

The Grain Store



Winter 2010 Volume 16 Issue 1

A Joint Publication of the Maryland Grain Producers Association and the Maryland Grain Producers Utilization Board

Renewed Focus on Ag & the Bay

Maryland farmers literally “weathered the storm” as far as this year’s growing conditions effecting the 2009 crops. With the wet season followed by an early and severe December, late harvesting occurred across the state. However, corn harvest is expected to match last year’s yield, and soybeans are expected to be higher. It is fortunate to have the markets stay as high as they have been with the strong harvest numbers showing. Certainly conditions have varied from farm to farm. Through the work of the Maryland Grain Producers Association (MGPA) in cooperation with other farm organizations and agencies, more crop insurance options have become available this year. Farmers should investigate what the different plans are so that their risk management plan meets their individual needs.

The potential storm ahead is the renewed focus on public policy regarding the

Chesapeake Bay. For the first time in history, the President of the United States has issued an Executive Order on Chesapeake Bay Protection and Restoration, which directs EPA to develop federal initiatives to restore clean water, conserve treasured places, protect fish and wildlife, and adapt to the impacts of climate change. To accomplish this, states in the Chesapeake Bay region are charged with developing Total Maximum Daily Loads (TMDLs) to meet restoration goals. These plans will have a great impact on agricultural operations. It is imperative that individuals within the industry take part in the development of the TMDL plans to ensure that decisions are based on sound science and consider the economic viability of the land users. Decision-makers need to know the positive actions farmers are already doing in their efforts to keep water clean and keep Maryland businesses growing.

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Jamison receives Miller Award

The prestigious Dr. James R. Miller award was presented to Charles “Jamie” Jamison by the Maryland Grain Producers Association to recognize his outstanding contributions to the grain industry. A Montgomery County grain farmer, Mr. Jamison has been a strong voice for agriculture at both local and national levels.

Jamison grew up on his family’s farm in Poolesville and started farming on his own in 1969 after returning from service in Vietnam. He currently farms 4,000 acres of corn, wheat, soybeans and sod.

Jamison attended Montgomery College and American University. He is married to Kathy and they have three sons, who are involved in the business. Jamison is a member of the Montgomery County and Frederick County Farm Bureau and the Montgomery County Board of Realtors. Jamison was a founding member of the

(continued page 2)

\$2,500 Scholarships Awarded to Four College Students

Cody Fletcher of Laytonsville, Brittany Gaban of Centreville, Grace Garst of Walkersville, and Ben Murphy of Ijamsville, were named as recipients of Maryland Grain Producer Utilization Board scholarships to further their educations in agriculturally-related careers. The \$2,500 scholarships were presented at the 2009 Maryland Commodity Classic.

“By supporting education and rewarding commitment, we can help build the country’s agricultural workforce, a necessary step for our industry to provide food, fiber and renewable energy,” said MGPA President, Walter Gordon. “Having knowledgeable professionals to develop and implement the latest science and technology is imperative to conserve our environment, and still meet consumer demands around the world.”

Cody Fletcher is a fourth generation farmer with what he describes as “*the strong foundation, the determination to succeed, and the compassion for my future in grain production*”. Son of Robert and Sandy Fletcher, Cody comes from a 1,000 acre farm producing corn, soybeans, wheat and green beans, as well as hay and straw. He is majoring in Agricultural Science and Technology



Gaban, Fletcher, Garst receive scholarships at the Maryland Commodity Classic from Walter Gordon, MGPA President.

at the University of Maryland, where he participates in the collegiate band program. Cody is a certified EMT and Fire Fighter with Sandy Spring Volunteer Fire Department.

President of the Sigma Alpha Chapter at the University of Maryland, Brittany Gaban lives its motto of “women excelling in agriculture”. Brittany is a dual major in Agricultural Sciences and Technologies, and Horticulture and Crop Production. Daughter of Janet Dean, it was her grandfather Bill Dean who fostered her love of agriculture. Her goal is to continue her education in agriculture at Auburn University to earn a Master of Agriculture degree, then be a lobbyist for agriculture, as well as working towards the development of new ideas for efficient nitrogen use.

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Award *(continued from page 1)*

Maryland Grain Producers Utilization Board. He has served on National Corn Growers Association (NCGA) Committees and Boards since 1995. Living close to DC, NCGA calls on Jamison frequently to provide testimony and input into policy decisions in Washington to benefit the grain industry as a whole.

"This award means a lot to me," Jamison said. "What I have done is because of what our producers are doing. I am deeply honored and want to thank them as none of this would have been possible without them."



MGPA President Chip Bowling presents Jamie Jamison with the 2009 Award at the Maryland Commodity Classic.

MEMBERSHIP FEE TRANSFER FOR MGPA

Under the guidelines established for the Maryland Grain Checkoff program, a grain producer may request to have \$125 of the checkoff program assessment that the producer has paid to be used for a 3-year membership to the Maryland Grain Producers Association, or \$50 for a 1-year membership, for both new or renewal membership. MGPA will then provide the producer with information and educational materials from the state checkoff board (MGPUB) and national associations such as the National Corn Growers Association, National Association of Wheat Growers, and the National Barley Growers Association. To initiate this transfer of funds, a producer must complete the form below and return it to MGPUB. If a producer has requested a refund during the last year, the request must include a grain sales receipt for at least \$125 (\$50 for one year) on which a refund has not been requested. Non-producers who fail to meet the above criteria, can complete the application and enclose a check for \$125 (3 years) or \$50 (1 year). Forms without checks can be faxed to 410-956-0161. Contact Lynne Hoot at 410-956-5771 or email lynnehoot@aol.com with questions.

MARYLAND GRAIN PRODUCERS UTILIZATION BOARD

To use grain checkoff funds to become a member of the Maryland Grain Producers Association (MGPA), complete the following. Please print or type.

Member's Name _____ Membership in (check one) Name _____
Company _____
Farm/Co. Name _____ Farmer (Check if yes) _____
Spouse's Name _____
Home Phone (____) _____ Business Phone (____) _____
Address _____
City/State/Zip _____
Email address _____
Total Farm Acres _____ In Corn _____ Wheat _____ Barley _____ Oats _____ Milo _____ Canola _____
County _____
Do you wish to receive information from: National Corn Growers Association? Yes _____ No _____
National Association of Wheat Growers? Yes _____ No _____
Referred by MGPA Member _____ (optional)
This is a partial refund form for grain checkoff to pay MGPA membership dues only.
3 years _____ 1 year _____ New _____ Renewal _____ Member Record No. _____
I hereby certify that I am a bona fide grain producer and that I contribute a minimum of \$125 to the checkoff program in a 3-year period (a minimum of \$50 for a 1-year membership).
Signature _____ Date _____
Please return the completed form to: MGPUB, 53 Slama Road, Edgewater, MD 21037-1423

MGPA & MGPUB BOARD

MGPA & MGPUB Regional Members

(Regional members serve on both boards)

- Kevin Anderson (Region 1) 410-651-0022
- Zeke Collins (1) 443-880-6097
- Robert Garrett (2) 410-822-8920
- Paul Spies (2) 410-829-2902
- Tom Gannon (3) 410-758-2370
- Marion Wilson (3) 410-758-1545
- Lawrence Meeks (4) 410-848-2867
- Vacant (4)
- Chip Bowling (5) 301-259-4397
- Bubby Norris (5) 301-769-3870
- Steve Ernst (6) 301-842-3926
- Walter Gordon (6) 301-371-7605

MGPUB Officers

- President - Walter Gordon
- Vice President - Robert Garrett
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MGPUB Non-Voting

- Breck Debnam - Ag Commission
- Charles Morris - Industry (Perdue)
- Bob Kratochvil - University of Maryland
- Mark Powell - Maryland Dept. of Agriculture

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- Robert Hutchison - NBIC Director
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- Mike Nelson
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- Ronald Mulford - UMD

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- Marguerite Guare - Administrative Assistant
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Maryland Grain Producers Association & Maryland Grain Producers Utilization Board
53 Slama Road
Edgewater, MD 21037-1423

Renewed Focus

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Correlating initiatives are moving forward in the environmental area that are being monitored closely by state and national organizations in which the MGPA is involved.

- **TMDL Plans:** The development of TMDLs for 52 watersheds in Maryland with an aggressive timetable of June 2010 for the first draft.
- **Chesapeake Bay Ecosystem Restoration Act of 2009:** Bills by Senator Cardin and Congressman Cummings to give EPA new enforcement authority and \$1.5 billion in new grants to restore the Bay's health, and sets May 2020 deadline for all restoration efforts to be in place.
- **Two-year Milestones:** To accelerate the state's efforts to reach current nutrient reduction goals by 2020, Governor O'Malley and the Chesapeake Executive Council initiated ambitious two-year milestones with a new level of accountability.
- **Conservation Tracker:** Maryland Dept. of Agriculture database project which tracks agricultural best management practices, including those implemented by farmers without state or federal assistance. Growers are encouraged to assist in this process, as the results will provide a more accurate account of the agriculture's positive work to improve water quality.
- **CAFO/MAFO Permit:** Issued by the state Department of the Environment, this general discharge permit for Maryland Animal Feeding Operations (MAFOs) and Concentrated Animal Feeding Operations (CAFOs), requires large animal operations to install additional measures to control nutrient discharges.

The MGPA Board is a strong group of individuals that represents the interests of all growers. However, it is the voice of the farmer that is most important. Growers must take an active role in telling the positive story that is today's agricultural industry. Participation in local forums and meetings will help favorably guide the development of these new policies and initiatives directed to help protect and restore regional waters.

*Chip Bowling, President
Maryland Grain Producers Association*

University of Maryland Extension - Changes Abound

University of Maryland has made some changes to its extension arm during the past year. Extension is no longer called Maryland Cooperative Extension. The new name is University of Maryland Extension. The name change was precipitated by the belief that each County Extension Office serves as the front door to the University. By renaming the organization, it is believed the public will increase their association of Extension with the University.

Budget constraints have created shortages of personnel in most counties. Gone are the days of each county having an Agricultural Extension Agent, and are not likely to return. In order to meet the challenges that come with having less personnel while still meeting customer's needs for reliable and unbiased information and service, a new organizational structure has been devised. Extension personnel are now affiliated with one or more of the seven Impact Teams that have been established. The name for each team is reflective of its responsibility.

Though grain producers will likely have an interest in many of these impact teams, the one that most closely aligns itself with crop production is the Agriculture and

| University of Maryland Extension Impact Teams | |
|---|---|
| 1. | Agriculture & Natural Resources Profitability |
| 2. | Natural Resources Conservation & Sustainability |
| 3. | MoneySmart |
| 4. | HealthSmart |
| 5. | FoodSmart |
| 6. | Community Resources & Economic Development |
| 7. | Community Leadership & Civic Engagement |

Natural Resources Profitability team. Dr. Bob Kratochvil, University adviser to the Maryland Grain Producers Utilization Board, is one of three co-leaders for this team. In addition, Maryland Grain Producers Executive Director, Lynne Hoot, is serving as a team stakeholder representative.

During 2010, all seven impact teams will be implementing initiatives that they identified during work sessions in September, 2009. Though different in areas of responsibility, all impact teams maintain one similar objective: *To continue serving their farmers, their youth, their communities, and all citizens of Maryland with the same reliability that people have depended on for decades.*

Maryland State Corn Yield Results

Advanced production techniques, informed growing practices, and improved seed varieties helped corn growers achieve higher yields this year amidst challenging weather in the state. Winners in the 45th Annual National Corn Yield Contest sponsored by the National Corn Growers Association were announced December 18, 2009.

| CLASS | PRODUCER | HYBRID | YIELD |
|------------------------------------|----------------|-----------------|----------|
| Irrigated | Michael Bostic | Pioneer 34P92 | 299.4152 |
| | Bruce Bartz | DEKALB DKC62-99 | 282.3233 |
| | Willin Farms | DEKALB DKC63-42 | 274.0869 |
| Non-Irrigated | Sage Baker | Pioneer 33N58 | 269.1384 |
| Ridge Till Irrigated | Michael Bostic | Pioneer 34F97 | 290.4105 |
| Ridge Till Non-Irrigated | John Rigdon | Pioneer 33N58 | 261.5056 |
| | Cathy Bostic | Pioneer 34F97 | 240.5456 |
| No-Till / Strip Till Irrigated | Ed Appenzeller | DEKALB DKC63-42 | 296.6269 |
| | Tuckahoe Farms | DEKALB DKC63-42 | 279.4530 |
| | John Windsor | Pioneer 33N58 | 278.7088 |
| No-Till / Strip Till Non-Irrigated | Ed Lippy | Pioneer 33N58 | 273.1777 |
| | Donald Lippy | Pioneer 33N58 | 269.8254 |
| | TB Farms | SC 11HQ38 | 261.1858 |

Scholarships

(continued from page 1)

After graduating from the University of Maryland with her Bachelor of Science in Plant Science, Grace Garst plans to pursue a career in agricultural crop research, with a special interest in virology and hybrid production. It was through an FFA Career Development Event where she reports, "I found my love for agricultural plant science and production." She volunteers with the Walkersville FFA as assistant coach for the agronomy team, and with the American Red Cross. Brittany helps her parents Stuart and Ellen Garst with the family dairy heifer operation where they raise alfalfa, wheat, barley, oats and corn.

Working on a dual major in Agronomy and Animal Science at Ohio State Agricultural Technical Institute, Ben Murphy plans to work as an agronomist or consultant, as well as the family farm. He is the son of Patrick and Mary Murphy, who have a family livestock and grain farm. He volunteers as a Farm Safety Camp Counselor and with the Urbana Volunteer Fire Department. On the future of agriculture, Ben stated, "To become and stay economically viable in production agriculture, you need to be willing to try new things, take small risks, and have a large amount of drive. I plan on being a leader and example in the farming community, and make a difference throughout my life in Maryland agricultural crop productivity."

The Scholarship Selection Committee looks at extensive criteria regarding each individual application, which is formatted to remove all identifying information. Applicants are ranked to select those students who demonstrate exceptional commitment and excellence in academics, their career plans, as well as service and ambassadorship within the agricultural community. The MGPIB has awarded more than \$70,000 in scholarships to date.

For 2010, the MGPIB Scholarships have been increased to \$4,000.

Applications are due June 1.

More information and the application form are available on the website at www.marylandgrain.com.

Educating lawmakers and the media in Washington DC about corn facts and farming practices is the focus of a newly formed group called the Corn Farmers Coalition. Much of the national data and information lawmakers need is collected and based in offices in Washington DC, even though the work is being done on farms across the country. The coalition's advertising campaign includes print, Web and radio with the overriding theme being corn growers produce more from less with educational ads on environmental footprints and innovative technology. The ads also capitalize on the fact that more than 90% of U.S. corn farms

are family owned and operated. Visit www.cornfarmerscoalition.com for details.

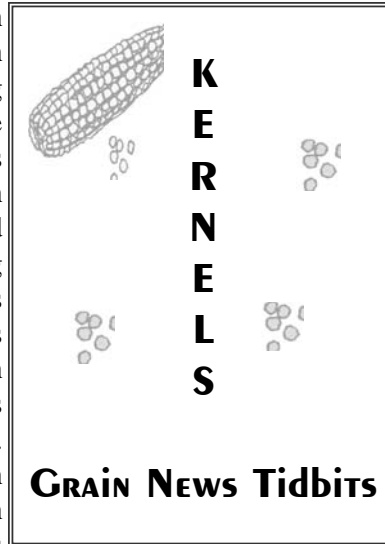
The Wheat Foods Council created www.HowWheatWorks.com to teach consumers how the food on their plate comes to be and why it is an important part of a healthy diet. Visitors have the opportunity to grow and harvest their own wheat field, mill the grain and create their

wheat food. This interactive farm-to-fork program is filled with factual information, vibrant video and 3-D animation with fun, educational activities for all ages. For each person who completes this program, the Wheat Foods Council will donate one pound of flour to **OPERATION Homefront**, a nonprofit that provides emergency and morale assistance for U.S. troops and their families.

Commodity Classic is the premier convention and trade show of the U.S. corn, soybean, sorghum and wheat industries. Growers are invited to the 2010 event in Anaheim, California on March 4-6, 2010. Valuable educational

sessions, cutting-edge technological demonstrations, entertainment events and important networking opportunities are featured. For schedule and details, visit www.commodityclassic.com.

Visit www.Partners-in-Agriculture.org, a site developed by the U.S. Trade Office to celebrate the unique partnership between USDA's cooperators and Japan.



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Here is what some of your neighbors have already done:

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This is a collaborative cost share program funded by the Maryland Energy Administration. Program partners include the USDA's Natural Resources Conservation Service in MD, USDA Rural Development, MD Dept. of Agriculture, MD Eastern Shore RC&D, MD Western Shore RC&D, MD Ag. & Resource-Based Industry Development Corp., MD Association of Soil Conservation Districts, Sustainable Ag Research & Education, Washington County Soil Conservation District, EnSave, Inc., and YOU—the farmer.



MGPUB 2009 Annual Funding Report

By the year 2040, the world's population is forecast to reach almost 9 billion people, about 30% more than today. Incomes are rising, particularly in many developing nations, bringing changes in dietary preferences and energy use. This increases pressure on agriculture to provide more food and energy, while protecting land and water resources to ensure its future use.

Farmers have long accepted the important role that scientific research has played in improving the way we farm. Since 1980, corn yields have increased a remarkable 74% while nutrient inputs decreased. This was possible with genetic advancements, improved placement and timing of nutrients, and more efficient agrichemical use based on scientific research. This work continues as Maryland grain farmers fund research for further science-based solutions to improve production while protecting our resources.

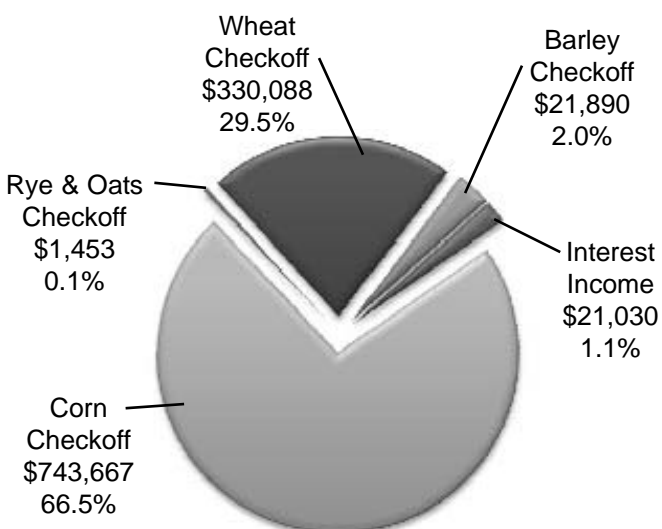
As you will see on the following pages, the Maryland Grain Checkoff Program has funded a variety of research projects specific to our growing needs and environmental conditions. Funding has also supported market development efforts to promote the use of Maryland products both locally and internationally. Educational projects span the ages with elementary classroom activities on where grocery food comes from to consumer information on nutrient management.

We are confident agriculture producers and agribusinesses will rise to the challenge of providing food, fiber and energy products for a growing world. As farmers, we invest in that future. If you should have any questions about the direction of the Checkoff Program, please contact me, a board member or the MGPUB office. Your input into your organization is meaningful as we assist growers in achieving a successful future.

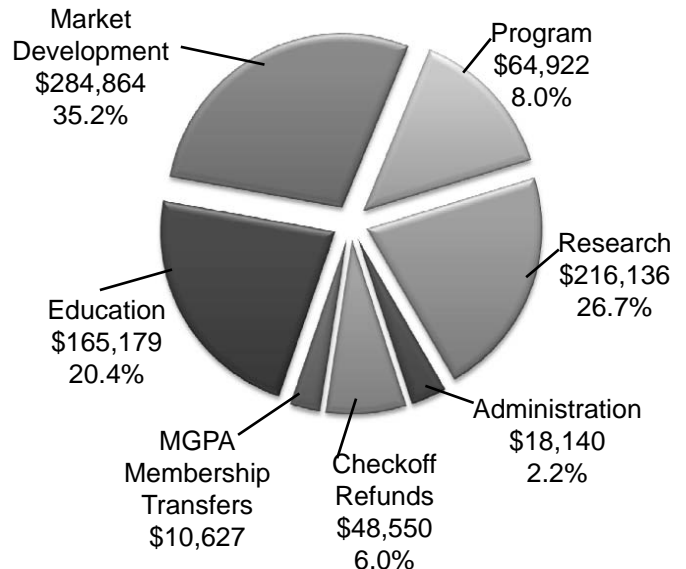
Walter Gordon, President

Maryland Grain Producers Utilization Board

MGPUB INCOME



MGPUB EXPENSES



Nitrogen and Phosphorous Fertilization on a Long-Term No-Tillage Corn, Soybean, Wheat Rotation

Mark Reiter, Virginia Tech Institute
www.vt.edu

No-tilled wheat, corn, and soybean rotations are common place in the Mid-Atlantic region and have evolved into continuous conservation tillage systems. Continuous no-tillage is a best management practice for soil and nutrient conservation but comes with its own problems, such as nutrient stratification. Similarly, poultry litter amended with alum is a best management strategy to mitigate phosphorus (P) issues in runoff, but crop P availability is unknown over long periods of time. A study on a Delmarva Bojac sandy loam was initiated to test long-term soil nutrient reactions. Results over time verify that poultry litter significantly increases soil test concentrations and is a valuable fertilizer source. However, it is not clear how long it will take to reduce high soil P in Delmarva soils or when alum bound P will be available for crop uptake. More research will be conducted using Delmarva cropping rotations and soils to fully understand nutrient management in long-term conservation tillage systems.

Corn Hybrid Test Includes Benchmark Hybrids

Robert Kratochvil, University of Maryland
www.mdscrops.umd.edu

Beginning in 2001 and every year since, MGPIB has funded the inclusion of some benchmark, check hybrids in the University of Maryland Corn Hybrid Performance Tests. During 2009, ten benchmark hybrids were included in the three maturity group tests conducted at five Maryland locations. Of those ten hybrids, five represented Pioneer, a company that does not enter hybrids in the University of Maryland test, two each represented Dekalb and Augusta brands, and one represented T.A. Seeds. Record yield (nearly 196 bu/acre) was recorded during 2009 for the 83 hybrids tested across the five Maryland locations. Learn more about the results of the 2009 test that is supported by MGPIB funds at www.mdscrops.umd.edu.

Utilization of Aerial Imagery, Yield Monitors, and Active Optical Sensors

Joshua McGrath, University of Maryland
www.psla.umd.edu

In 2008, the University of Maryland partnered with the Maryland Grain Producers Utilization Board to evaluate the use of active optical sensors to generate variable rate side-dress nitrogen applications for corn. In 2009, these sensors were evaluated in wheat production. Active optical sensors can be used to measure the vigor of a crop and show variability across a field. One such active optical sensor, the GreenSeeker®, emits light in the red and near infrared wave lengths and calculates the normalized differential vegetative index (NDVI). Using an algorithm, the sensor can calculate the nitrogen (N) requirements at side-dress on the fly. Research indicates that sensor-based variable rate has the potential to reduce N rates in corn 20% relative to standard practices, while maintaining yield. It is hoped that at least 10% N reductions will be seen in the next trials.

Effect of Nitrogen Rate on Corn Hybrid Performance

Robert Kratochvil, University of Maryland
www.mdscrops.umd.edu

Corn is highly dependent upon nitrogen (N) with N response depending upon soil type, previous crop, manure use, weather, pest management, and tillage system. There are now genetically modified (GM) hybrids that are resistant to some insects and tolerant to some herbicides. These new traits have farmers asking if hybrid stability (the ability to perform consistently over a range of sites) is better and, if so, does it mean improved efficiency for N use. This study had eight corn hybrids that were tested at five N rates at five Maryland locations during 2008 and 2009. Hybrid stability ranged from high to low. Conventional (non-GM) and GM hybrids, including a triple stack hybrid, were tested. The N treatments ranged from 0 to 225 lb N/acre, and with the exception of the 0 rate, were supplied as side-dress applications less 30 lb/acre starter.

The test sites provided different growing conditions. The average yields that included the 0 N rate at each location were 212 bu/acre at Keedysville ('08) where timely rainfall occurred during the season; 126 bu/acre at Beltsville ('08) and 121 bu/acre at Wye ('08), locations where dry conditions existed during August; 68 bu/acre at Beltsville ('09), a site with sandy loam soil that was impacted by wet conditions during the first half of the season; and 126 bu/acre at Wye ('09), a site that had timely rainfall.

Hybrid yield, regardless of hybrid type, was similar at 4-5 locations. And, each of the hybrids responded similarly to the N rates indicating that N use efficiency was not improved significantly with the addition of the GM traits. The one location where the GM hybrids produced significantly better compared with the conventional hybrids (71 bu/acre compared with 59 bu/acre, respectively) was Beltsville ('09).

Response to N rates did differ by location with corn at Keedysville ('08) having no yield differences across the five rates. Keedysville likely had high soil nitrate concentration at side-dress time resulting in no response to the additional N. The outcome at Keedysville indicated that the use of the PSNT (pre side-dress nitrate test) would have been valuable. This test likely would have shown that no additional N was needed.

At the four locations where an N rate response occurred, average yield with no N was 52 bu/acre showing that mineralization of soil organic matter provided some N but that additional N was needed. The maximum or agronomic optimum yield (AOY) across the other two 2008 locations was 150 bu/acre. It was attained with an average N rate of 182 lb/acre. During 2009, AOY varied by location. At Beltsville, 81 bu/acre was attained with 193 lb N/acre, while at the Wye 175 bu/acre was the projected maximum using the model and it would have required 280 lb N/acre. Since the cost of N varied greatly between the two years, the economic optimum yield (EOY) and economic optimum N rate (EONR) were calculated separately. The 2008 N price was \$0.75/lb N while for 2009 it was \$0.50/lb N. A corn selling price of \$4.00/bu was used in the calculations for both years. The EONR during

2008 was 156 lb N/acre and it produced nearly 148 bu/acre. For 2009, the EONR at Beltsville was 152 lb N/acre with production of only 78 bu/acre. At Wye during 2009, the EONR was 238 lb N/acre producing 172 bu/acre.

During both years, profit was improved when N rates were determined with consideration given to the cost of N. Simply determining the corn N rate necessary to produce maximum yield did not maximize profit. A tool will be developed to help farmers determine their economic optimum N rate.

Alternative Cover Crops, Performance & Planting Techniques

*Richard Nottingham, University of MD
www.somerset.umd.edu*

This research is exploring alternative cover crop combinations in the Delmarva region. Cover crop study plots of rye/vetch, rye/tillage radish, hairy vetch/tillage radish, and clover/tillage radish have been planted. One set of each planting was no-till drilled, and another set was broadcast and lightly disked. Plots are being evaluated for emergence, stand evaluation, winter hardiness, biomass, cost of establishment, and nitrogen content. This research will provide practical research results that can be utilized by farmers in the region concerning the economics and benefits of cover crops, in particular the addition of a winter legume to offset increasing fertilizer costs while protecting water quality.

Planting Techniques for Cereal Cover Crops

*Robert Kratochvil, University of Maryland
mdcrops.umd.edu*

Maryland pays farmers who plant cover crops with a tier-based system that encourages early planting dates. A variety of planting techniques, ranging from drilling seed no-till (NT) to broadcasting (BC) seed and chopping residue, are recognized. Opinions vary about the agronomic, economic, and nutrient management benefits for these planting techniques. Farmers are primarily concerned about input costs and time associated with planting, while nutrient regulatory agencies are focused on adequate stand establishment to immobilize nutrients.

This two-year study conducted at two locations each year evaluated wheat and rye seeded following corn harvest at two planting dates (~ October 1 and November 1), and via a number of planting methods, including one that broadcast the seed with no other operation. Weekly seedling emergence counts tracked stand establishment and

Support for Farm Stewardship Certification and Assessment Program

*Gerald Talbert
www.mascd.net*

The Farm Stewardship Certification and Assessment Program (FSCAP) is a project of the Maryland Association of Soil Conservation Districts (MASCD). It is a voluntary program to recognize those farmers across Maryland who are good conservation stewards. One component of the project is working to cost-share the development of twenty comprehensive nutrient management plans for poultry growers and to recognize those who implement the plan. The other project component is working through soil conservation districts to contact farmers in all agricultural operations for volunteers to be evaluated for stewardship certification.

Funding was combined with the United Soybean Board and Chesapeake Bay Foundation to focus on poultry operations as an opportunity to identify growers who would meet the Agricultural Conservation Stewardship Certification Standard (ACSCS) administered through the FSCAP. In coordination with the Somerset Soil Conservation District, poultry growers were identified who needed Comprehensive Nutrient Management Plans (CNMPs) to meet EPA's Concentrated Animal Feeding Operations permit requirements.

Two certified CNMP planners were hired to work with the staff of the Somerset Soil Conservation District to develop 20 CNMPs by April 30, 2010. The project will pay the planner 75 percent of the cost of each plan for a total cost of \$23,325.

A data form was developed which will be completed by the planners on each CNMP for reporting purposes and to identify those who have implemented their CNMPs.

The Project Leader has completed training and certification as a nutrient management consultant and an apprentice conservation planner. Other training includes data collection for Maryland Farm Energy Efficiency Audit Program, (a service to be offered to FSCAP participants) and Phosphorus Site Index.

The Project Leader has been meeting with individual soil conservation districts and requesting them to contact their most likely candidates for FSCAP participation to expand resources for project implementation. The districts are encouraged to adopt FSCAP as their own program and to continue with it in the future. A farm sign and Stewardship Notebook components have been developed for FSCAP participants that meet the certification standard.

biomass samples collected in the spring were used to determine nitrogen uptake.

Though not recommended, the study did show that there is a small nitrogen immobilization benefit realized with simply broadcasting seed as a means of establishing a cereal cover crop. Growers must be cognizant of the fact that this method is highly dependent upon rainfall and mild winter temperatures for success.

The study overwhelmingly confirmed the reliability associated with cover crop planting methods which ensure seed incorporation into the soil. The NT drill, BC seed and disk, and BC seed and Turbo-till treatments consistently established the best stands, produced the most biomass, and absorbed the most nitrogen regardless of fluctuations in temperature, rainfall, and planting date. In addition, the study confirmed the importance of planting cover crops early, as the early planting date consistently performed better than the later planting date regardless of planting technique.

Nitrate Quick Test for Fall Fertilizer Nitrogen Management in Wheat

*Robert Kratochvil, University of Maryland
www.mdcrops.umd.edu*

This project has examined the yield benefit associated with use of fall starter nitrogen (N) in winter wheat production following corn in Maryland. Statewide average corn yields during the past ten years have ranged between 74 and 153 bu/acre; the result of variable summer rainfall. Rainfall patterns are impossible to predict when determining corn N rate. Consequently, a farmer's corn N rate tends to be constant across years. However, when the corn under-performs, potential exists for substantial residual nitrate to remain in the soil following harvest. During this five-year study, corn that received a total N rate of 180 lb/acre had yield that ranged from 60 to 228 bu/acre and residual nitrate levels in the surface 12 inches of soil that ranged between 2 and 34 ppm (8 to 136 lb N/acre). This residual nitrate after corn represents an economic loss to the farmer and creates environmental concern.

This study assessed what an adequate residual nitrate concentration would be following corn for establishment of winter wheat without fall N. It has evaluated the use of a soil nitrate quick test, available at county extension offices, to measure the residual nitrate. The results from 17 sites over five years indicate that sites where residual nitrate levels in the surface 12 inches exceeded 10 ppm (40 lb N/acre), yield response to fall N for wheat was less likely to cover the cost of the fall N. Recommendations for wheat fall N management based on the five years of data will be finalized when wheat trials are harvested in July 2010. These recommendations will be made available to farmers prior to fall 2010 wheat planting via a fact sheet and other University of Maryland Extension information distribution mechanisms.



RESEARCH

A Systems Approach to Evaluate Nitrogen Sources, Blends, Additives, Timing

Ronald Mulford, University of Maryland

As the cost of plant nutrients, fuel and equipment for application increase, farmers along with agribusiness look for ways to improve the efficiency of these inputs. These studies were designed to compare nitrogen (N) sources, blends of N sources, use of additives, timing of N application, and method of N application. A phosphorous (P) study was included to improve starter P efficiency.

Research showed that ammonium sulfate blended with urea and applied preplant performed as good as all other treatments except where UAN solution was blended with Agrotain and dribbled between the rows, and UAN solution was coultter injected respectively. It has been shown in other studies, blends of fertilizer N sources with Ammonium Sulfate and certain additives can greatly improve the efficiency of a blended N source. Where 8-0-0-9 was blended with 30% UAN to make a solution of 25-0-0-5 yielded somewhat less than the treatment where 30% UAN was dribbled between rows. The blended solution of 25-0-0-5 only gave 18 lbs. of sulfate -S/a. It has been shown that a minimum of 24 lbs/acre of S from ammonium sulfate is needed to improve N efficiency of urea and UAN solutions.

Spinning the sidedress N of urea or urea/ammonium sulfate produced the lowest yields. However, of the three treatments of urea that were sidedressed by spinning the urea over the corn, the blended of urea and ammonium sulfate gave the highest corn yield.

Nutrisphere blended with either urea or 30% UAN performed inferior to both Agrotain and ammonium sulfate.

This study will be repeated in 2010. In 2008, applying all the plant nutrients preplant was as efficient as sidedressing. In 2009, the preplant treatments yields less than the sidedress treatments of UAN blended with Agrotain and where the UAN solution was coultter injected.

Studying Nitrogen and Management Systems on Wheat Quality

Ronald Mulford, University of Maryland

The objectives of this study were to compare nitrogen sources in no-till and minimum tillage wheat planted after no-till corn and no-till single crop soybeans, and to evaluate different management systems in no-till and minimum tilled wheat planted after no-till corn and no-till single crop soybeans.

The studies' plots were either 5.7' or 10' wide by 25' or 30' long with four replications. Plots were harvested using a John Deere 4435 combine. Alley ways were harvested between plots before harvest to remove any influence on grain yield from the alley ways.

Prior to 2009, there was no significant difference between the wheat yields after soybeans and corn. In general, wheat did not yield as well after corn compared to soybeans in 2009. It is important to mention, in most years wheat can be planted earlier after corn than soybeans. Early planting was very important in the fall of 2009 because of abundant rainfall.

Call for Applications:

**2011 MGPUB Grant Applications due
December 1, 2010**

Visit www.marylandgrain.com for details

The Role of QoI Fungicides in Field Corn Production

*Arv Grybauskas, University of Maryland
www.psla.umd.edu*

Strobilurin or QoI fungicides, such as Headline and Quadris, or pre-mixes with other fungicides as in Stratego and Quilt, have been shown to have effects on plant growth and development in addition to fungicidal activity. These non-target properties of the products have been touted as stress-reducing and yield-enhancing, and have fueled an increase use in fungicides even in the absence of significant levels of foliar diseases. One additional claim is that these products reduce corn stalk-rots and lodging even in the absence of foliar diseases. Field

corn diseases have been primarily managed by hybrid resistance, but with increased prices and untapped yield potential, the product claims need to be fully tested. The trials conducted under this project in Maryland demonstrate that these fungicides are much more likely to produce a positive and larger yield response if foliar diseases are significant than at low foliar disease levels. The research has not been able to substantiate any claims that lodging is reduced except in the event that foliar diseases were present. These products are best used when foliar disease risk is high and not solely as yield enhancement aids.

Control of Perennial Weeds in Corn

*Ron Ritter, University of Maryland
www.psla.umd.edu*

Two studies were conducted in 2009 to examine the control of perennial weeds in corn.

One study investigating the post-emergence control of Canada thistle in Roundup Ready corn was performed. It was conducted at the Manor Farm, located in Howard County on a site heavily infested with Canada thistle. The site had a preemergence application of Gramoxone. This was followed with a planting of Roundup Ready corn. A total of 14 different herbicide and/or herbicide combinations were evaluated. Post applications were made June 16, 2009. The corn averaged 16 inches in height, while the Canada thistle plants ranged from 4-10 inches in height. The Canada thistle population averaged about one plant per square foot. Treatments consisted of three rates of Status (5, 7.5, and 10 oz/acre), two rates of Stinger (1/2 and 2/3 pt/acre), three rates of glyphosate (1, 1.5, and 2 lb ai/acre), and combinations of glyphosate at 1 lb ai/acre with all three rates of Status and both rates of Stinger. By two weeks after application (WAA), most of the glyphosate and glyphosate tankmix combinations were averaging 90% control or better, while the Status and Stinger treatments averaged 70% or less control. Improvement was seen with these treatments at the 4 WAA ratings, with most averaging 80% Canada thistle control or better. By the last rating on August 4, 2009, Stinger applied alone or in combination with glyphosate provided best overall control.

A johnsongrass control study in corn was conducted at the Wye Research and Education Center. Corn was planted late, on July 6, 2009. Early post applications were made July 28, 2009, when the johnsongrass was about eight inches in height. A total of 14 different treatment or treatment combinations were examined. Treatments included the HPPD line of herbicides (Callisto, Laudis, Capreno, and Impact) applied in combination with Accent; Halex GT, Celebrity Plus, Sequence, and Steadfast applied alone; and three rates of Ignite 280. Touchdown Total and Roundup Weather Max were also included. The HPPD/Accent combinations were slow to act; however, by the last rating they averaged 95% johnsongrass control or better. Halex GT was extremely active in providing control, averaging 98% control by the last rating. The three different rates of Ignite 280 showed promise initially, but by the last rating, averaged 83% or less johnsongrass control.

Control of Weedy Grasses in Small Grains

*Ron Ritter, University of Maryland
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Three studies were conducted at the Central Maryland Research and Education Center located in Beltsville.

One study examined the utility of Prowl H2O for Italian ryegrass control in wheat. Preemergence applications of Prowl, regardless of when they were made, did not

provide any level of Italian ryegrass control. However, when Prowl was sprayed pre-emergence, and then followed with a post-emergence application of Osprey, 100% control of Italian ryegrass was observed by the last rating. It should be noted that Osprey applied alone provided 100% Italian ryegrass control by the last rating as well.

Another study compared Everest plus Glean (sold as Finesse Grass and Broadleaf), Osprey, Axial XL, PowerFlex, and Finesse. They were applied early fall, mid-fall and early spring to Italian ryegrass to determine the best timing of application with each product. When plots were rated early May, most treatments averaged 80% Italian ryegrass control or better. However, Axial XL, when applied early fall, averaged less than 70% Italian ryegrass control at the May rating. Finesse was also marginal, averaging 80% Italian ryegrass control with the early fall application. In general, Everest plus Glen, Osprey, late applications of Axial XL, and PowerFlex, were all similar in control of Italian ryegrass. There were no significant differences in yield.

A third study compared preemergence applications of Axiom, applied alone or with a follow-up post treatment, of various herbicides Osprey, Axial XL, PowerFlex, and a new formulation of Osprey called Atlantis, were included as standards. Some injury was noted with all products, but the plants quickly outgrew the injury symptoms. By the last rating, all treatments provided 100% Italian ryegrass control. Wheat yields did not vary among the different treatments.

Anti-Transpirant Products for Wheat Protection Against Pre-Harvest Sprouting and Falling Number Reduction

*Robert Kratochvil, University of Maryland
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Anti-transpirant products are used for protection against shattering for crops like canola. They are also marketed in Europe as a protection mechanism against pre-harvest sprouting and falling number reduction for wheat. They have not been tested on wheat in the U.S. During the 2007-2008 crop year, three wheat varieties were planted at Beltsville. Two anti-transpirant products were surface applied via spraying to the wheat during the late hard dough stage of development or when the wheat was within a week of being harvest ready. Two harvest dates (timely and delayed three weeks) were used to measure the protection potential of these products. The two products had no effect on yield or harvest moisture content of the grain. When applied to the wheat at late hard dough stage, both products maintained test weight between the timely and delayed harvest dates. Neither product provided any protection against reductions in falling number that occurred during the delayed harvest situation. There were differences among the three varieties for the amount of reduction in falling number that occurred between the two harvest dates.

The best practice for a farmer is to select a wheat variety or varieties with a high innate falling number, and, if data is available regarding the change in falling number when harvest is delayed, select a variety or varieties that have a slow decline in falling number.

Falling Number Research on Wheat (pre-harvest sprouting)

*José Costa, University of Maryland
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This grant supported the testing of the wheat varieties included in the Maryland state variety trial for their falling number values. The falling number test measures the soundness of wheat for baking purposes. When grain has sprouted, its falling number is lowered. Most varieties tested in the 2008 harvest had a high falling number even after exposure to excessive weathering (delayed harvest) to cause pre-harvest sprouting. There were significant differences among varieties for falling number values. Some cultivars such as MD01W233-06-8, FS627, Southern States 548 and MD01W233-06-16, retained high falling number values even under conditions that were favorable for pre-harvest sprouting.

Equipment for Measuring Pre-Harvest Sprouting

*Edward Souza, USDA Agricultural Research Service
www.ars.usda.gov*

Maryland wheat is routinely damaged by rain at harvest. The grain industry assesses that damage primarily through the falling number test. Work has begun to improve the accuracy and amount of falling number information on wheat varieties grown by Maryland grain producers through automation of the tests and by measuring directly the alpha-amylase that

causes the damage to the flour. This will allow growers to select varieties that will reduce their risk of crop loss.

Last year, samples were processed from the 2008 trials from Professor Kratochvil and Professor Costa. The level of pre-harvest sprouting in the samples, and the information on the level of resistance to pre-harvest sprouting, were both less than in previous years. Full sets of data were provided to the researchers for their use in presentations to growers. Processing of the 2009 crop year samples has begun. Data summaries will be available at the research review.

The value of a single trial is limited. Typically, the year to year variation for varietal differences is too great to make more than general conclusions about the level of resistance. Yet, weathering had only limited impact on several of the cultivars in the Clarksville study. Some of the experimental cultivars developed by the University of Maryland also appear to have only limited loss in quality due to weathering.

With the results of a multi-year study, researchers will assess the falling number cut-off levels for their inappropriateness for modern high quality soft wheat cultivars grown in the mid-Atlantic region. A less arbitrary grain value after pre-harvest sprouting occurs will be assigned which should expand the use of grain with falling numbers below 300 seconds, reducing the discounts for sprouting.

2009 Eastern US Wheat and Southern US Small Grains Workers Meeting

*José Costa, University of Maryland
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The 2009 Eastern US Wheat and Southern US Small Grains Workers Meeting was held at the Maryland Maritime Institute and the Wye Research and Education Center in May 2009. This meeting is held every two years in a different state. It was attended by 82 small grains scientists that includes breeders, plant pathologists, weed scientists, and agronomists from Universities, state organizations, USDA and private companies, as well as growers to discuss advances in plant breeding, plant pathology, and crop science important to the region, which includes Maryland, Virginia, Delaware, Pennsylvania, New Jersey, North Carolina, South Carolina, Georgia, Florida, Tennessee,

New York, Michigan, Ohio, Kentucky, Illinois, Missouri, Louisiana, Texas, Indiana, Arkansas, Alabama and Mississippi.

Scientific presentations and posters on wheat breeding, pathology and management were given to the group the first two days. Attendees visited the University of Maryland Wye Research and Education Center and viewed several wheat and barley nurseries (such as the Maryland state tests, Eastern and Southern Uniform Wheat tests during flowering of small grains in May 2009). In addition to support provided for this meeting by the MGPIB, other sponsors included the Maryland Crop Improvement Association, Pioneer Seeds, Syngenta, Westbred, Osage Bioenergy, Mennell Milling, and USG Seeds.

Effect of Fungicide and Insecticide Applications on Yield, Aphid and Beneficial Organisms in a Wheat Agroecosystem

*Cerruti Hooks, University of Maryland
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In 2009, two field studies were conducted at the University of Maryland Research and Education Center in Beltsville and Queenstown. The objectives of these field investigations were to (1) determine whether the applications of systemic fungicides (Tilt and Headline) or a broad spectrum insecticide impact insect pests of wheat and their associated natural enemies, (2) determine if the addition of Tilt, Headline, or Warrior insecticide provide a yield benefit to wheat, and (3) determine the economical feasibility of using Tilt, Headline, or Warrior based on application cost and final yields.

The main insect pests encountered at the study sites were various species of cereal aphids and the cereal leaf beetle which mainly occurred in the Wye test plots. Although environmental conditions were favorable this spring for an aphid outbreak, natural enemies such as parasitic wasps and lady bugs kept them in check throughout the growing seasons at both sites. One of the objectives of the 2009 study was to determine if the applications of systemic fungicides would have a negative impact on naturally occurring fungal pathogens, known as entomopathogens, that attack aphids. Because aphid populations were kept to a minimum, conditions were not conducive for an epizootic outbreak of aphid entomopathogens. These entomopathogens typically will not occur unless aphid populations reach high levels.

Several plant pathogens of wheat were identified at the two study sites, but fungicide applications did not result in a significant yield increase compared to treatment in which just Warrior insecticide was applied. At the Beltsville site, there was a significant yield decrease in the check treatment compared with the pool pesticide treatments (Tilt, Headline, and Warrior) and although grain yields were lower in check compared to the pesticide treatment plots at the Wye study site,

there was no significant difference. Because insect pest populations were low it is unclear why yields were lower in check compared to Warrior treatment plots especially since insect pest populations were similar among treatments. The current belief is that if disease pressure is high, low populations of insect pests that typical would go unnoticed and not impact yield may contribute to yield reductions as low pest pressure may be damaging.

Evaluation of Resistance to Wheat Spindle Streak Mosaic Virus and Soil-Borne Wheat Mosaic Virus

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Wheat spindle streak mosaic virus and Soil-borne Wheat Mosaic are plant diseases that can easily escape detection. Disease symptoms can disappear when weather gets warm, so the cause of poor or unsatisfactory yields could easily go undetected. Because they are soil-borne and patchy when symptoms are present in spring, they are easy to mistake as fertility or soil pH imbalances. Knowing what to look for and when helps to reduce the confusion, but ultimately this disease must be combated with resistant varieties. Many public and private seed companies have limited information on the resistance of their varieties. Thanks to a grant from the MGPUB, virus disease nurseries are being maintained that allow evaluation of genetic resistance in wheat varieties and experimental lines annually. Results from the evaluations show that there are a full range of responses from very susceptible to very resistant. Evaluations are presented at the Wye small grain twilight tour, Extension winter meetings and are incorporated in the variety resistance tables in the University of Maryland Extension Bulletin number 237, "Pest Management Recommendation for Field Crops". The publication is updated annually and is available in print or online under Extension publications at www.agnr.umd.edu.

Genetic Improvement and Testing of Small Grains for Maryland

*José Costa, University of Maryland
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This grant supported the development of new varieties of small grains for Maryland. Seed of the variety, Chesapeake, was developed and widely available to growers in 2009. Chesapeake is high-yielding, has excellent test weight, and is resistant to powdery mildew. It is susceptible to stripe rust, however, like most other currently available varieties. A new soft red winter wheat line (MD00W389-08-4) with high test weight and high yield is being tested in the Maryland state test. Twenty other promising new soft red winter wheat lines are being tested across MD, VA, KY and NC.

A backcross program, aided with DNA markers, is being used to produce a scab resistant variety. The variety McCormick is being used as the backcross parent. Additionally, lines with stripe rust resistance (such as SS8641) are being used in a final crossing of this material, so the final variety will also include stripe rust resistance. Several F5 lines were identified for evaluation from this cross with SS8641 in 2009 to generate new breeding lines to be tested in 2009/2010. Furthermore, DNA markers are being used in other selected crosses to improve scab and powdery mildew resistance in wheat. New hullless and new hulled Maryland-bred barley lines are included in the MD state test in 2009/2010.

This grant also supported yield testing of current varieties and new lines of winter wheat and winter barley available for planting in Maryland. This information and updates were timely posted in July 2009 on the webpage located at <http://www.mdcrops.edu>.

All the wheat entries in the state test were also screened for their susceptibility or resistance to Fusarium head scab in a misted nursery in Salisbury. The information from this test is also currently displayed on the mdcrops website. Additionally, grain samples from across the state are being tested for Fusarium toxin (DON) levels, to identify varieties that have lower concentrations of toxins.

Assessment and Improvement of Yield Potential in Hulless Barley

Carl Griffey, Virginia Technical Institute
www.vt.edu

Objectives of this project are: 1) to assess and improve the yield potential of hulless barley lines derived from hulless x hulled crosses and; 2) to develop hulless barley varieties that have yields that are more comparable to hulled barley varieties using both conventional and marker assisted breeding methods.

Last season (2008-2009), a total of 14 barley populations, comprised of hulled and hulless subgroup derived from crosses made between Thoroughbred with elite hulless lines, were evaluated in field trials at two locations (Blacksburg and Warsaw, Virginia). Four populations in the F4 and higher generations were selected from each subgroup (hulled and hulless). Approximately, 100 heads were harvested from each of the four hulled and four hulless population subgroups, threshed individually and planted in headrows. This season (2009-2010), pure lines from nearly 1,000 headrows comprising of hulled and hulless sister lines derived from the same crosses will be evaluated and selected. Also, hulled and hulless seed bulks from each population were planted separately and will be advanced. In addition, other hulled x hulless F3 and F4 populations were bulk harvested for inclusion in the proposed study.

In a separate experiment, a marker-assisted backcross breeding method is being used to transfer the hulless trait into the high yielding hulled barley cultivar Thoroughbred. During spring 2009, BC1F1 plants derived from initial crosses between Thoroughbred and three elite hulless lines were backcrossed to Thoroughbred. This fall (2009), marker assisted

selection will be used in the backcross process to transfer the hulless and other desirable traits into Thoroughbred.

In addition, Dan hulless barley (formerly VAO3H-61) has been released as the third winter hulless barley variety developed in the Virginia Tech breeding program. Dan was officially released in April 2009, and this variety is targeted for production in the Eastern U.S. as a potential commodity for fuel ethanol, food and feed. Dan is a short stature, full season, long awned, six-row winter hulless barley having good winter hardiness and straw strength. Dan also has very high test weight and grain starch concentration, thus providing grain of superior end-use quality and marketability.

The commitment and construction of Osage BioEnergy's barley-based ethanol and protein-feed production plant provides promise for an initial market for winter barley in the Eastern U.S. The plant has the capacity to utilize 24 million bushels of barley per year. The facility is expected to begin operation in 2010 and will be using barley as its primary feedstock for fuel ethanol. Osage will not only create an important market for barley throughout the Eastern U.S., but also will provide a valuable feed ingredient for domestic animals. Osage eventually hopes to produce enriched food products for human consumption.

The Kellogg company is performing a compositional analysis on some of the program's advance barley lines and has interest in ultimately using barley as food ingredient in their products. This also will create greater market demand for barley.

Winter Canola Variety Trials

Robert Kratochvil, University of Maryland
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During 2007-2008 (Beltsville) and 2008-2009 (Beltsville and Wye), winter canola varieties were evaluated in Maryland. No data was collected the first year because the planting date was extremely late (late October) and resulted in poor stand establishment and winter kill. During September 2008, 21 varieties (a subset of the National Winter Canola Variety Tests) were planted. Fall stand establishment was considered good to excellent at both locations. In general, varieties with weaker fall establishment had poor yield. A flowering date rating (measure of maturity) made on April 16 determined that 60% to 80% of the varieties were in full bloom, indicating that if canola were produced in Maryland it would fit in a double crop system. During late May, a major disease outbreak was observed at both locations. Canola is highly susceptible to Sclerotinia stem rot (white mold) caused by the fungus *Sclerotinia sclerotiorum*. Sclerotinia is particularly troublesome if warm, wet conditions are present during flowering. In addition, soybean is another host to the disease. The canola plots followed soybean at both locations necessitated by the plant-back restrictions for canola following small grains, corn or sorghum when certain herbicides are used (i.e. sulfonyl-urea; imadazalinone; and atrazine containing products). The Sclerotinia caused significant lodging at both locations but was extremely bad at Wye resulting in a decision to not harvest that location.

At Beltsville, where lodging was less severe (~20% average with a range between two and 45%), the plots were harvested. The top yielding variety was KS3074 (1873 lb acre⁻¹ and a test weight of 51 lb bu⁻¹ [50 lb bu⁻¹ is the standard]). This variety had excellent fall stand establishment, had medium to late maturity, and very little lodging probably because it was shorter than average. To contrast the yield of KS3074, the six lowest yielding varieties averaged 947 lb acre⁻¹.

In summary, production of winter canola is feasible in Maryland but it would face numerous challenges. Production research would likely identify ways to make these challenges manageable but with no current local market, more research is unwarranted.

Barley offers growers a number of benefits. As a winter crop, it can be planted in fields that might otherwise be unused and provides growers with an incremental cash crop. Barley enables high soybean yields when double-cropped with soybeans. Perdue AgriBusiness is launching a barley contracting program for the 2009-2010 crop to supply the Appomattox Bio Energy plant, with plans to contract up to 30 million bushels. Growers interested in contracting barley for Osage BioEnergy should contact Steve Norris at Perdue AgriBusiness at steve.norris@perdue.com or 410-726-9104.

Assessment of the Off-Site Value of Bt Field Corn and its Economic Benefits to Other Maryland Crops

*Galen Dively, University of Maryland
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Trends in blacklight trap monitoring over the past 36 years in Maryland provide evidence of regional suppression of European corn borer (ECB) and Corn Earworm (CEW) populations as a result of Bt corn use. An analysis of moth activity trends for all regions has not been completed. However, to illustrate this, a subset of moth records recorded from over 20 traps located in the lower Eastern Shore are selected because this region has the highest adoption rate of Bt corn (currently about 70%). ECB moth activity during the period of greater Bt corn use (2000-2009) was significantly 65% less than the long-term average captures prior to Bt corn use and decreased linearly at a yearly rate of 44 fewer moths caught. Similarly, CEW activity declined significantly at a yearly rate of 34 fewer moths caught per trap and averaged 52% less during 2000-2009. In contrast, the dingy cutworm and green cloverworm used as control populations showed no significant difference and no decreasing trend in average yearly captures during the period of Bt corn use. These results imply that the decline in ECB/CEW moth activity was unlikely due to weather trends or other environmental factors.

Suppression of ECB populations was clearly evident by declined trends in infestation levels recorded from untreated plots in insecticide efficacy tests on peppers and sweet corn during years before and after Bt corn use. These data were compiled from studies conducted at the VPI Eastern Shore research farm in Painter, VA, where the adoption rate of

Bt corn is greater than 70% population levels of ECB varied with region in Maryland and were correlated indirectly with the percentage of corn acreage planted in Bt hybrids. Infestations were the lowest at the Salisbury, Wye, and Beltsville farms, which are located in regions where the adoption of Bt corn exceeds 70%. The highest infestation levels were observed at the upper Marlboro and Keedysville farms in southern and western Maryland where Bt corn use is the lowest.

As work continues, project results will ultimately lead to more effective insecticide use on grain and vegetable crops, improved farm worker safety, reduced risks of environmental contamination and resistance development, and enhanced natural control of other insect pests.

Enhancing MD Grown Soft Wheat Consumption for Health Promotion & Disease Prevention

*Liangli Yu, University of Maryland
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The goal of this research was to promote the production and consumption of value-added Maryland-grown soft wheat varieties for human disease prevention and health promotion. Tasty whole-wheat foods, including cranberry orange muffins, rich in health beneficial factors have been developed for improving health. These recipes have been modified to optimize the bioavailability of their health beneficial components. In addition, this research has also shown that wheat antioxidants can inhibit membrane oxidation and lower cholesterol production. Finally, this research generated several research articles, book chapters, and a PhD dissertation.

Doe Harvest Incentive Program

*Kurt Fuchs, Maryland Farm Bureau
www.farmbureau.md*

In an effort to reduce crop damage and improve yields while simultaneously helping support the less fortunate in their communities, the Maryland Farm Bureau initiated the Doe Harvest Challenge with funding from MG PUB. As a pilot program taking place in the Midshore and in Southern Maryland, the Doe Harvest Challenge partnership also included the Farmers and Hunters Feeding the Hungry. The goal of the Challenge was to reduce local overpopulations of deer by incentivizing the legal harvest and donation of does within participating counties.

Beginning on opening day of bow season, each time a hunter donated a legally harvested doe to a participating Farmers and Hunters Feeding the Hungry processor, they were eligible to enter into a drawing for a prize package valued at \$500. The program was split into five, three-week cycles with drawings taking place at the end of each cycle. Hunters were able to enter as many times as they donated a doe and winners of previous cycles remained eligible for future drawings, including the grand prize drawing held in January 2010. With each region holding five contest cycle drawings and a grand prize drawing valued at \$1,000, participating hunters had a total of 12 opportunities to win over \$7,000 in prizes simply by donating their harvested does.

It was reported by the Department of Natural Resources that harvested doe numbers were up significantly in all pilot areas. The project will be refined and expanded for the 2010 hunting season.



Supporting Technology for the Mobile Science Classroom

George Mayo
www.maefonline.com

Ten \$400 matching grants were provided to support elementary schools in the state who have not had the MAEF mobile science labs visit their schools. Each \$400 matched \$400 grants from the Maryland Fair Board. In 2008, only three schools took advantage of this opportunity. In 2009, the grant opportunity was extended with six additional schools participating and one still pending. Grant funding also supported the installation of Smart Board technological teaching tools and improvements for the three mobile science classrooms.

Rural Montgomery County Cable Program

Doug Tregoning
www.montgomery.umd.edu

Rural Montgomery County is a 30-minute television program developed for the local cable access television network in Montgomery County. The shows are geared towards non-farm audiences and are designed to emphasize the positive aspects of local agricultural production.

Four programs were produced and aired in 2009. Two programs were recorded in February, 2009. Both programs addressed ongoing problems associated with high deer populations. One show was focused on deer impacts in agriculture and the other one dealt

with deer impacts on suburban homeowners. Two more programs were recorded in April. The first one was on the *Grow It, Eat It* campaign that encourages Marylanders to grow their own gardens and eat local produce and other local farm products. The second show was concerned with the devastating effects of Lyme disease. The shows were aired on multiple occasions over the Montgomery County local cable access channel. Over 400,000 county households have access to these programs. Reaction from Montgomery Community Television and the general public has been very positive towards this series.

Sharing Your Food Dollar

OFF-FARM costs (marketing expenses) associated with marketing, transporting, and handling your produce are significant. Take it from Maryland Farmers: **More than you think!**

Take it from Maryland Farmers:

More than you think!

Growing for a Greener Planet

BIODEGRADABLES
For a cleaner environment, grocery, utility & composting bags, packaging peanuts and more, reduce the use of oil-based plastics that do not decompose.

AFFORDABLE
Garden fresh fruits and vegetables, and whole grains, are the most nutritious and healthiest diet. U.S. food remains the highest quality in the world.

GREEN HOUSE
Renewable agricultural products are raw materials for a wide range of products including insulation, wallboard, and adhesive products.

BIOFUELS
Ethanol and biodiesel are renewable fuels that improve air quality and decrease dependence on fossil fuels.

INDUSTRIAL
Pharmaceuticals, enzymes, lubricants and other products are produced by the agricultural industry with renewable-based products.

Find helpful hints and Maryland grown products at www.IWantMarylandsBest.com

Big Benefits from Cover Crops

Cover crops are hard-working plants that build productive soil and help control weeds, pests and diseases. Cover crops can be any type of plants, but are most commonly legumes, grasses, and small grains. They are planted in the fall or winter and cover the soil through the growing season. They are then tilled under or left on the surface to decompose and add nutrients to the soil.

Take it from Maryland Farmers:

Just like nutritious foods help children grow, plants need nutrients to grow, too.

Plants depend on naturally-occurring nitrogen, potassium and phosphorus. Average soils don't contain enough of these to produce healthy, food-bearing plants. Farmers manage the application of nutrients to ensure the proper timing and placement of the right amount for proper soil fertility and protection of water quality.

Your lawn and garden needs the same care. Learn how to use fertilizers wisely - you will help your lawn and protect the Chesapeake Bay.

Signage sponsored by the Maryland Grain Producers Utilization Board www.MarylandGrain.com

Science for a Healthier Future

Thanks to advances in scientific research, every year it takes less inputs to grow more crops to meet our world's growing needs for food, fiber and renewable energy. Selecting the best traits from different seed varieties and combining them together enables plants to have qualities to thrive in adverse weather, require less nutrient inputs, and be more insect and disease resistant.

In the last ten years, **farm use of fertilizers has significantly decreased while homeowner use has dramatically increased.** Do what farmers do and use nutrients wisely to protect our valuable land and water resources.

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| <p>PLAN PESTICIDE ALTERNATIVES</p> <ul style="list-style-type: none"> ▲ Plant flowers & vegetables together to attract beneficial insects ▲ Place bird or bat houses near gardens | <p>CONTROL SOIL EROSION</p> <ul style="list-style-type: none"> ▲ Add trees & shrub buffers ▲ Add plants or grass to slopes ▲ Use winter Cover Crops in gardens |
| <p>USE FERTILIZERS WISELY</p> <ul style="list-style-type: none"> ▲ "More is Better" is NOT true for fertilizers! ▲ Have your soil tested ▲ Follow directions precisely | <p>CONSERVE WATER</p> <ul style="list-style-type: none"> ▲ Use mulch to conserve moisture ▲ Water in morning only when needed ▲ Water infrequently but deeply |

TRY COMPOSTING

- ▲ Recycle leaves, grass & non-meat food scraps to improve soil health and create natural fertilizer

98% of Maryland's 6,200 organic farmers have natural manure/ammonia plans on 59% of the state's 13 million acres of cropland.

Find more helpful hints and Maryland grown products at www.IWantMarylandsBest.com

Maryland Grain Producers Association

www.marylandgrain.com

New educational signs have been produced by the Maryland Grain Producers Association (MGPA) to educate consumers about farm practices and current issues related to agriculture. Signs offer consumers ways that they can help do their share in Bay clean up efforts, just as the farmers do. Consumers are directed to two websites, www.marylandgrain.com and www.IWantMarylandsBest.com, for further information. MGPA offers anyone in the agricultural industry a complimentary set of these four weatherproof, 18x24" signs, to post at direct farm markets, fairs, agritourism farms, and any location where consumers have the opportunity to read the information.

Public relations work of the MGPA has focused on providing accurate information to the public through media contact, the Speakers Bureau, fair and event exhibits, and the marylandgrain.com website. The MGPA also conducts the annual meeting of the grain producers and Maryland Soybean Board, the Maryland Commodity Classic, each July and includes tours and presentations of projects funded through the Maryland Grain Checkoff Program. MGPA administers the Maryland Grain Producers Scholarship Program, where four students each received \$2,500 scholarships to pursue a college education and career in an agricultural-related field.

County Extension Offices Across the State Offer Students Agriculture Experiences

*Doug Tregoning, Montgomery
www.montgomery.umd.edu*

Close Encounters with Agriculture is an outreach agricultural awareness program geared for Montgomery County 4th grade students. Since 1993, over 50,000 students have participated in the program. Thirty-eight public and private elementary schools from all over the county participated over a three-week period in October. Learning activities are short and hands-on to keep students attention. Production agriculture, environment and nutrition are the focus of the program. Six hands-on learning stations consisting of grain and grain products, dairy, beef, swine/goats, horticulture and horses are used to teach production agriculture concepts. The environmental segment emphasizes the positive relationship farmers and farming practices have on the environment. Students are taught and shown how all sources of pollution impact the Chesapeake Bay. They also learn about local soils and how habitat affects the number and type of wildlife. The nutrition segment emphasizes the relationship of agricultural products to nutritious diets and focuses on uses and benefits of grain products. The students play a jeopardy style nutrition bowl to test their knowledge. Participating schools and teachers are provided with teaching packets containing learning activities for the students prior to their field trip to the Extension Office Farm Park. Follow up activities are also included in the teaching packet including pre/post tests to measure the students learning.

*Deb Rhoades, Frederick
www.frederick.umd.edu*

Four public elementary schools, four private schools, and students from the Maryland School for the Deaf participated in the popular **Kids Growing with Grains** program that began over a decade ago. In the fall, 395 fourth grade students and their teachers came by school bus to the farm. Bus transportation was funded by the individual schools which was a real treat in this time of soaring energy costs. The students, with 37% representing minorities,

participated in four learning stations designed to teach them about grains. They begin with a wagon tour of the farm viewing fields in production, valuing machinery and recognizing grains from field to table. At the corn station students learned the many uses of corn, everything from grits to gasoline and corn syrup to crayons and made tortillas using masa. The nutrition station explained the health benefits of eating grains, especially whole grains. Students sampled steel cut oats and made buckwheat pancakes. At the animal station students met cows, pigs, chickens, horses, and sheep and learned how much grain the animal is fed to produce for our needs. Teachers report this is the favorite part of the field trip! Each student received a spiral bound recipe booklet to take home to prepare grain foods at home.

*Beth Bubacz, Washington
www.washington.umd.edu*

A **Kids Growing with Grains** program was held at the Western Maryland Research and Education Center in October where 361 youth and 45 adults from public schools throughout Washington County participated in three learning stations. The students learned about MYPyramid recommendations, identified food products made from grains, and the nutritional value and health benefits of grain/whole grain products. Each student learned the function of each ingredient, science, math, reading skills and team-building skills through the hands-on experiential learning activity of making wheat bread in a bag. The students learned about the different types of digestive systems between various livestock, the digestion process, and the different uses for grains in animal feeds and roughages. Students learned the anatomy of a plant and developed an understanding of the difference between several grain seed characteristics. The students made a grain mosaic from raw grain materials. The students discussed the planting, growing and harvesting of various grains. The grant also provided funds for in-class activities for schools and programs unable to attend the program at the Western Maryland Research

and Education Center. The Washington County 4-H Youth Development Extension Educator provided youth with grain nutrition information and production facts and led making bread in a bag, and grain mosaic activities for 93 youth and four adults in the classroom setting.

*Sharon Pahlman, Caroline
www.caroline.umd.edu*

The **All About Grains** program provided opportunities for more than 700 youth to experience hands-on agriculture lessons during 4-H school enrichment classes. A new farm display held during the Caroline-Dorchester County Fair provided experiences for several hundred youth to dig potatoes, pick apples from trees and collect eggs in a hen house. One hundred sixty youth learned how to be and remain safe around livestock; learned to keep safe by avoiding contact with various household and farm chemicals, and also learned about various agricultural products during a safety day program. Several fall harvest festivals provided a venue for more than 400 parents and children to identify wheat, barley, corn and soybeans and learn how they are grown and harvested. Six elementary schools were provided with several new books on farming practices for their libraries. The librarians and teachers reported that the children read and learned new facts from these books and they are appreciated.

*Jennifer Bentlejewski & Lacie Ashby,
Allegany
www.allegany.umd.edu*

Fourth grade students in Allegany County increased their awareness about food products through the **Explore Maryland Agriculture: Now and Then** Program. This program helped youth gain a greater understanding of the health benefits of including more grain products in the diet. New to the program in 2009 was the use of clicker technology for answering questions. Students were able to interact using the remotes and see the results of the answers instantly.

Maryland Envirothon

Craig Zinter

mascd.net/envirothon

The 2009 Maryland Envirothon was held from June 16th - 18th at the campus of Mount St. Mary's University located in Emmitsburg. There were 111 students from 19 counties and Baltimore City that participated in the 2½ day state competition. While there, students received additional learning opportunities in the Envirothon core areas of aquatics, forestry, soils, wildlife and the 2009 special topic; "Biodiversity in a Changing World."

On Tuesday, June 16th, after completing registration requirements, the team advisors met with the Envirothon Steering Committee to go over the guidelines of Maryland's #1 environmental education program. After the team advisors reviewed the rules and regulations, students gathered to present their oral presentations. Afterwards, the Maryland Department of the Environment sponsored a pizza party and ice cream social.

Wednesday, June 17th, was a day filled with educational observations and overviews. At nightfall, the students reported to the campus auditorium to engage, while being entertained.

While there, they interacted with the Maryland Fur Trappers Association and "The Kevin and Frog Herpetology Show." The evening concluded with a campfire celebration.

On the day of the competition, the teams received final pointers from environmental and agricultural professionals on ways to best express and identify their Envirothon knowledge. At the conclusion of the testing stations, an awards ceremony was held to recognize the high scoring teams in each of the five resource stations and the oral presentation station.

Each team had the potential to earn a total of 600 points. The Maryland Envirothon presented scholarships to the teams with the top three overall scores: \$500 each for the first place team, \$300 each for the second place team and \$200 each for the third place team. Venturing Crew 202 from Carroll County earned 456.5 total points. This was the first time students from Carroll County won the state competition. Later, they went on to break another Maryland Envirothon record by placing third at the Canon Envirothon which was held at the University of North Carolina, Asheville, in August.

LEAD Maryland

Susan Harrison

www.leadmaryland.org

The LEAD Maryland Foundation, Inc., provided educational, training, and personal growth opportunities for its program participants. During 2009, LEAD Class VI (2009-2010) completed five multi-day seminars throughout Maryland and Washington, DC. Class V Fellows (2007-2009) completed a Washington, DC seminar. Fellows are already taking initiatives to serve in leadership roles and to help communicate a positive agriculture story to the nonfarm public. Class VI Fellows are identifying leadership mentors; defining personal leadership projects; and forming a common vision of Maryland agriculture, rural communities, and natural resources. Fellows are also learning more about water resources issues, proposed legislation and regulation; the international grain market; the growing demands for local foods; the relationships between the grain industries and animal agriculture; land use, planning, zoning; and so much more! Class VI is preparing for a January 2011 international study tour to Vietnam and Taiwan.



Developing Future Leaders through FFA

Ronald Seibel

www.mdffaoundation.org

The State FFA Association is the premier youth leadership program in Maryland. In 2009, MGPIB was designated a 4 Star Partner for their sponsorship of: a student leadership development workshop, an FFA proficiency award, a motivational speaker at the State Convention, and four FFA career development events: Junior Extemporaneous Speaking, Agricultural Issues, and two Agriscience Events. CDE sponsorships fund the recognition of student achievement and help reduce student costs in representing Maryland at the next level of competition. This helped numerous Maryland students receive valuable educational and leadership experiences.

In October, 170 FFA students, advisors and chaperones attended the FFA Convention in Indianapolis, Indiana where 90 FFA members participated in 25 National CDE events. Three Maryland members placed in the top 15 in their individual CDE events with two of them receiving a total of \$900 in National FFA Scholarships



for their impressive performance. In team competition the following FFA Chapters were in the top 15 in CDE events: Linganore - 5th in Dairy Cattle Evaluation, Frederick - 10th in Food Science and Technology, Hereford Tech - 11th in Job Interview, and Walkersville - 15th in Dairy Foods.

Seven Maryland students were awarded the American Agriculturalist Degree, the highest degree that can be awarded to an active member. This degree is achieved by having a strong Supervised Agricultural Experience (SAE) project. An SAE is an outside of the classroom project designed to help students prepare for a career in agriculture by applying their classroom learning to their own entrepreneurial efforts or to working within an established agribusiness.

Supporting the development of future leaders for Maryland agriculture is vital to the future of agriculture and Maryland can be proud that their FFA Program is one of the Nation's best.



Issue Brief:

The Impact of Ethanol Production on Food, Feed and Fuel

A Publication of Ethanol Across America

For more than three decades, critics have tried to cast ethanol as a “food versus fuel” argument. The marketplace is a better indicator of grain supply and demand.

Statistics simply don’t bear out the dire predictions of those who say we must choose between fueling our cars and feeding people. We don’t have to make a choice.

Documenting Ethanol Facts

Doug Durante

www.cleanfuelsdc.org

The Clean Fuels Development Coalition (CFDC) recently completed a project to revise part of the CFDC Ethanol Across America program. *The Impact of Ethanol Production on Food, Feed, and Fuel* is part of the ongoing series of CFDC Issue Briefs that take specific issues like this and presents them in a way that helps legislators, media, and ordinary citizens understand. The Issue Brief series has been immensely successful, with other briefs produced on Economic Impacts; Energy Security; and Net Energy Balance.

Working in cooperation with the U.S. Department of Agriculture and citing other documented studies, the *Impact of Ethanol Production* Issue Brief addresses many of the misconceptions and criticisms surrounding the use of corn for ethanol production. The brief clearly makes the case that even with an increase in corn demand resulting from ethanol production, increases in productivity and yield more than meet this new demand. Consequently, there is no significant correlation to increases in food prices, which are much more susceptible to energy and labor costs. This is the third edition of this particular brief as the so called “food versus fuel” issue has been among the most serious challenges the ethanol industry has faced in decades.

Ethanol Race Car

Bunny Burkett

www.bunnyburkett.com

Through the efforts of many, such as the “Bunny & the Boys Dodge Avenger Funny Car” fueled by Ethanol, notable strides have been made with the use of ethanol on the East Coast. The number of E85 fueling stations across the U.S. is growing at an accelerated rate and U.S. automakers are manufacturing a larger number of FFVs. Fair displays provide the opportunity to talk with thousands of local drivers, making them aware of the future of ethanol. Along with using the ethanol fueled race car as an attention getter, Bunny & Crew hand out boxes of literature on ethanol and the many uses of grain. The bright green

and yellow Maryland grain bags can be seen in the hands of fairgoers throughout the fairgrounds. Besides the fairs, over 100 days per year are spent on East Coast highways with the ethanol logo prominently displayed on the trailer as the crew travels to televised racing events. Questions about ethanol are answered with facts to help kill the myths about ethanol. Audiences are constantly reminded how ethanol helps reduce America’s dependence on foreign oil, and is also environmentally friendly. Byproducts are also discussed and it is mentioned that new avenues for marketing grain are being created every day. The end result is to help increase grain’s value at the farm gate.

Mid-Atlantic E85 Station Numbers to Increase

Jill Hamilton

www.sesi-online.com

In 2009, Sustainable Energy Strategies, Inc. (SESI) supported the promotion of E85 in Maryland and surrounding areas. During 2009, approximately 481,000 E85 gallons were sold at MGPIB-supported stations. SESI submitted an application and received a U.S. Department of Energy Clean Cities Program Infrastructure Development grant. Project costs including federal funding and matching support total \$984,989. The federal grant is \$469,364 and begins in January 2010. It includes five regional partners who will install nine refueling pumps at seven sites in Maryland, DC, and Virginia. Six stations will be E85, two will be biodiesel, and one will be propane. SESI participated or presented at local meetings such as Clean Cities, Earth Day and Odyssey Day among other promotional activities.

National Ethanol Vehicle Coalition

Phil Lampert

www.e85fuel.com

The National Ethanol Vehicle Coalition (NEVC) serves as the nation’s primary educational resource, outreach group and advocacy organization promoting the use of high level blends of ethanol, such as E85, and the production of flexible fuel vehicles. Resources were provided to many of the 469 new locations nationwide that added high level blends of ethanol as a dispensing alternative in 2009. The NEVC circulated the bi-weekly “E85 FYI” newsletter to over 100,000 subscribers in the first half of 2009, continuing to be the nation’s primary news and educational resource on E85. The NEVC serves as the leading non-federal organization to interact with the Underwriters Laboratory to develop new standards for high level blends of ethanol dispensing and storage equipment. The NEVC also provided expert testimony on high level blends of ethanol during state and federal hearings throughout 2009.

National Corn Growers Association

*Richard Tolman
www.ncga.com*

The National Corn Growers Association (NCGA) was able to undertake a number of significant activities in 2009 to expand markets for corn. Plus, recognizing that huge shifts in the political and social landscape have taken place, NCGA worked hard to build and maintain relationships during the administration transition that will ensure increased productivity and profitability for our growers.

With support from many state affiliates including Maryland, NCGA tirelessly promoted the ACRE program, authorized in the 2008 Farm Bill. The many efforts included: extending the sign-up date, creating an ACRE Resources Center on the NCGA website, producing supporting and marketing materials and updated CD-ROM calculators, and engaging FSA county office staff to ensure they possessed the highest level of knowledge and familiarity with the program. NCGA also represented growers' interests in the review of federal risk management programs and regulations in Congress and with the Risk Management Agency.

NCGA was active in promoting the importance of corn-based ethanol as a part of the overall solution to energy independence and to economic growth in rural America. The organization worked with ethanol industry allies and many others on campaigns supporting higher ethanol blends in gasoline, as the EPA reviews such efforts.

In addition, NCGA has designed a new Online Learning Library to house its existing stable of online resources for biotechnology and insect and weed resistance management, plus new resources developed in-house and with research and industry partners. The first such module on water quality issues will be available in 2010. The organization also released important white papers on water quality, the sustainability of modern farming, the importance of the livestock sector, and the future of rural economic development.

National Association of Wheat Growers

*W. Daren Coppock
www.wheatworld.org*

As a grass-roots advocacy organization, the National Association of Wheat Growers (NAWG) works on policy issues with Congress and the Administration, which includes federal farm policy; crop insurance; tax provisions; trade; environmental regulations; transportation; conservation program development and implementation; federal research investments; and biotechnology acceptance.

In the past year, NAWG has worked with member-states, Members of Congress and other agricultural groups on a number of critical issues. NAWG has closely followed the 2008 Farm Bill implementation process to ensure new regulations relating to payment limitations, eligibility requirements and the new ACRE and SURE programs are appropriate for producers. NAWG's Board of Directors has been engaged in the debate about climate change legislation and its likely impact on wheat and other agricultural producers. NAWG has also closely followed pending legislation to reform rail and food safety regulation. NAWG has focused significant attention over the past year on continuing its work to ensure a smooth introduction of biotechnology into the wheat crop.

U.S. Wheat Associates

*Ruth Bracken,
www.uswheat.org*

As the export market development organization funded by America's wheat growers, U.S. Wheat Associates (USW) supplies information and training to wheat buyers and wheat food manufacturers in more than 90 countries. USW is the only organization promoting the use of Maryland's soft red winter (SRW) wheat in overseas markets.

The overall goal of the market development program USW proposed for 2008/09 was to meet or exceed USDA's SRW export forecast—initially estimated at 220 million bushels and adjusted to 190 million bushels. USDA estimates total SRW exports reached almost 184 million bushels. Even though total SRW exports were down compared to 2007/08, sales significantly outperformed the 5-year average with major increases in several countries. USW achieved these results by providing detailed milling and processing information based on SRW quality analysis to increase confidence in SRW performance and supply; helping buyers and processors accurately compare the profit potential of flour produced from SRW and other U.S. classes where SRW might otherwise be overlooked; and educating government decision-makers about increasing market access in existing and new markets for SRW.

Grain Producers in Maryland have representation on these national organizations who express your local issues in policy and market development on the national and international levels. Contact your representatives for more information:

National Corn Growers Association:

Chip Bowling, 301-259-4397 and Jamie Jamison, 301-349-2570

U.S. Grains Council: Chip Councill, 410-822-5434

National Association of Wheat Growers:

Charles Otto, 410-749-7151

U.S. Wheat: Associates: Jason Scott, 443-521-0080

National Barley Improvement Committee:

Bobby Hutchison, 410-820-2093

U.S. Grains Council

*Ken Hobbie, U.S. Grains Council
www.grains.org*

The focus of the U.S. Grains Council (USGC), is to increase demand for U.S. corn, barley, sorghum and their co-products around the world. Checkoff funds are used to build international markets for U.S. grains, bringing additional dollars back to Maryland farmers.

"From improving livestock production practices in Morocco, to building U.S. feed grain use in aquaculture in Vietnam, the financial value of the Council, an export market development organization largely funded by producer checkoffs, to U.S. farmers is remarkable," according to Chip Councill, USGC Advisory Team leader for Trade Policy and farmer from Talbot County. "The Council will generate more than \$3 million for Maryland corn growers this year compared to \$2.4 million last year, a great return on the investment."

The return on investment calculation was conducted by a third-party research firm, Informa Economics LLC, and validated by USDA's Foreign Agricultural Service. The Informa Economics study concluded that the impact of the Grain Council's market development efforts on the U.S. feed grains industry is worth more than \$915 million to U.S. farmers. That amounts to \$50.30 in additional producer income for every dollar invested in the Council. Grains Council members provide only a minority of the investment; however, 100 percent of the returns accrue to U.S. producers. Informa estimates the Council increases the value of U.S. corn by about 7 cents for every bushel.

"It is clear that the organization creates an immense value for U.S. agriculture," said Councill. "If the Council was on Wall Street, investors would be bringing barrels of cash. It is difficult to find another investment that gives this kind of return."

National Barley Growers Association

*Steven Edwardson
www.nationalbarley.com*

National Barley Growers Association (NBGA) continued to monitor implementation of the farm bill with regard to the increased loan rate and target price. Comments and analysis were provided on new farm programs SURE and ACRE and on more reasonable payment limitation provisions. Crop insurance reform, a critical component of farm policy and risk management, was achieved for barley growers through initiation of a crop insurance product for specialty barleys including malt, human food, hullless and certified seed that will allow growers to insure their barley for the

appropriate price relative to actual production contract prices.

NBGA submitted comments in support of South Korea and Columbia Free Trade Agreements and unrestricted trade with Cuba and requested a new compliance panel to update the recent WTO ruling on the USDA GSM-102 export credit guarantee program. NBGA contributed to transportation reform legislation, provided input on climate change legislation's potential effect on barley producers, worked on food safety issues and submitted letters in opposition to state proposed increases in beer excise taxes.

Ag Day

*Ag Council of America
www.agday.org*

The National Ag Day program provides an annual spotlight on the first day of spring for the agriculture, food, fiber and fuel industry to help consumers understand how food, fiber and fuel products are produced, and to celebrate accomplishments in providing safe, abundant and affordable products.

The 2009 program featured grass roots promotional efforts including the Ag Day poster, Ag Day planning guide and Fun Fact cards. These elements help local and regional groups plan and execute their own ag day events.

In addition, the Ag Council also sponsored 50 FFA, 4-H and AFA students for a trip to Washington where they made hill visits to their congressmen. The ACA hosted nearly 150 senate staff members, corporation and association employees at a luncheon on Capitol Hill. The same evening, ag leaders from across the nation attended a Celebration of Agriculture at the USDA building. Secretary of Agriculture, Tom Vilsack attended the dinner and spoke to the group.

Wheat Foods Council

www.wheatfoods.org

The Wheat Foods Council provides a credible voice that gets accurate messages to the public through the creation of innovative promotional tools. One of the strengths of the organization is that it represents the entire grain industry and are currently the only organization that does so. WFC has resources available through its member organizations that encompass the entire grain cycle from "farm to fork".

The recommendation to consume more whole grains that emerged as a cornerstone of the 2005 Dietary Guidelines has left consumers confused as to how to do that. Bringing the farm to an urban setting with the Urban Wheat Field in New York City in 2008 allowed a nationwide audience to experience a wheat field firsthand. This outreach increases awareness about all things wheat such as: Nutrition, Agriculture, Milling and Baking. Continuing on that success, in October the Wheat Foods Council launched an online wheat field, www.HowWheatWorks.com. This brings the farm into the home as visitors virtually create a farm. The Urban Wheat Field will be set up on the Mall in Washington, DC in September 23-24, 2010.

Mark your Calendars!

Thursday,
July 22, 2010



Queen Anne's
4-H Park

FOR INFORMATION CONTACT:

Maryland Grain Producers Association, 53 Slama Road, Edgewater, MD 21037
Tel: 410-956-5771, Fax: 410-956-0161, Email: lynnehoot@aol.com

The Maryland Grain Producers Association and Maryland Soybean Board would like to thank the following sponsors of the 2009 Commodity Classic:

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