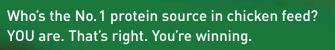
Obio Soybean News MAY-JUNE 2023 PUBLICATION OF THE OHIO SOYBEAN ASSOCIATION

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OSA March Hill Visits p. 5

Serve Yourself Some Soy p. 18



All soybean farmers, including you, are really big in poultry and livestock feed. How? By pooling your resources through your soy checkoff. Learn how your soy checkoff is bringing tangible returns back to you and your operation at unitedsoybean.org/hopper.



Moving Soy Forward. Moving You Forward.



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The Tradition Continues ... Tune in to listen to Dale Minyo, Ohio's most recognized farm broadcaster. www.ohioagnet.com



Perspective



Patrick Knouff Ohio Soybean Association President Shelby County soybean farmer

A Letter From the President

would like to begin this letter by wishing all a safe and efficient planting season. While I cannot guarantee consistent good weather to work in your favor, I can be sure that the Ohio

Soybean Association is working hard to advocate on behalf of Ohio members.

While farmers across the state will be in the fields this summer, OSA's volunteer farmer leaders will be advocating on their behalf. Earlier this spring, several of our board members made visits to their legislators in Washington, D.C., to push for an

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on-time and comprehensive farm bill, as well as an improvement on renewable fuel standards for soy-based biofuels. You can learn more about their time in D.C. on page 5.

In this crucial time leading up to a necessary farm bill, it is important to have your voice heard. Membership is vital to our organization and makes it possible for us to continue to push for policies that benefit Ohio farmers. You can learn more about our different OSA memberships by visiting **soyohio.org/Membership**.

Another big event came from this year's Commodity Classic, which took place in March in Orlando. From the policy session setting up our priorities to Ohio's own Jerry and Les Seiler winning the ASA Conservation Legacy Award, I can say with confidence this was another success for OSA, again serving as a testament to all the hard work that goes on across the state. Read more about Commodity Classic on page 6.

One more thing that we are excited to unveil is a series of Regional Meetings that will begin this summer. They are spread out throughout the Buckeye State and will give us the opportunity to come to you. These meetings will be opportunities to learn more about the ins and outs of our organization and how you can make an impact. You will also be able to hear about topics that will range from new innovations and technologies to plant research. We think this will be a great new way for us to really see how we can best serve Ohio farmers in your neck of the woods.

This issue of Ohio Soybean News is themed around soy foods. There are plenty of benefits for implementing some soy into your diet. That's why we've laid out an entire day's worth of soy-based meals in this edition of the magazine, which you can find on pages 22 and 23.

We are excited for another growing season in 2023, both in the field and in our organization, so thank you for your continued support of the Ohio Soybean Association.

Patrick O. Knoff

Patrick Knouf



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OHIO SOYBEAN ASSOCIATION

Building Membership and Grassroots Advocacy

OSA Takes on Capitol Hill



t the beginning of March, Ohio Soybean Association (OSA) board members returned to Washington, D.C., to advocate for issues crucial to the soybean industry. OSA board members who traveled to D.C. included President Patrick Knouff of Shelby County, Vice President Rusty Goebel of Williams County, Chairman Ryan Rhoades of Marion County, and Scott Metzger of Ross County, as well as OSA staff members Kirk Merritt and Emilie Regula Hancock.

OSA advocated for the following issues in this trip to D.C.:

Advance Soy in 2023 Farm Bill Development

> Support an on-time, sufficiently funded, meaningful and comprehensive farm bill that addresses ASA priorities, including:

• Protecting crop insurance • Improving the farm safety net for soybeans

• Growing investments in the promotion of U.S. commodities globally

• Enhancing access and continuing the voluntary, incentive-based, flexible approach to conservation programs

• Promoting new market opportunities through research, rural development, and nutrition

"The farm bill is a crucial piece of legislation for us this year," Metzger said. "It's the safety net that farmers need to give them that peace of mind. Things like crop insurance can make a big impact and is something we need to continue to make sure farmers across the country are able to benefit from."

Improve EPA's Renewable Fuel Standard for Soy-Based Biofuels

> Biofuels: Support higher renewable volume obligation targets for biomass-based diesel in the EPA proposed Renewable Fuel Standard rule for 2023-2025 ➤ Feedstock Availability: Ensure soy remains an eligible feedstock in renewable fuel opportunities "This is too important not to do," Rhoades said. "I believe it is true that if you believe, you belong,

and it's critically important now more than ever to get involved and know what is going on here in Washington, D.C., so we can be better prepared as soybean farmers and to share why we have such a great product."

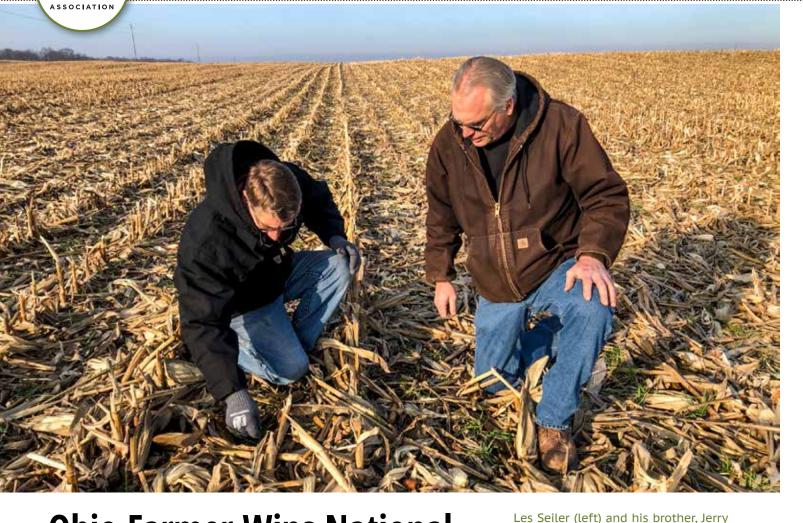
Impact the WOTUS Rule

> Consider efforts to improve the Biden administration's WOTUS rule so it works for farmers

On this trip, the board met with Congressional legislators and their staffs, including Representative Bob Latta (R-OH5) and Representative Max Miller (R-OH7). Representative Miller was recently appointed to serve on the U.S. House Agriculture Committee.

Goebel shared his thoughts on why he believes these visits are important. "It helps my community members, and anybody in Ohio, actually, to voice our opinions on some of the challenges that face soybean farmers to our legislators so they can hear some of the concerns that farmers have to deal with," Goebel said.

Building Membership and Grassroots Advocacy



which in turn help produce more

BASF, Bayer, Nutrien, the United

Soybean Board/Soy Checkoff and

not far from the Ohio-Michigan

line. The operation includes Les,

Jerry's son, Jerad. While Jerry,

Nathan and Jerad work off the

farm, Seiler says they, along with

their families, provide an extended

his brother Jerry, son Nathan, and

Seiler Farms, Inc. makes its home

sustainable U.S. soybeans. The

program is sponsored by ASA,

Valent USA.

Ohio Farmer Wins National Conservation Legacy Award

es Seiler's overarching goal for his Fayette, Ohio, farm is sustainable crop production to preserve and improve the land for future generations. After three decades of dedication to this goal, Seiler's fellow growers and conservationists are honoring his work.

The American Soybean Association presented Seiler with the 2023 National Conservation Legacy Award during the annual ASA Awards Celebration event at the Commodity Classic farm show in Orlando.

The Conservation Legacy Award is a national program designed

family farm. to recognize the outstanding support system that is key to making environmental and conservation the family business successful. achievements of soybean farmers,

Seiler Farms is part of the Western Lake Erie Basin where Les says conservation tillage practices can protect land in the area. He adds the Maumee River itself is one of the biggest contributors to the algal bloom issues of Lake Erie.

(right), check the soil on their Ohio

"Thirty years into [conservation practices] and the aggregation of the soils is really good," Seiler says. "We've seen the need to do something different besides the conventional farming practices of moldboard plowing and a lot of tillage."

Thinking Outside the Box

Faced with erosion problems, in 1986, the multi-generational operation turned to no-till to help keep the farm's soil in place.

In a world where change is often met with resistance, the Seiler's land stewardship journey has been led by their reliance on no-till followed by installing grass waterways, filter strips, subsurface drainage tile and a two-stage ditch on one farm.

But their quest for conservation hasn't come without challenges.

Seiler recalls when their striptilling experience in the mid-1990s was met by an arduous fall.

"I knew that somehow we had to get into cover crops," he says, "and all the time we were still continuous no-till. I spent a lot of time trying to figure out how we could make cover crops work in our situation."

Seiler eventually discovered how to integrate cover crops into the farm's management plan. Today, the land is 100% cover cropped in addition to winter cereal species as part of the rotation. Traditional crops grown include soybeans, corn, wheat, barley for malt and alfalfa is also harvested for a nearby alfalfa mill.

Proof in the Pudding

Three decades of thinking outside the box with the area's traditional farming methods have proved beneficial to Seiler's soil composition.

"Soils have changed dramatically over the years of using no-till and covers," he explains. "Infiltration rates have increased, erosion and runoff are reduced and nutrient inputs, especially phosphorus and potash, have been drastically reduced or eliminated. Organic matter content on the soils has increased."

Still, soil composition hasn't been the only change in the Seiler operation.

"We haven't strip-tilled anything

for a long time, and we've been cutting back on our commercial fertilizer usage a lot," he says. "We're trying to cut back on herbicides to make this more of a regenerative farming operation by improving our soil health and what's going on in the soil."

The result, he says, has been an increase in soil organic matter as well as an expansion in crop diversity. "We're seeing some pretty awesome results by doing that," he says.

Conservation Advocate

Seiler's goal is to sustainably produce crops with the least amount



Do you want to put a caption here and identify the people in this photo?

of environmental impact while preserving and improving the land for future generations. In addition, he unselfishly wants to share his knowledge with others.

in conjunction with area soil and water conservation districts, the Natural Resources Conservation Service and The Nature Conservancy. They also have an Ohio State University water quality monitoring site on the farm. Seiler has shared his soil health knowledge at conferences and through videos and webinars. Additionally, he and his brother communicate with their landlords to maintain good relations

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The farm actively hosts field days

and assist with snow plowing, mowing and maintaining buffers around their fields.

"Our dad did the best job he could with the tools he had to work with," Seiler explains. "I feel like we must carry the torch a little farther because of what we can work with. too. You get so many years to do this, and you hope when you're finished, you've done as good a job as you possibly could have."

Bevond Yield

While yield is the way to profitability for many of today's farmers, for Les Seiler, dollars and cents have come through his steadfast journey in land stewardship.

Still, he's quick to point out that his dad was always a believer in planting cereal rye, although he and his brother never knew the benefits of him planting it. Those efforts helped Seiler form a foundation to enhance soil health.

"It's made us way more profitable," Seiler says of the conservation practices he uses today. "Everybody thinks they must farm for yield. I know we're saving soil. I know we're not spending as much money on nutrients. That's something I really feel good about."

He recalls the Toledo water crisis of 2014, in which several people had no access to water for a couple of days because of the algal blooms on Lake Erie. He realized during the event that he didn't want to be any part of causing people to be without water because it was contaminated.

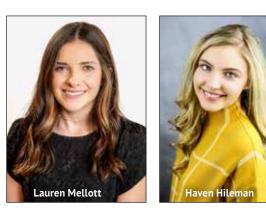
"I don't think there should be anybody, anywhere in the world, that wonders where their next glass of water is coming from," Seiler says. "I hope someday that somebody says, 'Well, I hope that that guy made a difference.' I don't want to be the one who didn't realize the importance of that."

Ohio Soybean Association Awards \$1,500 in Scholarships

cting as the membership and policy voice for Ohio soybean farmers, the Ohio Soybean Association (OSA) decided to create a scholarship program to support students interested in advocating for the future of soybeans. Last year marked the first scholarship awarded by the organization, and in year two of the program, \$1,500 were awarded to two students.

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OSA awarded a \$1,000 scholarship to Lauren Mellott and a \$500 scholarship to Haven Hileman, both of whom were also OSCF scholarship recipients. Mellott is from Butler, Ohio, and is in her junior year at The Ohio State University studying



agriscience education. Hileman comes from Stout, Ohio, and also attends The Ohio State University as a sophomore studying animal sciences.

"Lauren and Haven are great examples of why we are excited to give this scholarship," said

Bennett Musselman, Pickaway County soybean farmer and OSA scholarship committee member. "Both of this year's recipients have a genuine interest in the soybean industry and are excellent choices for this scholarship."

To qualify for OSA's scholarship, applicants must be immediate family (child or grandchild) of a current OSA member OR a Student and

Young Adult member of OSA (SYA membership is free). To qualify for the scholarship, applicants must be enrolled as a full-time student at a college, university or technical school. Applications for the 2024–2025 scholarship will open in October 2023. \blacklozenge

OHIO IS HOME TO CUTTING EDGE RESEARCH

The Ohio Soybean Council wants growers to stay on top of the most recent agronomic discoveries. That's why your soybean checkoff developed Field Leader, an online resource to give you access to the latest soybean research.

Find all the ways the Ohio Soybean Council and soybean checkoff work for you by clicking the "Ohio Field Leader" tab at OCJ.com.



MAINTAINING **OUR REPUTATION TO DELIVER**

Whether shipping by river, road or rail, the soy checkoff is committed to ensuring America's infrastructure is a significant advantage for U.S. soybean farmers. We're looking inside the bean, beyond the bushel and around the world to keep preference for U.S. soy strong. And it's helping make a valuable impact for soybean farmers like you.

See more ways the soy checkoff is maximizing profit opportunities for soybean farmers at **unitedsoybean.org**

May-June 2023

unitedsoybean.org

Commodity Classic Concludes With Annual Resolutions in Orlando

he annual Commodity Classic took place from March 8-11 in Orlando this year, with members of the American Soybean Association (ASA) approving the organization's annual policy resolutions. This process is critical as it updates and builds on existing resolutions and helps the organization in addressing current and emerging priorities for the U.S. soy industry.

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The event was filled with a trade show featuring the latest innovations and technologies as well as booths from agricultural companies from around the country as well as educational opportunities with panels and sessions meant to benefit farmers in a wide variety of topics.

The ASA resolutions process kicked off in January and was shaped by input from states, ASA board members and other farmer-leaders and staff who serve on ASA's advocacy teams covering various soy policy areas. Recommendations are thoroughly reviewed by resolution subcommittees, which hone the language that is voted on by delegates. The process is conducted in multiple stages to allow ample input, revisions and improvements from ASA membership across the soy states and culminates in the final voting process, held on the final day of Commodity Classic.

Ohio sent nine delegates to Saturday's policy session, where a variety of resolutions were passed. This year there were two amendments accepted that were proposed by Ohio's volunteer farmer leaders on the final day of the event:

> A-30: ASA supports a stand-alone double-crop insurance policy in counties where the practice of double-cropping is recognized as an acceptable practice under RMA rules, including those with a Written Agreement with no history.

> A-109N: ASA supports federal funding for existing soy biobased commercial companies to help with marketing and sale of their soy biobased products.

"This is a great event to come together and learn about other issues from farmers across the United States-OSA President Patrick Knouff said. "For the betterment of our members, it is important to be a voice as well as hear from other soybean associations to create priorities that will benefit all farmers in the following year in Washington, D.C." ♦









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Ohio Soybean Council Awards \$64,000 in Scholarships



In its 16th year of programming, the OSCF is awarding 15 scholarships to undergraduate and graduate students in Ohio. The OSCF Scholarship Program was created to encourage undergraduate students to pursue degrees in one of the many academic fields that support the future of the soybean industry, as well as to support ongoing graduate-level research. Since 2008, the OSCF scholarship program has awarded over \$550,000 in scholarship funds to students studying agriculture or a related field at Ohio colleges or universities.

For the first time, two \$10,000 Richard Cocks Scholarships were awarded to Grant Heuing and Lauren Thornhill. Named after a former Procter & Gamble executive and lifetime supporter of agriculture, these scholarships will be split over the next three years.

Undergraduate scholarships of \$3,000 each were awarded to Justin Beckner, Haven Hileman, Kiley Holbrook, Alicia Knapke, Lauren Mellott, Paige Teeters and Amber Zimpfer. The annual \$5,000 Bhima Vijayendran Scholarship, named in honor of a Battelle research scientist who has made tremendous contributions to the sovbean industry. was awarded to Rachel Barrett. The Robinson W. Joslin Scholarship was awarded to Rvanna Tietie. This annual \$3,000 scholarship was created to honor a long-time leader in the soybean industry both in Ohio and nationally. who passed away in May 2016.

Graduate scholarships of \$5,000 were awarded to Sayan Basak and Annika Pratt, and graduate

scholarships of \$2,500 were awarded to Fabiano Colet and Alison Peart.

"Congratulations to all of the 2023–2024 scholarship winners," said Cindy Layman, Hardin County soybean farmer and OSCF scholarship committee member. "I was beyond impressed by the caliber of the students we met and their passion for agriculture. These students make me excited for the future of the soybean industry."

Undergraduate Winners

Rachel Barrett of Rockford, Ohio, is a junior at The Ohio State University studying food science and technology.

Justin Beckner of Somerville, Ohio, is a junior at Wilmington College studying agriculture education.

Grant Heuing of Celina, Ohio, is a freshman at the University of Findlay studying pre-veterinary animal science.

Haven Hileman of Stout, Ohio, is a sophomore at The Ohio State University studying animal sciences.

Kilev Holbrook of Amanda, Ohio, is a junior at The Ohio State University studying agricultural communication and public policy.

Alicia Knapke of Celina, Ohio, is a iunior at Wright State University -Lake Campus studying agriculture.

Lauren Mellott of Butler, Ohio, is a junior at The Ohio State University studying agriscience education.

Paige Teeters of Hillsboro, Ohio, is a junior at Wilmington College studying agriculture education.

Lauren Thornhill of Anna, Ohio, is a freshman at The Ohio State University studying agricultural education.

Ohio Soybean Council Foundation

Ryanna Tietje of Deshler, Ohio, is a junior at The Ohio State University studying agribusiness and applied economics.

Amber Zimpfer of Anna, Ohio, is a junior at The Ohio State University studying agribusiness and applied economics and accounting.

Graduate Winners

Sayan Basak is pursuing his doctorate in polymer engineering at the University of Akron. His research area focuses on utilizing soybean oil and turning it into a smart and formfitting plastic.

Fabiano Colet is pursuing a doctorate in horticulture and crop science at The Ohio State University. His research analyzes situations where biological seed treatments improve soybean grain yield and profitability and measures the influence of biological seed treatments on soybean nutrient status.

Alison Peart is pursuing her masters in plant pathology at The Ohio State University. Her research looks at diseases and pests that threaten soybean production and yield, specifically soybean cyst nematode and fungal pathogens which cause brown spot, charcoal rot, and frogeye leaf spot.

Annika Pratt is pursuing her doctorate in plant pathology at The Ohio State University. Her research focuses on discovering which genes are essential in causing charcoal rot as well as identifying which soybean genes combat the fungus.

WISHH catches new markets for U.S. soy by advancing aquaculture.



ASA/WISHH is helping explore opportunities for soy-based feeds to grow aquaculture in 8 sub-Saharan African countries, including Ghana, Nigeria, Senegal, Togo, Burkina Faso, Uganda, Kenya, Tanzania

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WISHH is a program of the American Soybean Association and is funded in part by the United Soybean Board and state soybean board checkoff programs.









Investing Checkoff Dollars

The Center for Food Integrity: Earning Trust in Soy Foods & Soybean Farmers



he United Soybean Board (USB) and The Center for Food Integrity (CFI) have established a strong partnership to build trust in today's food system, including in soy foods and the modern farming methods from which they come.

USB was among the first members of CFI, a not-for-profit organization that's now in its 16th year of helping agriculture and food earn consumer trust. CFI's members and project partners represent the diversity of today's food system — from farmers, ranchers and food companies, to universities, non-governmental organizations, restaurants, retailers and food processors.

USB remains a key member of CFI. The early and continued partnership with USB has led to work with many state soybean associations including the Ohio Soybean Council, also a CFI member. Together, they have worked to bridge the information gap with consumers and food companies and help them

understand the vital role soybean farmers play in our food system.

The ultimate goal is to ensure, by working on many fronts, that soybeans are seen as a valuable commodity, so soybean markets and farmers — thrive.

The Many Faces of Soy

Early on, CFI's work with USB focused on initiatives to promote animal agriculture, the soybean industry's number one market. USB and several state soy organizations were fundamental in supporting the Animal Agriculture Committee.

On the consumer-facing front, USB funded Engage shared values training across the country, including in Ohio, to equip and empower farmers with tools and confidence necessary to engage consumers on key soybean industry topics.

More recently, CFI and USB promoted sustainability through closed-group roundtables where highprofile food companies were invited to the table with soybean farmers who shared their sustainability stories. The project also included articles for food and agriculture trade publications featuring soybean farmers, presentations at high-profile food industry events and public webinars.

The project fostered collaboration in an environment where food companies are increasingly making demands on how farmers grow and raise food yet know little about what's happening on farms. Currently, CFI is working with USB to support engagement with the aquaculture industry, a growing soybean market.

Soy Foods

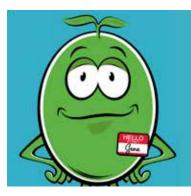
CFI partnered with OSC five years ago to reach consumer audiences in Ohio, especially those interested in understanding more about food and the industry from which it comes, through **BestFoodFacts.org**. A consumer-facing website, Best Food Facts shares information on farming and food written by credentialed third-party experts. The topics included crop production practices

and navigating food labels. More than 1.1 million people were reached with the expert-generated content.

Soy foods have been on the menu for several online influencer tours, too. CFI partnered with three state soy associations in the last few years to bring influencers to soybean farms to learn about sustainable practices first-hand. The tours included immersive experiences so influential digital content creators and bloggers could learn more about soy nutrition and cook with soy foods.

The tours provided an opportunity for influencers to talk with farmers. registered dietitians and others, who introduced them to all things soy.

Tour summaries, influencer content and feature videos were posted on BestFoodFacts.org and promoted via the sites' social channels. All in all,

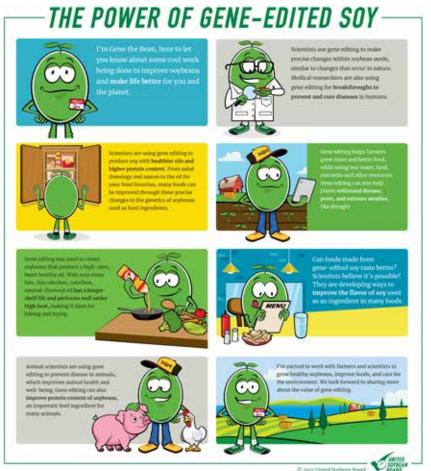


more than 1 million of the influencers' followers and tens of thousands of BestFoodFacts.org followers were reached with positive soy content.

Trust in Technology Recently, USB and CFI have focused on building trust in agriculture

field of biotechnology.

Gene the Bean made his entrance



I'm Gene the Bean, here to let you know about some cool work being done to improve soybeans and make life better for you and the planet.



technology, including the important

for a USB project to promote soy foods and gene editing. Gene the Bean was featured on BestFoodFacts. org and promoted in a toolkit of educational soy gene editing resources to state soy communicators so they could promote the benefits of soy foods with their audiences. In addition to Gene the Bean, CFI created BestFoodFacts.org content and a feature video to highlight the importance of gene editing in our food.

A two-year research project, funded by USB, took a deep dive into understanding the factors that lead consumers and food companies to either accept or reject new food technologies. Based on the findings, two resources were developed. The Strategic Roadmap provides steps to build acceptance tailored for the diverse sectors that use and advocate for innovation. The Communication Guide shares recommendations. messages and conversation starters to engage with consumers in a way that is likely to earn trust.

Together, the U.S. Soy industry and CFI have amplified the positive story of soybeans and sovbean farmers for well over a decade. Consumer and food industry audiences now have a better understanding of the many benefits of soy. This partnership will continue to grow trust in U.S. Soy and improve the market for soy producers and processors.

For more information on CFI, visit foodintegrity.org.

Investing Checkoff Dollars



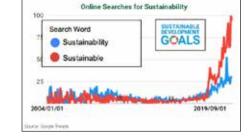
in China. According to the survey data of tofu products enterprises nationwide by the BPCA, the sovbean consumption in China's food industry in 2020 was about 14.6 million MT (536 million bushels), an increase of about 7.4% compared with 2019, showing an upward trend. Compared with 2019, the consumption processed soybeans in 2020 increased by

11%, to 8.9 million MT (327 million bushels), accounting for about 61% of the total soybean consumption in China's food industry.

Additionally, a new kind of plant-based food, plant-based yogurt mainly made from soybeans, is also popular in the world in recent years. Beijing Institute of Nutritional Resources collected and investigated 1,709 foreign plantbased yogurt products and made statistics on the raw materials used. Soybean-based yogurt accounts for the majority. As an important food crop, soybeans have the highest protein content of plant-based options. The protein content of soybean is about 40%, which is higher than other food crops, like peas. Double-protein yogurt contains milk and soybean protein. Companies producing doubleprotein yogurt claim it delivers a variety of nutritional benefits.

Japan

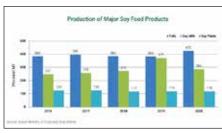
In 2020, U.S. soybeans had a 45% share of Japan's total food soybean supply. As Japanese



consumers show increasing focus on sustainability, soybeans are becoming a core component of sustainable food in the market, both in Japan and globally. To adhere to these growing interest, many Japanese food products carry the "Sustainable U.S. Soy" label. More than 900 products carry the label globally.

Korea

Korea is the second largest market for U.S. non-GM food soybeans, with Japan being the largest. In Korea, trade policy directly influences opportunities for U.S. Soy, as production of major soy food categories like tofu and soy milk remains strong. The soy food



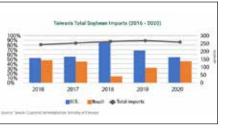
market grew from 756,000 MT in 2016 to 829,000 MT in 2020.

The Ohio Soybean Council works with USSEC to keep a strong U.S. soybean presence in Korea. For the past several years, the soybean checkoff has supported the Korea Soy Food master's program. This program promotes soy foods processed from U.S. food soybeans to the dietitians in the food service industry to increase the use of soy foods in the food service industry.

Taiwan

The soy food industry is

Overall, soybean imports have been steady. Taiwan has a wide variety of processed soybean products. These include tofu, natto, tofu pudding, soymilk, soy dates, miso, and much more. The diverse selection of options is popular with consumers. exploring options to find value for okara, currently considered



a waste product from tofu and soymilk production. Some value-added uses of okara could be raw materials for personal care products such as soy facial washes, use in processed food products, bakery products, fried foods, hamburger patties, dumplings, fish paste and minced meat products, of composted okara can be used in soil mixtures or as an organic fertilizer.

North American Food-Grade Sovbean Production

Soy food bean production in North America reflects demand in North Asia. Fifty-two percent of the non-GMO food-grade soybeans produced in the United States are destined for the tofu market. Another 28 percent will be used for soy milk. All other uses, such as miso, natto and sprouts, account for less than 10 percent each.

Historically U.S. non-GMO production has been approximately 5 to 6% of total U.S. production, with annual production generally around five

North Asia Soy Food Report **Analyzes Market Potential**

By Mary Peck

SSEC's flagship North Asia Soy Food Report provides a comprehensive review of current market factors impacting the soy food market across China, Japan, Korea and Taiwan. The report, funded in part by the soy checkoff, offers unique perspective on the soy food market in regions where soy is considered a cultural staple.

"Our in-country staff and market experts share both broad and deep insight into current factors impacting soy food markets with growing demand for both traditional soy foods and new plant-based protein options," says Will McNair, director of oil and soy food programs and deputy director of Northeast Asia for USSEC. "The report explores factors from sustainability and consumption

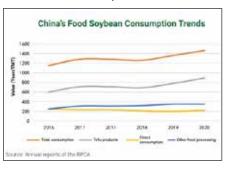
to policy and labeling to give the industry a holistic picture."

The report details trends in the consumption of traditional soy products like tofu, natto and soy drinks. It also delves into new trends focused on plantbased meat and other protein products, consumer interest in sustainability and countryspecific regulations.

A few examples highlight the breadth of the report's content:

China

Increasing tofu consumption drives overall soy food demand



million acres. Ohio non-GMO production fluctuates between 6 to 12 percent of total acres. U.S. non-GMO production decreased in 2021 due primarily to the high Chicago Board of Trade (CBOT) price for commodity soybeans.

"U.S. Soy is well positioned to meet the need for soy food beans in these markets," McNair says. "Soy food manufacturers throughout the region want reliable, sustainable sources of high-quality soybeans. U.S. soybean farmers have delivered for years, and they continue to improve the quality and sustainability of production." He believes the report

delivers valuable information about sov food opportunities in North Asia. It will help

	U.	S. Food-G	irade Si	oybean	Producti	on				
÷.	■ 2020 ■ 2021 <mark> </mark>									
K of Food-gri Sorbeans			•••			General				
		Soy Milk		Natto	Sprouts	Use	Other*			
2020	49%	29%	9%	5%	1%	1%	0.26			
2021	52%	28%	9%	5%	1%	1%	7%			
2022	49%	27%	8%	5%	1%	-1%	8%			

USSEC members, soy food manufacturers and farmers raising soy food beans better understand the market environment.

"Our team helps make sense of market trends and the factors influencing," he continues. "The North Asia Soy Food Report serves as a planning resource for the entire industry, especially those connected to markets in China, Japan, Korea and Taiwan." \blacklozenge

To read the full report, visit ussec.org or scan the QR code with your phone.





Serving With Soy

inding ways to add soy into your diet has never been easier, and to prove it, here is an entire day's worth of soy-based recipes. From breakfast in the morning to a late-night dessert, there are plenty of ways to serve with soy.



Breakfast: Wholesome Soy Berry Pancakes

There's no better way to start your day than with a nice stack of pancakes, and these blueberry pancakes made with soy ingredients are no exception!

Soy Berry Pancakes Ingredients:

- $1\frac{1}{2}$ cup white whole-wheat flour $\frac{1}{2}$ cup oatmeal, quick cooking 2 tablespoons baking powder
- 1¹/₂ cup vanilla or plain soymilk 4 Eggs
- 2 tablespoons brown sugar, packed
- 2 tablespoons soybean oil 4 cups fresh blueberries. divided
- Maple syrup (optional)

Instructions:

Combine flour, oatmeal and baking powder in medium bowl. Whisk soymilk, eggs, brown sugar and soybean oil in large bowl until blended. Add flour mixture to soymilk mixture; stir just until blended. Stir in 2 cups berries.

Heat large skillet over medium

heat; brush lightly with soybean oil. Pour 1/4 cup batter into hot skillet; cook until bubbles begin to burst. Turn and continue cooking for 1 to 2 minutes or until golden. Repeat with remaining batter. Serve with remaining berries and maple syrup, if desired.

Recipe by Soy Connection

Lunch: Margherita Pizza

After a hearty breakfast, it's time for delicious lunch. Pizza is a lunch classic and this margherita pizza recipe is sure to keep you going throughout your day, and it's another example of a great soybased recipe.



Margherita Pizza Ingredients:

- 2¹/₂ cups all-purpose flour, divided 1 package dry yeast (.75 oz.) ³/₄ teaspoon aalt 1 cup warm water (120 to 130⁰ F)
- 4 tablespoons U.S. grown sovbean oil. divided
- ¹/₂ cup store-bought marinara or pizza sauce 4 medium Roma tomatoes,
- thinly sliced
- 6 ounces fresh mozzarella. sliced
- 6 fresh basil leaves, torn into pieces

Instructions:

Combine 2 cups flour, yeast and salt in a large bowl. Stir in warm

water and 2 tablespoons soybean oil. Add additional water, as needed, to form a soft dough. Knead 4 to 6 minutes on lightly floured surface until smooth and elastic. Cover; let rest on floured surface 10 minutes. Preheat grill to medium-high. Divide dough into 4 portions. Pat or roll dough on a well-floured counter to about 8-inch circle. Brush both sides of each crust with remaining soybean oil. Place crusts on grill and cook for 3 to 4 minutes until crust bottoms are lightly browned. Carefully flip crusts over using large spatula. Top each crust with marinara or pizza sauce, tomatoes, cheese and basil, dividing ingredients evenly. Cook an additional 3 to 4 minutes until bottom of crust is browned and cheese is melted. Remove from grill and serve immediately.

Oven baking instructions: Assemble pizzas, place on baking sheets: bake for 10 to 12 minutes in 450°F degree oven.

Recipe by Wendy Yaegar, Soy Connection

Dinner: Southwestern Pork Tenderloin with Soy Succotash

Continue your day of soy-based food with a hearty protein. This southwestern pork tenderloin has multiple aspects of soy in it, from soybean oil to edamame, all to pair with the protein. Reward yourself after a hard day's work with this filling meal.

Southwestern Pork Tenderloin Inaredients:

2 tablespoons brown sugar 1 teaspoon paprika, ground ¹/₂ teaspoon cumin, ground ¹/₂ teaspoon cayenne pepper, ground



¹/₂ teaspoon salt 1 pound pork tenderloin 1 tablespoon soybean oil

Soy Succotash Ingredients:

- 2 teaspoons soybean oil 2 cups edamame, cooked,
- drained
- 2 cups cherry tomatoes,
- cut in half
- 1 cup corn, frozen, thawed,
- drained
- ¹/₄ cup red onion, diced
- 2 teaspoons garlic, minced
- 1 teaspoon cumin. ground
- ¹/₂ teaspoon salt ¹/₄ teaspoon cayenne pepper,
- ground

Instructions:

Southwestern Pork Tenderloin: Preheat oven to 350°F. Mix brown sugar, paprika, cumin, cayenne pepper and salt. Sprinkle mixture over pork tenderloin. Heat oil in large ovenproof frying pan over medium high

heat. Add pork; cook for 1 minute on each side, until brown.

Place frying pan in oven and bake 10 to 15 minutes until pork reaches an internal temperature of 155°F. Remove from oven and cool 5 minutes before slicing into medallions. Soy Succotash: Mix edamame, tomatoes, corn, onion, garlic, cumin, salt and cayenne pepper in medium bowl.

Heat oil in medium frying pan over medium heat. Add edamame mixture and cook, stirring constantly, for 1 to 2 minutes or until warm. Makes 4 cups succotash. Recipe by Soy Connection

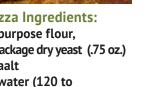
Dessert: Classic Cupcakes with Fluffy Icing

Finish off the day with a classic cupcake made from soybean oil and topped with a delicious fluffy icing. This recipe makes 24 cupcakes which makes it a multiple day dessert or a perfect addition to a party.



Cupcake Ingredients:

2¹/₂ teaspoons baking powder ¹/₂ teaspoon baking soda



2¹/₂ cups all-purpose flour, sifted

1 teaspoon salt

- 4 Large eggs, beaten
- 1¹/₂ cup sugar
- 1 cup soybean oil
- 1 tablespoon vanilla extract
- 1 cup buttermilk

Fluffy Icing Ingredients:

1/2 cup soybean oil-based shortening 1/2 cup whole milk 1 teaspoon vanilla extract ¹/₂ teaspoon salt 1½ lbs. (about 7½ cups) powdered sugar

Instructions:

Cupcakes:

Preheat oven to 350°F. Line 24 muffin cups.

Sift flour, baking powder, baking soda and salt into a medium bowl.

Beat eggs and sugar in a large bowl with an electric mixer on medium speed for 1 minute. Add soybean oil and vanilla; beat for an additional 1 minute.

Reduce mixer speed to low. Slowly add flour mixture to the large bowl, alternating with buttermilk, and scraping the sides of the bowl as needed. Spoon batter into prepared muffin cups using a ¹/₄ measuring cup or #16 scoop, filling each cup to about half full.

Bake for 20 to 22 minutes until cupcake springs back when touched.

Cool completely. Frost with Fluffy Icing.

Fluffy Icing:

Beat shortening, milk, vanilla and salt in a medium bowl on low speed, gradually adding powdered sugar until combined.

Increase mixer speed to high; beat 3 minutes until smooth and fluffy. Add additional powdered sugar or milk to achieve desired consistency.

Recipe by Soy Connection \blacklozenge



Building Soy's Reputation Through Human Health Research and Outreach

By Sarah Alsager, Director of **Communications and Outreach**, **SNI Global**

oy Nutrition Institute (SNI) Global is a 501(c) (6) non-profit corporation that funds research and shares evidence-based information on the impact of soybeans and soy ingredients for human health and nutrition. The organization includes a hearty mix of industry members (such as Kellogg, Cargill, Danone North America, IFF, and House Foods America), soy stakeholders (including the United Soybean Board, qualified state soybean boards, ASA, WISHH, U.S. Soybean Export Council), scientific advisors, and U.S. soybean farmers.

SNI Global leads the way in soy human health and nutrition research, and then communicates the scientific evidence to members. targeted food and nutrition influencers, policymakers, and the soy industry at large. The Soy Nutrition Institute was founded in 2004 through an initiative of the United Soybean Board. In 2021, it was reorganized with a new name - SNI Global - and more robust mission.

SNI Global implements strategies that allow member and farmer dollars to be leveraged by working in conjunction with other trade associations within the soy industry. The majority of SNI Global's funding for research and communications comes from the United Soybean Board and supports clinical research and scientific manuscripts as well as communications efforts to

disseminate the scientific findings. While funding from the United Soybean Board is not used to influence government action and policy, SNI Global

membership funds enable the organization to track key issues related to government and regulatory affairs and be the voice of soyfoods and advocate for U.S. soybean farmers when appropriate. All of this is amplified by collaborating with membership, medical and nutritional professionals, and key influencers.

SNI Global's research proactively promotes how soy protein and oil can aid healthy growth, healthy living and healthy aging, while also addressing misperceptions. With support from U.S. soybean farmers and soyfoods companies and organizations, SNI Global has invested in many exciting research projects such as research exploring how soy isoflavone consumption improves several aspects of the skin health including a reduction in wrinkles. Another highly anticipated research project currently underway is examining the role soy protein and soybean oil may play in reducing risk of coronary heart disease in people with metabolic syndrome, which refers to a cluster of conditions that increase the risk of heart disease, stroke and diabetes.







In addition, SNI Global builds relationships with key food and nutrition influencers to disseminate research findings. One such engagement is participation in FoodFluence, an invitation-only food and nutrition thought-leadership conference for registered dietitians (RDs). About 30 RDs are selected to attend each year based on their broad reach to consumers through traditional publications and social media channels. In January, SNI Global partnered with Kellogg to offer a three-hour session entitled "A Hunger for Health: Providing Clarity Rather Than Confusion". The session featured a panel of experts who examined the current research. provided a detailed perspective of global front of package (FOP) systems, assessed their potential basis for a successful U.S.-based system, and shed light on whether "processed" and "ultra-processed" equate to the nutrition and health value of food. This last topic is especially important to soy because both soymilk and soy-based meat alternatives are considered "ultra-processed" by NOVA, a well-known food classification system.

Investing in research and working with influential voices in the food and nutrition space helps remove barriers for soy and build demand for U.S. soybean farmers. SNI Global protects and defends soy's reputation and promotes soy as a premium food and ingredient. While food remains a relatively small piece of the soybean market, SNI Global's dissemination of evidence-based findings can result in new market opportunities and support the beneficial image of soy. To learn more about SNI Global, visit https://sniglobal.org. ◆

This article was partially funded by the United Soybean Board.

Investing Checkoff Dollars OHIO SOYBEAN **Behind the Beans**

did not grow up on a farm. I grew up in Delaware County, in a place where I knew people who farmed and many of my friends were involved in 4-H. My direct connection to farming, however, had ended when my grandparents moved off their Morrow and Knox County farms in the 1950s.

When I first started working for the Ohio Soybean Council (OSC) as a recent college graduate, I knew very little about soybeans. I knew what the plants looked like, and I knew that the farmers who grew them behind my parents' house planted them in the spring and



harvested them in the fall. But I knew almost nothing about what happened to them once they left the field. I figured they were all turned into tofu and soy sauce.

Somehow, I was both right and wrong. Soybeans are much more than just the soyfood products you can make with them, but food grade beans from Ohio are highly sought after. The climate and soils here produce the right texture and flavor profiles that can't even be replicated in Asia where soybeans originated. Each year, roughly 6-10% of our crop is comprised of food grade

By Julia Brown, OSC Director of Communications



beans, a higher percentage than any other state.

As the Director of Communications, I think I'll always have a sweet spot for soyfoods. When we do outreach to educate consumers about farming and soybeans, soyfoods often provide a great starting point for people who, like me five years ago, don't know that much about soybeans. It's an easy entry point because food is something we all have in common.

So I encourage you to try some of the recipes in this issue. The more we know and use our own product, the better we can help consumers understand what we do and why soybeans are so important to our state. \blacklozenge



OHIO SOYBEAN

Airable Expands Workforce Heading Into Summer 2023

By summer of 2023, Airable Research Lab will have officially hired three new members of the lab team. Airable is the award-winning research lab funded by OSC created to focus solely on developing new uses for soybeans.

Grant Proulx joins Airable as a subject matter expert. Proulx is a research and development chemist with 28 years of experience. Over the last six years, Proulx has been with MATRIC, working as a principal research and development chemist and a principal scientist. He also brings research experience from years working at DuPont

(senior research chemist), at Buckman (group manager of chemical synthesis and analytical research), and at Celanese (research



and development group leader). He received his doctorate in chemistry from the University of California,

Berkeley, as well as a bachelor's in chemistry from the University of Florida.

The other new team members are summer interns George Katradis and Clint Johnson. Katradis is a chemical engineer attending the University of Cincinnati. He has co-op experience focused on polymer formulations and scale-up applications. Johnson is a chemistry and mathematics major attending Ohio Wesleyan University. He has a lot of experience working in agriculture, from running an egg business to helping on an 88-acre cattle and hay ranch.



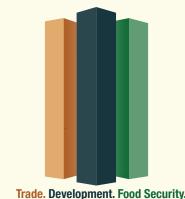




Make Moves with U.S. Soy

Our founding farmers took action 22 years ago to launch ASA's World Initiative for Soy in Human Health so WISHH could grow new markets for U.S. Soy. Today, WISHH is working with strategic partners that use soy for food or feed in 28 countries across Asia and Latin America to sub-Saharan Africa.

Find out how WISHH's three pillars of trade, development and food security cultivate new markets for U.S. Soy protein.







May-June 2023



"Researching soybeans is a really interesting line of work. There's always something new going on every day. And **it's exciting to be at the forefront of this push for more bio-based products**."

-ALEX SHAND, INNOVATION ENGINEER AIRABLE RESEARCH LAB

HEREINOHIO, WEGROW MARKED



Innovation helps drive soy demand and benefits your operation. By investing in the Ohio Soybean Council, farmers get a firsthand look at the new products and research that is revolutionizing the industry, helping to further global demand, improve yields and create new opportunities for future generations.

Learn more at SoyOhio.org/HereWeGrow

