





PENNSYLVANIA SOYBEAN BOARD MISSION STATEMENT

The Pennsylvania Soybean Board is committed to advancing soybeans in the Commonwealth and investing soybean checkoff dollars in programs and initiatives that fund research; outreach and education; promotions and alternative uses.



2014-2015 **BOARD MEMBERS**

William Beam*, Elverson, PA

Michael Gerhart, Ephrata, PA Vice Chairman

Steve Hykes, Greencastle, PA Secretary/Treasurer

BOARD MEMBERS

Daryl Alger, Lebanon, PA Brian Kreider, Lebanon, PA Andy Fabin*, Indiana, PA Emily Landis, Pennsylvania Furnace, PA

EX-OFFICIO MEMBERS

Del Voight. Penn State Extension Educator

EXECUTIVE DIRECTOR Jennifer Reed-Harry

* Also serves on United Sovbean Board

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THE SOYBEAN CHECKOFF AT WORK

The Pennsylvania Soybean Board (PSB) consists of a farmer-driven board responsible for managing Pennsylvania's share of funds received from the national soy checkoff program.

The soy checkoff helps ensure a strong and profitable future for soybean farmers. Through the checkoff, each farmer contributes one-half of one percent of the price of each bushel, which elevators and processors collect at the first point of sale. The checkoff uses the funds for activities to improve the profit potential for all U.S. soybean farmers. Half of the checkoff collected in Pennsylvania goes to the United Soybean Board, and half is retained by the PSB.

Pennsylvania soybean farmer-directors make up the Board of Directors, overseeing the activities of the PSB to support the profitability of Pennsylvania soybean farmers and the soy industry. The seven volunteer members of the PSB are responsible for the collection and administration of the soybean checkoff program within the State. The authority given to PSB under the Federal Act and Order are specific to soybean education, promotion, communication and research. Two members of the PSB also represent Pennsylvania growers on the United Soybean Board.

NOMINATIONS TO THE PENNSYLVANIA SOYBEAN BOARD OF DIRECTORS

The PSB accepts nominations of individuals within the Commonwealth who would be willing to serve on the Board of Directors. To be considered for the Board, you must raise soybeans in the State and have the time and talent to offer your expertise in support of the soybean farmers and the soybean industry.

The PSB is committed to growing leadership to serve on its board that reflects a diversity of perspectives and opinions as the industry population that pays the marketing and promotion assessment is diverse. That diversity is aimed at reflecting size of operation, experience of members, methods of production and distribution, ethnicity and gender, marketing strategies, and other distinguishing factors that will bring different perspectives and ideas to the table.

If you, or someone you know, is interested in being nominated to serve as a farmer/leader on the Board, contact Jennifer Reed-Harry at 717-651-5922 or jrharry@pasoybean.org. Diversity in age, sex, race, geographic location, and size of operation is encouraged on the Board.

PENNSYLVANIA SOYBEAN BOARD 2015 FISCAL YEAR Oct. 1, 2014 through Sept. 30, 2015 FY'14-FY'15 Assessments \$1,336,901 \$1,336,901 Total Income **Expenses** 50% of FY'14-FY'15 Assessments to United Soybean Board \$ 603,733 Administration, Compliance, Audits, Insurance 103,397 Communications \$ 62,393 Promotion/Education \$ 181,748 Research 272,594 \$ 1,223,865 **Total Expenses** Carryover available for FY'15-FY'16 \$ 113,036

TWO NEW MEMBERS **APPOINTED** TO PENNSYLVANIA **SOYBEAN BOARD**

At their August meeting, the Pennsylvania Soybean Board approved the appointment of two new members to the Board of farmer/leaders who administer the soybean checkoff on behalf of Pennsylvania soybean growers.



Dustin Kieffer, a 2003 graduate of Penn State University with a degree in Agricultural Engineering, farms with his family on the Mark M. Kieffer & Son, Inc., farm in Northumberland County. He worked in the agricultural machinery and defense industries before moving back to the family grain operation in 2013. In addition to farming, Keiffer is a Pioneer seed representative and a licensed crop insurance agent. He also serves on the Board of Directors of the Northumberland County Farm Bureau.



Justin Knoebel is a 2012 graduate of Penn State University with a degree in Animal Sciences. He works as Poultry Service technician for Heritage Poultry Management Services, a company that provides poultry nutrition and flock management services to layer and pullet farms throughout the northeastern United States. He is also involved in his family's grain farm and hog operations. The Knoebel family farms approximately 1,000 acres of corn and soybeans in Northumberland and Columbia counties, and has hog finisher barns in Columbia and Bradford counties that are on contract with Country View Family Farms.

CUTTING-EDGE INFORMATION FOR **CORN AND SOYBEAN GROWERS**

Presented at 2015 Winter Congress

More than 250 corn and soybean growers joined in as industry experts and specialists from Cornell University and Penn State University presented cutting-edge agronomic information at the 2015 Winter Corn and Soybean Congress, co-sponsored by the Pennsylvania Soybean Board and the Pennsylvania Corn Growers Association.

University educators reviewed the current research being done on behalf of corn and soybean farmers. Some key topics on the agenda were managing corn and soybean diseases with Dr. Gary Bergstrom from Cornell University and coping with low grain prices in crop management with Dr. Jayson Harper, Penn State. Other topics included grain drying and storage tactics and the fundamentals of Identity-Preserved grain production. Breakout sessions focused on a panel discussion on crop management issues in corn production and the findings of the On-Farm Network.

The 2016 Winter Corn and Soybean Congress is slated for February 25, 2016 in Grantville, Pa.

PENNSYLVANIA SOYBEAN YIELD **CONTEST WINNERS**

During the luncheon at the 2015 Winter Corn and Soybean Congress, the winners of the 2014 PA Soybean Yield Contest were announced. The contest, sponsored by the Pennsylvania Soybean Board, recognized not only the state-wide grand champion, but also the top growers in each of four regions of Pennsylvania, based on maturity maps.

1st Place Overall & South Central Region – Herman Manbeck, Womelsdorf, Pa. 1st Place Northern Region - Richard Snyder, Montoursville, Pa. 1st place Western Region – Frank Mutnansky, Uniontown, Pa. 1st Place Central Region - Matt Kehr, Littlestown, Pa.

Winners in the contest receive a trip to the Commodity Classic, the annual joint convention of the American Soybean Association, National Corn Growers Association, National Association of Wheat Growers, and the National Grain Sorghum Producers.

Winners of the 2015 Pa. Soybean Yield Contest will be announced at the 2016 Winter Corn and Soybean Congress in Grantville, Pa. Details of the contest are available at www. pasoybean.org.

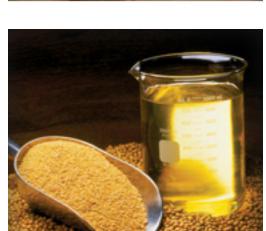


The winners of the 2014 Pennsylvania Soybean Yield Contest assembled at the 2015 Commodity Classic in Phoenix, Az. (Left to right) Matt Kehr, Herman Manbeck, Richard Snyder, Frank Mutnansky.













CHECKOFF FUNDED RESEARCH **EDUCATION PROJECTS**

The Pennsylvania Soybean Board awards grants for research projects focusing on crop management practices that will directly impact the state's soybean producers. Additionally, the Board provides research grants for projects related to education and market development, as well as projects in support of Pennsylvania's animal agriculture industry. Animal agriculture is the largest domestic user of soymeal and the largest sector of Pennsylvania's agricultural industry.

Research projects designed to provide reliable crop production data to soybean growers, to support Pennsylvania's animal agriculture industry, and to increase markets for soybeans were awarded checkoff grants in Fiscal Year 2015 by the Pennsylvania Soybean Board.

CROP PRODUCTION

SOYBEAN PRODUCTION IN NORTHEASTERN PA

Funding granted to Penn State to expand on 2014 research focusing on soybean production practices and variety selection in Northeastern Pennsylvania. The planting and harvest methods for soybeans that can be grown in the moderate temperatures and soils of northeast Pennsylvania were documented to expand the soybean acres planted, increasing soybean production and expanding soybean markets.

SENTINEL PLOT PROGRAM

Funding granted to Penn State for a sentinel plot program in Pennsylvania soybean fields. The program was run in collaboration with Penn State Extension to provide soybean growers with statewide assessment of insects and diseases active in soybean fields. Soybean fields throughout the state were scouted weekly for insect pest and disease population.

COVER CROPS IN SOYBEAN CROPPING SYSTEMS

Funding granted to Penn State to determine the profitability of using cover crops in soybean cropping systems. The objective was to determine the long-term benefits and cost effectiveness of consistently using cover crops in a primarily corn and soybean rotation. Crop yields were tracked each year and compared with fields with a cover crop to those without to do a cost/benefit analysis.

PA ON-FARM NETWORK

Funding granted to Penn State for continuation of the Pa. On-Farm Soybean Research Network. In 2015, this on-farm product testing network, which was initiated in 2009, focused on seed treatments, bio stimulants, fungicides and insecticides. Additionally, dedicated soybean production meetings were held at various locations throughout the state, and research results are being disseminated through crop meetings and online resources.

VARIETY TRIALS

Funding granted to Penn State to manage the annual soybean variety trials at Penn State's research farms in Lancaster and Centre Counties. Commercial varieties and experimental cultivars were evaluated. The continuing search for higher yielding varieties, quality traits, the onset of new diseases and insects, and the new focus on value-added traits in the future is essential to soybean producers in Pennsylvania. 2015 marked the 24th consecutive year for the trials, which are designed to evaluate soybean varieties for their performance under Pennsylvania conditions.

MANAGEMENT OF NON-**NODULATED SOYBEANS**

Funding granted to Penn State research in preventing and management of nonnodulated soybeans. Research aimed to provide insight and data to support management recommendations, and compare several inoculation methods.

MID-ATLANTIC STATES RESEARCH

Funding granted to Penn State to collaborate with other Mid-Atlantic states to coordinate research to increase yields and profitability of double-crop soybeans.

PENN STATE CROP CONFERENCES

Pennsylvania crop producers had the opportunity to learn about the latest crop management research and issues at Penn State Crop Conferences. Supported in part by the Pennsylvania Soybean Board, these sessions focus on current crop management issues.

PENN STATE SOYBEAN PRODUCTION WORKSHOPS

Day-long workshops are designed to teach soybean producers new integrated pest and cultural management practices, from planting to harvest. Support for the workshops is provided in part by the Pennsylvania Soybean Board through the soybean checkoff.

ANIMAL AGRICULTURE

VARIETAL DIFFERENCE IN SOYBEAN COMPOSITION FOR DAIRY FEED

Funding granted to Penn State to explore the varietal difference in soybean fatty acid and amino acid composition to enhance the feeding value of Pennsylvania soybeans to lactating dairy cows. The research will address the effect of soybean fatty acid profile on milk fatty acid composition in dairy cows, and explored the opportunity to use varietal differences in soybean amino acid profile to increase the feeding value of soybean meal for animal production.

GENOMIC CHARACTERISTICS OF AVIAN REOVIRUS VARIANTS FOR POULTRY DISEASE CONTROL

Funding granted to Penn State for

research on genomic characteristics of Avian Reovirus Variants for poultry disease control and agriculture production.

EFFECT OF HIGH OLEIC ON EGGS

Funding granted to Penn State for research on the effect of high oleic on Omega 3 fatty acid elongation and incorporation into eggs.

PREVENTION OF FATTY LIVER DISEASE BY SOY PROTEIN CONCENTRATE

Funding granted to Penn State to research prevention of fatty liver disease by soy protein concentrate in combination with oleic acid. Research could benefit soybean farmers by increasing the value of soy protein.

5 BENEFITS THAT HIGHLIGHT VALUE OF HIGH OLEIC TO FARMERS

In nine states, farmers are reporting competitive yield from their high oleic crop. Thanks to continued commitment from the soy checkoff, even more farmers are expected to see high oleic's strong performance this year.

Investment from the soy checkoff helps expand high oleic varieties to new areas each year. High oleic soybeans produce oil developed to meet food customer demand. It's exactly what restaurant chains and commercial kitchens are looking for – an oil that's stable for frying and baking without adding trans fats.

In 2015, farmers planted high oleic on more than 250,000 acres. It will take a lot more than that to meet demand. In fact, the soybean industry has set a goal of 18 million acres planted in high oleic soybean varieties by 2023. To find the next generation of soybean farmers who help meet that demand, here are five benefits that show farmers how high oleic soybeans can fit into their operations and bolster their profitability, too.

1. Profitability is Key

PSB Chairman Bill Beam decided to "test the waters" on his Pennsylvania

farm with 20 acres of high oleic soybeans. The premium grabbed his attention, but he wanted to make sure they performed.

"Every aspect lived up to what was expected," he says. "Everything went smoothly, last year, we grew 300 acres of high oleic soybeans. This year, it will be even more." While the premium was a driving factor in Beam's decision to give high oleic soybeans a try, it's the ease of growing them that's added to his overall profitability and keeps him coming back.

"When it comes to production, I don't see a difference," he says. "We plant them the same, we fertilize them the same, we spray them the same. The only difference is I get a premium when I deliver them.

2. No Management Change Needed

Herb Miller, a checkoff farmer-leader from Michigan, appreciates that high oleic soybeans allow him to grow a premium soybean – without having to adjust his basic practices or his approach to weed management. High oleic soybeans come stacked with glyphosate-tolerant traits to allow you to manage your weeds.

"I can use a GMO product and still

receive a premium," he says. "They entail the exact same process as our other beans, which makes for an easy transition to high oleic. The only difference occurs in where they're delivered at harvest, and I am fortunate to have processors and elevators nearby."

He says growing soybeans that meet customer needs is what will set American farmers apart. "We need to grow what our customer asks us for," Miller says. "High oleic soybeans give us a new demand with our supply – plus a premium."

3. Easy Delivery Options

"I choose to plant high oleic because the delivery point is close," says Steve Moore, a checkoff farmer-leader from Maryland. "A local elevator opened up just to accept high oleic soybeans, decreasing my transportation costs for these soybeans."

With the premium that Moore already receives for high oleic, the added benefit of a local delivery option made the profit potential even more attractive.

"I actually have to go farther to deliver my commodity soybeans than I do the high oleic," he says. "Especially





with today's prices, every mile makes a difference." And because of the high demand, Moore never has to wait to make deliveries. "My local crusher wants all the high oleic soy it can get," he says. "The market potential is impressive."

4. Focus on Demand

Mike Beard devoted a portion of his soybean acres to high oleic varieties because he's excited about growing demand for the oil.

"More uses for our oil means a more valuable market for our soybeans," says Beard, a soy checkoff farmer-leader from Frankfort, Indiana. "We have the opportunity to gain back some of the 4 billion pounds of oil demand that we lost to alternative oil sources when the government required trans-fat labeling."

The same features that make high oleic a good choice for restaurants – heat tolerance and stability – make it attractive for industrial applications, too. The soy checkoff supports research into these new uses for high oleic soybean oil.

"There are high expectations for high oleic in the industrial market," Beard says. "High oleic soybean oil can replace petroleum in lubricants and synthetic motor oil. That could be quite a market for high oleic."

5. Full Conversion Offers More Value

"On my farm, high oleic soybeans have proven to be hearty – they emerge well, we can plant them deeper and they have always been at the top end of my yield map, which is a testament to the breeding that goes into these beans," says John Motter, who has grown high

oleic soybeans since they first became available in Ohio six years ago. He says high oleic is a direct response to the needs of U.S. soy's biggest oil customer, the food industry. Food companies use the oil from high oleic varieties as an alternative to partially hydrogenated oils, which contain trans fats.

"It's what the end user wants," Motter says. "There is so much demand for a better cooking oil, and if we don't grow a bean that's best-suited for this major partner, we risk our customers turning to another oil." Since Motter's soybean acres are all high oleic, he avoids the added costs of managing a segregated supply. Even for farmers who also grow commodity varieties, he says they're paid well for their stewardship. "It's a reward for doing the right thing by providing for our customers."

HIGH OLEIC TAKES CENTER STAGE AT PA FARM SHOW

The Food Court is always a muststop destination for folks visiting the Pennsylvania Farm Show. At the 2015 Farm Show, many of the food court vendors were using a new oil in their fryers – high oleic soybean oil -- courtesy of a promotion sponsored by the Pennsylvania Soybean Board (PSB). The oil was used to serve up fried chicken sandwiches, French fries, fried mozzarella cheese cubes, deep-fried mushrooms and fried vegetables.

The promotion, in which high oleic soybean oil was introduced to the public in many of the deep fryers at the everpopular food court, was met with very favorable results.

"We were delighted to share for the first time the delicious and more nutritious aspects of high-oleic soybean oil to farmers and consumers," said Bill Beam, chairman of the PSB. "It's homegrown, has fewer saturated fats and zero trans fats, and offers a neutral taste that allows people to experience the natural flavor of the foods they enjoy. We are proud to grow these nutritious and great-performing soybeans right here in Pennsylvania."

The public and the media took notice. During the farm show, newspaper, TV, and radio interviews touted the health and taste aspects of this new oil.

JUST THE BEGINNING

Pennsylvania and other Mid-Atlantic farmers have the opportunity to contract and grow high-oleic beans, notes Richard Galloway, consultant to the United Soybean Board. "Two varieties have been released to date in a limited number of states, with Pennsylvania being one of them. The national goal is to have 18 million acres planted by 2023."

Jennifer Reed-Harry, executive director of the PSB, adds "High-oleic soybeans offer Pennsylvania farmers yet another option to consider for their farm. The oil from these beans is in high demand from the food service sector."

The reason? High-oleic oil offers a better nutritional profile than most commodity oils. It has fewer saturated fats, no trans fats and is non-hydrogenated. It also has a higher functionality and shelf life, making it perfect for frying, baking and in snack foods.





10 PRODUCTION PRACTICES THAT BOOST SUSTAINABILITY

U.S. soybean farmers are committed to continuous improvement – making sure the land they farm now is prosperous for years to come. Sustainability is a year-round effort; start your sustainability journey with these 10 sustainable practices.



SPRING

- 1. Rotate crops to increase biodiversity, control pests, prevent disease resistance, replace vital nutrients back into the soil and reduce the need for chemical fertilizers.
- 2. Preserve the soil's nutrients, increase organic matter and reduce runoff, soil erosion, labor, fuel use and equipment wear with reduced-tillage methods.
- 3. Use biodiesel, one of the leading carbon-reduction strategies available with today's vehicle technologies, in your diesel equipment.



SUMMER

- 4. Scout your fields and use chemical intervention only as needed when managing pests.
- 5. Use chemical intervention as needed when managing pests.
 When chemicals are necessary to eliminate the problem, carefully determine proper timing and spray coverage to limit pest resistance, runoff and residues.

FALL

- 6. Frequently test soils, maintain nutrient-management plans, know recommended nutrient levels and apply adequate nutrients as needed.
- 7. Research seed selection. Seeds enhanced by biotechnology allow farmers to reduce tillage and make fewer trips through the field in a tractor.



WINTER

- 8. Explore new precision-farming technologies to increase sustainability, such as GPS and computer monitors to use in tractors, sprayers and combines to track yield and inputs.
- 9. Preserve water and improve biodiversity with environmental practices like buffer strips, filter strips, and waterways.
- 10. Keep detailed records of all your farming practices, including planted acreage, annual yield for each field, all inputs for each field and proper calibration levels for all planting equipment.