

Long Island

Fruit & Vegetable Update

No. 15 - July 9, 2026

Cornell Cooperative Extension | Suffolk County

GENERAL

Plant Science Day and BBQ – July 30: Cornell University's Long Island Horticultural Research & Extension Center (LIHREC) will hold its annual Plant Science Day for agriculture and horticulture professionals on Thursday, July 30 at 3059 Sound Ave, Riverhead. Tours and demonstrations will be held from 4:00-6:00 pm. Tours will be available in one of four commodity areas: (1) vegetables, (2) nursery and ornamentals, (3) greenhouse and floriculture, and (4) grapes and viticulture. Registration for the afternoon begins at 3:30 pm. There is no charge to attend the tours and NYSDEC Pesticide Recertification credits are available.

At 6:00 p.m., a barbecue will be held on-site at LIHREC with food from Maple Tree BBQ along with local wines and beer. Many thanks to Farm Credit East for sponsorship of this event. The cost for the barbecue is \$25 per person. Participants are encouraged to attend both the tours and the barbeque dinner during Plant Science Day, but if you prefer, you can attend just one or the other. **Pre-registration is required to attend the BBQ.** If you are a Farm Credit East member, please visit <https://www.farmcrediteast.com/appreciation> to register. Others can register at <https://cals.cornell.edu/events/plant-science-day-lihrec> or can call Karen at 631-727-3595.

Spotted lanternfly note: A few 4th instar nymphs, with red markings, seen this week. Adults will follow starting late July. Some good news: progress is being made towards biocontrol with a nymph parasitoid wasp that may be released next year. So far levels appear very low in most eastern grape production areas. (DG)

VEGETABLES

Sweet Corn Report: The storm on July 4 had some impact around the area with downed trees and power lines but our traps were also taken down at many locations, so the numbers presented this week are not fully accurate. European corn borer (ECB) remains low with little to no damage observed in the field from this pest. Attribute II varieties will provide protection from all worm pests. Corn earworm (CEW) trap counts are at moderate levels. Weekly trap catches indicate the need for a 4-day spray schedule in silking corn. Due to resistance, pyrethroids alone should not be relied upon for management. Radiant, Lannate or a tank-mix of either of these with a pyrethroid are recommended. Initiate applications as soon as silks appear. We are not catching any fall armyworm (FAW) moths but expect to soon. (SM)

Pheromone Trap Catch Records Week of 7/2 – 7/8

Location	ECB	CEW	FAW
Aquebogue	0	0	0
Baiting Hollow	1	11	0
East Quogue	1	1	0
Laurel	0	15	0
Mattituck	0	25	0
Riverhead	1	0	0
Wading River	0	23	0
Watermill	2	12	0

Worms in tomatoes: Some hornworms seen this week. Eggs are bright green and spherical, caterpillars are hard to spot but look for droppings fallen from plants. Fruitworm is also a concern with increasing corn earworm levels. Hornworms can defoliate plants and both damage fruit. For hornworms check 10 plants: a suggested threshold is an average of 1 hornworm/2 plants. For fruitworm, watch CEW trap counts. Lannate (3 DTH), Radiant (1), Proclaim (7) or Avaunt (3) should provide control of both. For organic production Entrust will be most effective. Bt insecticides and pyrethroids are effective for hornworms but not fruitworms. The insecticidal virus products Helicovex and Gemstar are also labeled for CEW/fruitworm. When using the biologicals adjust spray water pH 5.5/6 to 8/8.5; don't-mix with copper fungicides and silicone-type wetting agents. Hand-removal of hornworms may be effective in small plantings.

Spider mites in tomatoes, melons, other crops. Damage appears as pale or yellowish discoloration and flecking especially older/middle leaves. Agri-Mek/ generic (7 DTH), Acramite (3), Portal (1), Kanemite (1) and Nealta (3) are specific miticides for tomatoes; pyrethroids Brigade EC (1), Hero (1), or Danitol (3) can also be used but are not best for high populations. M-Pede (0) and hort. oil (SuffOil-X, JMS Stylet Oil, Sunspray Ultra-Fine, all 0) can be used in organic situations. All have a 12 hr REI except Danitol (24) and SuffOil (4). In eggplant Acramite 50WS/generic (3), Portal (1), Vendex (3), Zeal Miticide1(7), Brigade EC (7), Hero (7), Danitol (3), SuffOil (0) and M-Pede (0) are options. In melons Rutgers suggests a threshold 50% of terminal leaves with mites this time of year. For very high levels and in organic production a horticultural oil (1.5 – 2%) or insecticidal soap (1-2%) can reduce populations but only if coverage under leaves is good and when conditions are suitable (below about 85F and not under drought stress). Specific miticides

include Agri-Mek/generic (7 DTH), Portal XLO (3 melon, 1 cucumber), Acramite/generic 50WS (3), Kanemite (1) and Zeal SC (7). Note label restrictions including numbers of applications allowed. Incipio is also labeled for mites and thrips in fruiting veg and cucurbits (3 for all) but note restrictions about application during flowering (highly toxic to bees). Most miticides work on contact so good wetting of leaf undersides will improve efficacy; Zeal and Agri-Mek have some translaminar activity. Don't combine Acramite with copper products or lime; Agri-Mek may benefit from a penetrating surfactant or horticultural oil (see label). Don't mix M-Pede with sulfur or products containing metallic ions (copper, e.g.) and no adjuvant with Kanemite.

Flea beetles in brassicas increasing. Mustard, bok choy, arugula, radish and related brassicas are especially prone though others can be heavily attacked too. Check seedlings/transplants frequently. Pyrethroids and Sevin/Carbaryl are very effective; Admire Pro/generic (foliar spray) can also be used. Radiant will provide some suppression and is specifically labeled for flea beetles on root brassicas. Organic growers can use Entrust/generic on root and leafy brassicas for suppression. Exclusion netting and rowcover provide good protection.

Squash bug eggs and adults were being seen in some vine crops this week. The bronze-red eggs are laid under leaves in groups. Gray nymphs follow. Feeding can cause leaves to turn brown and vines to wilt and die esp. under hot, dry conditions. Squash and pumpkins are preferred but other cucurbits are also hosts. One threshold is 1 - 1.5 egg masses/plant in squash. Use Assail, pyrethroids (Asana, Brigade 2EC, permethrin, Mustang Max, Warrior/generic), or Sevin as eggs start to hatch. For organic production azadirachtin (Azatin O, Aza-Direct, Molt-X, AzaGuard, Ecozin, Azasol – most organic-compatible) can be used for small nymphs. Hand-removal in small plantings may suffice.

White Mold Showing Up in High Tunnel Tomatoes: White mold, also known as timber rot, has turned up in a local high tunnel (HT), and the enclosed, humid environment is exactly what this pathogen likes. Look for water-soaked lesions on stems, often at a node, pruning wound, or where the stem meets the ground, that develop a dense, cottony white growth. The key sign is a hard, black sclerotia (resembling mouse droppings) on or inside affected stems. Infected stems girdle and wilt suddenly, and plants collapse. Manage it by improving airflow by opening the sides, using fans (when available), widen spacing, and prune to open the canopy. Water early in the day, and remove and discard symptomatic plants, don't leave them in the HT. The main solution for conventional and organic growers is to use biological fungicides. LALSTOP Contans (BM02) applied to soil pre-plant, when symptoms are first seen, and after discarding the diseased plants to attack sclerotia and decrease disease for the long run. These sprays should target the soil and base of plant stem. Foliar/soil biofungicides include Serifel (BM02), SoilGard (BM01), and Stargus (BM02).

Rain and Phytophthora in Cucurbits: With the wet stretch we've had, keep a close eye on cucurbits for Phytophthora blight. This pathogen thrives in saturated soils and standing

water and moves fast after heavy rain. Watch low spots and field edges where water collects. On fruit, look for water-soaked lesions that quickly develop a white, powdery-sugar spore layer; you may also see crown rot and sudden vine collapse. Because this pathogen is soilborne with long-lived resting spores, water management is your best defense: improve drainage, plant on domed raised beds, avoid low areas, and don't irrigate from contaminated ponds. If possible, rotate out of all susceptible hosts (cucurbits, peppers, tomatoes, eggplant, beans) for 3+ years. Mustard biofumigation is a great strategy to decrease risk and losses. For chemical management, soil-applied programs started at planting and alternated between FRAC groups work better than foliar sprays. Presidio (FRAC 43), Ranman (21), Revus (40) tank-mixed with copper-based fungicides, and Orondis Ultra or Gold; add Gavel for foliar coverage, but be careful in cantaloupe melons, as some varieties are sensitive to Gavel. For organic production, control is only partial, lean on cultural practices, supplemented by copper-based products and biofungicides (e.g., Double Nickel).

POTATO

Thrips in potato: The hot and dry weather we were experiencing most of the season until recently has made it favorable for thrips and this week we are finding thrips and their associated damage in fields. Populations increase quickly under hot and dry conditions. Look for thrips on the undersides of leaves checking plants along field edges. Damage appears as bronzed areas on the leaf and can become extensive if not managed. For thrips, the newly labeled Zivalgo should provide excellent control. Dimethoate, Malathion, Lannate, Assail and Radiant/Blackhawk labeled for other insect pests will provide incidental control.

Potato Leafhoppers: Leafhopper populations are still going strong. In some potato fields, adults, nymphs, and hopperburn have all been observed. Yield loss in potatoes can happen even before visible symptoms appear. Several materials are labeled for control.

Fungicide Sprays in Potato: There have been no reports of late blight in the surrounding Northeast region, and no diseases have been observed to date locally in fields scouted. However, growers should maintain a protectant fungicide spray program using products such as chlorothalonil or mancozeb every 7-14 days to protect foliage from disease. (SM)

SMALL FRUIT/TREE FRUIT

Managing Spotted Wing Drosophila (SWD) in Brambles and Blueberries: Berries become susceptible to SWD once they begin to change color and that risk increases the more they ripen. Management almost always requires multiple applications (at least every 7-10 days). If it rains in between sprays, repeat the spray. Start with your most effective product first, as this will delay the buildup of SWD over time. Effective insecticide options for managing SWD in raspberries and blackberries include Delegate WG (3-6 oz/A, 1 d PHI), Mustang Maxx (4 fl oz/A, 1 d PHI), Danitol (16 fl oz/A, 3 d PHI), Brigade EC (3.2-6.4 fl oz/A, 3

d PHI), Brigade WSB (8-16 oz/A, 3 d PHI), Bifenture 10DF (8-16 oz/A, 3 d PHI), and Malathion 9 Aquamul (2 pts/A, 1 d PHI). Effective insecticide options for managing SWD in blueberries include: Delegate WG (3-6 oz/A, 3 d PHI), Mustang Maxx (4 fl oz/A, 1 d PHI), Danitol (16 fl oz/A, 3 d PHI), Brigade 2EC (3.2-6.4 fl oz/A, 3 d PHI), Brigade WSB (5.3-16 oz/A, 1 d PHI), Lannate SP (0.5 – 1 lb/A, 3 d PHI) and Bifenture 10DF (5.3-16 oz/A, 1 d PHI), and Malathion 9 Aquamul (2.5 pts/A, 1 d PHI). Please note some differences in pre-harvest intervals between uses in blueberries and other labeled berry crops. Most insecticides will primarily target adults but some active ingredients (phosmet, malathion, methomyl, spinetoram, and zeta-cypermethrin) will target larvae as well. For a full list of insecticide options, see the quick reference guide for SWD Insecticides for Berries on the Cornell Fruit Resources site: <https://fruit.cornell.edu/spottedwing/management/>. (JD)

Summer Management of San Jose Scale: Second-generation San Jose scale (SJS) crawlers are expected to be active during this time. Feeding on the fruit causes local red to purple discoloration and reduces the crop's cosmetic quality. If your orchard has a history of SJS, monitor for crawlers by placing double-sided sticky tape around tree branches and limbs (the recommended threshold is 1-2 crawlers per tape). For managing SJS in problem blocks, Esteem 35WP (4-5 oz/A), Movento (6-9 fl oz/A), and Senstar (12-18 fl oz/A) can provide high levels of control. In situations with more moderate pest pressure, Admire Pro 4.6SC (2.8 fl oz/A), Assail 30SG (8 oz/A), Imidan 70W (2.13-5.72 lb/A), Leverage 360 (2.4-2.8 fl oz/A), and Venerate XC (2-4 qt/A) can be used. To achieve the best results, it is recommended to make the first spray at the first sign of crawler activity and follow up with a second spray 7-10 days later (i.e., peak crawler activity). When using Assail, it should be applied with a surfactant to improve its performance. In the case of Movento, an adjuvant with spreading and penetrating properties must be used to achieve high levels of control. Pre-mixes such as Senstar should be reserved for when multiple pests are present and appropriately matched to the active ingredients contained in the product. (JD)

GRAPES

Week of July 6: According to the LIHREC NEWA weather station, just over 3" of rainfall fell July 5-7. There was a total of 3.5" in May and only 1" in June. The rain was much needed though these prolonged periods of wetness bring concerns about fungal disease development.

Pest management: Conditions are optimal for downy and powdery infections with high humidity, dewy mornings, and intermittent rainfall. It is essential to maintain good canopy management coupled with a consistent, effective schedule of protectants and/or if necessary, post-infections products. When infections show up, they must be dealt with sooner rather than later. Under the right conditions, both diseases can spread rapidly to unprotected tissue such as new leaves on laterals and at the top of the canopy. Unlike other fungal diseases, downy has the ability to defoliate vines. In

situations where significant defoliation occurs in the latter half of the season, both fruit ripening and the vines' ability to overwinter can be compromised. The fuzzy white lesions on the leaf underside readily spew spores. Young berries are susceptible to DM for only 4-5 weeks while pedicels (berry stems) and leaves are susceptible for a much longer period. Fruit is susceptible to powdery for about the same time frame. Leaves are susceptible to both all season.

Downy mildew (DM) product review: Once lesions are evident, secondary spores spew from these primary infections. They provide a ready source of inoculum for unprotected tissue, such as new leaves on lateral shoots and at the top of the canopy. Young berries are susceptible to DM for only 4-5 weeks while pedicels (berry stems) and leaves are susceptible for a much longer period. Conventional DM products labeled for use on Long Island are listed below. Next week: the biologicals, most of which are organically approved.

- Mancozeb products - A reliable and effective protectant with a 66 day preharvest interval (PHI) restriction. This deadline is close for early varieties.
- Captan is also a good protectant. Should we get into extended wet conditions after fruit set, captan has the advantage of providing good activity against most of the common non-Botrytis cluster rots (ex: bitter rot) that can occur under those conditions. Note that most labels have 48-72 hr REI's, down from 96 hrs. Ziram (still labeled for now) is similar in action to mancozeb and captan but is less effective.
- Ridomil MZ and Ridomil Gold/Copper, 66 and 42 day PHI's, respectively. Ridomil is very effective, also resistance prone. Avoid use on moderate to severe infections. It has both protectant and post-infection ability.
- Copper is a good protectant and can be tank mixed with sulfur. Copper can cause phyto, even with a spray lime safener, if drying conditions are poor. Several formulations of copper are organically approved.
- Aliette is an aluminum-based protective product that has been effective in Cornell trials. Best when tank mixed with other chemistries; however, do not tank mix with copper, surfactants or foliar fertilizers. Also recommended to avoid spraying when copper residue is present. 24 hr REI.
- Phosphonate products have been widely used and effective. However in recent years, there has been slippage in the degree of control. Unspecified levels of resistance have been documented in upstate NY. PA products should be used with caution as phyto has resulted from certain PA-sulfur tank mixes, when the tank concentration is too high (see labels for warnings) and/or if nozzles overlap too much i.e. the targeted area gets a high dose.
- Curezin, newly labeled, is a combination of copper sulfate pentahydrate and phos acid. 48 hrs REI. Labeled for black rot, downy, powdery, Botrytis. Experience suggests that its best use might be for downy mildew. There are lots of cautions on the label such as do not

- include additional calcium, no additional phos acid or copper. It also states to not assume that Curezin will be compatible with your tank mix; a jar test is suggested. Does well against DM and PM when tank mixed with sulfur, Microthiol specifically due to its micro-encapsulation.
- Revus is absorbed into leaves and provides some post-infection activity. Historically, it has done well in pathology trials and in commercial vineyards. However, recent research by Gold and others indicates that 70% of the Finger Lakes vineyards tested had some level of resistance to the DM component (mandapropamid) of Revus Top. It is therefore prudent to tank mix a second product with Revus Top. Good options would be mancozeb or captan.
 - Strobilurins – Cornell pathologist Katie Gold is no longer recommending strobies for downy mildew control due to failures in the field.
 - Ranman--Unrelated to any other grape product. Primarily a protectant fungicide, it has provided good to very good control in trials when used alone, very good control when tank-mixed with a phosphorous acid product to add post-infection activity. The label has multiple resistance warnings and a 100 GPA minimum water requirement.
 - Zonix – Active ingredient rhamnolipids biosurfactant. According to the company, it ‘bursts zoospores through

intercalation of the fungus membrane’. Zonix is OMRI approved but carries a Danger designation because it is highly corrosive. There are no research results to offer.

- Next week: how the biological fungicides hold up vs. downy and powdery.

(AW with thanks to Cornell Grape Pathology Field Manager Dave Combs)

LIHREC Weekly Weather Report 24-hour Observation			
Time of Daily Observation: 5 PM			
Date	Max Temp (F)	Min Temp (F)	Precip. (in)
Thurs, July 2	99	73	0.00
Fri, July 3	98	77	0.00
Sat, July 4	98	78	0.00
Sun, July 5	93	69	0.84
Mon, July 6	79	63	2.00
Tues, July 7	69	63	0.08
Wed, July 8	83	63	0.04
Temp Average	88	69	
Total Precipitation			2.96
Growing Degree Days (Base 50) 08/15 - 08/21/2024			203
GDD (Base 50 Season total from 03/01/24)			1407

Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide.

The use of trade names DOES NOT imply endorsement by Cornell Cooperative Extension.

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