## GRAIN STORE

#### 2022-2023

Maryland Grain Producers Annual Report

Maryland Grain Producers 210 Fallen Horse Circle Suite 100 Queenstown, MD 21658 443-262-8491 www.MarylandGrain.org

#### Photo Credit: Tyler Rahmer

This past year brought a number of supply chain delays and inflationary challenges. Maryland Grain Farmers kept their head up and prayed for the grain market to reflect input prices. Producers across the state successfully harvested 62.7 million bushels of corn, 13.2 million bushels of wheat, and 1.3 million bushels of barley.

Through the Maryland Grain Producers Utilization Board (MGPUB), checkoff funds continue to help you! Funds are being used for new research, growing your markets, and educating the public about agriculture. For 2023, the board voted to fund 46 grants, totaling an investment of \$1,166,124. We are excited to see check-off funds hard at work to grow our industry.

We hope to see you in person at the **2023** Maryland Commodity Classic on Thursday, July 27th. This past year, we awarded \$15,000 in scholarships and awarded Mr. Mark Fuchs as the 2022 Dr. Miller Awardee. Thank you for your dedication to the future of agriculture.

If there is anything our board can do for you, please reach out to any representative on the board, listed on page 16.

Sincerely, Steve Ernst, President Maryland Grain Producers Utilization Board



## ASSOCIATION

A grassroots membership organization that represents your interests in regulation and policy issues so that you can focus on raising the best crop you can.



#### **Officers**

President: Justin Brendel Vice President: Chris McDonald Treasurer: Bobby Guy Secretary: Charlie Cox

## UTILIZATION BOARD

Implements the Maryland Grain Check-off Program, collecting funds and providing grants focused on market development, research, and education for the collective benefit of Maryland farmers.



#### <u>Officers</u>

President: Steve Ernst Vice President: Matt Morris Treasurer: Melvin Baile Secretary: Allen Davis



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## STAFF

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#### **Become A Member Today!**

Scan the code below to support the Maryland Grain Producers work in Annapolis.



## EDUCATION FUNDED GRANTS

12 Grants Funded, totaling \$317,000 in 2022

#### Road Safety Campaign, Education for SMV Drivers

The <u>Maryland Soybean Board</u> embarked on a Road Safety Campaign to address the growth of dangerous encounters between motorists and drivers of slow-moving vehicles on public roads in response to their Rural Road Safety Study. Implementation of this community awareness campaign calls attention to the unique measures required to drive safely near farm equipment and similar slow-moving vehicles. Utilizing the campaign www.FindMeDriving.com website and affiliated social media platforms, safe driving messaging was shared. A Tractor College for farmers and their employees was conducted to disseminate information on legal requirements and best practices for operating farm trucks, machinery, and slow-moving vehicles. Educational materials, featuring the campaign mascot SAM, were distributed at community events statewide. With supporting partners, the overall campaign has reached millions of drivers through billboards, public exhibits, social media, and online advertising to decrease the amoun of, cost, and severity of farm vehicle-related crashes on Maryland roads.

Funding from MGPUB | 2022 - \$8,500 | 2023 - \$18,700

#### **Amplifying Leadership**

Maryland grain check-off funds helped <u>U.S. Farmers and Ranchers in Action</u> deliver four specific program areas! *Farm Table* brings farmers and ranchers together to amplify their voices on a national scale. Board member, Jennie Schmidt was featured in May! *Food 360* works with farm and food leaders to co-create 21st-century food systems. *Food Hive* coordinates with partners and stakeholders and provides awareness of U.S. farming and its role in the global food system. Lastly, *Science Sense Program* has world-class scientists and sustainability professionals who collaborate to accelerate action on sustainable food and ag research.

Funding from MGPUB | 2022 - \$65,000 | 2023 - \$65,000

#### Zero Lives Lost, Grain Bin Safety

In 2022, Maryland funded four grain bin safety rescue tubes and trainings across the state through <u>Nationwide</u>. Tubes were placed in Cumberland, Bel Alton, Leonardtown, and Hebron Maryland. A full list of safety tubes can be found on our website! Providing resources to save farmers, is one thing the board is very invested in!

Funding from MGPUB | 2022 - \$20,000 | 2023 - \$20,000

#### Curriculum Delivered to LEAD MD Fellows in 2022

<u>LEAD Maryland</u> develops leaders to serve agriculture and rural communities by providing educational, training, and personal growth opportunities for program participants, called Fellows.

A new class of 25 Fellows, Class 12, met for their first seminar in January 2022. In September, Fellows explored more in-depth the Chesapeake Bay watershed, restoration, and conservation. Later in November, Fellows gained a larger understanding of the poultry industry and their relationship with Maryland's grain industry.

Funding from MGPUB 2022 - \$20,000 | 2023 - \$25,000



## EDUCATION CONTINUED

#### Addressing Consumer Questions about Food & Farming

The <u>Mid-Atlantic CommonGround</u> program provides volunteer farmers opportunities to reach consumers with a positive, factual story of agriculture. The goal is to build trust between consumers and farmers in the food system, showing that farmers share consumers' values and concerns. Mid-Atlantic volunteers resulted in conversations and information sharing with more than 160,000 consumers through presentations, exhibits, and social media. Farm stories are shared with credible, third-party science and research to increase consumer trust. Information is presented following the CommonGround philosophy of being inclusive of all types of agriculture and farming methods, speaking with a positive attitude, providing credible information with science-based facts, and using real stories from the farm.

Funding from MGPUB | 2022 - \$12,000 | 2023 - \$15,000

#### **Providing FFA Program Incentives**

The 2022 MGPUB Grant helped the <u>Maryland FFA Foundation</u> provide valuable educational and leadership experiences for students. Funds were also used to support Career Development Events, convention speakers, and workshops for the Regional Leadership Conference. Students benefited from these funds by testing their skills, hearing from outstanding speakers, and exploring new ideas and leadership skills.

Funding from MGPUB | 2022 - \$14,500 | 2023 - \$14,500



#### My Maryland Farmers

A consumer-engagement project that reaches Marylanders through a blog, website, and social media to introduce the public to all aspects of Maryland agriculture. Regularly citing farmers from across the state, My Maryland Farmers helps to bridge the communications gap between consumers and local farms. Since its inception in 2017, the project has produced tremendous results on social media and continues to grow as a respected and trusted source of information about food and farming. In 2022, six blogs focused on Maryland grain production received 2,199 views and reached 102,167 consumers on social media! Be sure to follow along online.

Funding from MGPUB | 2022 - \$10,000 | 2023 - \$10,000

#### Maryland Envirothon 2022 Award Scholarship

Educating tomorrow's decision-makers on the importance of conservation is vital to the health of our agriculture, natural resources, and the Chesapeake Bay. The 2022 MD Envirothon helped students become more involved in protecting natural resources by challenging their problem-solving skills and instilling a sense of stewardship in these future leaders. Statewide, over 500 students participated and check-off funds were presented as scholarship checks to each student on the first, second, and third place teams at the conclusion of the event.

Funding from MGPUB | 2022 - \$5,000 | 2023 - \$5,000

## EDUCATION CONTINUED

#### **Kids Growing with Grains**

The Washington County 4-H Youth Development Program, a part of the University of Maryland Extension, presents an agricultural education and literacy program for all schools in the county. Since 2012, 3,706 students have taken part in this program, which has provided over 22,236 contact hours of positive youth development and experiential ag education. The program is comprised of five sessions that are designed to educate youth about the importance of agriculture, the utilization of grains in the diets of people and livestock, the nutritional value of whole grains, and how to identify food products made from grains.

Funding from MGPUB | 2022 - \$1,000 | 2023 - \$2,000

#### Maryland Farm & Harvest

A multimedia series that puts a human face to farming, Maryland Public Television recently launched its tenth season! Viewers travel the state to see and experience what it is like to run a 21st-century farm. As MPT's #1 rated regional show, Maryland Farm and Harvest has attracted over 15 million viewers. This year, Farm and Harvest cover 14 stories related to grain production and use. You can view these segments every Tuesday at 7 PM or online at mpt.org/programs/farm/.

Funding from MGPUB | 2022 - \$150,000 | 2023 - \$175,000

#### Mobile Science Lab & Showcase

The Maryland Agriculture Education Foundation conducts numerous programs throughout the year in an effort to increase the ag literacy of Maryland's students, educators, and citizens. MAEF's Amazing! Maryland Agriculture Showcase engages consumers of all ages at fairs, festivals, and other large events across the state. Seven schools, reaching 4,500 students, in Central Maryland, took advantage of rebooking sponsorships in addition to a showcase visit. Check-off funding also supported three fairs allowing fairgoers to view the many aspects of agriculture.

Funding from MGPUB 2022 - \$5,000 | 2023 - \$5,000

#### Close Encounters with Agriculture

Working with the University of Maryland Extension, Close Encounters with Agriculture is an in-person field trip program designed to promote and increase the understanding of agriculture among urban youth and their families. The program is intended for public and private school 4th-grade students in Montgomery County and reached 3,448 students in 2022. The program demonstrates the inter-relationships and positive aspects of production agriculture, nutrition, and the environment.

Funding from MGPUB | 2022 - \$6,000 | 2023 - \$7,000

## 2022 RECOGNITION

#### Dr. James R. Miller Award

Thank you to Mark Fuchs for his lifetime dedication to Maryland grain farmers' advancement, success, and profitability.

Mark grew up as one of twelve children on his family's dairy and grain farm in Denton, Maryland. Mark attended the University of Maryland and earned his degree from the College of Agriculture in Dairy Science in 1976. Then, Mark spent nearly 28 years as an agronomist at Southern State Cooperative providing sound agronomic advice to Maryland farmers. He continued his career at Specialty Fertilizer Products and Verdesian Life Science before his retirement. More about Mark can be found online at marylandgrain.org/dr-miller-award/.



#### **<u>2022 Scholarship Recipients</u>** Scholarships valued at \$3,000 were awarded to five member families.

**Chad Patterson** was raised on a dairy and grain farm in Chestertown, Maryland, Chad Patterson is currently a junior at Purdue University. At Purdue, Chad is working towards a degree in Agricultural Systems Management to bring efficiency back to the family's multi-generational farm.

**Parker Miller** recently graduated from Kent County High School and attends the University of Maryland, College Park majoring in Agribusiness and minoring in Soil Science. Parker was raised on his family's grain farm in Kennedyville, Maryland, and enjoys being an advocate for agriculture in school and through 4-H.

**Caroline Wilson** recently graduated from North Dorchester High School and plans to major in Agribusiness at the University of Mount Olive in North Carolina. Aside from her experience in 4-H, Caroline has been employed by Nice Farms, packaging their dairy products, and also has experience working on a commercial poultry farm.

**Alexis Langenfelder** is a Junior at Delaware Valley University where she is majoring in Agribusiness. Alexis was raised on her family's grain and livestock farm in Kennedyville, Maryland, and when home can be found working alongside her family raising and selling pork.

**Makenzie Hereth** was born and raised on a grain and livestock farm in Woodbine, Maryland. Makenzie is the fourth generation of her family's farm and currently attends Iowa State University majoring in agriculture communications.



## MARKET DEVELOPMENT FUNDED GRANTS

8 Grants Funded, totaling \$453,148 in 2022

#### E85 Infrastructure and Education Project

<u>Sustainable Energy Strategies</u> worked to educate Maryland retailers and decision makers on the use of higher blends of ethanol and the opportunities for grant funding. With 56 flex fuel stations in operation, Maryland drivers have more choices at the pump than ever before. Each public station sells an estimated 800,000 to 1,400,000 gallons of ethanol-blended gallons annually, representing about 10 million bushels of corn.

Funding from MGPUB | 2022 - \$52,616 | 2023 - \$38,802

#### Working Together to Build Demand



The <u>U.S. Grains Council</u> was focused on finding new demand, building on it, and keeping markets open for U.S. corn, DDGS, and ethanol. The team worked hard to drive the first DDGS container shipment ever received by Tunisia. Next, the team partnered with a local distributor to demonstrate the benefits of DDGS in beef cattle feed rations. The USGC also recently signed an MOU with Audin Adnan Menderes University that will result in a new aquaculture training center in Turkey. Lastly, to provide information about the quality of the most recent U.S. corn crop at harvest as it enters the international merchandising channels, USGC shares Quality Reports annually.

Funding from MGPUB | 2022 - \$85,411 | 2023 - \$86,241



#### **National Association of Wheat Growers**

<u>NAWG</u> has been busy working on behalf of state wheat associations, by being at the forefront of the U.S. Department of Agriculture's Emergency Relief Program and addressing food security following Russia's invasion. Involvement continues around trade, agriculture appropriations, environmental regulations, tax reform, and more! Lastly, the Foundation has conducted several leadership trainings, continued the National Wheat Yield Contest, and held educational events, such as the Farm Tour at Eric Spates' this June.

Funding from MGPUB | 2022 - \$11,000 | 2023 - \$12,000

#### **National Barley Growers Association**

The <u>National Barley Growers Association</u> works to keep producers aware of a variety of issues. Specific issues of focus this past year included increasing federal research funding on the scab and pest initiatives and small grains genomic initiative while maintaining farm program and federal crop insurance.

Funding from MGPUB | 2022 - \$1,421 | 2023 - \$1,678

## MARKET DEVELOPMENT CONTINUED

#### MAIZALL

The International Maize Alliance represents 50% of total global corn production and currently 80% of total global corn exports. This past year, MAIZALL has continued outreach in Mexico and held a mission there in August. In October, MAIZALL directors traveled to Argentina for the International Maize Conference. President Zerboni moderated a panel to discuss international policy issues. The alliance was involved in a number of other great corn trade and use events across the world.

Funding from MGPUB | 2022 - \$10,000 | 2023 - \$10,000

#### **Base and Team Funding**

The <u>National Corn Growers Association</u> continues to propel the corn industry forward and advance its vision to sustainability feed and fuel a growing world. NCGA's staff and grower-led action teams and committees advance that vision through four strategic priorities: enhancing productivity and environmental sustainability; increasing demand, strengthening customer and consumer trust, and protecting profitability.

Funding from MGPUB | 2022 - \$120,000 | 2023 - \$96,000

#### **Developing Export Markets for Maryland's Wheat Producers**

This past year, the <u>U.S. Wheat Associates</u> used its grant to demonstrate to overseas buyers the functional value and performance of flour from soft red winter wheat. A major challenge for U.S. wheat continues to be competition from Black Sea suppliers and the EU markets. Despite a number of challenges, USW has been successful in its efforts to create and maintain demand by promoting the quality, value, and reliability of U.S. wheat to international customers.

Funding from MGPUB | 2022 - \$47,700 | 2023 - \$51,700

#### Education, Press, and Administration for Utilization Board

The <u>Maryland Grain Producers Association</u> provided public relations, education, and market development for Maryland's grain industry on behalf of MGPUB. Check-off funds supported the organization of the annual Commodity Classic, the successful administration of five student scholarships, updated website maintenance, current news coverage, recognization at state and national meetings, consumer and student outreach, and much more. Be sure to sign up for weekly news and follow along on Facebook and Instagram.

Funding from MGPUB | 2022 - \$125,000 | 2023 - \$150,000







## NATIONAL CORN YIELD CONTEST

#### **Conventional Non-Irrigated**

- 1. John Alexander Rigdon from Jarrettsville with a yield of 323.76
- 2. William Vickerman Riggs IV from Church Hill with a yield of 296.78
- 3. Reagan Joan Riggs from Church Hill with a yield of 275.47

#### **No-Till Non-Irrigated**

- 1. Drew Haines from Middletown with a yield of 382.84 nationally ranked first
- 2. Brad Rill from Hampstead with a yield of 273.99
- 3. Isaac Riggs from Lothian with a yield of 266.08

#### Strip, Min, Mulch, Ridge-Till Non-Irrigated

- 1. Andrea Rigdon from Jarrettsville with a yield of 324.99 nationally ranked first
- 2. David Hill from Kennedyville with a yield of 270.88
- 3. Michael R Harrison from Woodbine with a yield of 270.63

#### **Conventional Irrigated**

- 1. William Rigdon from Jarrettsville with a yield of 322.35
- 2. Doug D Scott from Hurlock with a yield of 282.54
- 3. Michael J Wood from Denton with a yield of 270.08

#### **No-Till Irrigated**

- 1. Chad Rigdon from Jarrettsville with a yield of 324.01 nationally ranked second
- 2. Dan Dulin from Queen Anne with a yield of 286.67
- 3. David & Ronnie Andrews from Hurlock with a yield of 272.64

#### Strip, Min, Mulch, Ridge-Till Irrigated

- 1. Temple Rhodes from Centreville with a yield of 344.94 nationally ranked third
- 2. Julia Rigdon from Jarrettsville with a yield of 324.04
- 3. Brian Tull from Seaford with a yield of 304. 22

## NATIONAL WHEAT YIELD CONTEST

#### **Dryland**

1. William Willard from Frederick with a yield of 121.73

## RESEARCH FUNDED GRANTS

16 Grants Funded, totaling \$206,502 in 2022

#### **Grid Sampling Soils to Improve Crop Yields**

Variability in soil land landscape characteristics reduces yield response to management techniques, particularly regarding seeding rates and fertilizer additions. One method to uncover soil variability and crop response is to use precision soil sampling, including either grid or zone methods. Check-off funds helped produce 90x90 foot grid maps of the UD irrigation research farm, with initial observations uncovering management-related pH issues and field patterns in micronutrients that were not similar to each other.



Corn N and population studies were also performed under irrigated and rainfed conditions, with irrigation boosting yields by 80 bushels under dry 2022 conditions. Nutrient uptake of N and S increased with yield, but only under irrigated parts of the field. Micronutrients could be higher in both higher-yielding irrigated plots as well as the lowest-yielding rainfed plots, indicating that micronutrient uptake (Zn and Mn) could indicate a stressed environment.

University of Delaware | Jarrod Miller | Funding from MGPUB | 2022 - \$8,563 | 2023 - \$11,890

#### **Optimizing Early Season Insect Pest Management**

Ph.D. student Maria Cramer and Dr. Hamby compared two early-season insecticides and an untreated control in a three-year study replicated at three research farms across the state. Regardless of whether a Bt or non-Bt hybrid was planted, seedling pest pressure tended to be low and not yield-limiting; therefore, input costs could be reduced or eliminated without a reduction in yield. However, this low pest pressure is the result of crop rotation, regional pest suppression from Bt corn, and a history of soil insecticide use and effective weed control. As with all pest control decisions, choosing to use or not use preventative treatments should be based on knowledge of pest pressure patterns in the region as well as on your farm.

University of Maryland | Dr. Kelly Hamby | Funding from MGPUB | 2022 - \$18,000

#### **Determine the Best Systems Approach to Managing FHB**

Project objectives are: 1) Evaluate the integrated effects of fungicide treatment and genetic resistance on FHB and DON in soft red winter wheat, with emphasis on a new combination of fungicides; and 2) Compare the efficacy of Prosaro Pro and Spharex to that of Prosaro and Miravis Ace. In October 2021, plots of wheat were replicated at two farms in Maryland. Planned fungicide sprays on resistant and susceptible wheat and barley plots at previously decided time points of flowering were done in May 2022. After 25 days of flowering, FHB severity and incidence were recorded. Harvesting was done in July and results were obtained later that month from a USDA lab. Sphaerex and Prosaro Pro were significantly effective in controlling FHB and DON content in susceptible as well as resistant varieties.

University of Maryland | Dr. Nidhi Rawat | Funding from MGPUB | 2022 - \$20,000 | 2023 - \$25,000

## RESEARCH CONTINUED

#### **Phytoremediation of Soils with High Phosphorus**

The University of Maryland currently maintains three long-term field sites where soil test P is monitored biennially on plots that have not received P application since 2001. Further evaluation of historic soil samples has been placed on hold, although the long-term grain rotation has continued. Yield data and grain nutrient concentrations are collected annually to monitor soil P drawdown and P removal in a grain rotation. This is one of the only long-term evaluations of long-term soil P drawdown in the country and we hope to provide valuable solutions to growers who are managing high P soils.

University of Maryland | Dr. Nicole Fiorellino | Funding from MGPUB | 2022 - \$8,373 | 2023 - \$9,619

#### **Developing Improved High Yielding Winter Barley Cultivars**

Continuous screening of barley germplasm to identify superior germplasm against biotic and abiotic stresses, growth parameters, quality traits, and flowering time is being completed at the University of Maryland. The team has identified 25 barley lines adapted to the Maryland environment which will be used as the parental line for making crosses. Since, Maryland has identified four excellent non-bearded barley lines, while yield evaluation is still in progress. Lastly, UMD tested seven advanced MD lines under the state tests and year-one data shows really exciting results (further testing is required for validation and promising results).

University of Maryland | Dr. Vijay Tiwari | Funding from MGPUB | 2022 - \$15,000 | 2023 - \$12,160



#### State Corn Test: Benchmark Hybrids

The University of Maryland performed a statistically sound and unbiased field trial to provide producers with an unbiased corn variety comparison. This sideby-side comparison is accomplished in a randomized complete block design, replicating and randomizing corn varieties across a field. The test was successfully conducted in 2022 at five locations across Maryland. Results can be found online through the Medius.Re platform from the grain producer's website.

University of Maryland | Dr. Nicole Fiorellino Funding from MGPUB | 2022 - \$8,286 | 2023 - \$8,664

#### Improvement and Development of Barley For Malt, Feed, Food, and Forage

This past year, breeding efforts were focused on the development and improvement of the yield potential of winter barley cultivars and a focus on the incorporation of value-added traits geared towards the development of new markets. This includes the development of dual-use malting and feed varieties that can meet either market class depending on management practices. Currently, five elite double haploid malt barley lines are being evaluated as potential release candidates, including one dual-use 6-row malt/feed barley that is being put up for release in the spring of 2023. Virginia Tech will continue to develop and evaluate new barley lines derived from crosses.

VA Polytech Institute | Nicholas Santantonio | Funding from MGPUB | 2022 - \$6,000 | 2023 - \$6,000

## RESEARCH CONTINUED

#### **Developing Improved High Yielding SRW**

Dr. Tiwari is leading the Maryland Small Grain Breeding Program and is focusing on three objectives to develop and improve soft red winter wheat cultivars. Check-off funds were utilized to evaluate 32 advanced MD wheat lines under the statewide yield trial at four locations across the state this past growing season. One of these Maryland lines placed fourth with a yield of 108.6 bushels per acre. Secondly, the team is speed-breeding headrows from different populations. Currently, 200 double haploids are being tested in the field for FHB resistance. For the final objective, UMD has identified 45 advanced lines and plans to increase the seeds for state and regional tests. The high-yielding lines that will be sent to the trials to be analyzed and later selected/licensed.

University of Maryland | Dr. Vijay Tiwari Funding from MGPUB | 2022 - \$25,000 | 2023 - \$41,344

#### Micronutrient Zinc to Enhance Yield in Corn

Micronutrient Zinc deficiency can cause a serious decline in corn yield. Dr. Dixin applied multiple doses of Zn at a depth of 4 inches below the soil level and 2 inches below the seed level using a strip-till machine. With one year of data, under drought conditions, positive effects were observed across the board. Economically it costs about \$60 an acre and showcased a 28 bu/A yield increase. The goal is to continue this study to compare results.

University of Maryland Eastern Shore | Dr. Naveen K Dixit | Funding from MGPUB | 2022 - \$23,567 | 2023 - \$12,500

#### Effects of Increasing Corn Tissue Boron & Sulfur Concentrations

As anions, SO4 and B leach easily from the soil surface, potentially leading to S deficiencies in grain crops. In this study, UD observed whether increasing S and B fertilizer applications separately or concurrently affected tissue N concentrations as well as overall yield. Yields ranged from 212 to 217 bushels per acre among the six treatments but no differences between the treatments were observed. This is similar to treatment effects the previous season, which just emphasizes that sulfur and boron are not lacking or driving yield in these systems.

University of Delaware | Jarrod Miller | Funding from MGPUB | 2022 - \$7,206 | 2023 - \$9,635

#### Field Evaluations of Small Grain Cultivars for Scab Resistance

On average, the total estimated value of wheat harvested in our region was over \$220 million with wheat and barley combined. With that, the goal of the small grain trial center is to perform a critical evaluation of the public and experimental lines to provide robust data on the adaptability of the cultivar in the Mid-Atlantic environment, yield, diseases, and agronomic performances. This year, UMD received and tested 75 entries of wheat and 22 entries of barley across five locations across the state. Results can be found online through the Medius.Re platform, visit the Maryland Grain website for the link.

University of Maryland | Dr. Vijay Tiwari | Funding from MGPUB | 2022 - \$20,000 | 2023 - \$24,299



## RESEARCH CONTINUED



#### **Promoting Natural Suppression of Slugs**

Check-off funds were utilized for the first time to identify potentially impactful natural enemies of slugs and develop a method to maintain slug parasitic nematodes in the lab. Last spring, UD visited 15 fields and collected 1,030 slugs and 1,745 natural enemy specimens. Of the slugs, 2.9% were found to be infected with parasitic nematodes. These are currently being maintained while research continues. Otherwise, data is continuing to develop and results will be available after some more research is completed.

University of Delaware | Dr. Michael Crossley Funding from MGPUB | 2022 - \$12,879 | 2023 - \$10,808

#### Survey of Plant Parasitic Nematodes in MidAtlantic Corn

From 2016-2019 nematodes consistently ranked in the top 10 most destructive diseases of corn in the southern United States. From the 2022 soil survey, seven nematode genera were recovered with two additional genera present at the on-farm trial site. Lance nematode was present in 58% of fields and above high thresholds in 25% of fields. No notable differences in nematode populations or final yield were observed in the on-farm strip trial investigating the use of Lumialza as a nematicide seed treatment.

University of Delaware | Dr. Alyssa Koehler | Funding from MGPUB | 2022 - \$9,053

#### Improving K Fertilizer Recommendations

Corn K rate trials in two fields in Delaware and two fields in Maryland were established to provide potassium (K) correlation and calibration data to Fertilizer Recommendation Support Tool (FRST). The FRST database will provide a searchable tool for the development of regional nutrient management recommendations based on soil testing data without political and institutional biases. With only two years of data, results will be compiled and develop value as research continues.



University of Delaware & Maryland | Dr. Amy Shober & Dr. Nicole Fiorellino Funding from MGPUB | 2022 - \$18,330 | 2023 - \$19,984

#### Medius.Re

View check-off funded research through the Medius.Re database online! State variety trial results for corn and small grains can be accessed at anytime for performance data. Scan the code with your phone camera or visit the database at **maryland.medius.re**/.



## NEWLY FUNDED 2023 GRANTS

#### <u>Research</u>

- Evaluation of Biological Fertilizer Enhancement Products on Corn Production in Maryland
  University of Maryland \$11,793
- Understanding How Native Ground Beetles Can Contribute to Bioctonrol of Native and Non-Native Pest Slugs - University of Maryland - \$6,747
- Corn Planting Timing Effects on Yield, Herbivory, and Nutrient Update University of Delaware - \$9,654
- Support for an On-farm Trials Coordinator to Execute Commodity Research | University of Maryland - \$80,350
- Preliminary Research for Managing Tar Spot in MD University of Maryland \$4,362
- Field Evaluation of MD Triticale Cultivars University of Maryland \$12,500
- Yield Impacts of Late Planted Wheat University of Maryland \$8,565

#### <u>Market Development</u>

- Lower Shore Doe Harvest Farm Bureau's \$5,000
- 100 Years of Chicken on Delmarva Delmarva Chicken Association \$12,000

#### **Education**

- JA Inspire Junior Achievement \$5,000
- Queen Anne's County FFA Chapter Field Trip \$400

## MGPUB FINANCIAL REPORT

#### Income

Corn: \$1,374,632 Wheat: \$185,999 Barley: \$14,452 Oats: \$2,961

Sorghum: \$5,094

Interest/Other: \$13,560

#### **Expenses**

Market Development: \$393,795 Education: \$379,800 Research: \$218,192 Program: \$94,165 Refunds: \$68,141 Administration: \$30,187 Other: \$12,969

## 2022 SPONSORS

Atlantic Tractor Augusta Seed Company Bayer, Dekalb/Asgrow Binkley & Hurst LP Chorman Spraying Corteva Agriscience Crow Insurance Agency Daisey Insurance, Inc. Delmarva Chicken Association Delmarva Farmer Farm Credit Farmsite Technologies Farm Service Agency **Fulton Bank** Growmark FS Harry R. Hughes Center for Agro-Ecology Hoober. Inc. Hostetter Grain, Inc. King Crop Insurance Co. M&T Bank MARBIDCO Maryland Crop Improvement Association Maryland Farm Bureau Maryland Pork Producers Association Maryland Soybean Board MD Agricultural Conflict Resolution Service Messick's Mid-Atlantic 4R Nutrient Stewardship Association Mid-Atlantic Certified Crop Advisers Mid-Atlantic Seeds Mid-Atlantic Soybean Association **Mountaire Farms** Nagel Crop Insurance Nutrien Ag Solutions Perdue AariBusiness Pioneer Hi-Bred International. Inc. Pivot Bio Reverse Seed Rural MD Council Scott Insurance Scoular Company Shore United Bank & Wye Financial & Trust Sound Agriculture Syngenta LLC Tidewater Seed LLC Timac USA. Inc. Tri-Gas and Oil UMD Agriculture and Natural Resources UMD Extension - Talbot County **UniSouth Genetics** VA Farm Bureau Weller and Associates, LLC Willard Agri-Service



## BOARD OF DIRECTORS

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Travis Hutchison Dale Roe, Jr

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Region 2 | Caroline, Dorchester, Talbot

Allen Davis Rob Davis Chris McDonald

Region 3 | Cecil, Kent, Queen Anne's

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Melvin Baile, Jr Justin Brendel Mike Harrison, Jr

Chip Bowling Charlie Cox **Region 5** | Anne Arundel, Calvert, Charles, Prince George's, St. Mary's

Steve Ernst Matthew Morris **Region 6** | Allegany, Frederick, Garret, Montgomery, Washington

#### National Representatives

National Association of Wheat Growers - Eric Spates National Barley Growers Association - Steve Ernst National Corn Growers Association - Evan Miles, Jr U.S. Grains Council - Jennie Schmidt U.S. Wheat - Jason Scott

Howard

#### Advisory

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