

Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION

December 2022



The Extension office will be closed on
December 26 for Christmas and January 2
for New Year's

University of
Maryland Extension

Harford County
Agricultural Center

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M—F 8:00 a.m.—4:30 p.m.

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Hello, Harford County!

We have arrived at the conclusion of yet another calendar year as we approach the closing weeks of 2022. I hope that 2022 treated you and your family well and you get some time to relax and prepare for what's in store for the 2023 farming year.

As we approach the Holidays, few symbols represent the season that are as iconic and recognizable as the evergreens and pine trees. The history of the pine tree and evergreens used as Christmas decorations is quite lengthy, but history seems to point to the pagan and Christian tradition of using evergreens to celebrate winter festivals and for winter home décor during the winter solstice, as it reminded them of the green of spring to come. Most evidence points to fir trees as the first Christmas trees, roughly 1,000 years ago in Northern Europe. Since then, the tradition of using pines and evergreens as holiday decorations has spread over much of the globe.

Members of the pine family (*Pinaceae*) consist of about 250 species, most all of which are trees ranging from 7-300 feet tall. The oldest known (non-clonal) individual plant in the world, and oldest known organism on earth, is a pine; a bristlecone pine (*Pinus longaeva*) located in the California Sierra Nevada's, is an estimated 5,000 years old. The tallest plant in the world also happens to be a pine—a coast redwood (*Sequoia sempervirens*) stands over 380 feet tall in

the Redwood National Park in California. Another record owned by pines is the largest tree measured by volume; General Sherman, is a giant sequoia (*Sequoiadendron giganteum*), standing 275 feet tall with a trunk diameter of over 36 feet, giving this massive tree a trunk volume of over 52,500 cubic feet and tips the scales at an estimated 4.2 million pounds!

Pines and other conifers are unique in that nearly all pine species retain their leaves (needles) throughout the winter, and are well-adapted to sub-zero temperatures. The needle-like leaf design and waxy coating minimizes water loss, and the cells in the tree prepare for the winter freeze by entering a dormant state where the cells shrink through dehydration, accumulate sugars, then harden and become glass-like. This combination of adaptations makes them survive winter temperatures while retaining their leaves.

Aside from providing us with holiday décor, members of the *Pinaceae* provide most of the world's softwood timber, which are found in countless everyday products. So as you gather 'round the tree this winter, maybe you can have some extra appreciation that you are among some pretty amazing company in the pine family of plants.

I wish you and your family a very Merry Christmas and Happy Holiday Season!

Until next time,
-Andy



United States Department of Agriculture [press release](#)

Today, the U.S. Department of Agriculture (USDA) mailed survey codes to all known agriculture producers across the 50 states with an invitation to respond online to the 2022 Census of Agriculture at agcounts.usda.gov. The ag census is the nation's only comprehensive and impartial agriculture data for every state, county, and territory. By completing the survey, producers across the nation can tell their story and help generate impactful opportunities that better serve them and future generations of producers.

The 2022 Census of Agriculture will be mailed in phases, with paper questionnaires following in December. Producers need only respond once, whether securely online or by mail. The online option offers timesaving features ideal for busy producers. All responses are due **Feb. 6, 2023**. Farm operations of all sizes, urban and rural, which produced and sold, or normally would have sold, \$1,000 or more of agricultural products in 2022, are included in the ag census.

"The 2022 Census of Agriculture is a powerful voice for American agriculture. The information gathered through the ag census influences policy decisions that will have a tremendous impact on ag producers and their communities for years to come," said Agriculture Secretary Tom Vilsack. "I strongly encourage all farmers, no matter how large or small their operation, to promptly complete and return their ag census.

This is your opportunity to share your voice, uplift the value and showcase the uniqueness of American agriculture."

Collected in service to American agriculture since 1840 and now conducted every five years by USDA's

National Agricultural Statistics Service (NASS), the Census of Agriculture is a complete picture of American agriculture today. It highlights land use and ownership, producer characteristics, production practices, income and expenditures, among other topics.

"Our farmers and ranchers have an incredible impact on our nation and the world. I want to thank them in advance for responding to the ag census," said NASS Administrator Hubert Hamer. "We recognize how valuable their time is, so we have made responding more convenient and modern than ever before."

Between ag census years, NASS considers revisions to the questionnaire to document changes and emerging trends in the industry. Changes to the 2022 questionnaire include new questions about the use of precision agriculture, hemp production, hair sheep and updates to internet access questions.

Responding to the Census of Agriculture is required by law under Title 7 USC 2204(g) Public Law 105-

113. The same law requires NASS to keep all information confidential, to use the data only for statistical purposes, and only publish in aggregate form to prevent disclosing the identity of any individual producer or farm operation. NASS will release the results of the ag census in early 2024.

To learn more about the Census of Agriculture, visit www.nass.usda.gov/agcensus. On the website, producers and other data users can access frequently asked questions, past ag census data, special study information, and more. For highlights of these and the latest information, follow USDA NASS on twitter [@usda_nass](#).



Owning & Renting Farmland: Legal Questions

January 26 & 31

9:30-3:30 PM

Chesapeake College. The *So You Want to Own Farmland in Maryland* workshops will be from 9:30 am to 3:30 pm.

The free program will cover those legal issues that Maryland landowners may face. A grant funds the program through the Northeast Risk Management Education Center.

The workshop will feature Paul Goeringer, a Senior Faculty Specialist and Extension Specialist in agricultural law. He will address leasing, landowner liability issues, right-to-farm law, fencing laws, livestock liability, and estate planning. The workshops will also involve research related to solar development by Elizabeth Thilmany, a Faculty Specialist in AREC.

“These workshops will be a great opportunity for

The Department of Agricultural and Resource Economics (AREC) will host two one-day workshops on Jan. 26th in Boonesboro and Jan. 31st at

landowners and other professionals in rural areas to learn about some of the basic legal issues that many deal with daily. They can understand their rights and responsibilities whether they are involved in agriculture or own land in a rural area,” said Goeringer.

Lunch is provided with the workshops. Each workshop will begin at 9 am with a check-in, and the workshops will run from 9:30 am to 3:30 pm.

Participants will receive copies of Extension fact sheets and other valuable documents as a part of the workshop series.

Register at agrisk.umd.edu/events.

For more information, please get in touch with Paul Goeringer at lgoering@umd.edu, (301) 405-3541.

This workshop is based upon work supported by USDA/NIFA under Award Number 2021-70027-34693.

Beginning Farmer Success Course

This course is designed for people in Maryland who are considering or in the beginning stages of starting a farm as a business. Topics covered will include business planning, marketing, crop production, livestock husbandry, soil health, pest management, food safety, and regulations and certifications. Additional elective resources will cover more specialized topics, such as organic production, urban agriculture, and direct marketing to local customers. Students will learn from over 14 speakers, including agricultural Extension educators, farmers, and agricultural industry professionals.

This 10-week course will be offered in a blended in-person and online format.

The class will meet on Thursday evenings, from 7 to 8:30 pm, from February 2 through April 6, 2023.

The course kick-off session on February 2 and the final class and graduation ceremony on April 6 will be held in person. Small groups of students will meet in person at one of several locations across the state of Maryland, in either Baltimore City, Baltimore County, Montgomery County, and Charles County.

In weeks 2 through 9 of the course, students will complete at-your-own pace homework on the course website on campus.extension.org and will meet online each Thursday from 7 to 8:30pm for a live class using the software Zoom.

This course **does not** provide college credit or an exam-based certification. Students who complete the course will receive a certificate stating that they completed the course requirements. To complete the course, students will need to both attend the weekly class and complete weekly homework on the course website.

By actively engaging in this program, participants will:

- Understand each of the topics covered at a beginner’s level, so they will be prepared to take more advanced trainings in future.
- Decide what they need to learn more about next to launch their farm business.

Two course textbooks will be used, with supplementary readings and videos from additional sources. Both course textbooks are available for free digitally. Hard-copies of the course textbooks can be picked up at the Feb 2 in-person kick-off session.

Registration: \$65 plus Eventbrite fees. Register at go.umd.edu/BFS2023. If the registration fee is a financial barrier, please fill out this scholarship application: https://ume.qualtrics.com/jfe/form/SV_06QwgaBZ6qVczyZ.

Carol Allen, Food Safety Coordinator
University of Maryland

Earlier this month the Requirements for Additional Traceability Records for Certain Foods (Traceability Rule) was sent to the Office of the Federal Register. It is expected to be published within a couple of weeks.

What does the Traceability Rule mean to Maryland farmers? We know that rapid traceability in the event of a foodborne illness outbreak is crucial in preventing sickness and death. The Traceability Rule requires persons who manufacture, process, pack or hold certain foods to keep records of Key Data Elements (KEDs), such that in the event of Critical Tracking Events (CTEs), those records could be reached rapidly and completely.

For Maryland's farmers this would mean keeping the records they probably already possess in such a manner that retrieval is fast and easy.

Currently, only certain fresh produce items are to be tracked; though the FDA would like to see producers keep such records on all their products. At this time there is a list of sixteen foods that have been selected due to their history and risk of involvement in foodborne illness. They are: certain cheeses, shell eggs, nut butter, fresh cucumbers, fresh herbs, fresh leafy greens, fresh melons, fresh peppers, fresh sprouts, fresh tomatoes, fresh tropical tree fruits, fresh cut fruits and vegetables, finfish, crustaceans, bivalve mollusks, and ready-to-eat deli salads. More information can be found here: <https://www.fda.gov/food/food-safety-modernization-act-fsma/food-traceability-list>.

What producers would be impacted by this rule? There are exemptions for the small producer. Here are some of the pertinent ones:

- Farms not subject to the Produce Safety Rule as their annual average produce sales is under \$25,000 and calculated according to 21 CFR 112.4(a) (<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=112.4>).
- Shell egg producers with fewer than 3,000 laying hens per farm.
- Other originators of food whose average monetary value of food sold during the previous three-year period was not more than \$25,000 (rolling average basis) and adjusted for inflation.
- Direct sales to consumer, such as farmer's markets, roadside stands, internet sales, and through CSAs.

- Food produced and packaged on the farm would be exempt if the packaging remains in place until it reached the consumer. The intent is that the packaging would maintain the integrity of the product and prevent any contamination or alteration. Packaging that does not maintain the integrity of the food would not be exempt. Examples of this would be: clamshells with perforations, cardboard boxes, plastic bags with holes, netted bags, and vented crates. Also exempted would be certain types of processed foods. This would be produce that receives commercial processing with a kill step such as described in the Produce Safety Rule.
- Shell eggs where all eggs produced at a particular farm receive a treatment as outlined in the Egg Safety Rule.
- All produce that is listed as "Rarely Consumed Raw" in the PSR. (<https://www.fda.gov/files/food/published/FDA-Fact-Sheet-Produce-Safety-Rule-21-CFR-112-Rarely-Consumed-Raw-Produce-PDF.pdf>).
- Small Retail Food Establishments with less than ten full time employees would be fully or partially exempt based on their record keeping or if they purchased directly from the producing farm. Records identifying the farm would need to be kept for 180 days.
- There is a partial exemption for Farm-to-School or Farm-to-Institution programs. In these situations the food would be purchased directly from the farm, and records identifying the farm, would be kept for 180 days.
- Certain nonprofit food establishments that prepare or serve food would be exempt, such as food banks, soup kitchens, and nonprofit food delivery services. These entities must be 501(c) (3) compliant.
- Food for personal consumption.

The above is just a bit of the Traceability Rule. The complete rule can be found here: <https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-proposed-rule-food-traceability>.

If you have questions concerning the Traceability Rule, feel free to contact Carol Allen: (240) 994-5043, callen12@umd.edu.

Produce Safety Rule Training

Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in § 112.22(c) which requires, "At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration."

What to Expect at the PSA Grower Training Course?

The trainers will cover content contained in these eight modules:

- Introduction to Produce Safety
- Role of Maryland Dept. of Agriculture and On-Farm Readiness Reviews
- Worker Health, Hygiene, and Training
- Soil Amendments
- Wildlife, Domesticated Animals, and Land Use
- Agricultural Water (Part I: Production Water; Part II: Postharvest Water)
- Postharvest Handling and Sanitation
- How to Develop a Farm Food Safety Plan

In addition to learning about produce safety best practices, key parts of the FSMA Produce Safety Rule requirements are outlined within each module. There will be time for

questions and discussion, so participants should come prepared to share their experiences and produce safety questions. Appropriate time will be made for breaks at the discretion of the instructors.

Registration includes course materials (Produce Safety Rule Grower Training Manual v1.2) and Course Certificate from the Produce Safety Alliance upon successful completion of course materials.

Funding for this series of work described in this article is supported by the Food and Drug Administration (FDA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award U2FFD007444.

Hybrid Remote PSA Produce Safety Rule Grower Training

Date: Dec. 7 and Dec. 8, 2022

Time: Dec. 7 from 1:00 p.m. to 5:30 p.m. and Dec. 8 from 12:30 p.m. to 5:00 p.m.

Cost: \$35

Location: Online (via Zoom)

Registration Link: <https://MFSNproducesafety1222.eventbrite.com>

In-Person PSA Produce Safety Rule Grower Training

Date: Jan. 23, 2023

Time: 8:30 a.m. to 5:00 p.m.

Location: University of Maryland Extension-Frederick County Office, 330 Montevue Ln., Frederick, MD 21702

Registration Link: <https://MFSNproducesafety0123.eventbrite.com>



Andrew Kness, Senior Agriculture Agent
University of Maryland Extension, Harford County

Note: Data from 2021 is presented here since all 2022 trials are not yet harvested. 2022 results will be posted to the Maryland Agronomy News Blog.

Trials were established at the Wye Research and Education Center in Queenstown, MD (WYE) and the Western Maryland Research and Education Center (WMREC) in Keedysville, MD in 2021 to assess the efficacy of select fungicides for the suppression of foliar diseases of soybean. Soybean 'MAS3720 E3/STS' were no-till direct-seeded into soybean residue at 150,000 seeds/A on 18 May (WYE) and 26 April (WMREC) using a 10-foot no-till drill set on 7.5 inch row spacing. Plots were 30 feet long and established in a randomized complete block design with 5 replications and data collection occurred from the center 5 feet of each plot. Soybean cultivation practices were consistent with recommendations from the University of Maryland Extension. The trial consisted of seven foliar fungicide treatments and a non-treated control. Fungicide applications were applied with a backpack CO₂ sprayer with TeeJet 8003 nozzles calibrated to deliver 20 GPA at 35 psi to the center 80 inches of each plot. Fungicides were applied at the R3 growth stage. Treatments with subsequent applications were made 14 days later. Based on the disease history of these fields and monoculture soybean rotation, natural pathogen inoculum levels were utilized for disease infection. Disease severity from frogeye leaf spot (FGL; *Cercospora sojina*) was visually rated as the percent leaf area infected in the upper canopy from the center four rows of each plot at the R6 growth stage. Normalized Difference Vegetation Index (NDVI) ratings were collected between R6-R7 using a handheld Greenseeker® from the center rows of each plot. Yields were collected by harvesting the center 5 feet of each plot and data reported are adjusted to 13% moisture. Plots were harvested on 23 Nov at WYE and 24 Nov at WMREC. Seed quality ratings were recorded at WMREC due to the presence of *Diaporthe* spp. (stem canker), which can also infect seeds. A random sample of 100 seeds were collected from each plot and the number of discolored seeds was recorded. Data were analyzed using ANOVA and significant differences between treatments were separated using Fisher's Least Significant LSD (LSD; $\alpha=0.10$).

Growing conditions were generally favorable, especially at WYE, and we did not observe any ratable foliar fungal diseases. This is likely due to the weather conditions around pod fill, as well as the resistance package in the soybean variety; frogeye leafspot resistance rating of 8 on a 10-point scale (10 being the most resistant). Yields were exceptional at WYE and slightly above average at WMREC, with an average overall trial yield of 94.5 bushels per acre and 57.9, respectively. None of the treatments differed from the mean at either location. Miravis Top, Revytek, and Veltyma improved seed quality of *Diaporthe*-infected grain at WMREC. No phytotoxicity was observed with any of the fungicide treatments. All fungicide treatments, with the exception of Headline, significantly increased incidence of green stem compared to the non-treated control.

This research was funded by the Maryland Soybean Board. Special thanks to the Maryland Agriculture Experiment Station and the farm crew at the WMREC and WYE.

Treatment, rate/A and timing	WYE		WMREC		
	NDVI	Yield (bu/A)	NDVI	Seed Quality (%)	Yield (bu/A)
Miravis Top, 13.7 fl oz at R3	0.35 ab ^z	96.2	0.46 ab	26 b	60.5
Miravis Top, 13.7 fl oz at R1 fb	0.31 bc	97.2	0.50 a	10 d	59.2
Miravis Top, 13.7 fl oz 14 days after R3					
Revytek, 8 fl oz at R3	0.35 ab	96.1	0.52 a	28 ab	59.7
Revytek, 8 fl oz at R3 fb	0.36 a	95.3	0.54 a	14 cd	60.0
Revytek, 8 fl oz 14 days after R3					
Headline, 6 fl oz at R3	0.28 c	92.7	0.35 c	32 ab	58.1
Lucento, 5 fl oz at R3	0.31 bc	91.9	0.41 bc	31 ab	58.0
Veltyma, 7 fl oz at R3	0.34 ab	93.5	0.47 ab	22 bc	55.2
Non-treated control	0.29 c	92.5	0.35 c	38 a	52.7
<i>p</i> -value	0.0282	0.5743	0.0030	0.0034	0.4637

^z Means followed by the same letter are not significantly different based on Fisher's Least Significant Difference (LSD; $\alpha=0.10$).

2022 Corn Hybrid Trials

Nicole Fiorellino, Extension Agronomist
University of Maryland, College Park

The University of Maryland offers a fee-based, corn hybrid performance testing program to local and national seed companies. The results from these replicated trials provide agronomic performance information about corn hybrids tested at five locations in Maryland considered representative of the state's geography and weather conditions.

Hybrids tested in 2022 were entered by participating seed companies that were solicited for submission of hybrids. These hybrids represented those currently available for purchase to experimental lines still under evaluation. Select Pioneer hybrids were identified for use as checks in the test. The inclusion of the performance data for check hybrids that are proven performers in the Mid-Atlantic

region allows comparisons of newer hybrids to proven hybrids.

During 2022, 72 hybrids were tested using three maturity groups: early season (12 hybrids), mid-season (20 hybrids), and full season (40 hybrids). Each company designated maturity group assignments for hybrids they submitted. Check hybrids were included in each of the five tests

To view the entire 38-page report, [click the link here](#). Results are also posted on the Maryland Crops webpage at <https://psla.umd.edu/extension/md-crops>. Hard copies are available upon request through the Extension office free of charge.

Online Maryland Food Ventures Course

In this self-paced, online course, you will learn important information regarding starting or expanding a value-added food business in Maryland. Course topics include: product development, food safety and licensing, financing, and more! Registration is \$35 and can be found at go.umd.edu/mfvcourse. For more information or questions, please contact Shauna Henley, shenley@umd.edu or (410) 887-8090.



Save The Date! January 26, 2023

Central Maryland Vegetable Growers Meeting

NEW LOCATION: Hereford Fire Hall

Registration details to come in next month's newsletter



Great resources are just a click away!

Andrew Kness

Andrew Kness
Senior Extension Agent,
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Back-issues can be found at: <https://extension.umd.edu/locations/harford-county/agriculture-and-nutrient-management>



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If you need a reasonable accommodation to participate in any event or activity, please contact your local University of Maryland Extension Office.

Agronomy

Vegetable & Fruit

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Ag Notes

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Dates to remember

- 13 Dec.** Maryland Beef Webinar Series: Wintering Bulls & Cows. 7:30 PM. Online via Zoom. Free. [Register online](#).
- 14 Dec.** Women in Ag Webinar: Understanding Property Purchase Agreements. 12 noon. Online via Zoom. Free. [Register online](#).
- 15 Dec.** Private Applicator Pesticide Training. Baltimore County Extension Office. Contact Erika Crowl at ecrowl@umd.edu or (410) 887-8090 for details.
- 23 Jan.** Produce Safety Rule Training. UME Frederick. 8:30-5 PM. \$35. Register [online](#) or call (301) 405-1271.
- 26 Jan.** Central Maryland Vegetable Growers Day. Details to come in next month's issue.

- 26 & 31 Jan.** Owning and Renting Farmland: Legal Questions. 9:30-3:30 PM. Boonsboro and Chesapeake College. Free. Register [online](#) or call (301) 405-354.

December 2022