

Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION

January 2023

University of
Maryland Extension

Harford County
Agricultural Center

Suite 600
3525 Conowingo Rd.
Street, MD 21154
(410) 638-3255

M—F 8:00 a.m.—4:30 p.m.

Extension.umd.edu/harford-county

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Hello, Harford County!



Happy New Year! Here we are off to another new year—hard to believe. Last week, the USDA mailed the 2022 Census of Agriculture to all known agriculture producers in the United States; if you have not already responded online at agcounts.usda.gov, you now have the option to complete by mail. The deadline for your response is February 6, 2023.

I encourage all producers to complete the census as accurately as possible, as it is the most comprehensive dataset we have of agriculture in the United States down to the local level. These data inform decisions and influence policy at the local, state, and federal level, so it is very important that we accurately represent our industry. Your individual identity is not disclosed in the data. Full results of the 2022 Census of Agriculture will be released in 2024. To learn more, visit www.nass.usda.gov/agcensus.

I've also had some more questions regarding pesticide and nutrient management training. For more details on pesticide training, see page 5 of this newsletter. Regarding nutrient management voucher training, you can obtain credits by attending any number of our [winter crop meetings](#), such as the Harford County Agronomy Meeting on

The Extension office will be closed
January 2 for New Year's and January
16 for Martin Luther King Day

February 14. If you'd rather attend only nutrient management training, I will be holding a 2-hour program on February 23 from 1-3 p.m. at the Extension office. Also, if your nutrient management voucher expires in December 2022 and you already have your credits, you should be receiving a new voucher card in the mail from MDA in the next few weeks. If your voucher expires in 2023, you will not receive a new card until next year.

If you have any questions regarding your pesticide license, call MDA Pesticide Regulation at (410) 841-5710. For questions regarding your nutrient management voucher, contact MDA Nutrient Management Program at (410) 841-5959.

Also in preparation for the 2023 cropping year, don't forget to pull soil (and manure) samples to update your nutrient management plan. Please contact Tricia Hoopes (sooner rather than later) for your nutrient management needs.

Finally, I would like to bring to your attention the job openings found on page 7 of this newsletter. Please share widely to anyone you think may be interested. Have a safe and happy New Year!

Until next time,
-Andy



Sarah Everhart, Legal Specialist
University of Maryland, Agriculture Law Education Initiative

The University of Maryland's Agriculture Law Education Initiative and the Harry R. Hughes Center for Agro-Ecology, Inc. recently launched the [Agricultural Conservation Lease Builder](http://www.agleasebuilder.org) (www.agleasebuilder.org) to aid farmers and farm landowners, throughout the Chesapeake Bay Watershed, create agricultural leases. The Lease Builder is an online tool that guides users through questions about the farm and conservation practices to generate a customized draft lease with suggested provisions to support those practices. The tool is intended to support farmers and farm landowners to protect business interests, encourage environmental stewardship, and support on-farm conservation practices.

The Lease Builder asks for information such as landowner and tenant information, property information, the length of the lease, activities the farmer may practice, and the farm's conservation plan. The tool is free to use, and the entire process should take users less than an hour to complete. After

building a draft lease, parties are strongly encouraged to seek individual legal advice prior to execution.

According to Sarah Everhart, Senior Legal Specialist, Agriculture Law Education Initiative, "our hope is that new tool will help both farmers and farm landowners put their handshake agreement into a simple lease document. By referencing specific on-farm conservation practices in the lease, leasing parties can set clear expectations about stewardship and reduce the potential for legal conflict."

In addition to the Lease Builder tool, the site also valuable resources related to on-farm conservation, including information about common conservation practices, cost-share programs, and conservation planning. The Agricultural Conservation Lease Builder was funded by the Keith Campbell Foundation for the Environment. The tool can be accessed at agleasebuilder.org. Anyone with questions about the Agricultural Conservation Lease Builder may contact Sarah Everhart at severhart@law.umaryland.edu.

Central Maryland Vegetable Growers Day

Commercial Vegetable Growers are invited to the 2023 Central Maryland Vegetable Growers Meeting on Thursday, January 26, 2023.

Topics will include:

- Spotted Lanternfly Update
- Improving tomato and pepper fruit yield and quality
- Efficacy of Biosolarization for Weed Management
- MDA updates
-and more!

Date: Thursday, January 26, 2023

Time: 8:00 am– 1:30 pm

Location: Summit Manor Hall at Hereford Fire Company
510 Monkton Rd., Monkton, MD 21111

Cost: \$20.00 if you pre-register, or \$25.00 at the door, includes lunch

To register, call (410) 887-8090 or use the online form: <https://go.umd.edu/VGD2023>.

This meeting serves as Recertification for Maryland private pesticide applicators, Maryland nutrient voucher, and offers recertification credits for Pennsylvania pesticide applicators.



New location

Salt Testing in High Tunnels

*Emily Zobel, Agriculture Agent Associate and Jerry Brust, IPM Vegetable Specialist
University of Maryland Extension*

If you had plants in high tunnel this season that were showing drought and salt stress in the form of poor growth, thin canopy, excessive leaf drop, poor fruit set, poor yields, necrotic leaf margins, especially on older leaves that can curl, then you might want to consider testing your soil for high soluble salts. These excess soluble salts often come from compost, manure, or fertilizers frequently applied without sufficient water (rain) to leach them through the soil.

High soluble salt levels in the soil can harm crops via drought stress in several ways. First, they can draw water away from plant roots resulting in wilted foliage and damaged roots (Figure 1). The plant roots can also absorb the excess soluble salts in the soil but cannot metabolize them. The soluble salts enter the roots and are moved through the water-conducting tubes to the leaves, where the water transpires, gradually concentrating the salts to toxic levels.

Some vegetable crops are much more sensitive to soluble salts than others. Crops such as green beans, onions, and peas are the most sensitive, while cabbage, cucumbers, peppers, and potatoes are a bit salt tolerant. Broccoli, squash, and tomato are moderately salt tolerant.

Some possible remedies for high salts include having adequate drainage to help move salts out of the root



Figure 1. Lettuce seedling showing burned rootlets. Photo: Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org.

zone and flushing the soil with as much water as possible for several days. When doing this, slowly apply the water, so it seeps into the soil and does not runoff. After the season, it may be best to take the plastic off the high tunnel and allow rain and snow to move the salts out of the growing zone, but you need to know if you have high soluble salt levels first, so it's best to do a soil test.

2022 Maryland Soybean Variety Trials

*Nicole Fiorellino, Extension Agronomy Specialist
University of Maryland, College Park*

The University of Maryland offers a fee-based, soybean variety performance testing program to local and national seed companies. The results from these replicated trials provide agronomic performance information about soybean varieties tested at four locations in Maryland considered representative of the state's geography and weather conditions. Click [here](#) to download the full report or contact the Extension office for a hard copy.



Grain Marketing Update

Friday, January 6, 2023 from 9:00 a.m.-11:00 a.m. This will be a virtual meeting including speakers on various topics in grain marketing. Topics include local and national grain outlook for 2023, tax considerations, crop insurance, agricultural law, and crop budgets.

Please register at: <https://go.umd.edu/grainmarketing2023>

UNIVERSITY OF MARYLAND EXTENSION

AgFS Agriculture & Food Systems



Harford County MID-WINTER AGRONOMY MEETING

Tuesday, February 14, 2023 | 9 AM—3 PM

Grain farmers and ag professionals are encouraged to join University of Maryland Extension for this educational program focusing on production agronomy. **Doors open at 9:00 a.m.** and the program starts at 9:30 a.m. Guest speakers include regional experts and University of Maryland faculty covering topics such as:

- Preparing for tar spot in corn
- Ag Law update and solar “farming”
- Weed management update
- Alternative fertilizer sources for forage and pastures
- Regional ag agency and agribusiness updates
- MDA pesticide and nutrient management updates

Deer Creek Overlook
6 Cherry Hill Rd.
Street, MD 21154

\$12 registration includes morning refreshments and a hot lunch. Registration is \$20 after February 6.

RSVP by calling (410) 638-3255, e-mail akness@umd.edu, or complete and return the registration form below.

*Topics satisfy requirements for **Maryland pesticide and nutrient management renewal**. Pennsylvania pesticide credits also available.*

Return form with payment to: **3525 Conowingo Rd, Suite 600, Street, MD 21154**



Name: _____

Phone: _____

Address: _____

Email: _____

Number attending: _____ **× \$12 each = \$** _____ *Checks can be made payable to “HC EAC”*

Pesticide Training Options

*Erika Crowl, Senior Agriculture Agent Associate and Andrew Kness, Senior Agriculture Agent
University of Maryland Extension*

I have mentioned this in previous newsletters, but it is worth reiterating since I have gotten many questions regarding pesticide training.

Again this year we will be offering multiple ways to renew your private pesticide applicator license. If your license expires December 2022, you will need to get continuing education credits prior to spring in order to renew your license.

Option 1: An in-person re-certification training will be offered March 8, 2023 from 1-3 p.m. at the Harford County Ag Center. Credits will satisfy Maryland continuing education credits (CEUs) necessary to renew your private applicator license. There is no cost for this class, but please register ahead of time by calling the office at (410) 638-3255 or emailing akness@umd.edu. Please bring your applicator certification number with you to the meeting.

As a reminder, recertification credits will also be offered at our upcoming Extension winter production meetings, such as the **Harford County Mid-Winter Agronomy Meeting** on February 14 and Central **Maryland Vegetable Growers Day** on January 26.

Option 2: Watch pre-recorded, online webinars at your own pace through our University of Maryland Pesticide Portal. Visit <https://umeagfs.teachable.com/> to access the video series. These are best watched on a tablet or computer as there are questions embedded in each video.

Option 3: Complete the Pesticide Recertification Workbook that offers a 30-question quiz. Upon the completion, you will send the quiz to the Baltimore County Extension office and you will receive a notification that you have successfully passed the quizzes and credits have been submitted to the State Department of Agriculture for your pesticide license renewal. This workbook is also approved for three (3) Delaware credits and two (2) core Pennsylvania credits.

To order your free workbook, please call the Harford County Extension office at (410) 638-3255.

For those seeking a new Pesticide Applicator License, the next exam will be offered on March 8, 2023 at the Harford County Extension office from 9-11 a.m. Please call our office to sign up.

New Rules for Food Processing Residuals

Maryland Department of Agriculture [Winter 2023 Newsletter](#)

New regulations affecting how food processing residuals (FPRs) are applied to farmland take effect on January 1, 2023. The new rules aim to reduce farm odors and complaints while ensuring that these products are applied to fields based on their nutrient content. Here's what farmers need to know:

From March 1 – October 31

- FPRs must be directly injected into the soil resulting in 95% soil coverage, or
- Incorporated into the soil by the end of the day that the application is made using deep tillage to achieve 95% soil coverage.
- Beginning July 1, a harvestable crop or cover crop must be planted no later than 14 days after land application of the material is complete.

From November 1 through December 15

- Non-injectable FPRs may not be applied to land. This material must be stored until the last day of February the following year.
- Injectable FPRs may be injected into an existing crop or cover crop. A cereal grain or cover crop must be established on fields accepting the residuals if a crop is not present. Cover crops will follow the guidelines of Maryland's Cover Crop Program, but are not eligible for cost-share assistance.

Beginning December 16

- Injectable FPRs must be stored until the last day of February of the following year.

Questions: Please contact Dwight Dotterer at (410) 841-5877 or dwight.dotterer@maryland.gov.



Effect of Potash Fertility on Orchardgrass Yield

Andrew Kness, Senior Agriculture Agent and Erika Crowl, Senior Agriculture Agent Associate
University of Maryland Extension

Orchardgrass is a popular pasture and hay forage species and it requires relatively high fertility levels, especially in a hay system where nutrients are being exported from the field. To test and demonstrate the importance of potash (potassium) fertility in orchardgrass plantings, we established a replicated trial at the Western Maryland Research and Education Center. Three orchardgrass varieties were planted in a prepared seedbed at a seeding rate of 22 lbs pure live seed per acre using a drop-seeder on September 27, 2021. Plots were 6 feet wide by 20 feet long. Each variety received three fertility treatments: 1.) 0 lbs/A potash, 2.) 45 lbs/A potash (based on soil test), or 3.) 200 lbs/A potash, based on the potassium removal rate of 4 ton/A orchardgrass yield.

On March 23, 2022, 50 lbs/A nitrogen and 20 lbs/A phosphate (based on soil test) was top dressed to all plots. On April 8, 45 lbs/A potash (0-0-62) was top dressed on the 45 lb/A plots and 200 lb/A plots.

First cutting was done on May 23 using a small-plot forage harvester from the center 3 feet of each plot (Figure 1). Each plot was weighed and moisture subtracted to calculate dry yield. Following the first cutting, all plots received 50 lbs/A nitrogen in the form of urea and 75 lbs/A potash was top dressed on the 200 lbs/A plots.



Figure 1. Orchardgrass harvest.

Second cutting was performed on July 13 as described above, followed immediately by 50 lbs/A nitrogen. The third and final cutting was performed on September 16. Final fertilization of 80 lbs potash added to the 200 lbs/A plots and 50 lbs/A nitrogen was added to all plots on September 23.

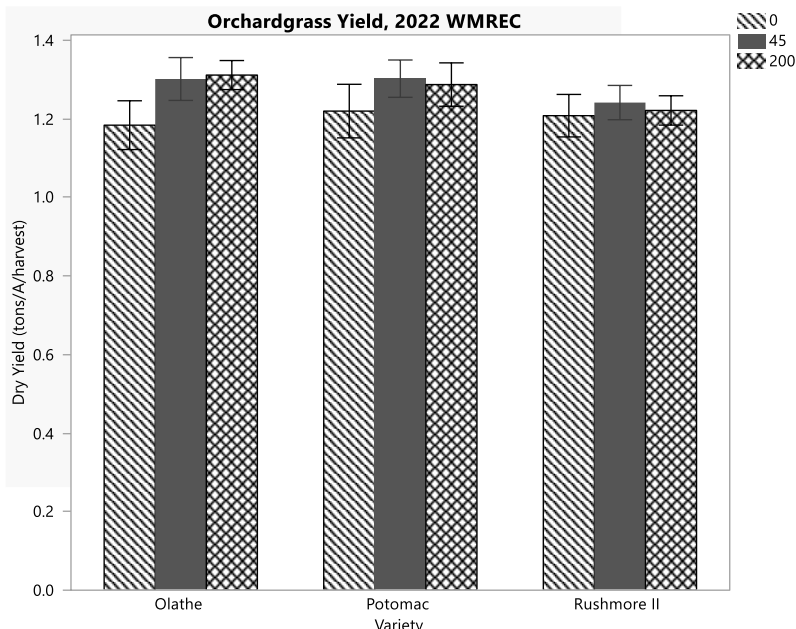


Figure 2. Average orchardgrass cutting yield by variety and potash treatment.

Yield data was compiled and analyzed in JMP statistical software package, differences were separated using Fisher's Least Significant Difference ($\alpha=0.10$).

Interestingly, Potomac, an old variety, yielded significantly more (3.96 tons/A) than Olathe (3.65 tons/A) and Rushmore II (3.67 tons/A). In terms of fertility, plots that received 200 lbs/A potash yielded significantly more than those that received 0 and 45 lbs/A (Table 1 & Figure 2).

We will continue this project in the coming years to collect more data and see how potassium fertility affects persistence and yield over the long term.

This work was supported by the Maryland Horse Industry Board and the University of Maryland AgFS Program. Special thanks to the Maryland Agriculture Experiment Station and the farm crew at the Western Maryland Research and Education Center.

Table 1. Orchardgrass yields in 2022 plots.

Potash Fertility	Average Yield/ Cutting (Tons/A)	Combined Yield (Tons/A)
0 lbs/A	1.23 a ^z	3.71 a
45 lbs/A	1.22 a	3.65 a
200 lbs/A	1.30 b	3.91 b
p-value	0.0328	0.0325

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

Job Openings

General Interest

Nutrient Management Advisor

The University of Maryland is searching for a Nutrient Management Advisor for Baltimore County (position number 127981). The best consideration date is **January 3**. All applications must be submitted online: <https://ejobs.umd.edu/postings/102571>.

4-H Program Assistant

The University of Maryland is hiring a 4-H Program Assistant in the Harford County Extension office. This position is not posted yet, but we anticipate it will be shortly after the New Year and will remain open for approximately two weeks. Go to www.ejobs.umd.edu and search for position number 103294. All applications must be submitted through the ejobs website.

UNIVERSITY OF
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EXTENSION

AgFS
Agriculture & Food Systems

2022-2023

CROP PRODUCTION MEETINGS

In-person and Virtual

University of Maryland Extension is excited to host local, in-person meetings along with statewide virtual meetings for the 2022-2023 production season!

AGRONOMY

Jan. 12, 2023	Carroll Co.	9:00 a.m. - 2:00 p.m.
Jan. 24, 2023	Lower Shore	9:00 a.m. - 3:00 p.m.
Jan. 26, 2023	Cecil Co.	9:00 a.m. - 3:00 p.m.
Feb. 14, 2023	Harford Co.	9:00 a.m. - 3:00 p.m.
Feb. 15, 2023	Mid Shore	4:30 p.m. - 9:30 p.m.
Feb. 22, 2023	Central Maryland	9:00 a.m. - 3:00 p.m.
Mar. 3, 2023	Queen Anne's Co.	7:30 a.m. - 1:30 p.m.
Mar. 2023	Howard Co.	TBA (evening)

FORAGE

Jan. 17, 2023	So. MD Forage Conf.	8:00 a.m. - 4:00 p.m.
Jan. 18, 2023	Western Maryland	9:00 a.m. - 4:00 p.m.
Jan. 19, 2023	Central Maryland	9:00 a.m. - 3:00 p.m.

FRUIT & VEGETABLE

Jan. 26, 2023	Central MD Vegetable	8:30 a.m. - 1:00 p.m.
Feb. 7, 2023	Eastern Shore Vegetable	8:30 a.m. - 3:00 p.m.
Feb. 9, 2023	Southern MD	8:00 a.m. - 4:00 p.m.
Feb. 28, 2023	Virtual Vegetable Meeting	8:00 a.m. - 12:30 p.m.
Mar. 2, 2023	Western Maryland Fruit	9:00 a.m. - 4:00 p.m.
Mar. 8, 2023	Virtual Fruit Meeting	8:00 a.m. - 12:30 p.m.

GRAIN MARKETING

Jan. 6, 2023	Virtual Meeting	9:00 a.m. - 11:00 a.m.
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ORNAMENTAL HORTICULTURE

Feb. 6, 2023	W. MD Com. Hort. Conf.	8:00 a.m. - 4:00 p.m.
Feb. 15, 2023	Est. Shore Pest Mgt. Conf.	8:00 a.m. - 4:00 p.m.
Feb. 22, 2023	So. MD Lan. IPM Conf.	8:00 a.m. - 3:30 p.m.

Dates and times are subject to change

This institution is an equal opportunity provider

FOR MORE INFORMATION
OR TO REGISTER
go.umd.edu/CPM2023



PESTICIDE APPLICATOR,
NUTRIENT MANAGEMENT AND
CERTIFIED CROP ADVISOR CREDITS
WILL BE OFFERED

go.umd.edu/PesticideNutrientMgmt

Andrew Kness

Andrew Kness
Senior Extension Agent,
Agriculture and
Food Systems



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Back-issues can be found at: <https://extension.umd.edu/locations/harford-county/agriculture-and-nutrient-management>



akness@umd.edu



Great resources are just a click away!

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.

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

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Dates to remember

06 Jan. Grain Marketing Update. Online via Zoom. 9-11 AM.
Free. Register [online](#).

19 Jan. Central Maryland Forage Conference. Midway Fire
Company. 9-3 PM. \$20. Register online or call (301) 600-
3576.

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. 8:30-1
PM. Hereford Fire Hall. Register [online](#) or call (410) 887-
8090.

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.

14 Feb. Harford County Mid-Winter Agronomy Meeting. 9-3
PM. Deer Creek Overlook. \$12 in advance, \$20 at door.
Register by calling (410) 638-3255.

23 Feb. Nutrient Management Voucher Training. 1-3 PM.
Harford County Extension Office. Free. Register by calling
(410) 638-3255 or email akness@umd.edu.

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