# The Grain Store 2019-2020 FUNDING REPORT



# FROM THE PRESIDENT... BOBBY GUY

or over twenty years now, the Maryland Grain Producers Utilization Board has been working toward one goal—making Maryland farmers more profitable, efficient and understood by the public.

We utilize the investment of every Maryland grain grower to bring greater success to every farm. As you all know, 2019 was a tough year for trade. We are hoping there is a light at the end of the tunnel coming very soon. In light of uncertain trade agreements, MGPUB worked with our national partners to maintaining relationships and expand markets. We are thankful for our affiliate national grain and marketing organizations who work on our behalf to grow markets. As you will see in the market development section of this report, maintaining personal relationships with buyers in key international markets is an important part of weathering this tumultuous time in trade. As always, we appreciate our Maryland farmers who make their voices heard at the state and federal level. It is important for our elected officials to hear from farmers and how their decisions will have real impacts on you.

For several years now, you've read about our partnership with USDA and Virginia on a Biofuels Infrastructure Project. We are elated to report that we are now seeing the positive outcomes of that project in the form of ethanol sales and corn demand. The public stations installed through this project dispensed an estimated 12.4 million gallons of E85 in 2019; this is six times the demand of last year, far exceeding our projected sales. Maryland's E85 FlexFuel and 88-regular use generated an estimated 2.2 million bushels of corn demand the first nine months of the year. The growth in consumer understanding of and demand for ethanol can also be directly correlated to this check off funded project.

Research is an integral part of our mission. We funded projects to evaluate the efficacy of fungicides and seed treatments and improve barley varieties. MGPUB is excited about the revitalization of University of Maryland's small grains development program. These research projects are all funded with the goal of improving production while reducing costs for our growers. While summaries of research are included in this report, explore details further on their websites and join us at the Maryland Commodity Classic on July 23rd to hear more on the checkoff-funded projects and enjoy a day with fellow farmers.

We are dedicated to providing resources and services to growers that are well-researched, unbiased and based on the goals and direction of your board of directors. If you have any questions or suggestions, please reach out to me or any of your representatives on our board. We look forward to continuing to grow with you.



The MARYLAND GRAIN PRODUCERS UTILIZATION BOARD implements the Maryland Grain Checkoff Program, collecting funds and providing grants focused on market development, research and education for the collective benefit of Maryland farmers.



## ETHANOL MARKETING AND INFRASTRUCTURE DEVELOPMENT Sustainable Energy Strategies, Inc. | www.sesi-online.com

n large part due to MGPUB support, Maryland now has 30 public E85 flex fuel retail stations—of which 14 include 88-unleaded (E15). More are planned for 2020! Maryland has three additional state Department of General Services stations and an estimated half dozen federal stations. The public stations alone dispensed an estimated 12.4 million gallons of E85, six times the demand of last year and more than three times what

Royal Farms installs E85 Flex Fuel and Regular 88 pumps at the National Harbor which will save drivers money, reduce air pollution and increase corn grind.

was projected. Maryland's E85 flex fuel and 88 unleaded (E15) use generated an estimated 2.2 million bushels of corn demand in 2019, even more if government demand were included. This is three times the estimated demand projected for the year. SESI closed-out MGPUB's role in the USDA Biofuels Infrastructure Partnership Grant, including assisting with the final report and coordinating a station opening at the new Royal Farms refueling station at the National Harbor. This three-year project included ethanol fuel promotion, station visits, website development, advertising campaign and station/ partner communications. SESI educated consumers and retailers at public events and retail stations. Staff also responded to questions, both technical and logistical, from retailers, consumers and fuel suppliers. SESI also attended and presented at meetings, i.e. Fuel Ethanol Workshop, Clean Cities events, MAPDA (Maryland's petroleum association), and wrote articles for MAPDA and the DELMARVA Farmer. 2019 Funding \$14,110; 2020 Grant \$16,846

Partnering with national organizations builds a strong coalition to grow trade for Maryland products domestically and abroad.

# ROADSHOW INVESTIGATES IBERIAN MARKET POTENTIAL FOR U.S. DDGS **AND SORGHUM**

US Grains Council | www.grains.org

The U.S. Grains Council conducted a Portugal to promote U.S. sorghum and DDGS to key importers. These meetings built on the Council's positive momentum in the market by connecting potential business partners and learning more about their capabilities. Spain is a top market for U.S. coarse grains and co-products in Europe, importing more than 800,000 metric tons of U.S. sorghum and DDGS in the 2018/2019 marketing year, in addition to sales of U.S. corn and ethanol in the new marketing year. Production on the Iberian Peninsula is suffering from a drought, resulting in upwards of 17 million metric tons of feed grain demand and U.S. sorghum is an attractive alternative with duty-free access. Spanish nutritionists have also been evaluating the efficacy of DDGS for livestock production. USGC conducted conferences with stakeholders in Cartagena and Seville, finding significant opportunities for containerized DDGS shipments because of favorable port infrastructure, freight rates and buyers' willingness to take advantage of market savings. Finally, USGC worked in Portugal with more than 200 key stakeholders in the feed industry. Because this industry relies on Spanish barley, the drought also affects Portugal. As a result, Portugal will import more feedstocks from other origins this year, including the U.S. The Council will continue to work closely with buyers in the Iberian Peninsula to maintain these relationships, improve imports of U.S. sorghum and DDGS and develop prospects for demand growth. Chip Councell serves on USGC for Maryland. 2019 Funding \$78,750; 2020 Grant \$81,900

## **GROWING OPPORTUNITIES IN BARLEY**

**National Barley Growers Association** www.nationalbarley.com

Tn 2019, the National Barley Growers ▲ Association (NBGA) began implementing its new strategic plan, which included the publication of a monthly newsletter and upgrading the NBGA website. In April, NBGA staff and state representatives attended the Craft Brewers Conference in Denver, Colorado to further relationships with the growing craft beer industry. NBGA continues working to bring additional industry members into the organization. Among the many policy issues NBGA worked on this past year include: implementation of 2018 Farm Bill programs, working to include barley acres in the 2019 Market Facilitation Program payments from USDA, enactment of annual agriculture appropriations bill with funding for barley industry research priorities, enactment of free trade agreements such as the U.S.-Canada-Mexico Agreement and extension of the tax provisions that promote growth in the craft and traditional beer industry. Maryland's representative to NBGA is Jennie Schmidt. 2019 Funding \$1,915; 2020 Grant \$1,817



John Bruning, MGPUB Vice President, (center) graduated from the NCGA Leadership At It's Best program, advocating for Maryland grain farmers on Capitol Hill.

# BASE AND TRAINING FUNDING National Corn Growers Association www.ncga.com

The National Corn Growers Association **1** and its state corn organizations continue to lay the groundwork for future profitability in the corn industry. The Renewable Fuel Standard stands on firmer ground today than a year ago thanks to NCGA coordinated grower outreach to the Administration and Congress, strengthening the political support for renewable fuels at a critical time. With another near-record crop, NCGA continues to look beyond U.S. borders to find new markets by supporting free trade agreements like protecting NAFTA, monitoring negotiations around the new USMCA, and expanding opportunities for meat exports. NCGA's Consider Corn Challenge highlights research and business proposals that will ultimately create new uses for corn and expand market opportunities for corn farmers. NCGA is also laying the groundwork for the sustainability of the corn industry. The Soil Health Partnership has gained interest from all segments of food production. Other initiatives are working in partnership with state corn organizations to improve nutrient management, protect water quality and evaluate how corn can provide a new pathway for reducing carbon emissions. These efforts will help corn associations meet the future demands of our customers and consumers. NCGA director for Maryland is Chip Bowling. 2019 Funding \$230,000; 2020 Grant \$200,000

## PROMOTING FAVORABLE WHEAT POLICY National Association of Wheat Growers | ww.wheatworld.org

The National Association of Wheat Growers (NAWG) had a busy year working on federal farm policy. Wheat growers were successful in achieving many priorities in the 2018 Farm Bill and continues to be engaged with USDA in implementing those programs. Farm Bill priorities included maintaining a strong crop insurance program, improving ARC and PLC, maintaining and increasing funding for the Market Access Program and Foreign Market Development program, and prioritizing working lands conservation programs. The organization has also been at the forefront of important debates on issues including trade, agriculture appropriations, environmental regulations, tax reform, the regulatory new breeding technologies framework, and many others. NAWG's efforts led to several key wheat research programs receiving funding increases in the FY 2019 agriculture appropriations bill and draft FY 2020 funding bills. NAWG's Foundation has also conducted several leadership training programs, continued its National Wheat Yield Contest, and led several public and Congressional educational events, including a wheat value chain program on Capitol Hill and a Congressional farm tour at NAWG Director Eric Spates' farm in Maryland. In addition, NAWG has continued to work with member states to ramp up communications activities. 2019 Funding \$13,000; 2020 Grant \$13,000



Eric Spates is the Maryland representative to NAWG, here hosting a NAWG congressional farm tour on his Montgomery County farm

## **DEVELOPING EXPORT MARKETS FOR** MARYLAND'S WHEAT PRODUCERS US Wheat Associates | ww.uswheat.org

In 2018/19 (June 1 to May 31), U.S. Wheat Associates (USW) used its MGPUB grant and 16 other state wheat commissions to earn federal matching funds and continue demonstrating to overseas buyers the functional value and performance of flour from soft red winter (SRW) wheat. SRW exports for 2018/19 reached their largest volume export sales since 2014/15 at 3.33 MMT. This 32% increase is related to competitive export pricing and growing demand for SRW characteristics in Latin America other regions. Activities included: reinforcing U.S. wheat commitments to the crucial Mexican SRW market at a successful buyers conference; establishing the first cereal grains testing and education institute in South America; holding the first series of formal crop quality seminars in South America where Jason Scott, Maryland's director at USW, provided producer perspective to buyers; bringing Brazilian flour millers to see SRW breeding, production and handling just before Brazil announced it would open a duty-free TRQ for imported wheat; continuing to build relationships with soft wheat users and encourage SRC flour quality analysis to demonstrate SRW's superior performance for cakes, pastry and cookie production; support from more competitive prices. 2019 Funding \$53,400; 2020 Grant \$47,800

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# TRENDS IN SOIL TEST PHOSPHOROUS University of Delaware | www.udel.edu

Field sites receiving long-term applications of manure and/or inorganic P fertilizer at Georgetown, DE and Chestertown, MD were maintained through 2018; soybeans were planted and no P treatments were applied. Soybean yields for plots receiving 8 ton/A poultry litter had higher yields (62.1 bu/A) than plots receiving other treatments (55.6 bu/A on average) at Chestertown, MD. At Georgetown, DE, manure amended plots yielded 44.6 bu/A, on average, which was significantly higher than plots receiving no P or fertilizer. Routine soil samples from 2018 showed increases in soil test P following two applications of poultry litter at increased rates (2014 and 2016), with the highest rates of manure exceeding the 200 FIV. There was a trend for increasing soil test P since 2014 for plots receiving all manure rates. However, historical data suggests that soil test P can be reduced by cropping over time when total P applied is less than P removal. The plan is to continue maintenance of these historic sites, which will allow researchers to provide Maryland farmers with better information about the chemistry and fate of P in soils with a long-term history of manure or fertilizer applications. 2019 Funding \$4,500; 2020 Grant \$6,205

# EVALUATION OF THE USE OF POULTRY LITTER ON SOILS WITH HIGH PHOSPHORUS CONCENTRATION University of Delaware | www.udel.edu

University of Delaware | www.udel.edu University of Maryland, Plant Science www.psla.umd.edu/extension/md-crops

Maryland, and the greater Delmarva Peninsula, have high concentrations of phosphorus (P) due to long-term history of manure applications at or exceeding rates designed to meet crop nitrogen needs. Maryland's P-based nutrient management standards restrict manure applications on soils with high soil test P, thus, manure may not be applied where P loss potential is high or where soil test P concentrations exceed 500 UM-FIV. Unfortunately, in fields where only grains are harvested, it is estimated that it will take decades to reduce P concentrations to a point where manure can again be used at P-based rates to fertilize grain crops (Fiorellino et al. 2017, Kratochvil et al. 2006). This results in economic hardships for farmers, who need to purchase commercial fertilizers to supply nitrogen, potassium, and other nutrients (e.g., sulfur, manganese, boron, etc.) that were typically added at adequate concentrations with manure applications. The specific objective of this proposal is to evaluate the drawdown and transformation of P forms following grain cropping with no P application on soils with historic P buildup. The current University of Maryland field sites were maintained with a corn, wheat, double-crop soybean, and cover crop rotation, and collecting grain and soil samples to monitor trends in soil test P, grain yield, and crop P uptake as influenced by various soil test P concentrations. Research continuing on these field plots provides a more complete picture of soil P dynamics under P build-up and drawdown scenarios. Inclusion of data from additional study locations is providing a clearer picture of how P is removed from soil P pools in the soil. From the data presented from one location, it appears that more labile P pools are preferentially utilized in soils but all pools tend to be replenished from more recalcitrant soil P pools. This transformation among soil P pools as more labile P is removed must be considered as usage of P fertilizers are recommended after a period of P drawdown, as there may be large amounts of more recalcitrant P still present in these soils. 2019 Funding \$\$18,680; 2020 Grant \$4,874

# FARM STEWARDSHIP CERTIFICATION AND ASSESSMENT PROGRAM Maryland Association of Soil Conservation Districts | www.mascd.net/FSCAP

The Farm Stewardship Certification and Assessment Program recognizes farmers who go above and beyond when it comes to conservation. A farmer who is fully compliant with their nutrient management plan and has a fully implemented conservation plan addressing all resource concerns on their farm is eligible to be certified. MDA and conservation districts assist with reviews to certifying farms and recognizing farmers. All 23 counties have farmers recognized. 2019 Funding \$7,500

# NEW VARIETY DEVELOPMENT AND TESTING OF SMALL GRAINS IN MARYLAND FOR HIGHER YIELD AND DISEASE RESISTANCE

University of Maryland | www.psla.umd.edu/extension/md-crops/small-grains-maryland

Research is critical for farmers to implement the best practices for sustainability, protection of water and soil health, and maintaining economic viability as new products and technologies are developed.

S tate trials are an effective tool for an unbiased comparison of the performance of new and current small grains varieties. Investigators participated in five regional breeding nursery field tests, published the results of the 2019 Maryland State Wheat and Barley Trials, and planted the Trials for 2020. A high-yielding line, "Luisa" was released as a public variety that producers can save for cover crop or yield under higher input management systems. To help meet reduced wheat DON goals, the research group performed an inoculated scab nursery, which stress-tested all wheat and barley entries in the statewide trials for fusarium resistance. The trials showed a statewide performance spread of 21.6 bu/acre, from a maximum of 80.2 to a minimum of 58.6 bu/acre. A conservative estimate of the financial benefit to producers by selecting the highest yielding variety versus the average yield, would mean an average gain of 4.8 bu/acre, resulting in \$27.55 profit per acre with wheat at \$5.73/bu. Trial results can be found in detail on the small grains website. 2020 Grant \$6.500

# A REGIONAL SURVEY OF SOIL AND TISSUE TESTS TO OBSERVE CRITICAL NUTRIENT LEVELS University of Delaware | www.udel.edu

rissue and soil samples were tested from University of Maryland sites (Salisbury, Poplar Hill, Wye, Clarksville, Keedysville) and University of Delaware (Marydel, Georgetown) corn variety trials. The goal of the project was to observe whether corn tissue samples across the region were above critical nutrient contents as described by past literature. Two varieties each from the early, middle, and late maturity groups were sampled at each site. Ear leaf and soil samples (0-8 inches) were taken at R1 (July 2019), dried, and sent to the University of Delaware testing lab for analyses. Yields were collected in September 2019. Early maturity varieties had the lowest yields (208 bu/acre) compared to late (220 bu/acre) with the highest. In 2018 differences were not actually statistically significant, compared to 2019. Although a different field was used for the Marydel site, yields were highest there (255 bu/acre), similar to 2018. This year, Clarksville (251 bu/acre) also had greater yields, followed by Georgetown (231 bu/acre) and Keedysville (216 bu/acre). The absolute lowest average yields were at Poplar Hill (150 bu/acre). Although this study is observing nutrient concentrations across different soil types, another factor in average yields is irrigation. Marydel, Georgetown, and Salisbury all include irrigation in their management, which should be kept in consideration when comparing yields to nutrient concentrations. Ear leaf N concentrations improved over 2018, but only 61% of the samples were above the critical value of 3%. Many of these lower N samples were on sandier soils, so management of N fertilizer could possibly be improved. Almost all tissue samples had macronutrient (P, K, S) concentrations that were within published sufficiency ranges, although ear leaf S did show correlations with increased yield. Both Ca and Mg ear leaf levels did not show correlations with yield, although Mg was below the reported critical threshold. Tissue micronutrients (Mn, Zn, Cu, and Fe) were also above critical tissue concentrations in most samples. There was a negative trend with B and yield, mostly due to Poplar Hill samples, but B was also below the critical threshold of 10 ppm. The role of S and B in yield needs further examination. 2019 Funding \$7,042; 2020 Grant \$3,562

# **NEW GRANTS FOR 2020**

MOBILE AG SCIENCE LABS AND THE AMAZING MD AG SHOWCASE Maryland Agriculture Education Foundation | \$5,000

STATE CORN TEST
BENCHMARK HYBRIDS
University of Maryland | \$6,500

DEVELOPING IMPROVED
WINTER BARLEY CULTIVARS
University of Maryland | \$10,000

IDENTIFICATION OF TRITICALE
VARIETIES WITH BEST COVER
CROP POTENTIAL FOR MARYLAND
University of Maryland | \$10,000

OPTIMIZING EARLY SEASON INSECT PEST MANAGEMENT IN FIELD CORN University of Maryland | \$15,000

REGIONAL SURVEY OF SOIL
AND TISSUE TESTS TO UPDATE
CRITICAL NUTRIENT LEVELS
University of Maryland | \$6,954

USING WHOLE GRAIN TO INCREASE THE PROFITABILITY OF PASTURE-RAISED LAMB University of Maryland | \$9,646

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IMPROVEMENT AND DEVELOPMENT OF BARLEY FOR USE IN FEED, MALT AND FUEL VA Polytech Institute | www.pubs.evt.vt.edu

breeding efforts primarily focused on development and improvement of superior, widely adapted, high yielding winter barley cultivars and a major focus on incorporation of value added traits geared towards development of new markets. As interest continues to grow in locally

produced ingredients from the craft brewing industry in the mid-Atlantic and eastern U.S. finding malted barley is not easy for those located east of the Mississippi river. Therefore, the program's main effort is breeding winter malting barley cultivars that have superior malt quality and are well adapted to the mid-Atlantic and southeastern United States. Development of Double Haploid (DH) malting barley lines in collaboration with Oregon State University has recently begun. Current results are encouraging since Double Haploids allows development of

across the country as well as cultivars from around the world, especially

Europe. Meanwhile, an Eastern Mid-Atlantic Malt Barley Trial (EMBT)

was initiated with neighboring states, (North Carolina, Kentucky and

Virginia) to facilitate collaborations and enhance cultivar development.

The EMBT currently includes over 40 elite malt barley lines and check

varieties that are being evaluated at two to four locations in NC, KY and

VA. A graduate student, is developing molecular markers for malting

quality traits to help with the selection of superior quality malting lines

with more precision and elimination of costly testing expenses. There is

anticipation that the production of malting barley will continue to grow in

this region and that the release of cultivars will meet diverse market

demands. The future allotment of resources will continue to provide more

resources to the winter malting barley program as it continues to grow.

The Virginia Tech breeding program is significantly diverse with

YIELD GRAINS, TARGET PESTS cultivars much faster than traditional methods. The DH lines are MANAGED. AND SECONDARY PESTS genetically pure, eliminating approximately 2-3 years of the total time **ASSOCIATED WITH PYRETHROID** required to develop a variety. Besides development and testing of **INSECTICIDE USE** experimental lines, the program also collaborates with other breeding University of Maryland, Plant Science programs, allowing evaluation of cultivars developed by collaborators

www.hambylab.weebly.com

Pyrethroid insecticides can be applied in-furrow at planting or mixed in the tank when trips are made through the field to apply other agrichemicals. These applications, however, may not pay off in Maryland. In some situations there may not be sufficient pest pressure, whereas in others the timing may not be correct for the pests targeted. In corn, other insect management strategies such as Bt and neonicotinoid seed treatments control some of the pyrethroid's targets. In addition, pyrethroids may flare secondary pests and/or interfere with biological control. Target pest populations were evaluated and determined yield gains from pyrethroid insecticide use at three timings: at planting in-furrow, four weeks after planting tank mixed with a herbicide, and at tasseling tank mixed with fungicide. In 2018, pyrethroid insecticides did not provide yield gains at any of the timings evaluated. In 2019, wireworm pressure in in-furrow plots was experienced, and any treatment that included an insecticide yielded better than fungicide alone. Similar to 2018, no yield benefits from tank mixing pyrethroid insecticides with herbicides or fungicides was seen in 2019. Seed treatments or in-furrow pyrethroids can effectively manage for soil pests and are economically justified where soil pest pressure

occurs, and other timings do not align

well with insect pest pressure in

Maryland. 2019 Funding \$15,000

**EVALUATING THE APPLICATION** WINDOW FOR WHEAT USING SYNGENTA AS A NEW FUSARIUM **HEAD BLIGHT FUNGICIDE "MIRAVIS"** 

n 2019, with funding support from ■ MGPUB the application window of a new fungicide 'Miravis Ace' was evaluated for controlling FHB and DON content in wheat. A susceptible wheat variety was used for the study, and effect of the new fungicide at four time points (50% head emergence, early flowering, late flowering and end of flowering) was evaluated. Miravis-Ace provided significantly higher control as compared to untreated control at all four stages both for FHB index and DON content. Miravis-Ace provided similar control at flowering to that provided by standard triazole fungicides Prosaro and Caramba for FHB and DON content. Based on 2019 single year's data and one location test, application of MiravisAce at 50% head emergence and later seem to be providing decent control on FHB and DON content. Although statistically similar to earlier and later spray, but still numerically the best stage of application of Miravis-Ace was found to be at flowering. However, to make conclusive recommendations more locations, varieties and years need to be included in the tests. 2019 Funding \$15,000, 2020 Grant \$15,000

ASSESSING THE EFFICACY AND COST **EFFECTIVENESS OF FUNGICIDES** APPLIED THROUGH IRRIGATION IN HIGH INTENSITY CORN PRODUCTION

applied through irrigation on a susceptible and resistant hybrid; 3) Investigate optimal timings of fungicides applied through irrigation on a susceptible and resistant hybrid; and, 4) Disseminate research results to Mid-Atlantic irrigated farmers. University of Delaware's Variable Rate (VRI) Lateral Move irrigation system was used to test multiple treatments in randomized replicated research plots. Results showed that fungicides applied through irrigation successfully reduced disease severity of grey leaf spot and Diplodia leaf streak in both a susceptible and resistant hybrid in 2019. Yield differences were not significant in either hybrid, but numerical yield differences and highly significant disease severity ratings merit further investigation and optimization of fungicides applied through irrigation. 2019 Funding \$8,440; 2020 Grant \$6,993

**DEVELOPING IMPROVED SOFT RED WINTER WHEAT CULTIVARS** University of Maryland, Plant Science www.psla.umd.edu/extension/md-crops

The latest results of agronomic research from

the University of Maryland can be found at:

https://psla.umd.edu/extension/md-crops

Selected headrows derived from these populations will be harvested and the resulting lines will subsequently be evaluated in the yield trials at Wye, Clarksville, and Beltsville. Using excellent collaboration with regional breeding programs, 12 double haploid plants that harbored multiple genes/ QTL against FHB were selected. Seeds of these lines will be increased and used for evaluations for yield, disease resistance and quality traits under state and regional trials. Best performing lines will be released as Maryland cultivars. 2019 Funding \$20,000; 2020 Grant \$20,000



2019 Funding \$5,000; 2020 Grant \$5,000

University of Maryland research led by Kelly Hamby focuses on gaining a better understanding of current insect pest pressure and distribution in Maryland grain crops to improve the efficacy and efficiency of pest management approaches, taking into account the economic benefits and non-target impacts of

commonly used insecticides.

University of Maryland, Plant Science uring year one of the research, University of Maryland, Plant Science www.psla.umd.edu/extension/md-crops critical evaluations of advanced www.psla.umd.edu/extension/md-crops rrigation research in the Mid-Atlantic UMD germplasm for its suitability to **L** has focused on water application to release as Maryland cultivars and improve yield and nutrient use efficiency. initiated a pipeline to develop new However, limited research has been germplasm were accomplished. A total done to examine the feasibility of using of ten advanced Maryland lines are irrigation systems to apply fungicides for being tested in the Maryland State trials foliar disease management. With signifias well as in a regional Mason Dixon trial cant portions of Maryland's central shore (multi-location trials conducted in and over 30% of tillable land in Delaware Virginia, Kentucky, and North Carolina). under irrigation, this project investigated Seed increases are planted for five top the feasibility of applying fungicides performing high-yielding, FHB tolerant through irrigation. Objectives included: Maryland lines and based on this year field performance, selection will be done 1) Quantify differences in foliar disease severity and stalk health in response to to release superior Maryland cultivars. fungicide treatments applied through Useful germplasm was developed by irrigation; 2) Determine the cost effecmaking new crosses and headrows of tiveness of a single or multi-site fungicide these germplasm are being analyzed.

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# MARYLAND FARM & HARVEST

Maryland Public Television | www.mpt.org/programs/farm

Hosted by Joanne Clendining, *Maryland Farm & Harvest* takes viewers around the state to see and experience what it's like to run a 21st century farm – from technological advances and conservation challenges to age-old problems like bad weather and insect invasions. With seven seasons, 91 episodes, and over 365 locations featured, *Maryland Farm & Harvest* continues sharing stories of the diverse, passionate people who feed Maryland and the world. The series has made major progress in connecting the general public with the agricultural industry, and helped foster better understanding of the work farmers do. *2019 Funding \$100,000, 2020 Grant \$100,000* 

MGPUB is proud to be a founding sponsor of Maryland Farm & Harvest, MPT's #1 rated regional show, which has attracted an audience of over eight million viewers in its first six seasons and received two Emmy® Awards.

# CULTIVATING LEADERS MD FFA Foundation www.mdffafoundation.org

n 2019, the Maryland FFA Association had 2,356 members, representing 43 active Chapters. Ninety-two career and leadership development events (CDE/ LDE) were held during the year, giving Maryland FFA members numerous opportunities to demonstrate their knowledge and skills. At the National convention, Maryland competed in 28 CDE/LDE activities. One individual placed 3rd in the Nation. Of the ten State Proficiency Award winners forwarded for National competition, two received Silver and 8 received Bronze Awards. At the National Convention, 14 Maryland FFA members were awarded the American Agriculturalist Degree, the highest degree awarded to an active member. Four Maryland Chapters received National Chapter Awards, 3 One Star and 1 Two Star recognition. MGPUB is recognized as a "Bronze 3 Star Partner" by the Maryland FFA Foundation. 2019 Funding \$13,000; 2020 Grant \$13,000

# YOUTH EDUCATION IN GRAIN PRODUCTION

Clear Spring FFA

In May of 2019, students procured corn seed through a generous donation from Martin's Elevator and borrowed a 4-row no-till drill to drill plant food plots for deer studies. The drill lacked markers and was well worn, needing repairs. Corn was planted with many issues, mainly being incorrect soil depth. While some of the corn planted well, other portions of the field resulted in a poor stand due to seed being planted on top of the soil. Mid-summer, the field was scouted by Martin's Elevator employee Steve Ernst, who arranged for fertilization and spraying for control of Johnson Grass. In mid-October, a local farmer was paid to harvest the corn. The haul to Martin's Elevator was donated where the corn was sold. The field averaged 48 bushels per acre. The field was turbo tilled and students procured a wheat seed donation from a local producer. Wheat was planted as a cover crop shortly after the corn was harvested. *2019 Funding \$400* 

# FFA CHAPTER FIELD TRIP Queen Anne's County FFA www.gacffa.theaet.com

Queen Anne's County FFA and High School agriculture students were able to explore and further their knowledge in the dairy and tractor/farming industry. During this field trip, the first stop started at Atlantic Tractor where students learned about the importance of farming for the community and country. They learned about technologies used on the tractors to increase yields and profitability and about career opportunities offered by dealerships, which support Maryland's grain industry. Students visited the Fair Hill Dairy Farm in Kent County where students furthered their knowledge of dairy cows and their role in the community and agriculture industry. Students were able to learn and understand the background of the business side of dairy products and everything that is taken into account for one product to be sold and profited. They learned about the grain consumption of dairy cows and items considered when making cow feed. They were also able to see and learn about their manure management operation. 2019 Funding \$400, 2020 Grant \$400

#### ANSWERING CONSUMERS' FOOD AND FARMING QUESTIONS MidAtlantic CommonGround www.findourcommonground.com

monGround provides a platform

for women farmers to share their personal farm experiences, as well as science and research, to help consumers sort through the myths and misinformation surrounding food and farming. Over the last seven years, local farmer volunteers have made millions of positive impressions about farming through media interviews, local events and social media efforts. The transparent approach builds trust and creates an environment for more impactful conversations about how food is raised. Farmer volunteers participated in community, state and national events, did speaking engagements, hosted guests on their farm, spoke to visitors at farm markets and fairs, and were active in social media to help consumers build confidence in the food production system. 2019 saw expanded outreach in the field of dietetics and nutrition, to amplify the farm message to consumers through these professionals. Volunteers participated in the national Academy of Nutrition and Dietetics Conference, as well as the state annual meetings in Delaware, Maryland and DC. The CommonGround "Ask a Farmer" booth encouraged visitors to stop and visit with a farmer. Exhibit handouts included a refrigerator magnet with food safety information, note pads with farm facts, soy crayons, and brochures answering the top questions asked of farmers, using vetted sources for answers. Materials included sources to find further information and "Ask a Farmer" when food and farming questions arise. 2019 Funding \$12,000, 2020 Grant \$12,000

## AG-VENTURE PROGRAM—Carroll County

University of Maryland Extension | www.extension.umd.edu/carroll-county

The Ag-Ventures Program is designed to target fourth grade students to further their knowledge of Maryland agriculture with a focus on grain through STEM education. Students from eight schools rotated through stations and participated in hands-on lessons on Grain Production, Grain Identification, Grain Nutrition, Livestock Production and Watersheds. Students made grain jars, identified whole grain foods, saw farm equipment, planted seeds and sampled vegetables, experienced land use best management practices, experimented with milk, and interacted with livestock. Evaluations from all schools, showed a significant increase knowledge gained. 2019 Funding \$1,500, 2020 Grant \$2,000

# CLOSE ENCOUNTERS WITH AGRICULTURE—Montgomery County University of Maryland Extension | www.extension.umd.edu/montgomery-county

The Close Encounters with Agriculture program promotes and increases the understanding of agriculture. This program demonstrates the inter-relationships and positive aspects of production agriculture, nutrition, and the environment. A total of 3,587 fourth-grade students and 601 teachers and chaperones participated in the program in October. The program is modified each year to maintain alignment with current Montgomery County School Curriculum. Students' test scores rose from 28% correct to 80% correct after participating in the program. Teacher evaluation scores averaged 4.50, out of 5.00. 2019 Funding \$6,500; 2020 Grant \$6,000

# KIDS GROWING WITH GRAINS-Washington County Extension Advisory Council | www.extension.umd.edu/washington-county

K ids Growing with Grains is an education program primarily targeting 4th grade students offered in March and October to all county schools at the Western Maryland Research and Education Center (WMREC). A total of 511 students from seven schools took part in the field trip during the four days of programming. The program meets the needs and interests of the schools, and offers hands-on, experiential learning through a variety of lessons, including: Grains and Agriculture, Grain Nutrition, Grain Food Demonstration, Animal Science, and Corn Science. Lessons are presented by UME and WMREC faculty and staff, volunteers, and 4-H/FFA youth. Students learn about the health benefits of grains, the use of grain in livestock production, and develop a connection between themselves and agriculture in their community. 2019 Funding \$1,000; 2020 Grant \$1,000

# KIDS GROWING WITH GRAINS-Frederick County Frederick County Extension | www.extension.umd.edu/frederick-county

The Kids Growing with Grains program improves the agricultural literacy of county at-risk students through field trips with three distinct elements: exploring the intersection of grain production, uses, and nutrition; feeder pattern that ties this curriculum across grade levels and integrates holistically into school programming; and delivery designed for Title I schools that have high-risk, underserved audiences. In 2019, the program reached over 900 youth and adults through in-school spring field trips with 3rd graders and fall field trips with 4th graders at the Western Maryland Research and Education Center where students learn about grain production, nutrition, and use in their daily lives. 2019 Funding \$2,500; 2020 Grant \$2,500

# **LEAD MARYLAND**LEAD Maryland Foundation, Inc. | www.leadmaryland.org

The LEAD Maryland Fellowship Program (LEAD) celebrated its 20th year in 2019, as it works to increase the numbers and capacity of leaders serving agriculture. LEAD completed a rigorous application process within the University of Maryland Extension, and in early 2019 was designated as a "Signature Program", meaning the program meets critical needs of the agriculture community, has public value, and incorporates research, evaluation, and scholarship. 2019 welcomed Class XI, with 22 individuals dedicated to learning, growing, serving, and ensuring positive future for Maryland agriculture. Fellows completed a series of five multi-day seminars, learning through lectures, tours, discussions, activities, and skill trainings. Class XI Fellows began preparing for an international study tour to Spain, with travel planned for fall of 2020. LEAD provides public issues education, skills building, leadership development, and personal growth, and networking opportunities. Fellows become more equipped and confident to solve problems, identify resources, educate the public, and to influence public policy. 2019 Funding \$20,000, 2020 Grant \$20,000

EDUCATION

# MARYLAND ENVIROTHON Maryland Association of Soil Conservation Districts www.mdenvirothon.org

ducating tomorrow's decision makers Lon the importance of conservation is vital to the health of our agriculture, natural resources, and the Chesapeake Bay. The 2019 Maryland Envirothon helped students become more involved in protecting natural resources by challenging their problem-solving skills and instilling a sense of stewardship. Statewide, over 1,000 students participated, receiving training in five areas: aquatics, forestry, soils, wildlife, and the current issue, "Agriculture and the Environment: Knowledge and Technology to Feed the World". This hands-on training, followed by the hands-on competition, makes the Envirothon a unique environmental education program. 2019 Funding \$5,000, 2020 Grant \$5,000

# EDUCATING OFFICIALS ON THE IMPACTS OF AGRICULTURE University of Maryland

The project team, Nicole Fiorellino, ■ Jon Moyle, Mayhah Suri, and Paul Goeringer met in early February to plan meetings. Based on the discussion, the group decided to expand the meetings beyond crop and poultry production, legal issues, and overviews of MDE and MDA programs to include irrigation issues and hot topics sessions. Meetings were held at Chesapeake College on September 17 and the Lower Shore American Job Center on October 10. The meetings reached a total of 50 state and local officials at the two locations. Feedback from the two workshops was extremely positive with officials from the other parts of Maryland attending asking when a similar workshop could be held in their counties. 2019 Funding \$4,461; 2020 Grant \$5,937

The Grain Store 2019-20 Funding Report

#### MARYLAND GRAIN PRODUCERS

Regional directors serve on both Utilization and Association Board of Directors. Meetings are held quarterly with a funding meeting in January.

## **REGIONAL REPRESENTATIVES**

Region 1: Somerset, Wicomico, Worcester Kevin Anderson 4410-430-8213 443-783-4833 John Bruning

**Region 2:** Caroline, Dorchester, Talbot Robert Hutchison 410-924-0085

**Region 3:** Cecil, Kent, Queen Anne's 410-991-7817 Lewis McDonald Evan Miles, Jr. 410-708-0032

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Region 5: Anne Arundel, Calvert, Charles, Prince George's, St. Mary's

Charlie Cox 443-624-7505 Donnie Tennyson 301-872-5612

Region 6: Allegany, Frederick, Garrett, Montgomery, Washington

Steve Ernst 301-491-1336 301-461-0722 **Eric Spates** 

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MD Dept. of Ag Mark Powell University of MD Nicole Fiorelino April Cheesman Industry Ryan Permelia Industry MD Ag Commission Donald Maring

#### MARYLAND GRAIN PRODUCERS **ASSOCIATION**

President Evan Miles, Jr. Vice President Melvin Baile, Jr. Treasurer Donnie Tennyson Charlie Cox Secretary

**ADVISORY** 

MD Dept. of Ag Steve Connelly MD Ag Commission Donald Maring

#### OFFICE

123 Clay Drive, Queenstown MD 21658 443-262-8491 | lindsay.mdag@gmail.com

**Executive Director** Lindsay Thompson Programs & PR Jenell Eck Administration Marguerite Guare



The Maryland Grain Producers Association is a member organization of grain producers in the state. It conducts legislative activities, wards scholarships, and conducts meetings to address grain issues. The Maryland Commodity Classic is the Association's annual meeting.

# SERVING MARYLAND GRAIN FARMERS

Maryland Grain Producers Association | www.marylandgrain.com

The MGPA grant funded the writing, printing and mailing of the "Grain Store" newsletter. The 2018-2019 funding report was sent to over 7,000 subscribers. The e-newsletter has been sent more often than bi-weekly for a total of 28 newsletters and has had a very positive response. The e-newsletter averages an over 40% open rate which is nearly double the industry average. The Facebook page has been updated almost daily in 2019 and is reaching over 4,700 people a month on average which is a 700 person increase. MGPA conducted the 20th annual Maryland Commodity Classic jointly with the Maryland Soybean Board and the Mid-Atlantic Soybean Board. Featured this year, was a grain bin safety training. Booth space was provided for grant recipients to provide information on the results of their research and activities to the grain producers. Under Secretary of USDA NRCS, Jimmy Bramblett, provided the keynote speech about conservation and other federal issues. Presentations were also provided on current issues and public policy impacting grain farmers including the value of the Maryland Grain Checkoff Program. MGPA promoted the scholarship program and reviewed the applications. The selection committee approved four recipients for the \$2,500 scholarships, who were announced at

the Maryland Commodity Classic. Recognition was given to MGPUB for funding the scholarships and the press, including the Delmarva Farmer and Lancaster Farming. provided publicity on the winners. Reaching the consumer with a positive and factual message about the Maryland farmer is a priority for the Maryland Grain Producers Association. In 2019, MGPA staff and directors participated in a variety of initiatives to achieve an improved image of grain producers. Further communication with farmers about the benefits of the organizations and the Maryland Checkoff Program garners support for the organizations which serve the farmers. Staff and members of MGPA staffed exhibits at farm meetings throughout the year, including the Maryland Commodity Classic, Farm Bureau Convention, and seasonal Extension Meetings. MGPA also branched out to talk to 4H groups, the Eastern Shore Land Conservancy, local Farm Bureaus and the Chesapeake Bay Program at their meetings. In an effort to strengthen relationships with the national organizations and develop the MGPA organization, staff attended the NCGA State and National Staff Summit, Commodity Classic and State Executives meeting. 2019 Funding \$100,000; 2020 Grant \$125,000

# Join us—we work for you!

Joining the MGPA is now easier than ever. Just download the Membership Form from www.marylandgrain.org/main membership.htm and mail it to the MGPA office. If you are a grain producer, MGPUB will transfer the annual fee (\$50 for one year or \$125 for three years) to MGPA from your checkoff payments. If you are a nonproducer, payment can be made via check or credit card information with your form.

<< Questions? Contact the office or your regional rep <<

The Dr. James R. Miller Award recognizes individuals for their outstanding contributions to the Maryland grain industry. 2019 recipients were Brad Powers and Valerie Connelly.



Left to right: MGPA President Evan Miles, MGPA former Executive Director Lynne Hoot, Brad Powers, and MGPUB President Bobby Guy.



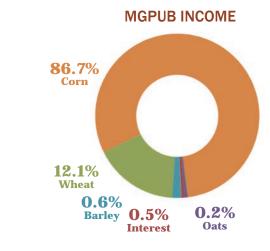
Left to right: MGPA President Evan Miles, MGPA Executive Director Lindsay Thompson, Valerie Connelly, and MGPUB President Bobby Guy.





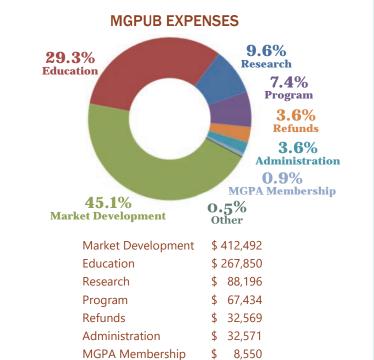
Investing in the future of agriculture: 2019 recipients of the MGPUB college scholarships with MGPUB President Bobby Guy include (left to right) Alexandra Guy of Hebron, Cody Martin Morris of Parsonsburg, Ethan Miller of Kennedyville, and Jacob Schmidt of Sudlersville.

# MGPUB FINANCIAL REPORT



Corn	\$ 907,433
Wheat	\$ 126,238
Barley	\$ 5,802
Oats	\$ 1,602
Interest/Other	\$ 5,200

ALTA CPA Group, LLC, audited the Maryland Grain Producers Utilization Board and determined the accounts to be in order. A copy of the report is available by calling 443-262-8491



Other

\$ 5,000

The Grain Store 2019-20 Funding Report



www.marylandgrain.org 443-262-8491 Non-Profit Organization
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# CORNYIELD

#### **STATE WINNERS**

Producer

Yield/Hybrid

# **CONVENTIONAL NON-IRRIGATED**

Brenda Walsh
Hampstead
Michael Harrison
Woodbine
Gregory Dell
Westminster
Woods 307.9723
A641-06 VT2RIB
287.6881
DKC64-35RIB
271.6846
Westminster
213-19VT2PRIB

#### **NO-TILL NON-IRRIGATED**

Drew Haines Middletown Brad Rill Hampstead DKC67-44RIB William Willard Poolesville DKC64-35RIB

# STRIP, MIN. MULCH, RIDGE-TILL NON-IRRIGATED

David Hill 231.9377 Kennedyville P0574AM<sup>TM</sup> Edward Appenzeller 216.2933 Millington DKC62-53RIB

#### **NO-TILL IRRIGATED**

Marion Wilson
Centreville
David & Ronnie
Andrews, Hurlock
William Layton
Vienna

288.8205
DKC67-44RIB
266.9029
P1197AM™
258.9412
DKC62-53RIB

# STRIP, MIN. MULCH, RIDGE-TILL IRRIGATED

Bruce Bartz
Denton
Gary King
Princess Anne
Catherine Bostic
Church Hill
Denton
DKC70-27RIB
286.7648
P1197AM<sup>TM</sup>
278.7938
A6544 STXRIB

#### **NO-TILL IRRIGATED**

Jason Sheubrooks Sudlersville DKC62-53RIB David Denny Queen Anne DKC67-44RIB Michael Bostic Sr. Church Hill P1464AML<sup>TM</sup>

# MARYLAND'S NATIONAL WINNER

Drew Haines, Middletown, placed first nationally in the No-Till Non-Irrigated category. Hear Drew's story at the Maryland Commodity Classic.



#### **AGENDA**

10:30 am Checkoff Project & Commercial Exhibits Open

for latest in ag news, products and research

1:30 pm Program and Awards Ceremony

**Farmers Panel featuring** 

**Yield Contest Winner Drew Haines** 

4:00 pm Chicken & Pork Barbecue and Crab Feast

✓\$10 advance tickets

✓ Free for MGPA members

See page 10 for MGPA membership information

The COMMODITY CLASSIC is made possible thanks to the generous support of:

**Augusta Seed Company** Maryland Soybean Board Binkley & Hurst LP MDA - Crop Insurance **Crow Insurance Agency** MidAtlantic Farm Credit Mid-Atlantic Soybean Assn Daisey Insurance, Inc. **Delmarva Farmer Mountaire Farms** Delmarva Poultry Industry, Inc. **Nagel Crop Insurance DE-MD 4R Alliance** Nutrien Eddie Mercer Agri-Services, Inc. Perdue AgriBusiness Farmsite Technologies Pioneer Hi-Bred International, Inc. **Fulton Bank Scoular Company** Growmark FS

Growmark FS
Harry R. Hughes Center for Agro-Ecology
Shore United Bank & Wye Financial & Trust So. MD Ag Dev Commission (SMADC)

Hoober, Inc.

Hostetter Grain, Inc.

King Crop Insurance

LNR Feed & Grain Systems

Local Seed Co.

MACCA

Sunrise Solar

Syngenta LLC

Tidewater Seed LLC

Tri-Gas and Oil

UMD AGNR

UniSouth Genetics

MADTech USDA-NASS, Northeast Region WARBIDCO USDA-NRCS/FSA Weller and Associates, LLC

Maryland Farm Bureau Willard Agri-Service