<complex-block>

Be Prepared, H-2A Visas and Embassy Closures will Impact Travel from Major H-2A Source Countries

Elizabeth Higgins, CCE Eastern NY Commercial Horticulture

If you rely on H-2A workers for your farm, you are probably aware by now that there will be delays in getting visas and travel restrictions from many countries due to coronavirus. USDA Secretary Sonny Perdue had a call with state departments of agriculture earlier this week outlining the situation and assured State Departments of Ag and others on the call that this situation is being taken very seriously. You can hear a recording of the call at this link: <u>https://</u>www.farmers.gov/sites/default/files/2020-03/Ag-Labor-Call-03172020.m4a

Employers are encouraged to monitor USDA's website on H2A <u>https://www.farmers.gov/</u> <u>manage/h2a</u> and the State Department's website <u>www.travel.state.gov</u> for the latest information and should monitor the relevant Embassy/Consular websites for specific operational information. For the primary countries of origin in our region here is the latest information, thanks to Dr. Rick Stup of the Cornell Ag Workforce Development Program <u>https://</u> <u>agworkforce.cals.cornell.edu/</u> for summarizing the current status. His blog is a great resource for current updates related to labor issues and coronavirus:

Mexico suspended all routine nonimmigrant visa services starting March 18, 2020, and until further notice. This includes both visa interviews at the embassy and consulates as well as processing at the Centros de Atención a Solicitantes (CAS). But will continue to accept nonimmigrant visa applications on a very limited basis for emergency travel only. According to USDA Secretary Perdue on his call, the State Department in Mexico is aware of the H-2A situation and "the consulates in Mexico will prioritize the visa applications of returning H-2A workers who were in the U.S. within the last 12 months, who are eligible for an interview waiver. If eligible, they can have a phone interview and receive a waiver for an in-person visit". For the Monterrey consulate this is estimated to be about 50-55% of the workers normally processed.

Jamaica has stopped processing visas until April. One embassy employee tested positive for COVID-19 and is now recovering. Jamaica's international airports will close for a period of three (Continued on page 2)

Table of Contents

- 1 H-2A Impact
- 2 Tree Fruit Product Registration Updates
- 3 Pesky Perennial Weeds
- 6 Statewide Herbicide Resistance Screening
- 7 Black Stem Borer Survey
- 7 Federal Apple Tree Insurance Program
- 8 Important Information

(Continued from page 1)

weeks beginning March 22, 2020. Secretary Perdue also said he expects the interview flexibility to be applied in Jamaica like in Mexico, once consular activities are resumed.

Guatemala cancelled all flights into and out of the country for 15 days beginning on March 16 and all non-emergency visa appointments are also cancelled with the "exception of some H-2A applications" according to the U.S. Embassy. Guatemalan workers in Guatemala right now, even with approved visas, are unlikely to be able to travel to the U.S. until something changes.

What other options are there?

USDA and DOL have identified nearly 20,000 H-2A and H-2B certified positions that have expiring contracts in the coming weeks. There will be workers leaving these positions who could be available to transfer to a different employer's labor certification. The data, available on an excel spreadsheet at this link https://www.farmers.gov/sites/default/files/documents/ H2-Certified-Positions-Ending-March-April-2020.xlsx, includes the number of certified worker positions, the current employer

2020 Tree Fruit Product Registration Updates

Art Agnello, Entomology, Geneva

Following is a list of the changes we are aware of to the pesticides Cancellations available for use in NY tree fruit crops for the 2020 growing season.

New Registrations

• Virosoft CP4 (BioTEPP, EPA Reg. No.72898-4) contains a new isolate of the Cydia pomonella granulosis virus, nominally targeted against codling moth, that is additionally effective against oriental fruit moth. Registered for use in both pome and stone fruits; low bee-poisoning hazard, OMRI certified.

 Verdepryn 100SL (ISK Biosciences, EPA Reg. No. 71512-34-88783 through Summit Agro; distributed by Helena) contains cyclaniliprole, a new member of the diamide group (IRAC 28) that includes Altacor and Exirel, that is effective against plum curculio and European apple sawfly, as well as the fruit-feeding leps such as codling moth, oriental fruit moth, and OBLR. Additional pests on the label include pear psylla, white apple leafhopper, European corn borer, leafminers, other leafrollers, cherry fruit fly, spotted wing drosophila and Japanese beetle. Restricted use, labeled in pome and stone fruits; not for use in Nassau or Suffolk Counties; high bee-poisoning hazard.

• Miravis (Syngenta, EPA Reg. No. 100-1601) contains a new SDHI fungicide Pydiflumetofen, which is effective for apple scab and apple powdery mildew. It's registered for use in both pome and stone fruits, and is allowed on Long Island.

name and contact, attorney/agent name and contact, and the worksite address. This information will be a resource to H-2A employers whose workforce has been delayed because of travel restrictions or visa processing limitations. Employers should be aware that all statutory and regulatory requirements continue to apply.

What you should do

Let your local elected officials know of your needs for workers and problems with accessing your H2A workers so that they can help to keep pressure on the federal government to prioritize processing H-2A workers visas. Depending on when your H-2A workers generally arrive, you may want to consider your cropping plans, anticipating that you might not have a full crew this season. You also may want to start advertising for local workers depending on how long businesses are closed, there may be a pool of workers who worked in the service sector who are looking for work.

- Carpovirusine (Arysta LifeScience, CM granulosis virus); NY registration has ended.
- Dimethoate (Drexel); the last remaining registration in NY tree fruits (e.g., against aphids in pears) has ended.
- Kumulus DF (sulfur) NY registration has ended.
- Pyrenone (Bayer, pyrethrins); NY registration has ended.

Lors-ban?

In December, Gov. Cuomo directed the NYS DEC to ban chlorpyrifos for any uses other than apple trunk sprays, which will be allowed through 2021. So far, the DEC needs to adopt in regulation the implementation of the ban; until that happens, it can still be used as currently labeled.

For the most up-to-date label information, use the product label search at the NYSDEC Bureau of Pesticide Management Information Portal: www.dec.ny.gov/nyspad/products?1

Strategies for Dealing with Pesky Perennial Weeds

Mike Basedow, CCE Eastern NY Commercial Horticulture and Dr. Lynn Sosnoskie, Cornell School of Integrated Plant Science

Perennial weeds can be particularly difficult to manage in the apple orchard. These plants are defined as being able to live for more than two years, which is due to their abilities to produce large root systems or other underground storage structures, such as bulbs, tubers, and rhizomes. These structures facilitate the spread of perennials in orchards, although many species also produce seed that support dispersal.

Perennial weed control begins well ahead of orchard planting, when the field is still fallow. This timing allows orchard managers to make good use of deep, frequent cultivation and herbicides to deplete nutrient reserves stored in the weed's underground structures. This should be followed by the establishment of a strong orchard sod that will prevent weeds from breaking through.

However, no matter how well we prepare the site prior to planting, problematic weeds will always find their way back into the orchard. Thankfully, we can still manage many of these challenging species by being vigilant and strategic with our weed management programs. Let's review management plans for a few of these perennial pests.

Yellow Nutsedge (Cyperus esculentus)



Figure 1: Yellow nutsedge has triangular stems and yellow/gold flowers (A). Nutsedge produces tubers that aid in its dispersal (B). Photos: Dr. Lynn Sosnoskie.

Yellow nutsedge (as the name suggests) is a sedge, which can be differentiated from the grasses by its triangular stems. It has three small leaves at the base of each flower, which are yellow/ gold in color (Figure 1A). Yellow nutsedge produces tubers, which are its underground food storage systems, at the end of rhizomes (Figure 1B). These tubers can persist in the soil for up to five years. Multiple daughter tubers can develop from a single parent plant. Nutsedge is difficult to control because it has large energy reserves as well as a prolonged sprouting period. Cultural tactics, such as planting orchards in well-drained soils, can be an effective strategy for dealing with nutsedge. Once the orchard is established, control programs will need to rely on welltimed herbicide applications. If you have nutsedge in your orchard, you might consider using pre-emergence applications of dichlobenil (Casoron, WSSA Group 20) or multiple applications of halosulfuron (Sandea, WSSA Group 2).

Casoron CS is a microencapsulated liquid product that should be applied to the soil surface from late fall through early spring. It can suppress yellow nutsedge (and other perennial species) and control many annual weeds. The soil should be moist at the time of treatment or else the application should be followed by a rain event so the product is activated. Germinating or emerging species at/below the treated zone will be affected; small (< 2" tall), existing weeds with roots in the herbicidal barrier may also be injured or killed. Casoron 4G is a granular product and can be applied as a soil treatment only between November 15 and February 15 because of volatility loss. Note that Casoron 4G can only be used for nutsedge control in non-crop areas of the orchard.

Sandea can be applied as a single broadcast application to the orchard floor on either side of the row when nutsedge is fully emerged in early to midsummer. Alternatively, two, sequential applications can be made; the first treatment should occur when the initial nutsedge flush has reached the 3-5 leaf stage while the follow-up application would be made during secondary emergence. Pre-emergence applications of halosulfuron will likely only suppress nutsedge. Other residual products like norflurazon (Solicam, WSSA Group 12) and terbacil (Sinbar, WSSA Group 5) may provide suppression to partial control of nutsedge but will likely require multiple years of application before you will see an impact. The same may be true with rimsulfuron (Matrix, WSSA 2), which also has post-emergence activity. Contact post-emergence products, such as paraquat (WSSA Group 22) and glufosinate (Rely, WSSA Group 10), can be used to burn back above ground shoot growth, but this will not kill the below ground tubers. Also note that because nutsedge is not a grass, it will not be managed using WSSA Group 1 herbicides.

Canada Thistle (Cirsium arvense)

Canada thistle is a broadleaf perennial. Canada thistle's root system is extensive; its roots can reach up to 17 feet across and 20 feet deep. Canada thistle forms a rosette of spiny, lobed leaves (Figure 2A), which will emerge from its roots during both a spring and fall growth flush. Canada thistle also spreads through seed dispersal. Seeds germinate about the same time as the spring

(Continued from page 3)



Figure 2. Canada thistle rosette of spiny lobed leaves (A), flowers, and seed head (B). Photos: Dr. James Altland, Oregon State University.

flush. A single large seed head can produce up to 5000 seeds (Figure 2B), and a new plant can sprout from as little as a single inch of root segment.

There are some pre-emergence herbicides with efficacy against Canada thistle seedlings including dichlobenil and rimsulfuron (Matrix, WSSA Group 2). Clopyralid (Stinger, WSSA Group 4) is an excellent post-emergent material for control of mature thistle. Stinger should be applied to Canada thistle from rosette to bud stage although it cannot be applied during apple bloom. Clopyralid should also be applied to thistle postharvest, but prior to the first frost while the plant is still actively growing and healthy. 2,4-D (another WSSA Group 4) will also provide partial control when used at similar timings. Contact products such as glufosinate (Rely, WSSA Group 10), and group 14 products like pyraflufen-ethyl (Venue) and saflufenacil (Treevix) will also burn down emerged foliage. These contact-only herbicides are not translocated to roots and will only result in shoot death.

Mowing while the plant is flowering will keep Canada thistle from setting new seeds, but no mowing should be done for at least ten days following a systemic herbicide application to ensure chemical movement out of the treated tissues.

Field bindweed (Convolvulus arvensis)



Figure 3A. Field bindweed has a creeping root system. Photo: Dr. Lynn Sosnoskie.

Field bindweed is a perennial broadleaf that spreads by both seed and through its large, creeping root system (Figure 3A). Bindweed's tap roots, which can grow upwards of 30 feet below ground, facilitates its



Figure 3B and 3C. Field bindweed produces arrowhead-shaped leaves that are simple and alternate (B) and has white or pink, funnel shaped leaves (C). Photos: Dr. Lynn Sosnoskie.

persistence and tolerance of environmental stress and most weed control tactics. Bindweed has arrowhead-shaped leaves that are simple and alternate with a flattened base and a rounded tip (Figure 3B). It has white or pink, funnel-shaped flowers that are one to two inches across (Figure 3C). The species can be confused with another perennial bindweed, *Calystegia sepium* (hedge bindweed), which produces larger leaves (with a deeply lobed base and pointed tips) and flowers.

Bindweed is best controlled prior to planting through frequent cultivations and systemic herbicide applications. Once the orchard is planted, spring applications of dichlobenil (Casoron, WSSA Group 20) can provide pre-emergence and post emergent seedling control when seedlings are small. Again, be mindful of the timing limitations associated with these products, as spring applications must be made between Nov 15 and Feb 15 for the 4G formulation, and when air temperatures are less than 70°F and before seedlings are two inches tall for the CS formulation. Pre-emergence applications should be followed up with frequent, additional spot treatments of a systemic product. Remember that 2,4-D, an auxinic herbicide, cannot be applied at apple bloom. Contact products like glufosinate (Rely, WSSA Group 10), and group 14 chemistries such as carfentrazone-ethyl (Aim) and pyraflufen-ethyl (Venue) may also be used to burn back foliage. Mowing is rarely an effective strategy for controlling field bindweed as the prostrate vines often grow under the height of a mower deck.

roots, which can Dandelion (Taraxacum officianale)

Dandelions propagate by seed and through shoots that grow from the thick, fleshy roots. Dandelions form a rosette of lobed, irregularly toothed leaves close to the ground (Figure 4A), and

(Continued from page 4)



Figure 4. Dandelions form a rosette of lobed, irregularly toothed leaves (A), produce large yellow flowers (B), and have globe-like, white seed heads (C). Photos: Dr. Lynn Sosnoskie.

produce large, yellow flowers (Figure 4B). Dandelions are characterized by their globe-like, white seed heads; individual seeds possess a feathery pappus that allows for wind-dispersal (Figure 4C).

Dandelions are best managed through the use of herbicides, as their low growth and large root systems make mowing ineffective. Pre-emergence products for dandelion seedling control include: indaziflam (Alion, WSSA Group 29), dichlobenil (Casoron, WSSA Group 20), flumioxazin (Chateau, WSSA Group 14), rimsulfuron (Matrix, WSSA Group 2) and terbacil (Sinbar, WSSA Group 5). Some of these products will also provide some partial post-emergence suppression of seedlings, including rimsulfuron (Matrix) and dichlobenil (Casoron). Systemic auxinic products like 2,4-D and clopyralid (Stinger) may provide partial control of the perennial dandelion plants when used following harvest, prior to the first frost. Burndown materials, such as glufosinate (Rely, WSSA Group 10), and the group 14 products pyraflufen-ethyl (Venue) and saflufenacil (Treevix), can also be utilized in the late spring to suppress above ground shoot growth.

A note on glyphosate for perennial weed management

Glyphosate can be an important tool in a perennial weed management program, as it is both non-selective and systemic, allowing it to be translocated from the foliage down into the storage tissues. There are a few key points to keep in mind if you plan to use glyphosate.

 To get the most out of glyphosate's systemic properties, timing is critical. For many weeds, it is best to apply in the spring prior to bud formation up through the flowering period, as this is the period when plants are actively growing and when phloem mobile products are most likely to be translocated to the roots. For yellow nutsedge, the best timing is prior to tuber formation, at about the 5 leaf stage.

• Due to glyphosate's broad spectrum and systemic properties, it must be used with caution to prevent injury to the apple trees. It should only be used in the spring, not beyond early July. Later applications risk uptake by the trees, increasing the potential for sub-lethal damage and winter injury. Every measure should be taken to keep the herbicide from contacting the tree foliage, root suckers, and trunks.

For a full review of the effects glyphosate can have on the apple orchard, we recommend the following Fruit Quarterly article from 2013: <u>http://nyshs.org/wp-content/uploads/2016/10/Pages-23-</u> 28-from-NYFQ-Winter-12-12-2013.cmc_.pdf

Always read the label before choosing a product and making an application. Each product has specific product use and tree age restrictions that are pertinent to your operation. Many herbicides can cause damage to trees if they come into contact with sensitive tissues; check labels regarding safe spraying requirements. While some pre-emergence herbicides can control small, emerged, annual weeds, a burn-down herbicide may be required to achieve complete vegetation control. Active ingredients vary with respect to their spectrums of control; reference product labels regarding tank-mixing recommendations. While we make every effort to provide up to date information, remember that ultimately the label is the law.

Statewide Herbicide Resistance Screening to Start in 2020: Help Us Help You! *Dr. Lynn Sosnoskie, Cornell University*

Weeds compete with crops for light, water, and nutrients, which can result in yield reductions. Weeds can also interfere with crop production by serving as alternate hosts for pests and pathogens, providing habitat for rodents, and impeding harvest operations. Consequently, growers employ a variety of control strategies, including the application of herbicides, to manage unwanted vegetation. Although herbicides can be extremely effective at controlling undesirable plants, failures can and do occur. Weeds may escape chemical treatments for many reasons including the evolution of herbicide resistance.

Worldwide, there are 512 confirmed cases (species x site of action) of herbicide resistance. With respect to the United States, 165 unique instances of resistance have been documented. In New York, there are only four formally reported occurrences; these include common lambsquarters (*Chenopodium album*), smooth pigweed (*Amaranthus hybridus*), common ragweed (*Ambrosia artemisiifolia*) and common groundsel (*Senecio vulgaris*). All were described as being insensitive to the photosystem II inhibitors (e.g. atrazine and simazine).

This, however, does not reflect the current on-the-ground situation in the state; work done by Drs. Julie Kikkert (CCE) and Robin Bellinder (Cornell) indicates resistance to linuron in some populations of Powell amaranth (*Amaranthus powelli*). Recent studies by Drs. Bryan Brown (NYS IPM) and Antonio DiTommaso (Cornell) suggest that horseweed (*Conyza canadensis*) and waterhemp (*Amaranthus tuberculatus*) populations may be resistant to one or more herbicide active ingredients. Pennsylvania has nine reported cases of herbicide resistance including glyphosate resistance in Palmer amaranth (*Amaranthus palmeri*), which was recently identified here in NY. While it is tempting to believe that herbicide resistance is a hallmark of agronomic cropping systems, resistance can and has developed in orchards, vineyards, vegetable crops, pastures, and along roadsides.

Beginning in 2020, we will undertake a screening effort to describe the distribution of herbicide resistance in the state. This coming summer and fall, growers, crop consultants and allied industry personnel who suspect they have herbicide resistance are encouraged to contact Dr. Lynn Sosnoskie (<u>Ims438@cornell.edu</u>, 315-787-2231) to arrange for weed seed collection. Indicators of possible herbicide resistance include:

- Dead weeds intermixed with live plants of the same species.
- A weed patch that occurs in the same place and continues to expand, yearly.
- A field where many weed species are controlled but a previously susceptible species is not.
- Reduced weed control that cannot be explained by skips, nozzle clogs, weather events, herbicide rate or adjuvant selection, and calibration or application issues.

Growers can take several actions to stop the spread of herbicide resistant weeds and to prevent the development of new ones. First and foremost is scouting fields following herbicide

applications and keeping careful records of herbicide performance to quickly identify weed control failure. Pesticide applicators should ensure that their equipment is properly calibrated and that they are applying effective herbicides at appropriate rates to manage the target species. Whenever possible, diversify herbicides to reduce chemical selection pressures that result from the repeated use of a single herbicide or site of action. If possible, incorporate physical and cultural weed control practices into a vegetation management plan. Be sure to control unwanted plants when they are small and never allow escapes to set seed. Clean equipment to prevent seeds of herbicideresistant weed species from moving between infested and non-infested sites and harvest areas with suspected resistant populations, last.



Current status of herbicide resistance, globally, over time according to the International Survey of Herbicide Resistant Weeds (<u>www.weedscience.org</u>)

Black Stem Borer Survey – Please Take a Minute to Respond!

Art Agnello, Extension Fruit Entomologist, Cornell AgriTech, Geneva

To all NYS Apple Growers: Black Stem Borer is a destructive pest of apple trees that is becoming more problematic around the state, particularly in high density dwarf plantings. We are working with a regional IPM Working Group focused on these ambrosia beetles to gain a better understanding of their biology, behavior, and



ultimately effective management around the country, not only in apples, but also in other commodities such as nursery ornamentals, pecans, avocados, and forest/shade trees. We are distributing this survey on Black Stem Borer ambrosia beetles for documentation of their impact, as well as to use in grant proposals to support further research on these pests. We ask that you please fill it out to assist us in this effort; responses will be anonymous, and it should take no more than 5 minutes of your time.

Here is a link to the survey: https://ugeorgia.ca1.qualtrics.com/jfe/form/ SV 0ojFgygi2BFmQ1n

Thanks very much!

Federal Apple Tree Insurance Program

Some of you may remember attending listening sessions about a year ago about a proposed apple tree insurance program under the USDA RMA crop insurance program. This insurance would provide coverage both for the cost of replacing a tree as well as the cost of lost production from the tree, based on tree age, tree value and production system. The program was approved and is now available in New York State. The approaching sales closing date (SCD) for the new Federal Apple Tree Insurance Program is April 15, 2020.

AgriLogic Consulting, who hosted the listening sessions and developed the program for USDA has prepared a short overview video on the program to inform producers and the industry of the highlights of the program. The video can be viewed online at the following link: <u>https://vimeo.com/398976893/f416cc2c9e</u>



IMPORTANT INFORMATION

As you may have already heard, **American Farmland Trust has launched a new Farmer Relief Fund** (<u>farmland.org/farmer-relief-fund/</u>) that will provide cash grants of up to \$1,000 to small and mid-size direct market producers impacted by the market disruptions from the coronavirus crisis. We are defining small and mid-size direct-market producers as those with an annual gross revenue between \$10,000 and \$1 million from sales at farmers markets and/or direct sales to restaurants, caterers, schools, stores, or makers who use farm products as inputs.

During this initial round, applications will be accepted through April 23 and will require applicants to include enough detail to ensure AFT is awarding producers that have the greatest needs. Applicants will be asked to estimate their financial loss.

If you are in a different position and are seeking ways to have a positive impact during this time, they are also accepting donations to the Farmer Relief Fund at: <u>farmland.salsalabs.org/farmerrelieffund/</u> <u>index.html</u> Every dollar that goes into the fund will be awarded to farmers with the greatest needs.

If you have any questions about the Farmer Relief Fund, please contact relief@farmland.org.

Organizations across New York are offering support and resources for farmers:

- NYS Department of Agriculture and Markets COVID-19 guidance for the agricultural industry: <u>agriculture.ny.gov/coronavirus</u>
- Cornell CALS and CCE have developed and regularly update several resource pages
 - General Questions and Links: <u>eden.cce.cornell.edu</u>
 - Food Production, Processing & Safety Question: <u>instituteforfoodsafety.cornell.edu/</u> <u>coronavirus-covid-19/food-industry-resources/</u>
 - Employment & Agricultural Workforce Questions: agworkforce.cals.cornell.edu
 - Cornell Small Farms Resiliency Resources: <u>smallfarms.cornell.edu/resources/farm-resilience/</u>
- NY FarmNet is open and available to calls at 1-800-547-3276. These calls are toll-free, confidential, and available 24/7.

Additional Resources:

Apple IPM Intensive Workshop 2020: https://www.nysipm.cornell.edu/agriculture/fruits/apple-ipm-intensive-workshop-2020/

CCE ENYCHP YouTube: bit.ly/ENYCHPyoutube

- 5-part Series: Diversifying Production on Small Farms
- Stone Fruit IPM videos
- Pruning videos
- and much more!

<section-header><section-header>

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.



Daniel J. Donahue Phone: 518-691-7117 Email: djd13@cornell.edu

Mike Basedow Phone: 518-410-6823 Email: mrb524@cornell.edu

Business Specialist

Liz Higgins Phone: 518-949-3722 Email: emh56@cornell.edu

ENYCHP Office

Chelsea Truehart Phone: 518-746-2553 Email: ct478@cornell.edu

www.enych.cce.cornell.edu



Find us on Facebook & Instagram



