Cornell Cooperative Extension

 Eastern NY Commercial Horticulture Program

 Treee Extension

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Early Summer Pest Management

Art Agnello, retired Cornell University; and Mike Basedow, CCE ENYCHP

Now that we are into July, we can direct our attention to our usual summer suspects. The following is a brief rundown of some pests to keep on your radar, just to help prevent anything from getting out of hand.

Internal Lepidoptera

The first brood CM flight is tapering off and we are through the hatch period, although we should remain attentive for any signs of a renewed surge in trap numbers during this time (the often-noted "B peak" that can vex early season management efforts). With this potential "B" peak, most sites with traditionally heavy pressure from these pests should still be subject to first generation larval control needs.

If you aren't actually inspecting the young fruitlets for signs of fresh infestation, it would be prudent at least to consider the need for a(nother) protective spray if weekly adult numbers surpass 5 per trap for CM. Altacor, Delegate, Exirel, Verdepryn, and premixes such as Besiege, Minecto Pro and Voliam Flexi are among the top-ranked options, with virus products such as Cyd-X, Madex, and Virosoft CP4 offering good supplementary activity, along with additional options such as Rimon, Grandevo, and Assail.

We'll also be looking for increasing captures of the 2nd flight of oriental fruit moth (time management sprays for when catches exceed 10/trap/week), and should note a definite uptick in trap numbers within the next 10–14 days, especially if the temperatures continue to be hot.

Obliquebanded Leafroller

OBLR larval emergence was predicted by Peter Jentsch for June 26th in the lower Hudson Valley this year, and he reports early instar larvae can now be found in Mid-Hudson Valley orchards. We usually expect emergence right around now in the Capital Region, and perhaps the first to second week of July in the Champlain Valley. Orchards with historically high OBLR pressure should normally receive an application of a suitable material during this larval emergence. To fine tune your application windows, enter your first trap catch date into the <u>NEWA OBLR model</u>. Applications should be made at 350DD base 43°F after your first catch date. A follow up application should be made 10-14 days

Table of Contents

- 1 Early Summer Pest Management
- 4 Announcing Peel SAP Analysis for Early Prediction of Bitter Pit in 'Honeycrisp'
- 4 Onboarding Seasonal Workers – Using Google Classroom as a Resource for Onboarding and Training New Farm Employees
- 5 Post-Emergent (Burndown) Herbicide Damage—Signs and Symptoms
- 7 About the Safe Use of Glufosinate and Glyphosate Herbicides in Apple and Peach Orchards
- 7 'Why are my Trees Growing so Poorly?' Webinar
- 8 Input Needed

(Continued from page 1)

2021 Weekly OFM and CM trap captures for our Saratoga and Clinton county trapping sites. Note the 1st generation "B" peaks we have observed.



later. Delegate, Altacor, Verdepryn, Exirel, Rimon and Proclaim are

appropriate choices, particularly in cases where the larvae are a bit larger. A B.t. product such as Dipel or the insect growth regulator Intrepid are also options, but these tend to be more effective when applied against the earlier stages. If you are applying any of the diamides (Altacor, Exirel, Verdepryn, plus the various premixes containing the same a.i.s) or Delegate to control lingering first generation codling moth and oriental fruit moth, they will also be very effective against OBLR at this time. Regardless, we have found that this specific spray is the most critical for preventing fruitfeeding damage at harvest from OBLR, so put this at the top of your list of priorities if OBLR has tormented you in the past.

Top: OBLR larvae. Middle: OBLR terminal damage. Bottom: OBLR summer fruit feeding damage. Photos: OMAFRA



Apple Maggot

4.5

3.5

3

2.5

1.5

0.5

0

4

Adults have now been caught in both the Hudson and Champlain valleys this season. Stings and larval tunneling may soon be detected in early and favored varieties such as Ginger Gold and Honeycrisp, particularly in the Hudson Valley. If you aren't monitoring in specific orchards and haven't yet made preparations for a protective spray against AM (and aren't using Delegate or Altacor for OBLR, both of which have some activity on AM), prudence would

4-May 11-May 18-May 25-May 1-Jun



15-Jun

22-Jun

8-Jun

Apple maggot adult. Note the "W" markings on the clear wings, and the white dot near where the thorax joins the abdomen. Photo: MSU extension.

suggest attention to this pest. Hanging a few volatile-baited sphere traps on the edge of susceptible plantings can provide valuable insight on when (and whether) immigrating flies start posing a threat. Growers on a Delegate or Altacor program for leafrollers/ internal leps should get some protection against moderate AM pressure. For those not using Imidan in their cover sprays, Assail will provide excellent control of apple maggot as well as internal leps where populations are still OP-susceptible.

(Continued on page 3)



Woolly Apple Aphid

Individual nymphs should have started to become noticeable as they make their way up into the canopies of infested trees, and we have been seeing some initial aerial colonies around ENY. This would be an advisable time to consider a preventive spray program for this pest in blocks with historically high pressure. WAA is resistant to many commonly used broad-spectrum products, but other insecticides are effective against WAA, including Diazinon (check with your marketer before using this material) and Movento, and some additional products such as Admire, Assail, Beleaf, or Sivanto Prime may be good alternatives. For Movento and Assail, addition of a non-ionic surfactant (e.g., LI-700 or Regulaid) or horticultural mineral oil will improve activity. (Do not use a penetrant 10 days before or after a captan application) Good coverage to soak through the insects' woolly coverings is integral to ensuring maximum efficacy. Additionally, a Lorsban trunk application with one of the 15 still approved materials (provided the fruit and foliage is not

affected by the spray) will give collateral control of any crawlers that might be contacted by these sprays. The remaining 15 Lorsban products still allowable in NYS can be used until July 31st of this year.



Wooly apple aphids on a shoot. Photo: Greg Krawczyk

San Jose Scale

Our models indicate the susceptible crawler stages of this perennial tiny but irksome pest should now be emerging. To check for emergence in your orchard, consider wrapping black electrical tape around a limb of an infested tree to see when crawlers are present. Management options now include contact insecticides or insect growth regulators that will target the emerging crawlers. Centaur 0.7WDG, an insect growth regulator (IGR; IRAC Group 16), acts to inhibit the synthesis of chitin. Esteem 35WP, also an IGR (Group 7), functions as a juvenile hormone mimic, inhibiting metamorphosis from one stage to another. Movento 240SC (lipid biosynthesis inhibitor; IRAC Group 23) is also effective when applied preventively, as its systemic activity requires some time for it to become established in the woody tissues. Sivanto Prime 1.67SL (nicotinic acetylcholine receptor agonist; IRAC Group 4D) is also systemic in the xylem, and acts by causing feeding cessation; Venerate (microbial, no IRAC group) causes enzymatic degradation of skeletal structures and interference with the molting process.

All these insecticides are most effective when directed against the first appearance of crawlers. Assail and Admire Pro (Group 4A) are

both broad-spectrum neonicotinoids that can be effective when directed against emerging crawlers.

The efficacy of some of these materials (e.g., Movento, Assail, Centaur) is improved by the addition of an adjuvant with penetrating properties; however, Esteem, Sivanto Prime, Venerate



Monitoring for SJS crawler emergence by wrapping black electrical tape around the limb of an infested tree. Photo: Peter Jentsch.

and Admire Pro can be used effectively without the use of a penetrant. Remember, rotating classes of insecticides for each generation will delay the onset of resistance. Making multiple applications of the same class or same insecticide at a 14-day interval for the same generation is recommended.

European Red Mite

It would be advisable to inspect the foliage in traditional hot spots and in sensitive varieties like Delicious, Braeburn, and Gala, to be sure they don't blow up with the warm temperatures. During July, we recommend a 5 per leaf threshold of motile stages, and you can use the appropriate presence-absence sampling chart on p. 78 of the Tree Fruit Pest Management Guidelines to assist in your decisionmaking. Some ERM materials include Acramite, Apollo, Banter, Envidor, Kanemite, Nealta, Onager, Portal, Savey, and Zeal. Note that Apollo, Onager, and Savey are primarly ovicides, and will have little activity on adult mites.

Green Apple Aphid

Green apple aphids are out on flush terminal shoots. Aphids should be sampled several times throughout the season. Inspect 10 rapidly growing terminals from each of 5 trees throughout a block, noting the number of infested terminals. While no economic thresholds exist, we recommend treatment if 30% of terminals or more are infested. Effective materials include Actara, Admire Pro, Asana, Assail, Aza-Direct, Beleaf, Danitol, Lannate, Movento, Pyrenone, Sivanto Prime, Vydate, and Warrior II.

Looking for Additional IPM Information?

Be sure to check out our online video resources for a quick refresher on orchard IPM. For apples, visit the <u>NYSIPM Apple IPM Intensive</u> <u>Workshop playlist</u>, and for stone fruit visit the <u>ENYCHP Stone Fruit</u> <u>IPM Webinar playlist</u>. For information on summer rots of apple, you can review the video of last summer's <u>Fruit Rot Management</u> webinar.

Announcing Peel SAP Analysis for Early Prediction of Bitter Pit in 'Honeycrisp' Terence Robinson, Lailiang Cheng, Chris Watkins, Mario Miranda Sazo, Craig Kahlke, and Michael Basedow

In early July we will begin a cooperative effort between Cornell extension, growers, consultants, and storage operators to collect Honeycrisp fruitlets statewide to analyze them for mineral nutrient concentrations. This is part of a statewide extension effort funded by ARDP to evaluate Honeycrisp orchards throughout the state for determination of fruit storage potential and the risk of bitter pit in storage.

For the last several years we have evaluated peel SAP analysis to better predict bitter pit early in the growing season to allow better decisions on mitigation efforts during the rest of the season and storage potential. Peel SAP analysis was developed over the last 4 years, with support from the NY Apple Research and Development Program. In 2020 we evaluated 265 blocks in Western NY, and this year are extending the project to growers anywhere in the state of NY.

We would like to encourage all Honeycrisp growers to start thinking about which Honeycrisp blocks (or ideally all blocks on your farm) you would like to collect fruit for peel SAP analysis in July 2021. We are specially inviting all Honeycrisp growers to submit peel samples to CCE this season.

Signing up is a two-step process

1. First, register and pay at the LOF website via the following link:

<u>https://lof.cce.cornell.edu/event.php?id=1552</u>. There will be a minimal fee of \$5 for each sample submitted, but most of the analysis cost will be covered by the ARDP grant we were awarded.

2. Then, email Liz Tee at <u>emt44@cornell.edu</u> to request a block information form to fill out on your computer for each block. Alternatively, you can fill out, scan, and email this alternative form to Liz Tee : <u>https://rvpadmin.cce.cornell.edu/pdf/event_new/</u> <u>pdf72.pdf</u>

Submitting samples

After registering and providing your block details, at the announced date in July (probably early July in the Hudson Valley and early to Mid-July in WNY and the Champlain Valley), you will:

- Collect a 30-fruit sample from each of your Honeycrisp blocks,
- weigh the sample to get the average fruit weight in grams (see note below in the next column),

- rinse the fruits with purified water,
- peel the fruits,
- freeze the peel samples,
- and then contact your local fruit extension specialist for submitting the samples.

What will you receive?

We will collect your frozen peel samples, analyze the peel sap for nutrient concentrations, and send you a report on nutrient ratios, recommendations for mitigation actions, and storage recommendations by late July. We believe that this new and early predictive tool will allow for more effective management of Honeycrisp fruit nutrition to reduce bitter pit incidence.

Additional Important Information

Detailed instructions on how to collect the fruit samples will be sent to participating growers a few days in advance of the collection dates for each region. However, to facilitate the collection of samples we ask that you sign up now, following the above instructions.

After the samples are collected, a member of the CCE team will pick up your frozen sample(s) and will transport them for peel SAP analysis at the Cornell Nutrient Analysis Lab in Ithaca.

We hope all Honeycrisp growers will submit a sample from <u>each</u> Honeycrisp block in NY for peel SAP analysis via CCE this season!

Note: It is very important that growers weigh their 30-fruit sample (with stems on the fruit) **BEFORE** peeling the fruits this year. This new data will be used to correct and standardize the nutrient ratios by factoring in the effect of fruit size at sampling in July. We encourage all growers to use their digital kitchen balances (if working properly) or buy a cheap balance on Amazon at \$17.99. Please check the following website:

https://www.amazon.com/GDEALER-Digital-Kitchen-0-001oz-Stainless/dp/B08YW3NCJT/? _encoding=UTF8&smid=A2QMH4UKDFN4Y&pf_rd_p=5d280014-

ec5b-42f3-a3b6-117903cdd60e&pd_rd_wg=y45KJ&pf_rd_r=WWRPVEQWHE4F70SE2 ASE&pd_rd_w=UIEK1&pd_rd_r=02da2642-9199-46bb-87d1-2c7db1ba9267&ref =pd gw deals&th=1

Onboarding Seasonal Workers – Using Google Classroom as a Resource for Onboarding and Training New Farm Employees Elizabeth Higgins, CCE ENYCHP

Does your farm use training videos for onboarding or trainings such as sexual harassment prevention and safety? Do you have good records documenting attendance at trainings? A problem many farmers face is keeping all their hiring paperwork, training materials and videos and training documentation organized so they are easily accessed when needed. Google Classroom is a possible solution. Some farms are using Google Classroom to post links to all of the training resources that they use to onboard new employees. This may include video links, standard operating procedures, maps, and other documents that are important for employees to view.

(Continued from page 4)

Google Classroom is a free learning tool available to anyone. All you need is a Google account. <u>https://www.google.com/</u>. Google Classroom is one of the apps available within Google. Within Google Classroom you can post links to videos, pictures, standard operating procedures, and any other important materials, which allows you to keep all of your critical materials only a click away. It organizes materials including documents, PowerPoints, videos, and allows the student to take quizzes and ask questions, among other features.

If you are looking for a jumpstart on creating your own Google Classroom, email Elizabeth Higgins (emh56@cornell.edu), to request a copy of a pre-filled, bilingual classroom that is organized with key resources and links for onboarding farm employees. It is packed with links to required new employee paperwork, safety training videos, sexual harassment prevention training resources including recommended training videos, and quizzes, as well as prompts for where to include information specific to your farm.

There is a video on using Google Classroom from a webinar given last February. You can find it here <u>https://bit.ly/3AedLBk</u>, and we are developing a guidebook for using it that will be available in early July.

This material is based on work supported by USDA/NIFA under award 2018-70027-28588.

Post-Emergent (Burndown) Herbicide Damage—Signs and Symptoms *Mike Basedow, CCE ENYCHP; Janet van Zoeren, CCE LOFP; Lynn Sosnoskie, Cornell University*

Herbicides can damage any part of the tree – shoots, roots, leaves, flowers and fruits – which can lead to stunted or distorted growth, reduced yield, and decreased winter hardiness. Of course, you already know that herbicides are specifically intended to kill plants. However, unintended herbicide contact with orchard trees can and does happen in a variety of ways. For example, soil-applied herbicides can move into the root zone via leaching. Residual herbicides may be deposited on leaves, flowers or fruit if disturbances, like mowing, cause treated soil particles to become airborne. Spray tank contamination is a route for depositing herbicide residues directly onto sensitive tissue. Herbicides may also come into contact with trees via spray drift or volatilization.

Spray drift vs. volatilization

Herbicide drift occurs during the application process and is the physical movement of spray droplets onto non-target tissues. This unintentional contact may lead to significant plant injury as well as reduced weed control (because target weed species do not receive the optimal herbicide dose. Drift is most likely to occur when applications are made under high wind speeds and conditions that increase turbulence, when travel speeds are faster, and when droplet/particle size is small (which may be affected by spray pressure, small nozzle orifices, and conditions that result in droplet evaporation such as high temperatures and low humidity), among other factors. Inversions, which may be accompanied by calm conditions, may also facilitate spray drift. Look closely at the spray drift section of your herbicide labels to ensure you are doing everything possible to prevent drift.

Volatilization occurs when the pesticide itself changes from a solid or liquid form into an air vapor. Even if the original application landed on the intended target, volatilized herbicides can spread off-target. Herbicides are most likely to volatilize when the products are applied to non-absorbent surfaces (like rocks or concrete) and when air temperatures are high and the humidity is low. Note that not all products are volatile. The volatility of a product may be listed on the label, or can be found through an online search. Note that the specific formulation is key in determining risk of volatilization – for

example, some 2,4-D products have a high risk, whereas others have a low risk, depending on their formulation. If in doubt, you can always contact any of us for help determining the volatility of a product.

Symptoms/identification

Any herbicide, if applied incorrectly, can damage your trees. Knowing the symptoms that herbicide active ingredients cause can help you determine which active ingredient may be responsible for observed injury. For example:

Glyphosate injury appears as yellowing between leaf veins (usually beginning at the base of leaves), stunting of new growth (due to shortened internodes, which is referred to as a 'witches broom'), and leaf cupping, curling, and distortion. Because glyphosate is a systemic product that is translocated to



Glyphosate damage on apple terminals. Photo: University of California.

meristems, symptoms may not be observed immediately after application. Glyphosate injury is sometimes not observed until the spring following the season of application. Glyphosate is not volatile, so tree injury from this product will occur during application or due to accidental particle drift.

Glufosinate injury is similar to glyphosate (leaf yellowing, crinkling, and distortion, and stunted growth), but may also include necrotic spots on the leaves. Some symptoms (like leaf burning) may occur within a few hours of application while others may develop over the course of several days. Glufosinate injury can be enhanced when the weather following application is sunny and humid.

(Continued from page 5)

2,4-D is another systemic herbicide, which is translocated to sensitive growing meristems. Injury often first appears as leaf cupping and curling, along with stem disfigurement or excessive lengthening of shoots. Within a few weeks you may see yellowing of growing tips, wilting, and the eventual necrosis of growing shoots.



2,4-D damage on apple terminals. Photo: University of California.

Since **paraquat** is a contact material, paraquat damage most consistently appears as necrotic spotting of leaves, which can develop quickly following herbicide application. Other symptoms may include leaf yellowing, crinkling, and wilting, which, within a few days, can lead to complete leaf necrosis.

There are a couple of websites with excellent pictures of herbicide damage. Visit and bookmark: the <u>University of California Herbicide</u> <u>Symptoms</u> page and the <u>OMAFRA Apple IPM Herbicide Gallery</u>. Cornell weed scientist Dr. Lynn Sosnoskie is developing an online gallery of herbicide injury images across New York's specialty crops as well.

Of course, not all mysterious damage is caused by off-target herbicide applications. Herbicide symptoms can be confused with damage caused by diseases, nutrition imbalance, drought, or winter injury. Some clues that herbicides may be a culprit include:

- Specific patterns of injury within the orchard block, such as damage predominantly in border rows, on one side of the tree, or only the outer leaves of the tree (drift shadows).
- Weeds showing similar symptoms near the orchard block, or between the orchard and suspected source of drift or volatilization.
- Symptoms that are consistent with recent herbicide applications made within or near the orchard.

To help identify herbicide damage (and if applicable, to help with insurance claims if drift is from an outside source), it is best to keep consistent records. Have good records of all herbicide applications you make on your farm, as well as of any damage symptoms or other unusual things you notice while driving or moving through the orchard. Keep a pad and paper with you when scouting the orchard. If you see any unknown injury, jot down some notes if you notice any specific patterning, such as those described above. Be sure to document weather conditions at the time of and following your herbicide applications, as well as details about travel speeds, nozzles used, boom heights, spray pressure, weed density, and canopy height.

Avoiding herbicide damage

You can't always predict when herbicide drift or volatilization will occur, but you can decrease the likelihood.

- Do not apply under high temperatures (see labels regarding specifics for each herbicide). If an application is necessary during a prolonged hot spell, use herbicides that have a lower risk of volatilizing, if applicable.
- Keep the boom as low to the ground as possible to reduce the chance of herbicide hitting the trees, but high enough above target weeds to ensure good spray coverage.
- Plant windbreaks to prevent drift from neighbor's fields.
- Use shields or air induction nozzles when applicable, to reduce drift.
- Counterintuitively, drift can be worst both when there are strong gusty winds, but also when there is no wind. The best condition for an herbicide (or any) spray is a mild, consistent, predictable breeze.
- When allowed by the label, the use of an adjuvant may reduce the chance of drift for certain products.

As a side note, remember to read and follow the label for cleaning spray equipment, especially if you use the same sprayer for herbicides as you use for other pesticides. Water is not always sufficient to clean all herbicide residue out of the tank, which can have disastrous consequences! Even when re-using equipment for

another herbicide application, the residue may lead to a mix of products or adjuvants that are more toxic to the crop or more prone to drift or volatilization. Conversely, incompatible herbicides may congeal and clog sprayer components.



A shielded boom sprayer can minimize herbicide drift to the trees. Photo: Phil Brown Welding.com.

What to do if you do see herbicide injury?

The good news for orchard managers is that perennial plants, and especially trees, can often recover from significant single-time herbicide damage. The larger biomass and longer life allows trees to dilute and translocate the product away from the most sensitive tissues.

Although less well-studied, chronic low-dose exposure may be detrimental to the overall health of the tree, making it more susceptible to insects, diseases, or other stressors.

In general, if you are concerned about herbicide damage to your orchard block, you can contact Mike Basedow (<u>mrb254@cornell.edu</u>) or Lynn Sosnoskie (<u>lms438@cornell.edu</u>).

About the Safe Use of Glufosinate and Glyphosate Herbicides in Apple and Peach Orchards Thierry Besancon, Rutgers University

Recently, New Jersey tree fruit growers have expressed concerns regarding the use of glufosinate for weed control in apple and peach orchards.

Glufosinate is a nonselective post-emergence foliar herbicide that can be used for directed applications around trees, vines, and berries. Glufosinate provides control of many annual broadleaf and grass weeds; however, control of large or well-tillered annual grasses, such as yellow or giant foxtail can be marginal. Glufosinate has no soil activity.

Work conducted by Dr. Brad Majek a few years ago indicated that **direct** application of glufosinate to the mature brown bark of the lower trunk **may** cause severe injury by killing the cambium layer at the point of contact (<u>https://plant-pest-advisory.rutgers.edu/</u> glufosinate-products-sold-as-rely-280-expand-as-generic-products-<u>enter-the-market/</u>). However, this type of injury is not systematically associated with glufosinate application as we observed it in a trial conducted in 2017 at the Snyder Research Farm on mature "Pink Lady" apple trees which were not damaged following glufosinate application (Rely 280 at 64 fl oz/A). Additionally, injury in the form of vertical cracks in the of trunk bark have also be observed on apple trees exposed to glyphosate (<u>https://nyshs.org/wp-content/</u> <u>uploads/2016/10/Pages-23-28-from-NYFQ-Winter-12-12-</u> 2013.cmc_.pdf), **not only to glufosinate**.

As highlighted by Dr. Dave Rosenberg (retired Plant Pathologist at Cornell's Hudson Valley Lab) on his blog (<u>https://blogs.cornell.edu/</u><u>plantpathhvl/2014/06/30/apple-summer-diseases-herbicide-</u><u>problems-and-irrigation/</u>), "**NEITHER** glyphosate nor glufosinate cause trunk injury to apple trees **EVERY** time that they are used or in every orchard in which they are applied". Field reports suggest that injury is detected when trees are exposed to specific conditions that still need to be precisely defined. Dr. Rosenberg's opinion is that "the potential for damage is significantly higher if tree trunks are hit with either of these herbicides during or just prior to periods of drought stress". Under these drought conditions, "the additional desiccation from herbicide exposure may predispose the trunks to invasion by *Botryosphaeria dothidea*, a canker pathogen that is incapable of

killing the cambium in healthy functioning trees, but which becomes very pathogenic in drought-stressed trees". Dr. Rosenberg also suspects that similar injury can be observed on young trees following application of paraquat. Other stress factors, such as cold injury or previous bark damages, may also increase the risk of herbicide injury.

So, to safely apply glyphosate or glufosinate in peaches or apples, it is important following some guidelines that will help minimizing glyphosate or glufosinate damages to the bark:

- As specified by the label for glufosinate products and the Rutgers 2021-22 E002 Rutgers Tree Fruit guide, contact by the herbicide of parts of trees other than mature brown bark (including suckers) can result in serious damage. It is therefore especially important to protect young trees from potential glufosinate or glyphosate injury by wrapping them with grow tubes or waxed containers.
- For mature trees, the use of a shield boom is required for minimizing as much as possible contact between the herbicide spray and the tree bark. Shields will also minimize the bounceback from bare soil that sometimes allows a haze of small droplets to drift upward into the trees.
- Avoid applications of herbicides during periods when trees are already experiencing water stress or where water-stress can be expected in the near future. Additionally, weed control efficacy of herbicides such as glyphosate of glufosinate can severely decrease when weeds are under heat stress.
- Keep the pressure as low as possible (no more than 30 psi) to minimize generation of small droplets. If not feasible, use airinduction nozzles to reduce the production of small droplets.

Glyphosate should not be applied immediately after suckers are cut because it is readily absorbed by freshly cut stems.

This article first appeared in the Rutgers Cooperative Extension Plant & Pest Advisory on June 29. The original article can be found <u>here.</u>

Hard Cider Research & Education Needs Assessment

Dear Cider Industry Member, The New York Farm Viability Institute, New York Cider Association, and Cornell University have teamed up to conduct a research and outreach needs assessment of the New York hard cider sector and we need your input! Please take a few minutes and share your thoughts about the greatest needs in your operation and the industry overall. **The completion deadline is July 19.** <u>https://corexms6ch5fq3hh4pt3.sjc1.qualtrics.com/jfe/form/SV_0cU2eo5mbHtPalM</u>

Please Fill Out "Rodent Management" Survey

The New York State IPM Program helps people manage pests in ways that minimize environmental, health and economic risks. In addition to expertise in agricultural commodities, our program provides education about 'structural pests,' including rodents. The purpose of this nine question survey is to collect information about current rodent management practices around farms to identify opportunities for outreach. Survey Link: https://cornell.ca1.qualtrics.com/jfe/form/SV a5HcSjws6ref59Y

UPCOMING EVENTS

'Why are my Trees Growing so Poorly?' Webinar August 2nd, 3 - 4:30PM via Zoom 1.5 DEC Credits Available

We have been increasingly noticing tree collapse in New York orchards over the past several years. There are a number of causal factors, both biotic and abiotic, that can cause poor tree growth and death. In this webinar, Cornell and Penn State experts will provide a quick summary of some of the common agents of tree collapse typical of northeast apple orchards.

Hosted jointly by CCE-ENYCHP and CCE-LOFP. There is no fee to attend, however you must register online at the following link by Friday, July 30th.

Register by Clicking Here

Detailed Agenda:

2:45 - 3:05 - Credit Check-in and introduction - Mike Basedow

- 3:05 3:15 Boring insects and tree decline- Janet van Zoeren
- 3:15 3:25 Nematodes and their association with apple replant Dr. Kerik Cox
- 3:25 3:35 Could viruses be involved in poor tree growth? Dr. Marc Fuchs
- 3:35 3:45 Apple tree decline case studies and quality Dan Donahue
- 3:45 3:55 Investigating causes of apple tree decline in Pennsylvania Dr. Kari Peter
- 3:55 4:05 Abiotic issues, such as drought and cold damage Dr. Terence Robinson
- 4:05 4:30 Questions and discussion

1.5 DEC credits are available for this online meeting in categories 1a, 3a, 10, 22, and 25. In order to receive credits, you must complete the following:

- Enter your NYSDEC applicator ID number into the registration field when you register for the meeting. (Attendees from Vermont, Massachusetts, and Connecticut may also enter in their ID's to receive credits through their state reciprocity agreements.)
- Each employee seeking credit must register separately, and watch from their own device to receive credit.
- Send a photocopy of your applicator ID to Mike Basedow at <u>mrb254@cornell.edu</u> or (518) 410-6823 by noon on August 2nd.
- Log onto the meeting by 2:45 for a virtual roll call so we can ensure your screen name matches the applicator ID we have on file.
- Attend the meeting in its entirety.
- Using in-session polling, answer occasional poll questions to verify that you are actively engaged throughout the course of the session.
- Questions may be directed to Mike Basedow at

mrb254@cornell.edu or (518) 410-6823.



Photo: OMAFRA.

The Eastern New York Commercial Horticulture Program is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in these seventeen counties: Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Orange, Montgomery, Putnam, Rensselaer, Saratoga, Schenectady, Schoharie, Ulster, Warren & Washington.

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