 or 6-day spray schedule (see chart). Fall armyworm (FAW) was caught at 7 sites and Western bean cutworm (WBC) was caught at 13 of the reporting sites.

CEW really increased over the last week, with an average of 32 moths caught per site. Where CEW are being caught in high enough numbers to drive the spray schedule, the other worm pests should also be controlled. CEW eggs are generally hard to detect, but in years with higher pressure, they can sometimes be found on the silks (see photos).





CEW egg on silk. *Photo: NYS* IPM

Close-up of CEW egg on silk. Photo: NYS IPM

Upcoming Events

Regional Agritourism Networking Session August 26, 2024 (Monday) | 12:00 ppm - 4:00 pm Wickham Farms, 1315 Sweets Corners Rd, Penfield, NY 14526

Agritourism is a growing niche of tourism. At this event hosted by CCE Monroe and CCE Erie, experienced agritourism operators will discuss the best practices and opportunities that agritourism can bring to your farm. You will be able to connect with tourism agencies and learn about the resources available through your Extension and Cornell's Agritourism Program Work Team. This newly established state-wide outreach Team will also facilitate discussions and connections to the national agritourism network.

Speakers:

- Jarmila Haseler & John Whitney, CCE Welcome
- Bill Wickham, Wickham Farms Introduction
- Greg LaDuca Visit Rochester Support
- Sara Emmert, NYS Division of Tourism I LOVE NY Representative
- Amy Machamer, Hurd Orchards Sharing an Agritourism Model That Works for Them
- Laura Biasillo, CCE Broome Agritourism Resources & Networking Dialogue
- Wickham Farms Sstaff Facility tour and continued dialogue

COST: \$12 per person, includes lunch. Additionally, you can enter a raffle to win a prize. Each raffle ticket includes a 10% discount to the Taste NY Markets in Western NY and Finger Lakes Welcome Centers who generously donated the raffle baskets.

REGISTER by August 22: https://tinyurl.com/5n6m3sd6

Northeast Cover Crop Council Webinar Series August 28 - October 23, 2024 | 12:00 - 12:30 Eastern

Weekly FREE webinars will include time for audience questions. Registration is open through the entire webinar series. Qualify for 0.5 CCA CEUs per session attended. More information, session topics, and registration available at <u>https://northeastcovercrops.</u> <u>com/conferences_webinars/</u>

2024 Dry Bean Growers Twilight Meeting September 24, 2024 (Tuesday)

SAVE THE DATE! 1.5 DEC credits will be available. More details will be available after Labor Day.

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Cornell Cooperative Extension Cornell Vegetable Program

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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 or visit CVP.CCE.CORNELL.EDU

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