

Dave's Ramble

"I believe that farmers understand competition." declares the Crops Master. Every farmer knows just how far to separate a seed in the ground to give each young plant a fighting chance at success. They understand that with careful, mindful calculated fertilizer applications, weed control measures and plant protection chemicals, a champion crop is a mere season away. They will eagerly attend fairs and expos to tell tales of success. Even if their crop falls short against a neighbor's, well they shrug and say "next year, you bet." The trophy or ribbon is not the reward, it's the competition that's exhilarating.

A marvelous competitive spirit built this great nation full of prideful winners and inspired losers. It's amazing to me that all of the years of farming witnessed, I have never heard a farmer say, "Why that was the best year I will ever have. I should quit now while I am ahead."

Farmers around the world are in a fierce competition for resources necessary to fulfil an ever increasing desire to achieve food justice for all. Maybe the rest of us could use a dose of hunger to rekindle that competitive spirit. I always thought hunger was afar off, but it might be closer than I ever imagined.

Let us hasten to teach the competitive spirit, integrity and work ethics necessary to never be hungry. Oh, how we sit at Starbucks, eat a scone and sip coffee, chatting about insignificant things; yet, the world rages around us. Thankfully, there is still time for each of us to become a farmer, and grow America to greatness.

Winter 2022

Calendar of Events

Mark Your Calendars --- Plan To Participate

- ♦ Jan. 4, 2022 - Pesticide Certification Training – AA Ext Office
- ♦ Jan. 18, 2022 - Pesticide Certification Exam - AA Ext Office
- ♦ Jan.- April 2022 – Good Morning Farmer via Zoom
- ♦ Jan. 18, 2022 – So. MD Forage Meeting – Prince Frederick
- ♦ Feb. 10, 2022 - So. MD Vegetable & Fruit Meeting - Baden
- ♦ Mar. 8, 2022 - Pasture & Crop Workshop NM/PAT-AA Ext Office
- ♦ April 5, 2022 - Online Pesticide Applicator Recertification
- ♦ April 19, 2022 - Online Nutrient Voucher Recertification

All Local UME Upcoming Events: [Click Here](#)

All Statewide UME Upcoming Events: [Click Here](#)



The Veteran in a New Field by Winslow Homer, 1865

Inside This Issue

- Winter Meetings
- Crop Updates
- MDA News & Highlights
- USDA/EPA Updates



Central Maryland Vegetable Growers Meeting January 27, 2022



Make plans to attend the **Central Maryland Vegetable Growers Meeting on January 27, 2022** at the Friendly Farm Inn in Upperco, MD from 8:30 a.m. to 4:00 p.m. This meeting will provide *Private Applicator Recertification & Nutrient Applicator Voucher Recertification*.

This well sponsored, large grower meeting always offers a great deal of vegetable industry information. Pesticide recertification credits are awarded for attending this meeting. **Register by calling UM Extension Baltimore County Office at 410-887-8090 or ecrowl@umd.edu.**



Become a MD Certified Private Pesticide Applicator

If you have allowed your Private Pesticide Applicator Certification to expire or are a new applicant, then you are invited to attend the **Private Pesticide Applicator Certification Training and Examination**. It's a two-step process:

Step 1: A Private Applicator Certification Training will be conducted at the **Anne Arundel Extension Office** from **6:00 to 8:00 p.m. Tuesday, January 4, 2022**.

Step 2: A Private Pesticide Applicator Exam will be given at the **Anne Arundel Extension Office** from **6:00 to 8:00 p.m. Tuesday, January 18, 2022**.

Registration is required. Participants are required to wear a mask and follow social distancing guidelines. Register on-line for this event at: <https://extension.umd.edu/locations/anne-arundel-county> Seating may be limited for on-site participation due to University of Maryland COVID 19 meeting rule compliance.

Southern Maryland Vegetable & Fruit Production Meeting February 10, 2022



Make plans to attend the **Southern Maryland Vegetable and Fruit Production Meeting on February 10, 2022** from 8:00 a.m. to 4:00 p.m. at the Baden Volunteer Fire Department. This meeting will provide *Private Applicator Recertification & Nutrient Applicator Voucher Recertification*.

Speakers will provide IPM updates and present on a broad range of production topics. Also at this meeting sponsors will showcase their products and services, and state vegetable organization leaders will be present to recruit and answer your questions.

Attendance at this conference will satisfy the requirement for the *Private Pesticide Applicator Recertification & Nutrient Applicator Voucher*. **Registration is required. Participants may be required to wear a mask and follow social distancing guidelines.**


Register on-line for this event at: <https://extension.umd.edu/locations/anne-arundel-county> Seating may be limited for on-site participation due to University of Maryland COVID 19 meeting rule compliance.

See the attached meeting flier.

Southern Maryland Forage Conference
Jan 18, 2022, 9:00 AM - 3:00 PM
Calvert County Fairgrounds, 140 Calvert Fair Dr,
Prince Frederick, MD 20678, USA

Maryland-Delaware Forage Conferences -
Southern Maryland Meeting 1/18/22

[MORE INFORMATION](#)



Forage Conference January 18, 2022

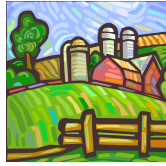
Make plans to attend the **Southern Maryland Hay & Pasture Conference on January 18, 2022** at the Calvert County Fairgrounds, 140 Calvert fair drive, Prince Frederick, MD 20678 from 9:00 a.m. to 3:00 p.m. This meeting will provide *Private Applicator Recertification & Nutrient Applicator Voucher Recertification*.

To register: [Click Here](#)

See the attached meeting flier.

Crop Sustainability & IPM Workshop

March 8, 2022



Make plans to attend one of the **Crop Sustainability & IPM Workshop, Tuesday, March 8, 2022, from 6:00-9:00 p.m. at the Anne Arundel County Extension Office.** The workshops will explore advanced crop production practices focusing on sustainability, food security and integrated pest management tactics.

The workshops will also be available virtually via ZOOM. To participate in a live ZOOM session a high speed cable or satellite internet connection is required.

Attendance at this conference will satisfy the requirement for the **Private Pesticide Applicator Recertification & Nutrient Applicator Voucher. Registration is required. Participants may be required to wear a mask and follow social distancing guidelines.**

Register on-line for this event at:

<https://extension.umd.edu/locations/anne-arundel-county>

Seating may be limited for on-site participation due to University of Maryland COVID 19 meeting rule compliance.



The University of Maryland Extension will host **Good Morning Farmer!** an online gathering place where farmers can discuss topics of interest, learn from experts and provide support through community fellowship.

GMF Winter/Spring Sessions 8:00-9:00 a.m. in ZOOM:

- 1) January 12, 2022 – Urban Farming: Can it make a difference?
- 2) February 16, 2022 – The No-Tillage Revolution: A history lesson still relevant today?
- 3) March 16, 2022 – GMO Agriculture: Where are we going?
- 4) April 13, 2022 – IPM: How to make it work on your farm?
- 5) More sessions are being planned, stay tuned.

Register on-line for this event at:

<https://extension.umd.edu/locations/anne-arundel-county>

or contact the Anne Arundel County Extension Office at 410-222-3906.

Live Online Sessions Private Pesticide Applicator Recertification

April 5, 2022



If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in this **Live Online Private Pesticide Recertification Training**, scheduled for **from 6:00 to 8:00 p.m. on Tuesday, April 5, 2022.**

The session will focus on pesticide use and related topics for all field crops, fruits and vegetables. This ZOOM recertification session will be live via the internet directly from the University of Maryland. ZOOM is a student interactive system that will document your attendance. To participate in a live ZOOM session a high speed cable or satellite internet connection is required.

Private Pesticide Applicator Recertification credit will be awarded for full 2-hour session participation.

Registration is required by April 4th in order to receive ZOOM login instructions.

Register on-line for this event at:

<https://extension.umd.edu/locations/anne-arundel-county>

or contact the Anne Arundel County Extension Office at 410-222-3906.



Live On-Line Sessions Nutrient Applicator Voucher Recertification

April 19, 2022

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in the **Live Online Nutrient Applicator Voucher Recertification Training**, scheduled for **from 6:00 to 8:00 p.m. Tuesday, April 19, 2022.**

This session will focus on fertility and production related topics for all field crops, fruits and vegetables. This ZOOM recertification session will be live via the internet directly from the University of Maryland. ZOOM is a student interactive system that will document your attendance. To participate in a live ZOOM session a high speed cable or satellite internet connection is required.

Nutrient Applicator Voucher Recertification credit will be awarded for full 2-hour session participation.

Registration by April 18th is required in order to receive ZOOM login instructions.

Register on-line for this event at:

<https://extension.umd.edu/locations/anne-arundel-county>

or contact the Anne Arundel County Extension Office at 410-222-3906.



Anne Arundel Nutrient Management Program Update

Timely Viticulture is an electronic newsletter that is designed to give those in the grape industry a timely reminder of things they should be considering in the vineyard. Since we are all busy it is not meant to be an exhaustive list of things to consider or even a full discussion of the options. It is just meant to think about what is happening and what is coming up, with some comments. To view Timely Viticulture: [Click Here](#)

Dormant (November - February)

- [Final Pruning, Pre-Emergence Herbicides, and Planting New Vines](#)
- [Grow Tubes](#)
- [Online Sustainable Viticulture Resources From USDA-NAL](#)
- [Warm Weather and Deacclimation](#)
- [Balanced Pruning 1: Critical Step in Maintaining and Adjusting Vine Balance](#)
- [Balanced Pruning 2: Timing](#)
- [Balanced Pruning 3: Pre Pruning](#)
- [Assessing Grapevine Bud Damage](#)
- [Understanding Grapevine Bud Damage](#)
- [Grapevine Frost/Freeze Damage I: Background and Prevention](#)
- [Grapevine Frost Damage II: Compensation, Management, and Potential Options](#)
- [Hilling-Up to Prevent Winter Injury in Vineyards](#)

Pre-Bloom (March - May)

- [Avoiding Injury to Grapes from Off-Target Herbicide Exposure](#)
- [Canopy Management-Shoot Thinning and Positioning](#)
- [Early-Season Disease Management](#)
- [Periodical \(17-year\) Brood X Cicadas](#)
- [Phomopsis](#)
- [Pre-Bloom to Post-Bloom Disease Management](#)
- [Managing Frost Damage: Background, Compensation, and Potential Options](#)
- [Nitrogen Fertilization in the Vineyard](#)
- [Red Leaves in the Vineyard—Diagnosis, and Management](#)
- [Season Insect Management: Climbing Cutworms](#)
- [Season Insect Management: Flea Beetles](#)
- [Using Difenoconazole Fungicides for Effective Disease Management](#)

Krista Mitchell is currently assisting Anne Arundel County with nutrient management plan writing. Please feel free to email or call Krista with any questions or to request a nutrient management plan for your operation.

Krista's email address: kristaw@umd.edu

Krista's phone numbers: (410) 313-2709 or 443-328-4894

In order to accommodate all of the producers that need nutrient management plans developed for the 2022 growing season, here are some recommended deadlines for nutrient management plan development, depending on your specific type of operation:

- After January 1st, plan-writing focuses on operations that utilize manure as a nutrient source, which require a manure sample collected as close to application time as possible.
- Please submit all necessary analyses as soon as possible to ensure your plan can be developed by March 1st.

Nutrient management plans must be completed prior to planting and nutrient applications. March 1st is the MDA regulatory date of when spring nutrient applications may begin, assuming the ground isn't frozen, saturated, or covered with snow greater than one inch.

Nutrient management plans are required for all operations that make or exceed \$2,500 Gross Annual Income and/or have 8 or more animal units (1 animal unit = 1,000 lbs.). For soil sampling instructions and a list of labs that analyze soil and manure, please visit:

go.umd.edu/testing-lab-comparisons

go.umd.edu/soil-sampling-guidance

Do You Know the Importance of a Farm Plan?



Developing a [Soil Conservation and Water Quality Plan \(SCWQP\)](#),

otherwise known as a Farm Plan, is a free service the [Anne Arundel Soil Conservation District](#) provides to agriculture landowners. A plan includes an aerial photograph of the property, an inventory of resources on the property, a soil map and a list of management decisions made by the landowner.

A conservation planner will work with you to see if you would like to install any [Best Management Practices \(BMP\)](#) to help prevent sediment and nutrients from leaving the farm. There are also BMPs to help with farm management such as adding fencing to have the ability to rotate pastures, stream crossings for livestock and equipment to access other fields and watering facilities to help with livestock rotation. A SCWQP is required if you would like to apply for any of the

agriculture preservation programs and if you are applying for either federal or state cost share programs.

Another benefit of a SCWQP allows for a possible exemption from obtaining a building permit and grading permit to construct an agricultural building. If you think you might be interested in having a SCWQP developed for your farm, please contact the Anne Arundel Soil Conservation District at 410-571-6757. [Learn More](#)



Plant Science Food Safety Group
Department of Plant Science and Landscape Architecture
College of Agriculture and Natural Resources
College Park, MD



3rd Wednesday of Each Month
Online Webinar
FREE registration, links below

Warning Signs that a Septic System is not Working Effectively – January 19, 2022

How can you tell if your system is losing its effectiveness and approaching the end of its life expectancy? In addition, how can these signs guide you to help maintain its function? This webinar will present various signs or signals that your system is not working, as it should and what are possible remedies/practices. Registration: <https://umd.zoom.us/meeting/register/tJcrde-rpi8gHNUfhoMpyzvxv7SauHAiBbf5>

Corrosive Water Impact on Water Quality, Plumbing, and Appliances – February 16, 2022

Ever wonder why you have to replace appliance such as water heaters, dishwashers or clothes washer more frequently than anticipated. Corrosive water may be the cause. This webinar will discuss characteristics of corrosive water and what you can do to reduce the impacts.

Registration: <https://umd.zoom.us/meeting/register/tJcsd--srzMuHdA4xHU01mwv6xt6vJJJe83fe>

Septic System Maintenance – March 16, 2022

Repairs or replacement of a drainfield or entire septic system are expensive! Maintaining a system is actually relatively simple and much less costly than repairs. The top maintenance practices will be presented to help you protect your investment and keep your system working longer.

Registration: https://umd.zoom.us/meeting/register/tJEkfuuqr8oG9LSrJuof3U2_aGQkXq4ox1k

Simple Steps to Protect your Water Well – April 20, 2022

Your drinking water well is a valuable asset to your home and your health. Following basic care practices of your well and wellhead can help reduce risks of bacterial and chemical contamination. This webinar will cover the basics of how to care for a well including homeowner tips and when to contact a well professional.

Registration: <https://umd.zoom.us/meeting/register/tJ0od--hqTkoG9H2Xqr70SmKbOMNuZFII8hM>



Do You Grow Fruits or Vegetables?

Are you wondering about the Produce Safety Rule or Good Agricultural Practices Certification?

Ask us about farm visits, we will come to you! We can help write your farm food safety plan.

Contact Carol Allen (callen12@umd.edu, 240-994-5043) if you reside in Central, Western or Southern Maryland.

Contact Angela Ferelli (angfer@umd.edu, 302-353-7159) if you live on the Eastern Shore, in Baltimore City, Baltimore. Cecil or Harford Counties.

Check out the Plant Science Food Safety Website:

<https://psla.umd.edu/extension/produce-safety>

And Now on YouTube!

<https://www.youtube.com/channel/UCGIAPo2366cds7uWG6v2Bg>

Clearing Up the Confusion Between GAP Audits and PSR Inspections

By Carol Allen

Agent Associate in Food Safety, PSLA
University of Maryland
callen12@umd.edu

&

Angela Ferelli
Agent Associate in Food Safety, PSLA
University of Maryland
angfer@umd.edu

Developing a food safety culture is an ongoing exercise that requires reminders, reinforcement and retraining. What about regulations? What about certificate (or audit) programs? Where do each of them begin, and who needs to either comply or elect to participate? That is where the confusion often comes in.

The confusion occurs because both GAP and PSR have many of the same practices and standards, and both encourage the development of a **food safety culture** on the farm.

The Produce Safety Rule (PSR) is a regulation under the Food Safety Modernization Act (FSMA) of 2011. This Act was the first revision of food safety laws since 1938. It came about due to the changes in the global food system and a better understanding of the consequences of foodborne illness. FSMA includes both animal (livestock and pet) and human foods. The PSR section of FSMA pertains to the safe production and handling of fresh produce for human consumption.

Although this is a **federal regulation**, it is enforced by the Maryland Department of Agriculture (MDA). Producers frequently wonder if the law applies to them. Necessary compliance to the regulation is based on how much food a farmer sells on a three-year rolling average and who buys the majority of the farm's food. Go to <https://psla.umd.edu/extension/produce-safety/does-produce-safety-rule-apply-my-farm> to learn more.

Good Agricultural Practices (GAP) is a **voluntary audit program** that a farmer may request. Usually, a wholesale buyer requires a farm to have GAP certification before they will buy the farm's produce. More recently, some direct-market farms are also earning GAP certification as proof to their consumers that food safety standards are practiced. Go to <https://psla.umd.edu/extension/produce-safety/how-will-gap-certification-help-my-farm> to learn more about GAP and the process to earning a certificate.

Harmonized Good Agricultural Practices (HGAP) is a **voluntary certificate** with more stringent practices and standards for food safety. Some of the larger grocery stores require this higher level of food safety audits before they will buy a farm's produce. More information can be found here: <https://www.ams.usda.gov/services/auditing/gap-ghp>.

There are several programs that producers may want to or need to observe. They all start with the overriding *philosophy of food safety* that is referred to as "developing a food safety culture" on the farm. What is a **food safety culture**? It is making the compliance to food safety standards second nature, such as washing hands after eating, using the toilet, working with animals or compost or any other chore where cross contamination may be an issue. It becomes reflexive muscle memory to not use a harvesting crate to hold cans of motor oil or personal possessions. It becomes reflexive to not put a dirty crate onto a food contact surface. There are many more examples of procedures that every employee and every owner need to commit to muscle memory in order to develop a food safety culture on the farm.

Still unsure or just want help? Contact Carol Allen (callen12@umd.edu, 240-994-5043) if you reside in Central, Western or Southern Maryland. Contact Angela Ferelli (angfer@umd.edu, 302-353-7159) if you farm on the Eastern Shore, in Baltimore City, Baltimore, Cecil or Harford Counties.

Maryland Grain



Wheat in Maryland



Wheat is Maryland's most popular small grain and cover crop with over 300,000 acres planted annually.

[UMD Small Grain Trials](#)

[Fungicide Efficacy for Control of Wheat Diseases](#)

Corn in Maryland

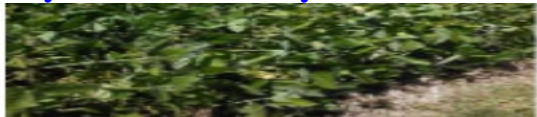


Corn is the most popular grain crop grown in Maryland. The crop grows well in this area and is an important feed source to the livestock and poultry industry.

[UMD Corn Variety Trials](#)

[Maryland Grain Producers](#)

Soybeans in Maryland



Soybeans are the second largest grain crop grown in Maryland. Soybeans are a legume and have many uses in the food system.

[UMD Soybean Variety Trials](#)

[Maryland Soybean Board](#)

Forage Program



Maryland Forage & Cover Crops

Cover crops are an important practice for the health of the Chesapeake Bay and the productivity of Maryland's farmland. Farmers participate in Maryland's Cover Crop program in an effort to improve soil health and recycle unused nutrients.

[MDA Maryland Cover Crop Program](#)

[UMD Cover Crop Research](#)

Maryland Farm Well Water Quality Project and Survey



Farmer Training and Certification Series “Write Your Own Nutrient Management Plan”

Learn how to write a nutrient management plan for your operation that meets Maryland Department of Agriculture regulations. These classes are suited for agronomic crop, hay/pasture, and/or animal farm operations using commercial fertilizer and/or manure. Fields or pastures high in soil-test phosphorus may require additional training and a greater time commitment.

REQUIRED SKILLS & RESOURCES

Competency in high school math, familiarity with using a keyboard, and the ability to save and retrieve files is essential.

Bring up-to-date soil analyses, manure analyses (if applicable), and crop plans/history on a field-by-field basis. Detailed guidance will be emailed to registrants.

SCHEDULE

In-Person Sessions (choose the location most convenient to you) 9:30am-4:30pm each day:

Wye Research and Education Center (Queenstown, MD):

Day 1 (instructional day): Tuesday January 18, 2022

Day 2 (instructional day): Thursday January 20, 2022

Day 3 (exam/plan development): Tuesday February 1, 2022 (snow day 2/3)

Washington County University of Maryland Extension Office (Boonsboro, MD):

Day 1 (instructional day): Wednesday January 26, 2022

Day 2 (instructional day): Friday January 28, 2022

Day 3 (exam/plan development): Wednesday February 9, 2022 (snow day 2/11)

REGISTRATION

Registrations must be received 14 days before the first class. For more information, please call 301-405-2465 or email Emileigh at erosso@umd.edu. Classes will be cancelled if there is insufficient enrollment.

Cost:

\$30-includes binder of materials and lunch on days 1 & 2

If you want to take the exam to become certified:

Additional \$20 exam fee due by

check to MDA- Exam application will be distributed to registrants

Space is limited and registrations are accepted on a first-come basis; therefore, register early at the following link according to location:

Wye (Queenstown): [Click Here](#)

Washington (Boonsboro): [Click Here](#)



Image by Edwin Remsberg

The University of Maryland will be conducting drinking well water educational programming for Maryland farms in 2022. We request your input by completing a short survey to provide Extension Educators with more information about drinking water wells on farms in Maryland and to develop educational programming to assist farmers in ensuring safe, good quality drinking water.

In addition, the project will be providing reduced-cost well water testing for up to 75 farms that have wells of varied types and are located in varied regions of the state. We appreciate your time and feedback by completing this survey. Your personally identifiable information is strictly confidential. Thank you!

Take the survey: [Click Here](#)



To register, go to FieldWatch.com

For more information about FieldWatch, read this helpful [resource](#) or call the department's Pesticide Regulation Section at 410-841-5710.

5th Annual Professional Development and Networking Meeting for Maryland Urban Farmers

In-person on Saturday, January 22, 1 to 3 pm
Meet at Real Food Farm in Baltimore, MD to practice pruning fig trees and to meet and socialize with other urban farmers (hot cocoa and coffee provided)

Online on Monday, January 24, 10am to 4pm
Drop in to online professional development and networking sessions.



Session topics include:

- Results of a survey of urban farmers across the Northeast USA
- Urban agriculture in Lagos, Nigeria
- Food safety legal issues for urban growers
- Variety trial of basil resistance to downy mildew
- E coli testing harvested rainwater
- Tomato and trellised cucumber variety trials
- Farm stress resources
- Greenhouse design
- Aquaponics production methods
- How to sell "Farm to School"

To register: [Click Here](#)



BACK BY POPULAR DEMAND...

MDA's Conservation Buffer Initiative returns for a second year with attractive incentive payments to plant streamside buffers on farms to protect water quality. New this year, farmers can receive up to \$4,500/acre to install riparian forest buffers with pasture fencing. Deer fencing next to grass buffers is also eligible for funding. Apply for our grants January 10-February 18, 2022.

Learn more: [Click Here](#)

Winter Ban on Spreading Manure Starts December 16, Ends March 1

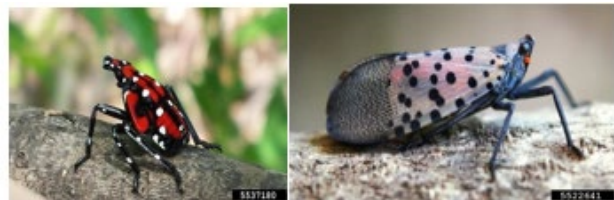
The Maryland Department of Agriculture reminds farmers that the winter ban on spreading manure and other organic nutrient sources on cropland begins **December 16**. Farmers may resume spreading on **March 1, 2022**, as long as fields are not saturated, snow-covered, or hard-frozen.

To avoid nutrient losses on farmland and to reduce runoff into waterways, spreading manure in the winter is prohibited by Maryland's Nutrient Management Regulations. Liquid manure sources generated on the farm must be stored in structures. The department is authorized to work with farmers to prevent overflows from storage structures in the winter and to minimize impacts to water quality. In these circumstances, farmers must contact the Nutrient Management Program for emergency authorization **before** any spreading can take place.



Temporary field stockpiling of stackable poultry litter and other organic nutrient sources is allowed as long as the moisture content is 60% or less. Stackable organic nutrient sources **should not** be applied to fields in winter under any conditions.

Farmers should contact their regional [nutrient management specialist](#) if they have storage concerns or questions about the regulations. For more information, please visit the department's Nutrient Management Program [website](#).



Marylanders Encouraged to Keep a Lookout for this Invasive Pest

If you suspect you have found a spotted lanternfly or their egg masses, snap a picture of it and then smash it. Report the sighting with photo attachments and location information to the Maryland Department of Agriculture at: DontBug.MD@maryland.gov.

Dead samples of spotted lanternfly from any life stage can be sent to the Maryland Department of Agriculture's Plant Protection and Weed Management Program at 50 Harry S. Truman Parkway, Annapolis, MD 21401.



The Maryland Department of Agriculture's Annual Maryland's Best Expo

January 19, 2022

10am – 2pm at the Navy-Marine Corps Memorial
Stadium in the Banquet Room in Annapolis, Md.

The meeting is designed for Maryland growers, seafood companies, producers, and processors interested in selling their products to buyers from grocery stores, restaurants, hospitals, schools and other venues.

Who should attend this event:

- A Maryland farmer, seafood producer, or processor interested in finding new markets for your products (Depending on the product, it must either be grown or produced in Maryland)
- A buyer from a grocery store, restaurant, hospital, school, or other venue looking to purchase Maryland grown or produced products
- A service provider in agriculture and local food such as a county extension agent, food writer, etc.

There is no fee for Buyers or Ag Services Providers to attend.

January 19, 2022— 10 am to 2 pm Navy-Marine Corps Memorial Stadium N Room (Club Banquet Room)
511 Taylor Ave. Annapolis, MD 21401

Please pull in gate 5 off of Taylor Ave. and park near Gate C or D. To get to the banquet room enter the stadium at Gate C. Parking will be \$5.

For questions contact Karen Fedor at
karen.fedor@maryland.gov or 410-841-5773.

Seafood producers contact Stone Slade at:

stone.slade@maryland.gov

Buyers register for FREE here: [Buyer Registration Link](#)

Growers, artisan food companies and seafood companies register here: [Exhibitor Registration Link](#)

Extension, media etc. register here: [Others Registration Link](#)

MDA Certified Local Farm Program

The recently established Certified Local Farm Enterprise Program (CLFEP) spearheaded by the Maryland Department of Agriculture (MDA) is one effort that will encourage state agencies, including public four-year universities, to achieve an overall goal of purchasing 20% of their food from MDA's directory of certified local farm enterprises.

A certified local farm enterprise is one that meets specified nutrient management requirements in current Maryland law and is certified by MDA. The program regulations are currently in development but scheduled to be finalized by the end of 2021. Meanwhile, MDA has started compiling the [Certified Local Farm Enterprise Directory](#) to help state purchasers connect with qualifying producers.

To register your farm as a Certified Local Farm:

- Register. Complete the [short online application](#) – you can also fill it out by hand, just print the [online form](#) and mail it to MDA. NOTE - starting in December, the application will be available only via [Maryland OneStop](#).
- Farm verification. MDA will verify that you have a nutrient management plan. Out-of-state producers, who may not be required by their state law to have a plan, can still qualify for the directory if they can provide proof that they satisfy the program's nutrient management plan requirements.
- Certification. Producers will receive notification that their farm is certified once the nutrient management plan is verified. Contact information, list of products, and certification number will be placed in the certified local farm enterprises public directory for state agencies to access. MDA will ask for updates to directory information once a year.
- What is the cost to become a Certified Local Farm Enterprise? There is no cost to become a Certified Local Farm Enterprise.

Anyone with questions can reach out to the CLFEP Director Karen Fedor by Phone: (410) 841-5773; or email, karen.fedor@maryland.gov For additional information, visit the program's [website](#).



For a copy of the SARE Cover Crop Economics Bulletin [Click Here](#)



Reimbursement Scholarship Offered for Acidified Foods Better Process Control School Training

Interested in making and selling pickles in Maryland? Acidified Foods Training Reimbursement Scholarship offered to Farmers in Southern Maryland

Interested in making and selling salsa, pickles, relishes and other acidified foods? The Southern Maryland Agricultural Development Commission (SMADC), a division of the Tri-County Council for Southern Maryland, is offering a reimbursement scholarship to eligible Southern Maryland farmers/producers towards half the training fee of the "Understanding Acidified Foods" virtual Better Process Control School training workshop on January 11 & 12, 2022.

The 'virtual' Better Process Control School training workshop, presented by Dr. Y. Martin Lo, will take place over two half days on Tuesday, January 11 and Wednesday, January 12, 2022, from 8 a.m. to 12 noon each day. The workshop is designed to teach food safety and regulations for acidified food products and satisfies Maryland Department of Health (MDH) and the Food and Drug Administration (FDA) certification requirements to make and sell acidified foods in Maryland. The workshop fee is \$160 including class materials.

The Acidified Foods Training Reimbursement Scholarship (\$80) is offered to farmers/producers resident and actively farming in one of the five Southern Maryland counties (Anne Arundel, Calvert, Charles, St. Mary's and Prince George's). Eligible applicants must successfully complete the Acidified Foods Better Process Control School training workshop on January 11 & 12, 2022, and provide: a copy of the workshop completion certificate; a copy of their 'farmland' agricultural land tax assessment for the land they are currently farming, and/or a copy of their IRS Schedule 'F' form (Profit or Loss from Farming).

Applications for the Training Reimbursement scholarship

may be submitted upon completion of the workshop. For planning purposes, allow up to up to six weeks for the review/award process.

To register for the Better Process Control School Workshop, visit 'News & Events' at SMADC.com. Registration closes Monday, January 3, 2022. Limited in-person seating is available at the SMADC Office upon request on a first-come first-serve basis.

To apply for the Training Reimbursement Scholarship, visit [Scholarships & Sponsorships](http://Scholarships & Sponsorships at www.smadc.com) at www.smadc.com.

REGISTER AND VIEW ACIDIFIED FOODS TRAINING WORKSHOP DETAILS [HERE](#)



New Guide Explores the Importance of Forestry in Maryland

'An Introduction to Southern Maryland's Forestry Industry' highlights how responsible forest management benefits our state's ecology and economy

Forestry grows food, creates hundreds of products and materials, supports the environment, and builds careers. Nearly 40% of Maryland is forested. As the single largest land use in the state, forests are vital to the health of the Chesapeake Bay and offer numerous environmental and economic benefits.

To promote and support this important industry, the Southern Maryland Agricultural Development Commission (SMADC), a Division of the Tri-County Council for Southern Maryland, and Grow & Fortify teamed up to develop a new resource guide and companion video 'An Introduction to Southern Maryland's Forestry Industry' to highlight how responsible forest management benefits our state's ecology and economy. The guide also encourages consumers to identify and seek out products made from locally sourced wood and explores forestry career opportunities.

Many climate experts believe that a responsibly managed forest offers one of the best and least expensive ways to mitigate climate change by sequestering carbon and using carbon-neutral renewable energy. "Forests also provide a viable timber market, incentivizing landowners to retain and care for their trees ensuring the overall health of their forests and habitat for wildlife," said Kelly Dudeck, Chief Strategy Officer at Grow & Fortify.

In 2017, the statewide forestry industry directly contributed about \$4.2 billion and supported 18,046 jobs in the Maryland economy. In Southern Maryland, forestry businesses contribute over \$585 million to the state economy, supporting more than 3,000 jobs. "Forests provide much-needed employment and economic sustainability for our rural communities," commented Shelby Watson-Hampton, SMADC Director. "And here in Southern Maryland, we are very fortunate to have the Dr. James A. Forrest Career and Technology Center, which offers students a wide variety of career-specific programs in natural resources, including forestry."

The new guide is available now as a digital educational resource for residents, entrepreneurs, and commercial interests. A brief video announcing the launch of the guide will be previewed for attendees at the 2021 Rural Maryland Council Summit in Annapolis on December 2, to be followed by the premiere launch of the full Forestry Industry Video on Friday, December 3, 2021. To view the forestry guide, forestry industry video and learn more about the important role forestry plays in Maryland, visit: growandfortify.com or SMADC.com.

[VIEW THE FORESTRY INDUSTRY VIDEO](#)
[VIEW OR DOWNLOAD THE DIGITAL FORESTRY GUIDE](#)



MARYLAND AGRICULTURAL AND RESOURCE-BASED
 INDUSTRY DEVELOPMENT CORPORATION
 1410 Forest Drive, Suite 21 ~ Annapolis, MD 21403
 Office: 410-267-6807 ~ Fax: 410-267-6809
 www.marbidco.org

Mary Shank Creek, Chair / Stephen R. McHenry, Executive Director

Local Farm Enterprise Food Aggregation Grants Program Now Open

ANNAPOLIS, MD (Dec. 14, 2021) — The Maryland Agricultural and Resource-Based Industry Development Corporation (MARBIDCO) is accepting applications for the current round of its Certified Local Farm Enterprise Food Aggregation Grant Program.

This program is designed to support the development of local food aggregation infrastructure in Maryland to help meet current and future wholesale and institutional market demand for locally produced food products. For Fiscal Year 2022, MARBIDCO has approximately \$740,000 available to fund such projects.

Created by the Maryland General Assembly in 2020, MARBIDCO's grant program is designed to support a new procurement goal for State agencies and universities to purchase at least 20% of their food from Maryland Certified Local Farm Enterprises. Certified Local Farm Enterprises are farms that adhere to Maryland's nutrient management requirements and opt to be included on a list that is maintained by the Maryland Department of Agriculture.

The purpose of MARBIDCO's Certified Local Farm Enterprise Food Aggregation Grant Program is to create opportunities for small farmers to sell products to wholesale and institutional markets and demonstrate how the investment of funds can help to grow and strengthen Maryland's local food system. The grants will be used to fund projects that help small farmers aggregate their products to sell to the institutional or wholesale buyer and for projects that will help institutional buyers increase their capacity to purchase locally grown food.

Farm products can include fresh food as well as food that has been preserved for out-of-season consumption. It is anticipated that funds will be used to provide financial support to both small-scale and large-scale aggregation projects.

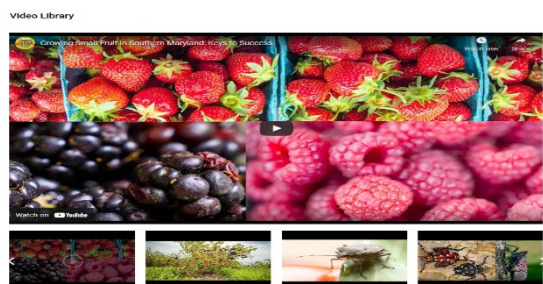
Grants of between \$25,000 and \$100,000 are available for small-scale farmer-led aggregation projects that include at least three Maryland Certified Local Farm Enterprise farmers. Grants of between \$150,000 and \$350,000 are available for public-sector aggregation projects that plan to engage with at least three Maryland Certified Local Farm Enterprise farmers to purchase locally grown food or facilitate the sale from those farmers to public institutions. (Public institutions can include county governments, municipalities, community colleges, universities, county school systems or rural regional councils). All projects will require at least a 10% match.

The application deadline for the Certified Local Farm Enterprise Food Aggregation Grant Program is February 11, 2022. There are separate application forms this year for small-scale farmer-led aggregation projects and larger public-sector-led aggregation projects. Persons interested in applying to this program are encouraged to go to the MARBIDCO website for more details and to access these application forms.

Further information about the Certified Local Farm Enterprise Food Aggregation Grant Program may be obtained by contacting Stacy Kubofcik, Senior Programs Manager, at skubofcik@marbidco.org, calling (410) 267-6807, or by visiting MARBIDCO's website at: www.marbidco.org.

Small Fruits & Hops Information Resource Portal

[Click Here](#)



Pesticide Update

EPA's Office of Chemical Safety and Pollution Prevention

EPA Releases Summary of Dicamba-Related Incident Reports from the 2021 Growing Season

As part of the Biden-Harris administration's commitment to transparency and scientific integrity, the Agency is providing a summary of dicamba-related incident reports from the 2021 growing season obtained from pesticide registrants, States, the general public, and non-governmental organizations.

Dicamba is an herbicide used to control certain types of broadleaf weeds. Some dicamba products can be sprayed over-the-top of genetically engineered soybeans and cotton after the crops have emerged from the ground. This use has been subject to considerable controversy, including the [2020 Vacatur of the Agency's 2018 dicamba registrations](#) and the [2021 EPA Inspector General report on the 2018 dicamba decision](#), both of which noted the Agency's failure to fully disclose and address risks of which it was aware.

Despite the control measures implemented in EPA's October 2020 dicamba registration decision, [the 2021 incident reports](#) show little change in number, severity, or geographic extent of dicamba-related incidents when compared to the reports the Agency received before the 2020 control measures were required. EPA received approximately 3,500 dicamba-related incident reports from the 2021 growing season indicating that:

- More than one million acres of non-dicamba-tolerant soybean crops were allegedly damaged by off-target movement of dicamba;
- A range of non-target agricultural crops were allegedly affected by dicamba, such as sugarbeets, rice, sweet potatoes, peanuts, and grapes;
- Dicamba allegedly damaged non-agricultural plants and trees, such as those that grow near homes and in wild areas, including a 160,000-acre wildlife refuge; and
- More than 280 incident reports came from counties where additional restrictions are required to protect endangered species when dicamba is applied to dicamba-tolerant soybean and cotton crops.

Based on prior research and numerous stakeholder meetings, EPA has reason to believe the number of incidents reported significantly understates the actual number of incidents related to dicamba use. For example, in a 2020 memo, EPA estimated that one in 25 dicamba incidents was reported to EPA. No evidence available to EPA suggests that underreporting has changed.

Given the new information from the 2021 growing season, EPA is reviewing whether over-the-top dicamba can be used in a manner that does not pose unreasonable risks to non-target crops and other plants, or to listed species and their designated critical habitats. EPA is also evaluating all of its options for addressing future dicamba-related incidents. The regulatory tools that the Agency could use to address the extent and severity of the alleged dicamba-related incidents are unlikely to be fully implemented by the 2022 growing season due to the statutory processes the Agency is required to follow.

However, EPA is committed to helping states address issues related to incidents in their jurisdictions. If a state wishes to further restrict or narrow the over-the-top uses of dicamba, the Agency will work with them to support their goals. Additionally, due to the extent and severity of reported incidents from the 2021 growing season, EPA is unlikely to approve section 24(c) requests under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to register additional uses of federally registered over-the-top dicamba products to meet special local needs.

EPA's decisions will continue to be informed by information submitted by, as well as discussions with, scientists, academics, state agriculture extension agents, pesticide registrants, growers, the U.S. Department of Agriculture, the Association of American Pesticide Control Officials, and the State FIFRA Research and Evaluation Group. The Agency is committed to acting in a transparent manner, following well established regulatory processes, while upholding its mission of protecting human health and the environment.

To view the report and supporting documents, visit docket EPA-HQ-OPP-2020-0492 at www.regulations.gov.



Paraquat Dichloride Training for Certified Applicators

As required by EPA's [Paraquat Dichloride Human Health Mitigation Decision](#) and amended paraquat dichloride (a.k.a. paraquat) product labels, certified applicators must successfully complete an EPA-approved training program before mixing, loading, and/or applying paraquat. The training provides important information about paraquat's toxicity, new label requirements and restrictions, and the consequences of misuse.

The [EPA-approved training module can be accessed here](#). This training was developed by paraquat manufacturers as part of EPA's 2016 risk mitigation requirements and has been approved by EPA.

EPA Publishes Memorandum Containing Revised Framework and Response to Comments to Improve Pest Resistance for Plant-Incorporated Protectants

EPA published a memorandum addressing resistance risks to lepidopteran pests of corn and cotton containing the *Bacillus thuringiensis* (Bt) Plant-Incorporated Protectant (PIP). Bt PIPs, which are pesticidal substances genetically engineered into corn and cotton to control insect pests, are one of the safest methods of insect control, and, when used properly, they can greatly reduce the need for conventional pesticides. However, since commercialization of Bt PIPs, some species of lepidopteran pests of corn and cotton have developed resistance to certain Bt toxins.

In 2018, EPA hosted a Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel (SAP) to help pesticide registrants better detect and manage arising resistance cases. In 2020, utilizing many of the recommendations from SAP experts, EPA released a draft framework for pest resistance management for public comment.

Following the 2020 public comment period, EPA revised the framework to incorporate recommendations regarding key pest resistance management components. This includes, but is not limited to, changes to the resistance definition, resistance monitoring, mitigation methods, annual reporting and product phase downs.

EPA's response to comments received during the 2020 comment period and a revised framework for pest resistance management that incorporates stakeholder feedback. This framework is intended to extend the longevity of Bt PIPs as effective pest management tools. Moving forward, the agency will work with Bt PIP registrants to amend their existing product registrations to be consistent with the revised framework. EPA expects to finalize the framework in 2022.

[View the memorandum.](#)
[Learn more about Bt PIPs and pest resistance management strategies.](#)

EPA Extends Expiration Deadline for Pesticide Applicator Certification Plans

The United States Environmental Protection Agency (EPA) is announcing an extension to the expiration deadline of federal, state, territory, and tribal certification plans. The [2017 Certification of Pesticide Applicators final rule](#) had set stronger standards for people who apply restricted use pesticides (RUPs) and required that states, territories, tribes and federal agencies with existing certification plans submit proposed modifications by March 4, 2020, to comply with the updated federal standards. As specified in the rule, existing certification plans remain in effect until EPA

completes its reviews and approves the proposed plan modifications, or until those plans otherwise expire on March 4, 2022, whichever is earlier. Due to the impact of the COVID-19 public health emergency, the complexity of plans, and the need for careful review of program-specific issues and questions, EPA is extending the existing plans' expiration deadline from March 4, 2022, to November 4, 2022.

This interim final rule allows additional time for proposed certification plan modifications to continue being reviewed and approved by EPA without interruption to federal, state, territory, and tribal certification programs or to those who are certified to use RUPs under those programs. During the extension, EPA will issue a proposed rule and seek public comment through a Notice of Proposed Rulemaking (NPRM) on the need for extending the expiration date beyond November 4, 2022.

EPA has reviewed all proposed plan modifications and is making progress on sending agency comments to certifying authorities. To date, EPA has completed 45 final reviews of the 68 plans submitted by certifying authorities (states, territories, tribes and other federal agencies). During the extension, EPA and certifying authorities will continue to work together so that all plans meet the federal standards. EPA also intends to provide periodic notifications to the public when approvals have occurred. Any additional extension pursued by the Agency will be informed by both the progress on plan reviews and approvals during this extension period, and by the public comments on this interim final rule and the NPRM. EPA encourages all stakeholders to submit comments on this current deadline extension, as well as comments on the need for, or concerns over, further extending the expiration date of existing plans. Comments submitted on this interim final rule will be considered in the development of the final rule.

Read the interim final rule.

EPA Announces Updated Schedule, Completes Safety Assessments and Decisions for Hundreds of Pesticides to Address Risk and Ensure Safe Pesticide Use

EPA is releasing the registration review schedule for the next four years through fiscal year 2025. While EPA has historically updated this schedule once each year, it will be updated on a quarterly basis going forward.

In 2007, an amendment to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) formalized a requirement that EPA review each registered pesticide at least every fifteen years. During the registration review process, EPA completes draft risk assessments, proposed interim decisions/proposed decisions, and interim decisions/final decisions. Throughout, EPA makes its information, assessments, and supporting material for each case available to the public through the case's docket at [regulations.gov](#).

Registration review ensures that, as the ability to assess risk evolves and as policies and practices change, the pesticide continues to meet the statutory standard of causing no unreasonable adverse effects on human health or the environment. When EPA identifies risks of concern to human health or the environment, it imposes pesticide label amendments designed to reduce risk. Mitigation measures can include the cancellation of uses or pesticide registrations, reduced application rates, spray drift restrictions, personal protective equipment, and advisory language, among myriad other options.

For the 726 pesticide cases that were registered before October 1, 2007, the amendment to FIFRA required EPA to complete its review by October 1, 2022. Working toward this goal over the past fifteen years, EPA has:

- Issued more than 550 interim or final decisions,
- Completed more than 600 proposed interim decisions,
- Conducted more than 680 human health and ecological draft risk assessments (excluding endangered species assessments),
- Imposed new risk mitigation requirements for 51 percent of antimicrobial pesticides and 70 percent of conventional pesticides for which EPA issued an interim or final decision, and
- Cancelled some or all uses in 120 cases.

The updated registration review schedule provides a roadmap for the next several years of EPA's registration review program. For some pesticides registered before October 1, 2007, EPA anticipates that its review will extend beyond October 1, 2022 due to a number of challenges including delays in receiving data from registrants; the demands of responding to COVID-19; and a significant increase in recent years of resources devoted to litigation. Complying with the Endangered Species Act (ESA) is also part of the registration review process. Since 2007, EPA has completed ESA assessments for certain high priority pesticides and, in the coming years, plans to assess the effects of many more pesticides on endangered species in registration review. Further, in the coming months, the Agency will release its first ESA pesticides workplan, which will outline steps the Agency will take to come into compliance with the ESA in ways that are fair and transparent to the agriculture sector.

By following the science and making evidence-based decisions that rely on the input of career scientists, EPA will continue to ensure that risk assessments and regulatory decisions reflect the best available public health and ecological science.

Visit EPA's website for more information on the [registration review process](#) and the [updated schedule](#) of upcoming registration review actions.



EPA Research Updates

The Coeur d'Alene Basin Cleanup is located in northern Idaho and eastern Washington. Historical mining and milling disposal methods spread contaminants throughout the channel and floodplain of the South Fork and mainstem of the Coeur d'Alene River and the site was added to the National Priorities List in 1983. [EPA researchers recently traveled to the area](#) to sample pore water, surface water, and sediments.

Superfund sites often have contaminated groundwater in aquifers hundreds of feet below land surface. EPA researchers tested [a system for extracting contaminated water from a deep aquifer](#) to determine if and to what extent trees can treat the contaminated water.

When excess nitrogen and phosphorous seep from agricultural fields into watersheds, they can impact larger waterbodies and lead to harmful algal blooms. EPA researchers gathered hundreds of peer-reviewed literature sources to conduct two studies looking at [what causes agricultural nutrients to move into Midwest waterbodies](#).

When building sustainable and smarter cities of the future, city planners must consider many factors including energy, environment, urban planning, and living standards. To equip local officials with the tools they need to find integrated solutions, [EPA researchers designed the City-based Optimization Model for Energy Technologies \(COMET\)](#). The first application of COMET was recently piloted in New York City, which has a goal to reach 80 percent greenhouse gas reduction relative to 2005 levels by 2050.

EPA's CompTox Dashboard has been a one-stop-shop for chemical information online since its creation in 2016. In November, [EPA researchers released the 11th version of the dashboard](#), which now includes chemistry, toxicity, and exposure information for over 900,000 individual chemicals and provides access to 300 chemical lists.

Over one-third of the food produced in the United States is never eaten, wasting the resources used to produce it and creating a myriad of environmental impacts. Read EPA's new report about the [environmental footprint of food loss and waste](#) in the U.S. and the environmental benefits that can be achieved by reducing U.S. food loss and waste.

Anne Arundel County Extension Ag
Website: [Click Here](#)

Anne Arundel County



- 1) Southern MD Forage Meeting Flier
- 2) Southern MD Vegetable and Fruit Meeting Flier
- 3) 2022 Multi-Fruit Spray Sheets.
- 4) 2022 Common Fruit Herbicides.

New Anne Arundel Urban Agriculture
Webpage [Click Here](#)



Welcome to the Anne Arundel County Urban Agriculture webpage.

Thanks for Partnering

Thanks for partnering with the University of Maryland Extension, and supporting our programs. I also hope you enjoy this newsletter. If you are no longer interested in receiving this newsletter, please call or write the office for the removal of your name from the mailer.



**R. David Myers, Principal Agent
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**Prince George's County Extension
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Clinton, MD 20735
301 868-8783**



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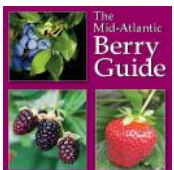
[Nutrient Management](#)



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[Ag Tech Slide Presentations](#)



[Mid-Atlantic Berry Guide](#)



[Mid-Atlantic Commercial Veg Production Guide](#)



[Commercial Fruit Production Guide](#)

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**Southern Maryland Forage Conference
Program Agenda**

January 18, 2022

**Calvert County Fairgrounds Banquet Hall
140 Calvert Fair Dr., Prince Frederick, MD**

- 8:30 a.m. --9:00 a.m. **Registration, refreshments, visit exhibits**
- 9:00 a.m. – 9:15 a.m. **Moderator Welcome**
Moderator: Ben Beale, Extension Educator, UMD Extension, St. Mary's Co.
- 9:15 a.m. –10:00 a.m. **Frequently Found Forage Fertility Problems in So MD**
Alan Leslie, Extension Educator, University of Maryland Extension Charles Co.
- 10:00 a.m. – 10:15 a.m. **Break**
- 10:15 a.m. – 11:00 a.m. **Weed Control in Hay and Pasture Systems**
Dave Myers and Ben Beale, Extension Educators, UMD Extension, Anne Arundel and St. Mary's Co.
- 11:00 a.m. – 11:45 a.m. **Improving Soil Quality and Organic Matter in Grazing Systems**
Charles Sasscer III, Extension Educator and Marketing Specialist, UMD Extension, Extension Prince Georges Co.
- 11:45 a.m. – 12:00 p.m. **Words from the Maryland Delaware Forage Council**
Amanda Grev, Member of Board of Directors-MDFC
- 12:00 p.m. – 12:45 p.m. **Lunch- Fried Chicken and all the Fixing's**
- 12:45 p.m. – 1:30 p.m. **From Seed to Harvest- BMP's to Optimize New Forage Stand Production**
Dave Myers and Ben Beale, Extension Educators, UMD Extension, Anne Arundel and St. Mary's Co.
- 1:30 p.m. – 2:15 p.m. **Tall Fescue Management to Mitigate Toxicosis**
Amanda Grev, Extension Forage Specialist, University of Maryland
- 2:15 p.m. -- 3:00 p.m. **Pesticide Recertification and Nutrient Voucher Required Topics**
Southern Maryland Ag Agent Team, University of Maryland Extension

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MOUNTAINS-TO-BAY



GRAZING ALLIANCE

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A.A. Co. Farm, Lawn & Garden Center, LLC

Anne Arundel County Farm Bureau

NetGlo

Registration

Ticket Fee: **\$15.00.**

Please register online at the Anne Arundel Extension Website Upcoming Programs Section: [Click Here](#) or by calling your local Extension office no later than February 8, 2022 to ensure lunch availability. Tickets will be held and paid for at the door. Thank You.

Anne Arundel County Extension Office
97 Dairy Lane
Gambrills, MD 21054
410 222-3906

Calvert County Extension Office
30 Duke Street, Room 103
Prince Frederick, MD 20678
410 535-3662 or 301 855-1150

Charles County Extension Office
9375 Chesapeake Street, Suite 119
La Plata, MD 20646
301 934-5403 or 301 753-8195

Prince George's County Extension Office
6707 Groveton Drive
Clinton, MD 20735
301 868-9366

St. Mary's County Extension Office
P. O. Box 663
Leonardtown, MD 20650
301 475-4482



Southern Maryland Vegetable & Fruit Meeting

Thursday, February 10, 2022

**Baden Fire Hall
16608 Brandywine Road
Brandywine, Maryland 20613**



University of Maryland Extension programs are open to all citizens and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.

7:30 a.m. Doors Open

8:00 a.m. Visit Sponsor Displays
Enjoy Coffee & Doughnuts



8:45 a.m. Welcome & Thank You Sponsors and Partners

9:00 a.m. Trellised Cucumbers
Dr. Alan Leslie
Extension Ag Educator
Charles County
University of Maryland

9:30 a.m. Hot Set Tomatoes
Mr. Ben Beale
Extension Ag Educator
St. Mary's County
University of Maryland

10:00 a.m. Watermelon and Pumpkin Weed Management
Dr. Kurt Vollmer
Extension Weed Specialist
WYEREC
University of Maryland

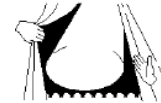
10:30 a.m. Break

10:45 a.m. North East Urban Farm Survey Results
Ms. Neith Little
Extension Urban Ag Educator
Baltimore City
University of Maryland

11:15 a.m. Choosing the Right Fruit Cultivar
Dr. Haley Sater
Extension Ag Educator
Wicomico County
University of Maryland

11:45 Sponsors Recognized

Noon Lunch & Visit Sponsor Displays



1:00 p.m. Farm Stress Management
Ms. Shannon Dill
Extension Ag Educator
Talbot County
University of Maryland

1:30 p.m. Canopy and Weather Strawberry Disease Management
Dr. Mengjun Hu
Fruit Pathologist
PSLA
University of Maryland

2:00 p.m. Biostimulants in Vegetables
Dr. Jerry Brust
IPM Vegetable Specialist
CMREC
University of Maryland

2:30 p.m. Vegetable IWM with Cover Crops and Plastic
Dr. Dwayne Joseph
Postdoctoral Associate
Entomology Department
University of Maryland

3:00 p.m. Food Safety Program Update
Ms. Carol Allen
Agent Associate Food Safety
PSLA
University of Maryland

3:30 p.m. Nutrient Management & Pesticide Law Update

4:00 p.m. Adjourn & Visit Sponsors



Remember to Sign Pesticide Recertification & Nutrient Management Rosters and Complete the Meeting Survey



Spray Program for Multi-Tree Fruit Orchards



Many local orchards are composed of multi-fruit combinations producing for fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree spray programs are required to achieve high quality fruit. These multi-fruit orchards create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-fruit orchard spray program for the control of major tree fruit pests and diseases may offer some assistance: **Labeled as noted in 2022 for All Tree Fruit – Pomes: Apples & Pears Stones: Peaches, Plums, Nectarines, and Cherries.**

FUNGICIDES: [FRAC]	*RATE	NOTES
Captan® 80WDG [M4]	3-5.0 lbs	General Protectant (Not Labeled for Pears; Reduce Rates for Cherries)
Dormant Oil [NC]	4.0 gal	Apply Temp 35-85° F
Kocide® DF [M1]	6.0 lbs	Other Fixed Coppers (Stones: Dormant Spray Only)
Rally® 40W [3]	4.0 ozs	Powdery Mildew
Sulfur 95W [M2]	3.0 lbs	General Protectant
Gem® 500 SC [11]	3.0 ozs	Brown Rot & Peach Scab (Stones Only) or
Adamant® 50WG [3/11]	6.0 ozs	Brown Rot, Peach Scab & Powdery Mildew (Stones Except Plums)
Pristine® [7/11] or	14.5 ozs	Brown Rot, Powdery Mildew, Scab, Rusts & Fruit Spots (Limited to 4 Sprays/Season With Only 2 Consecutively)
Indar® 2F [3]	6.0 ozs	Powdery Mildew & Rusts
Topsin-M® 70W [1]	8.0 ozs	General Protectant
Ziram 76DF [M3]	5.0 lbs	Dormant Peach Leaf Curl (Captan Substitute for Pears)
Agrimycin® 17 W	24.0 ozs	Fireblight Control (Apples & Pears Only)
Ph-D® WDG [19]	6.2 ozs	Powdery Mildew & Scab (Not labeled for stones)

INSECTICIDES: [IRAC]	*RATE	NOTES
Imidan® 70W [1A]	2.0 lbs	Curculio, SWD, Scale & Fruit Moths
Warrior® [3] or Tombstone® [3]	4.0 ozs 2.0 ozs	Borers, Curculio, SWD, BSMB & Fruit Moths
Besiege [3/28]	6.0 ozs	Peachtree Borer, SWD, Aphids, Curculio, Fruit Moths & Thrips
Actara® [4A]	4.5 ozs	Aphids & Curculio
Acramite® 50WS [25]	1.0 lbs	Mites Only as Required
Sevin® 50W [1A]	4.0 lbs	SWD, Japanese Beetles (Apple Thinning Agent) Hornets & Sap Beetles

***Rate for 50-100gal Acre Concentrate Spray**

****Be sure to follow all labels closely for PHI and REI!**

Multi-Fruit Spray Calendar*

March 15 - Dormant Spray	Dormant Oil 4.0 gal (Scales & Mites) Kocide® DF 6.0 lbs
April 5 - Peach Bloom	Apple Tight Cluster Captan® 80WDG 3.0 lbs
April 15 - Peach Petal Fall	Apple Bloom Captan® 50W 3.0 lbs Indar® 2F 6.0 ozs Agrimycin® 17 W 24.0 ozs (Fireblight Control Add for Apples & Pears Only)
April 25 - Peach Shuck Split	Apple Petal Fall Pristine® 14.5 ozs Warrior® 4.0 ozs (Curculio) Agrimycin® 17 W 24.0 ozs (Fireblight Control Add for Apples & Pears Only)
May 5 - 1st Cover Spray	Captan® 80WDG 4.0 lbs (Cedar Apple Rust - Higher Rates for Wetter Conditions) Indar® 2F 6.0 ozs (Powdery Mildew & Rusts) Actara® 4.5 ozs (Curculio & Aphids; PHI: 35-Days Pomes, 14-Days Stones)
May 15 - 2nd Cover Spray	Captan® 80WDG 3-4.0 lbs Rally® 40W 4.0 ozs (Peach Rusty Spot Only) Warrior® 4.0 ozs (Curculio; PHI 21-Days Pomes, 14-days Stones)

June 1 -

3rd Cover Spray

Captan® 80WDG 3-4.0 lbs
Topsin-M® 70W 8.0 ozs (Apple Scab Resistance Likely)
Imidan® 70W 2.0 lbs (Curculio, Scale & Fruit Moths; PHI: 7-Days Pomes, 14-Days Stones)
Acramite® 50WS 1.0 lbs (For Mites if Required PHI: 7-Days Pomes, 3-Days Stones)

June 15 -

4th Cover Spray

Captan® 80WDG 3-4.0 lbs
Sulfur 95W 3.0 lbs (0-day PHI; Stones Only)
Tombstone® 2.0 ozs (Borers, Curculio & Fruit Moths – 7-day PHI)

July 1-

5th Cover Spray

Early Peach Harvest
Captan® 80WDG 3-4.0 lbs (0-day PHI; 1-day REI); or
Pristine® 14.5 ozs (Early Stones 0-day PHI; Limited to 4 Sprays/Season With Only 2 Consecutively)
Tombstone® 2.0 ozs (Borers, Curculio & Fruit Moths – 7-Day PHI)

July 15 -

6th Cover Spray

Peach Harvests
Captan® 80WDG 3-4.0 lbs (0-day PHI; 1-day REI)
Rally® 40W 4.0 ozs (0-day PHI, except apples 14-days)
Sevin® 50W 4.0 lbs (Japanese Beetle & Moths – 5-Day PHI for All Fruit)

August 1-

7th Cover Spray

Peach Harvests
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); **or**
Pristine® 14.5 ozs (Early Pomes 0-day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetle & Hornets – 5-Day PHI for All Fruit)

August 15 -

8th Cover Spray

Early Apple Harvests
Late Peach Harvest
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); **or**
Pristine® 14.5 ozs (Pomes 0-day PHI)

September 1 -

9th Cover Spray

Apples and Pears Only
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); **or**
Pristine® 14.5 ozs (Pomes 0-day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetle & Hornets – 5-Day PHI for All Fruit)

September 15 -

Directed Trunk Bore Spray

Besiege® 12.0 ozs (Post Harvest for Borers)

HERBICIDES: [HRAC]

*RATE	NOTES
Gramoxone® [22]	1.0 qts Burndown, Directed Spray
Roundup® [9]	1.0 qts Burndown, Shielded & Directed Spray
Devrinol® 50 DF [15]	4.0 lbs Spring/Summer 35-day PHI
Princep® 4L [5]	1.0 qts Spring Dormant, Avoid High pH Soils
Solicam® [12]	2.5 lbs Spring/Fall Dormant, 1-yr Established
Goal® or Galigan® [14]	2.0 pts After Harvest to Spring Bud Swell
Chateau [14]	12.0 ozs After Harvest to Spring Bud Swell
Aim®, Shark® or Venue [14]	2.0 ozs Directed Spray, 0-3-day PHI
Matrix® [2]	4.0 ozs Late Spring, 1-yr Established
Prowl® [3] or Surflan® [3]	2.0 qts Spring/ Summer, Prowl 60-day PHI
Poast® [1]	1.5 pts Summer Grasses, Variable PHI
Karmex® [7] or Diuron® [7]	1.6 qts Spring/Fall Dormant, 3-yr Established

***Lowest Use Rate Recommended Initially**

Organic Approach Substitutions:

Conventional Product	Organic Certified Product (OMRI)
Captan® & Topsin-M®	Surround® or Sulfur or Lime Sulfur
Rally®	Kaligreen® (Powdery Mildew Eradicant)
Listed Insecticides	Neem® or Pyganic® or Entrust® (Stone Fruits Only)
Agrimycin®	Agrimycin® or Fixed Copper (Apples & Pears Except During Bloom)
Gramoxone® or Roundup®	Avenger® or Burnout® or AXXE®/BioSafe® or (Scythe® no OMRI label)

*** Important Note: The calendar spray dates given are an average estimate for Anne Arundel and Prince George's County Orchards, and may vary by location in Maryland. Be sure to adjust your spray schedule application dates accordingly. The above recommendations very closely reflect the current spray program utilized at the University of Maryland Research and Education Center, Upper Marlboro Facility for its research orchards. Remember to always "Read the Label"**

Spray Program for Multi-Small Fruit Plantings



Many local farms are composed of multi-small fruit combinations producing for fresh market blackberries, raspberries, blueberries, strawberries and grapes. Aggressive fruit spray programs are required to achieve high quality fruit. These multi-small fruit plantings create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-small fruit spray program for the control of major small fruit pests and diseases may offer some assistance:

Labeled as noted in 2022 for All Small Fruit – Strawberries, Brambles: Blackberries, Raspberries, Blueberries, and Grapes.

FUNGICIDES: [IRAC]	*RATE	NOTES
Lime Sulfur [M2]	10.0 gals	Dormant Fall Sanitizer
JMS® Stylet Oil [NC]	1.0 gal	Apply Temp 35-85° F
Kocide® DF [M1]	2.0 lbs	Other Fixed Coppers
Captan® 50W [M4]	2.0 lbs	General Protectant
Ziram® 76DF [M3]	5.0 lbs	General Protectant
(Except for Strawberry use Thiram®)		
Sulfur 95W [M2]	3.0 lbs	General Protectant
(Grape variety sensitivity)		
Rally®40W [3]	4.0 ozs	Powdery Mildew & Black Rot
(Except for blueberry use Tilt®)		
Pristine® [7/11]	14.5 ozs	Fruit Rots, Fruit Spots, Powdery & Downy Mildew & Cane Blight
Elevate® 50 WG [17]	1.5 lbs	Botrytis & Powdery Mildew
Switch® 62.5 WG [9/12]	11.0 ozs	Anthracoese, Mummy Berry, Phomopsis, Sour Rot & Botrytis
Phostrol® [33]	4.0 pts	Downy Mildew & Red Stele
Ph-D® WDG [19]	6.2 ozs	Botrytis & Powdery Mildew
(Strawberries and grapes only)		
INSECTICIDES: [IRAC]	*RATE	NOTES
Provado® Admire® [4A]	4.0 ozs	SWD, Grubs, Aphids, Hoppers, Curculio & Whitefly
or Actara® [4A]		
Brigade® WSB [3]	12.0 ozs	BMSB, SWD, Clipper Beetle, Plant Bug, Mites & Root Weevil
Malathion [1B]	2.0pts	SWD, Scale, Fruit Moths & Whitefly
Sevin® 50W [1A]	4.0 lbs	SWD, Japanese Beetles, Hornets & Sap Beetles

*Rate for 50-100gal Acre Concentrate Spray

**Be sure to follow all labels closely for PHI and REI

Multi-Small Fruit Spray Calendar*

March 5 - Spring Dormant Spray	JMS® Stylet Oil 1.0 gal (Scales & Mites)
April 10 - Early Strawberry Bloom	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Thiram® 75WDG 5.0 lbs (Strawberry Only)
April 15 - Strawberry Bloom/ Blueberry Early Bloom	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Ziram 76DF 5.0 lbs (Except Strawberry) Brigade®WSB 12.0 ozs (Clipper Beetle, 0-3-day PHI)
April 25 - Strawberry Full bloom/Blueberry Mid-Bloom/ Grape Bud Break	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Pristine® 14.5 ozs Brigade®WSB 12.0 ozs (Clipper Beetle, 0-3-day PHI)
May 5 - Strawberry 1st Cover & Early Harvest Spray/ Blueberry Full Bloom/Grape & Bramble Shoot Growth	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Elevate® 1.5 lbs (0-day PHI) Provado® 4.5 ozs (Curculio & Aphids; 7-Day PHI)
May 15 - Strawberry 2nd Cover & Harvest Spray/ Blueberry 1st Cover/Grape Bloom Spray/Bramble Cane Development	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Switch® 11.0 ozs (0-day PHI) Malathion® 2.0 pts (Curculio, Scale & Fruit Moths; 0-3-day PHI)
June 1 - Strawberry 3rd Cover & Harvest Spray/Blueberry 2nd cover/Grape 1st Cover/Bramble Bloom	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Pristine® 14.5 ozs (0-day PHI) Malathion® 2.0 pts(Curculio, Scale & Fruit Moths; 0-3-day PHI)

June 15 - Strawberry 4th Cover & Harvest Spray/Blueberry 3rd Cover & Early Harvest/ Bramble 1st Cover/ Grape 2nd Cover	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Ph-D® 6.2 ozs (0-day PHI) Sevin® 50W 4.0 lbs (sap beetle, 5-Day PHI)
July 1- Strawberry Renovation/Blueberry 4th Cover & Harvest/ Bramble 2nd Cover & Early Harvest/ Grape 3rd Cover	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Pristine® 14.5 ozs (0-day PHI) Rally 40 W 4.0 ozs (Except Blueberry, 0-day PHI) Brigade®WSB 12.0 ozs (0-3-day PHI)
July 15 - Strawberry Post Harvest/ Blueberry 5th Cover & Harvest/ Bramble 3rd Cover & Harvest/ Grape 3rd Cover & Veraison	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Switch® 11.0 ozs (0-day PHI) Sulfur 95W 3.0 lbs (0-day PHI) or Kocide DF 2.0 lbs (0-day PHI) Malathion 2.0 pts (0-3-day PHI)
August 1- Strawberry Post Harvest/ Blueberry 6th Cover & Harvest/ Bramble 4th Cover & Harvest/ Grape 4th Cover & Early Harvest	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Pristine® 14.5 ozs (0-day PHI) Sevin® 50W 4.0 lbs (Japanese Beetle, 5-Day PHI)
August 15 - Strawberry, Blueberry & Bramble Post Harvest/ Grape 5th Cover & Harvest	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Elevate® 1.5 lbs (0-day PHI) Phostrol® 4.0 pts (0-day PHI) Sevin® 50W 4.0 lbs (Hornets – 5-Day PHI for All Fruit)
September 1 - Strawberry Post Harvest/ Grape 6th Cover & Harvest	Captan® 50W 2.0 lbs (0-3 Day PHI & 2-Day REI) Phostrol® 4.0 pts (0-day PHI) Sevin® 50W 4.0 lbs (Hornets – 5-Day PHI for All Fruit)
October 30	
November 25 Fall Dormant	Lime Sulfur 10.0 gals Kocide DF 2.0 lbs (0-day PHI)

HERBICIDES: [HRAC]	*RATE	NOTES
Gramoxone® [22]	1.0 qts	Burndown, Directed Spray
Roundup® [9]	1.0 qts	Burndown, Shielded & Directed Spray
Devrinol® 50 DF [15]	4.0 lbs	Spring/Summer 35-day PHI
Princep® 4L [5]	1.0 qts	Spring Dormant, Avoid High pH Soils
Solimax® [12]	2.5 lbs	Spring/Fall Dormant, 1-yr Established
(Except strawberry)		
Aim® [14] or Shark® [14]	2.0 ozs	Directed Spray to Weeds, 3-day PHI
Venue [14] (Grapes only)	2.0 ozs	Directed Spray, 0-day PHI
Chateau [14]	12.0 ozs	After Harvest to Spring Bud Swell
(Except brambles)		
Zeus Prime XC [14]	7.5 ozs	Shielded Spray, 3-14 day PHI, Avoid >7 pH soil, 2-yr Established
(Except strawberry)		
Surflan® [3]	2.0 qts	Spring/ Summer, Prowl 60-day PHI
(Except strawberry)		
Poast® [1]	1.5 pts	Summer Grasses, Variable PHI
Sinbar® [5]	4.0 ozs	Fall Dormant, 1-yr Established

*Lowest use herbicide rate recommended initially

Consult label for specific fruit applications

Organic Approach Substitutions:

Conventional Product	Organic Certified Product (OMRI)
Captan®	Surround® or Sulfur or Lime Sulfur
Rally®	Kaligreen® (Powdery Mildew Eradicant)
Listed Insecticides	Neem® or Pyganic® or Entrust® or Dipel®
Gramoxone® or Roundup®	Avenger® or Burnout® or AXXE®/BioSafe® or (Scythe® no OMRI label)

* Important Note: The calendar spray dates given are an average estimate for Anne Arundel and Prince George's County small fruit production, and may vary by location in Maryland. Be sure to adjust your spray schedule application dates accordingly. The above recommendations very closely reflect the current spray program utilized at the University of Maryland Research and Education Center, Upper Marlboro Facility for its research fruit plots. Remember to always "Read the Label".

R. David Myers
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Common Fruit Herbicides*

Herbicide	Low Rate	H R A C	Application Timing and Activity	Koc ml/g	Water Solubility mg/L	Soil Half-Life Avg Days	Application Notes
Gramoxone paraquat	1.0 qts	22	Burndown	1,000,000	620,000	1000	Directed Spray, Latex Trunks, Wraps 1-3 Years
Roundup glyphosate	1.0 qts	9	Burndown	24,000	15,700	47	Shielded, Directed Spray, Latex Trunks, Wraps 1-3 Years
Rely glufosinate	22.0 ozs	10	Burndown	100	1,370,000	7	Shielded, Directed Spray, Latex Trunks, Wraps 1-3 Years
Devrinol napropamide	4.0 lbs	15	Preemerge	700	73	70	Spring, Early Summer, 35-day PHI
Surflan oryzalin	2.0 qts	3	Preemerge	600	2.6	20	Spring or Summer, Surflan 0-day PHI
Prowl pendimethalin	2.0 qts	3	Preemerge	17,200	0.275	44	Spring, Prowl 60-day PHI
Karmax diuron	1.0 lbs	7	Preemerge	480	42	90	Fall or Spring Dormant, 3-yr Established
Sinbar terbacil	4.0 ozs	5	Preemerge	55	710	120	Fall Dormant, 1-yr Established
Kerb pronamide	2.0 lbs	15	Preemerge	840	15	35	Fall Dormant, 1-yr Established
Princep simazine	1.0 qts	5	Preemerge	130	2	80	Spring Dormant, Avoid >7 pH Soils, 3-yr Established
Alion indazaflam	3.5 ozs	29	Preemerge	496	dispersible	---	Fall or Spring Dormant, Directed Spray, 3-yr Established
Casoron dichlobenil	100 lbs	20	Preemerge	---	dispersible	---	Granular Applied Incorporated, 4-weeks Post Transplanting
Solicam norflurazon	2.5 lbs	12	Pre & Post	700	28	112	Spring or Fall, 1-yr Established
Chateau flumioxazin	12.0 ozs	14	Pre & Post	---	1.79	14	Broadleaves, After Harvest to Bud Swell
Goal oxyfluorfen	1.0 qts	14	Pre & Post	100,000	0.1	30	Broadleaves, After Harvest to Bud Swell
2,4-D	1.0 qts	4	Pre & Post	62	---	14	Dormant Only, Avoid Temps Above 85° for 3-Days
Matrix rimsulfuron	4.0 ozs	2	Pre & Post	---	7300	2	Spring, 1-Yr Established, Mixed Weeds
Zeus Prime XC sulfentrazone + carfentrazone	7.5 ozs	14	Pre & Post	mobile	dispersible	---	Shielded Spray, 3-14 day PHI, Avoid >7 pH soil, 2-yr Established
Aim carfentrazone	2.0 ozs	14	Post	750	12,000	0.1	Broadleaves, Directed Spray, 0-3-day PHI
Venue pyraflufen	2.0 ozs	14	Post	2090	0.5	3	Broadleaves, Directed Spray, 0-3-day PHI



* Consult label for specific fruit applications.

R. D. Myers 2022