NATIONAL SORGHUM PRODUCERS

SORGHUM Grower

FALL 2021

Did You Know?

MILO OR SORGHUM

NSP MEMBERSHIP MATTERS

THE TRUTH ABOUT TANNINS

Plus

TRADE DISRUPTIONS DRIVE UP INPUT PRICES

SORGHUM FOR BIRDS PROGRAM LAUNCH

Included Inside

SORGHUM CHECKOFF NEWSLETTER

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ON THE COVER: In this "Did You Know?" issue, we're tackling a few differences of opinion and common misperceptions about sorghum. Learn where the term milo originated along with a few other sorghum facts, including your own responses to a survey! (Harvest photos from Berning Farms by Hailey Gilbreath)

NATIONAL SORGHUM PRODUCERS
SORGHUM Grower

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NATIONAL SORGHUM PRODUCERS

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Sorghum Grower is published by the National Sorghum Producers, an organization that represents U.S. sorghum producers and the sorghum industry. NSP is headquartered in Lubbock, Texas, in the heart of the U.S. Sorghum Belt. The organization serves as the voice of the sorghum industry coast to coast through legislative and regulatory representation and education. To subscribe, make address changes, or inquire about membership or advertising, please call 800-658-9808 or email our office at jennifer@sorghumgrowers.com.

From the CEO

A Season of Change

Welcome to the 60th edition of *Sorghum Grower* magazine. It does not seem possible there have been that many issues, but what started as a new medium to reach sorghum farmers has turned into one of our strongest tools.

I hope you are all finished with a blessed harvest season. As we look ahead from both an industry and an organizational standpoint, there are some key changes continuing to take place. We greatly appreciate our members and advertisers who have helped us make *Sorghum Grower* magazine a successful tool for sharing information with our growers and industry.

Travel restrictions over the last year afforded us some well-used downtime, which allowed us to do survey work with our growers and our sponsors. National Sorghum Producers continues to strive to be data driven in our focus to take care of your needs. Input from that data clearly showed us it is time to make a couple of tweaks to how we deliver *Sorghum Grower* magazine and when we deliver it. Therefore, you will notice a special edition of *Sorghum Grower* coming to your mailboxes in January that is much more focused in its content. The Spring, Summer and Fall editions will continue on as normal.

NSP is not the only area experiencing change. On a different front, D.C. is all about climate-smart agriculture. Both on Capitol Hill, as Congress continues to debate infrastructure and reconciliation bills, and at USDA where they announced at the end of September several billion dollars of support for multiple areas.

USDA is really focusing on climate-smart agriculture programs, which should be a great fit for sorghum as we were using the term climate-smart crop long before it was cool in Washington, D.C. Our board and legislative committee continue to work hard to develop priorities that make sense for the Sorghum Belt as the government continues to move forward with these programs. Expect more announcements from USDA about climate-smart agriculture and forestry initiatives in the next few months.

In the Sorghum Belt, we see droughts and weather extremes on a regular basis, and the reason many of you plant sorghum is because of its value in a system where you have to manage risk and increase profits. It remains to be seen the exact details of the size and scope of government involvement in the climate arena, but it is definitely one of the most significant areas today. I personally believe that farmers will have some interesting choices to make in the next year as you decide which of these new programs fit your farming operations and which are better left for the neighbor down the road.

As always, it is an honor to continue to lead your trade association, and we continue to work daily to make sure we help provide you tools, information and support to continue to raise sorghum (or milo!) in a profitable manner.

Tim Lust

Tim Lust, CEO

milo OR SORGHUM
what say you?

By Peter Hill, originally posted to "The Refined Woodworking Agronomist" blog May 2021

I was recently asked by David Ocker (@davidocker286 on Twitter), "Where did the nickname for sorghum, 'milo,' originate?"

There are several sources that can enlighten us on the history of sorghum and its relatives and many theories on the various names we call it today.

I thought this excerpt taken from the book, *Crop Production – Evolution, History and Technology* by C. Wayne Smith (Wiley & Sons, Inc., 1995), provided valuable insight on how various sorghum types, including milo, came into production in the United States.

"Deliberate introduction of sorghum began in 1857 with the importation of a 'sorgo' type used for the production of syrup. These are referred to today as cane sorghum, sweet sorghum or cane, not to be confused with sugar cane. In that year, seed of Chinese Sugarcane, a sorgo or syrup sorghum, was sent to Texas by the U.S. Indian Service for production in the Brazos and Comanche Amerindian reservations. Additional early introductions were:

- 1874: Brown and white seeded durras called "gyp" corn, as they were falsely believed to have originated in Egypt;
- 1876: Kafir type from South Africa;
- 1880: Milo, milo maize, or giant milo: race and origin unknown;
- 1890: Shallu, a guinea-kafir intermediate from India;
- 1906-8: Feterita, race caudatum, or intermediate race durra-caudatum, from Sudan;
- 1906-8: Hegari type, race dauatum, from Sudan; and
- 1906-8: Pink kafir from South Africa.

All of the early sorghums were for forage or were dual-purpose – i.e., they were grazed, baled, and/or seed harvested as feed. Early farmers in the more arid plains of Oklahoma and Texas quickly realized the difficulty and uncertainty of producing corn as a feed for work animals and turned to the more drought-tolerant grain sorghum. The Texas Agricultural Experiment Station Bulletin No. 13 published in 1890 reported 23 varieties (i.e., cultivars) of sorghum available to Texas producers. That publication noted that farmers valued both the stalk and grain as feed stuffs. The need for more drought-tolerant crops in the arid plain states resulted in the majority of early plant improvement in grain sorghum being accomplished in Texas, Oklahoma, and Kansas.

The early sorghums in the United States were tall-growing and late-maturing, facts that we will return to subsequently. But the milo maize introduction of 1880, later referred to as Giant Milo, spread to Texas by 1890 and was particularly tall-growing. In fact, the common Texas folk tale of this sorghum was that it took a ladder to reach the head, an axe to cut the stalk, and a grubbing hoe to uproot the stubble. Seed of tall sorghums of that time were harvested by a person standing on a mule-pulled wagon to cut off heads and then of course accumulate the heads in the wagon for transport.

Shortly after the turn of the century, farmers found early-maturing heads of Giant Milo, which gave rise to a cultivar called Standard Milo. (Note that much of the literature will use the term 'milo' to refer to grain sorghum of the durra race. Much of this race is characterized by a recurved peduncle such that the head is upside down at maturity.) Also about 1900, a farmer in Oklahoma selected Dwarf Yellow Milo from Standard Milo, seed of which were purchased by A B. Conner for the U.S. Department of Agriculture (USDA) and distributed to farmers in north Texas near the town of Chillicothe. The distribution probably occurred between 1905 and 1910, as the Texas Agricultural Experiment Station and the USDA began research efforts at Chillicothe in 1905. An earlier-maturing cultivar, Early White Milo, was selected from the yellow milos about 1910."

So, did this excerpt really answer the question on where the name "milo" came from? I think given that milo was a type of sorghum introduced and cultivated throughout the United States since 1880, it stands to reason the name carried over through the generations. At least in my travels throughout the south and Great Plains regions, milo and sorghum are used interchangeably. And given that a high percentage of it is for grain production, I understand both to mean the same. Perhaps other regions of North America call it something different?

In today's world of grain production, varieties of sorghum other than the standard grain sorghums sold by the major seed companies are generally grown and sold by heirloom seed providers. Scouring the web, it's easy to find providers of kafir, sweet sorghum and other old world varieties. You'll often find old cane presses being demonstrated at country fairs and antique farming shows.

If the reader is curious about the etymological origin of milo, look no further. The answer to that question lies in the online American Heritage Dictionary *https://ahdictionary.com/word/search.html?q=milo*.

I want you to do well. - PH

Unprecedented Trade Disruptions Drive Scarcity, Record Prices for Agricultural Inputs

By Partrick Wade, Texas Grain Sorghum

When Eiji Toyoda visited Dearborn, Michigan, in the early 1950s, he hoped to glean some insight into the United States' prodigious automobile manufacturing prowess that would bolster his embryonic family business back in Japan—the Toyota Motor Company. Toyoda left the Ford Motor Company plant in Dearborn with an appreciation for the sheer volume of American automobile production, but as the legend goes, it was not until Toyoda happened to visit an American grocery store afterward that the seeds of the revolutionary Toyota Production System—commonly known now as just-in-time production—began to take root.

Toyoda believed the manufacturing supply chain could replicate the lean efficiency of a grocery store where inventory is meticulously managed so stores restock shelves to replace just what is purchased by consumers. Beyond elevating Toyota to the upper echelon of the automobile industry, this philosophy spread across the increasingly globalizing economy with manufacturers across all sectors adopting a more agile approach to production. In order to minimize costs, orders are placed on short notice and inventory is minimized. In conjunction with liberalized trade policies and free trade agreements, the Toyota Production System helped usher in the new era of an interconnected global supply chain in which each link in that chain must be able to play its part on demand and without delay.

But what happens when major, unpredictable disruptions do occur? While manufacturers build some risk-based flexibilities into just-in-time production strategies, the current coalescence of a global pandemic, devastating weather events, raw material scarcity and labor shortages is begging urgent questions about the resilience of the global supply chain. In agriculture, the supply chain crunch is sending the costs and availability of some critical agricultural inputs sky-high, driving many U.S. producers to rethink 2022 planting decisions.

Perhaps the most illustrative example of this phenomenon can be seen in fertilizer availability and costs. While weather events such as the winter storm and summer hurricane season hobbled domestic production, it is global fertilizer exports facing the sharpest challenges. Europe, a major producer of fertilizer, has seen the price of natural gas (the primary feedstock and process fuel for ammonia production) climb to six times over what it was last year due to energy constraints. On top of that, geopolitical tensions with Russia—the region's major supplier of natural gas—over the national security implications of a cross-border energy infrastructure project are further limiting its availability, which, in turn, restricts fertilizer production.

However, while Europe plays an important role in the global agricultural input crunch, all roads eventually lead back to China. Like Europe, China is experiencing its own energy supply crisis, which caused the world's largest exporter of phosphate to briefly pause urea and diammonium phosphate exports earlier this year in order to focus on servicing the country's share of the global boom in feed grain plantings in 2021. As production challenges cascade across continents, the Green Markets North America Fertilizer Price Index rose to $996.32 per short ton in mid-October, well beyond the previous high recorded in 2008, to levels not observed since the index was first published in 2002.

▲ SUPPLY CHAIN DISRUPTIONS have led to a fragile supply of farm inputs like fertilizers, fuel and machine parts, sending prices sky high.

Fertilizer isn't the only agricultural input whose price and availability is being affected by a litany of supply chain disruptions in China. Agricultural chemicals, particularly glyphosate, are experiencing significant price hikes and strained inventories as we enter Q4, typically the highest exporting quarter of the year for the products. A variety of factors, including new environmental quality mandates ahead of the 2022 Winter Olympic Games in Beijing, have limited production of raw materials such as yellow phosphorus, a key ingredient in glyphosate and other organophosphorus products.

Like with fertilizer, U.S. growers are disproportionately reliant on export markets to fulfill agricultural chemical demands due to recent extreme domestic weather events. Hurricane Ida knocked out the Luling, Louisiana, Bayer plant—the largest U.S. producer of glyphosate—for weeks, causing another rippling disruption through the supply chain. Also, like with fertilizer, these production challenges are compounding to send projected prices of glyphosate well beyond highs seen in 2008.

The challenges facing China's sprawling share of the global supply chain extend beyond raw materials and manufacturing sites. In fact, across all the disruptions to the global supply chain in the last 18 months, bottlenecks in China's shipping and transit infrastructure have perhaps been the most caustic to prices and availability of both agricultural inputs and goods in general.

This summer, Bloomberg's Ann Koh charted the path of one shipment of fertilizer from China ordered by a midwestern U.S. farmer and observed that it experienced COVID-19-related shutdowns at two separate ports along the way due to infected workers. In between those two shutdowns, a particularly active typhoon season forced all ships to evacuate the Shanghai port and restricted movement of goods through China's arterial system of rivers. In all, these slowdowns pushed a fulfillment that typically took 70 days pre-pandemic to eight months and counting.

In total, there are 25 million containers in the global supply chain and roughly 6,000 ships tasked with hauling them between ports. A variety of factors, from U.S. labor shortages to resurgent consumer demand post-pandemic, have dramatically reduced the availability of these containers and burdened shippers with demurrage costs as a consequence of the slowdown. By many metrics, this came to a head in September when the median cost of shipping a container from China to the West Coast of the U.S. climbed above $20,000 with surcharges and premiums factored. While October has seen that figure drop by 11 percent (the steepest decline since the beginning of the pandemic), many experts do not expect the logistical knot to be fully unraveled until well into 2022. These unprecedented freight costs affect the scarcity and costs of all agricultural inputs, as well as equipment, raw materials and other resources critical to any modern farming operation.

By all accounts, in the long-term, the unceasing thrum of economic activity will soothe the global supply chain back to an equilibrium. But the disruptions over the past 18 months have exposed the links in that chain to be more fragile and more susceptible to fraying than once thought possible. As farmers brace for skyrocketing input costs, though, one thing still rings as true in 2021 as it did in the 1950s when Eiji Toyoda walked into that Michigan grocery store: agriculture is right in the middle of it all.

Congress Punts Priorities to December

By Haleigh Erramouspe

Infrastructure and how to fund it persist as the big ticket items on the Congressional to-do list as Congress heads into the final hours of 2021.

Despite months of negotiations, it took Congress into high time before government funding expired on Sept. 30 to pass a stopgap funding bill to keep the government open through Dec. 3.

In addition to funding the government, the package, which was signed by President Biden late in the evening of Sept. 30, includes $275 million for watershed and flood prevention operations (WFPO) at the Natural Resource Conservation Service (NRCS), $10 billion for an extension and improvements to WHIP+, including $750 million for livestock affected by drought, as well as an extension of authority for USDA's livestock price reporting system.

The agriculture disaster funding covers losses of crops, trees, bushes, and vines caused by a wide range of disasters across the country including drought, wildfire, hurricanes, floods, derechos, excessive heat, winter storms, freeze, including a polar vortex, smoke exposure, quality losses of crops, and excessive moisture.

Counties experiencing D2 drought for eight consecutive weeks or higher drought qualify. The yearly payment limit is $125,000. However, if at least 75 percent of a producer's AGI is derived from farming, ranching, or forestry-related activities, the per year payment limit is increased to $250,000. Specialty crop producers deriving at least 75 percent of their AGI from farming, ranching, or forestry related activities will have a payment limit of $900,000.

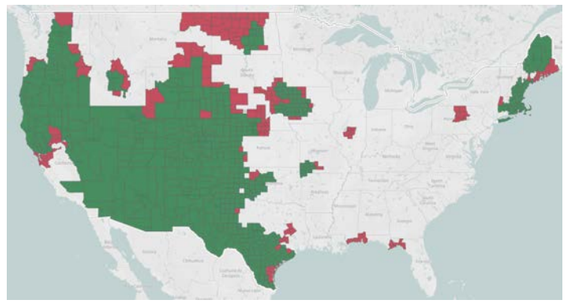
National Sorghum Producers advocated for the extension of WHIP+ for the 2020 and 2021 crop years. Overall, the extension of WHIP+ improves upon the existing program and provides much needed relief after several economically challenging years in agriculture, and NSP was pleased to see the measure included in the continuing resolution recognizing the needs of producers.

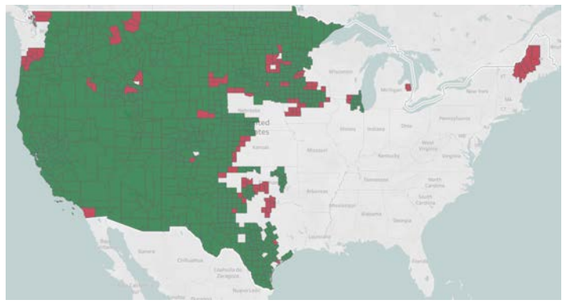
While Congress had success in the bare minimum of passing a clean continuing resolution to keep the government running, at the time of writing this article, they have still failed to negotiate passage of the bipartisan and social spending infrastructure packages. The same thorn of bottom line spending, combined with a looming debt ceiling, continues to be the major holdup.

Once again decisions on both infrastructure packages and raising the debt ceiling have been punted and negotiations will continue through the fall until the new Dec. 3 deadline. While there are still significant partisan differences of opinion on the packages, the Democrats are also facing inter-party disagreements on just how large the second package should be.

More moderate Democrats, such as Sens. Krysten Simema (D-AZ) and Joe Manchin (D-WV), have drawn a hard line in the sand at $1.5 trillion, while more progressive Democrats in the House want to push the package to the full extent of $3.5 trillion. With extremely slim margins in both the Senate and House, Congressional Democratic leadership must find a way to build compromise within their own party should they hope to get these packages across the finish line and have something to hang their hat on in the upcoming 2022 elections.

▼ COUNTIES EXPERIENCING D2 (red) or D3 (green) drought for more than eight consecutive weeks in 2020 (left) or 2021 (right) qualify for support under the WHIP+ extension.





Who's Who and Who's New at USDA?

With a new Administration comes new faces at USDA. From a former Secretary of Agriculture to former Members of Congress and those who have served USDA for many years, the new slate of leaders at USDA may be new but certainly are not unfamiliar to sorghum leaders.

Chosen to lead USDA as **Secretary of Agriculture** is Thomas Vilsack. NSP worked with Secretary Vilsack when he served in the same role under the Obama Administration. Between his appointments as Secretary, Vlisack served as president and CEO of the U.S. Dairy Export Council.

Robert Bonnie was nominated as the **Under Secretary of Farm Production and Conservation**. He currently serves as the deputy chief of staff at USDA and the senior adviser for climate and was a part of the early Biden transition team at USDA. Prior to this role, Bonnie worked with Vilsack as an adviser in the Obama Administration and was Under Secretary for Natural Resources and the Environment. As of the publishing date, Bonnie has yet to be confirmed by the Senate.

Serving as **Administrator for the Farm Service Agency** (FSA) is Zach Ducheneaux. Ducheneaux was appointed on Feb. 22. A native of South Dakota, he previously served as the executive director of the Intertribal Agricultural Council, the largest, longest-standing Native American agriculture organization in the United States.

The new **Chief of the Natural Resources Conservation Service** (NRCS) is Terry Crosby. Crosby served as Acting Chief for several months prior to his current appointment, which started May 24, but he has worked for NRCS for more than 40 years in numerous leadership and staff positions.

Jenny Lester Moffitt was confirmed by the Senate on Aug. 11 to serve as the **Under Secretary for Marketing and Regulatory Programs**. Moffitt previously served as undersecretary for the California Department of Food and Agriculture where one of her responsibilities was leading climate efforts for the department.

Xochitl Torres Small was confirmed as the **Under Secretary of Rural Development** on Oct. 7. Prior to this appointment, Torres Small served one term in Congress, representing New Mexico's second district. While in the House of Representatives, she served on the House Committee on Agriculture as well as the Armed Services and Homeland Security Committees.

**Under Secretaries for Trade and Foreign Agricultural Affairs; Research, Education and Economics; Food Safety; and Food, Nutrition and Consumer Services have yet to be nominated by President Biden.*

Member Testimonial

An Investment in NSP is an Investment in Us All

By Ted Bannister, Hays, Kansas

It is seldom that I, as a farmer, have the nerve to feel proud of my production. I understand that, despite following best practices, my yields and profits can vary by 50-100 percent due to things I cannot control like rain (too much, or too little, or too late), markets, pests, breakdowns, etc.

I must also humbly recognize that, although being the grower makes me a vital part of the food production chain, there are other critical components ahead and behind me getting a seed into the field and out again. I will revisit these components below, but I would like to take this chance to brag about a management part of my farming operation that I DO feel proud of.

I take pride in having a streak of years where I was KICKED OUT of the Kansas Farm Management Association (KFMA) livestock producer data set. My exclusion happened because my costs were so low that I was considered an "outlier." KFMA said I was, "so far outside the norm as to question their validity or use in a data set."

What had I done to achieve this ignominy? I graze my cow herd on grain sorghum stalks four plus months per year. As soon as harvest is done, electric fences go up, and cattle are released onto the crop residue. They happily remain there until the first couple of calves hit the ground (April 1) before coming home for closer attention.

In April, we have some grass greening in the pasture draws, so some moms that just got home have a calf and are back out on grass within a week. While they are home on my groceries, they are eating bromegrass made from the conservation waterways hayed from those same grain sorghum fields the cows spent the winter on.

This is how I utilize my environment and my mainstay crop, grain sorghum, to minimize costs and maximize profit in my farm and ranch operation. What makes this system particularly advantageous is that grain sorghum is already the most profitable crop I raise.

I live in Rush County, Kansas, which as I say "is in the middle of everything and close to nothing." We average 22 inches of rainfall per year (it's never an average year). The predominant crop rotation in our area is wheat-grain sorghum-fallow.

I use that as the basis for my rotation but tweak it to add more grain sorghum either by stacking it or going sorghum-fallow-sorghum. I also raise some corn and use fallow substitutes like barley, oats or cover crops. Again, grain sorghum is the most profitable crop I raise (some years it is the only profitable crop), evident through my constantly revised budgets and verified by KFMA from the above example.

However, I cannot be too smug about my grain sorghum profitability because, as I alluded to earlier, I am buttressed on both sides of the production chain by groups bigger, louder and smarter than me—the National Sorghum Producers and United Sorghum Checkoff Program.

The seed I put in the ground has the yield potential, disease resistance, environmental adaptation, and now herbicide tolerance, all largely because of these sorghum grower groups. I also have to admit that the price I receive for the grain coming out of my fields is greatly supported not by my branding or the "terroir" (look it up) of Rush County soil, or its packaging I present it in at the elevator.

That price, which is now higher than ubiquitous corn, is supported by these grower groups assuring buyers, domestic and international, about the quality and consistency of my grain, finding new buyers for that grain and finding new uses for it.

When I admit that my profitability (and latent pride) owes so much to these sorghum grower groups and their efforts, it becomes clear that maximizing their success means maximizing my success. That's why, fellow grain sorghum farmers, I hope that you would look at an annual contribution to National Sorghum Producers not as a gift, but as a vital expense like any other line item in your business.

My KFMA (again with this?) economist tells me year after year about farmers stressed out about having to pay taxes and making year-end expenditures that make no economic sense nor have a return on investment. INSTEAD, why don't they 1) put their money toward something that generates a positive return (National Sorghum Producers!), and 2) reward that part of your business and industry that allowed you to have that annoying profit (National Sorghum Producers!). Contribute a dollar an acre (!) toward all our success.

Member Testimonial

Sorghum Membership Contributes to My Bottom Line

By J.B. Stewart, Keyes, Oklahoma

I am a fourth-generation farmer from Cimarron County in the Oklahoma Panhandle. I started farming in partnership with my father in 1969 when I graduated from college, and, soon after that, I married Carol, my lovely wife of 51 years.

For several years we farmed mostly wheat, fallow, wheat, and wheat for grazing purposes. In the mid-1980s, I brought sorghum onto the farm with a wheat, sorghum, fallow rotation that we still use today. I believe that in our environment, my wheat yields actually increased with this rotation.

In 1993, my son Jarrod came into partnership on the farm. I had a great personal and business relationship with my father, and now I have that same relationship with my son—we have a very blessed life on the Stewart farm.

I have been a member of National Sorghum Producers for over 30 years. I am convinced that my longtime membership in this organization has contributed to my success on the farm. In the early years, sorghum seemed to be a pretty boring crop as it had a set basis relative to corn.

When commercial ethanol production came to the Sorghum Belt, we had a bump up in basis value because sorghum is equal in value to corn for ethanol volume and the distillers grain has higher protein with sorghum.

> "Sorghum is a relatively small commodity when compared to the other major crops; therefore we need a high percentage of producers to support our organizations."

Many years ago, much of what we now call the Sorghum Belt had many wild and spirited herds of Mustang horses roaming the prairies. I mention this analogy because in the past few years our sorghum production has experienced a wild and spirited basis increase across those same prairies.

China came into the market so aggressively that it appeared our entire crop was a niche market. As producers, we experienced increased value in our crop that was never dreamed of previously. This kind of value increase does not happen by accident. The Sorghum Checkoff invested in this market development, and NSP invested time and money in governmental policy development in order for this to all come into place.

I urge everyone reading this to become active members of NSP and to support our Sorghum Political Action Committee (PAC). Sorghum is a relatively small commodity when compared to the other major crops; therefore, we need a high percentage of producers to support our organizations. We need an efficient and well staffed NSP in order to maintain this excitement in our industry. Strategic placement of Sorghum PAC dollars ensures that our crop is well positioned as farm policies change.

I served on the NSP board of directors for several years and went through the officer rotation, which is not something I had planned to do, but I thoroughly enjoyed every minute of my time on the board and made many lifelong friends. It is not easy, but it is extremely rewarding.

I hope that no one reading this thinks when NSP goes to Washington, D.C., they are there on vacation. I can assure you those trips are the most intense, action-packed three or four days on the planet. Oftentimes we are scheduled non-stop from 8:00 a.m. until dinner with meetings in Senate and House offices, USDA and EPA.

Sorghum Leaders go there on behalf of our producers and have gained a lot of wins that show up on everyone's bottom line. I have tremendous respect for our sorghum organizations, and I am thankful for the value I have received across the many years of my membership. I welcome all who wish to contribute to Team Sorghum.

National Sorghum Producers

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JIM PAT CLAUNCH
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JOIN TEAM SORGHUM

Dear Readers,

As a U.S. sorghum farmer, you are a part of a resilient group of people who possess a passion for what you do and the way you live. You know what hard work looks like and what it takes to make a difference.

Today, our farmers, families and rural communities are facing serious threats, making your support of the National Sorghum Producers critical. **What's at stake?** Proposed changes to the U.S. tax code, including stepped-up basis, capital gains tax and estate taxes, would impose a significant and disproportionate burden on family farms. Special interest groups are clogging the courts and threatening the ability to keep and bring seed and chemical technologies you need to farm to market, like seed treatments, Transform and Atrazine. There will be winners and losers as climate policy is being drafted by some legislators who do not understand the contributions you make to the environment through conservation practices and other management decisions. And, there's more.

Working together, we have the opportunity to make an impact. While there are threats, there are also boundless policy opportunities, and we need your membership more than ever.

Individual members are the heart and soul of National Sorghum Producers, and your membership makes our mission to lead positive change for sorghum farmers work. With your support, we will promote, advocate for and defend the sorghum industry. We like to say we're in D.C. so you don't have to be. Know we are in your corner, committed to serving as the voice of the sorghum industry through legislative and regulatory representation day-in and day-out.

We extend our thanks to the members above and all of our supporting members. If you are not a member, consider joining our organization. I hope we can count on you to help us continue championing your cause and providing value to you by choosing a member selection on the next page or online.

NSP Board Chairman

NATIONAL SORGHUM PRODUCERS

Membership Form

Join Online!
Scan the QR code or go to *SorghumGrowers.com/join* to join online.

Join the Team

NAME: _____

DATE OF BIRTH: ___/___/___ (DD) (MM) (YYYY)

OCCUPATION: _____

FARM/EMPLOYER: _____

ADDRESS: _____

_____

HOME PHONE: ( )_____

CELL PHONE: ( )_____

EMAIL: _____

NO. OF SORGHUM ACRES: _____

INVOLVEMENT IN OPERATION:

- ☐ PRODUCER
- ☐ LANDOWNER
- ☐ NON-PRODUCER

I WANT TO DONATE TO THE NSP PAC

PLEASE NOTE: PAC contributions cannot be given by corporations, but by individuals only. A donation is not a condition of membership and the contribution is voluntary

- ☐ $100
- ☐ $500
- ☐ $1,000
- ☐ $5,000
- ☐ OTHER: _____

PAYMENT INFORMATION

If paying by check, please include it with this form. If paying by card, please visit SorghumGrowers.com/join to enter the information. You may also call our office at (806)749-3478. We accept Visa, Mastercard or American Express.

- ☐ CHECK
- ☐ CARD

Membership Levels

National membership automatically confers membership in state organization

LEGISLATIVE CONTRIBUTOR

Receive the quarterly *Sorghum Grower* magazine and the weekly Sorghum Notes newsletter, allowing you to stay informed on issues impacting your farm.

- ☐ **1 YEAR MEMBERSHIP:** $100 min. _____ (amount)
- ☐ **3 YEAR MEMBERSHIP:** $280 min. _____ (amount)
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Everything from previous levels, plus the heightened involvement in legislative activities and recognition in *Sorghum Grower* annually as a Legislative Champion.

- ☐ **1 YEAR MEMBERSHIP:** $1,000
- ☐ **3 YEAR MEMBERSHIP:** $2,800

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EMAIL: nationalsorghumproducers@sorghumgrowers.com

SORGHUM SUSTAINS

Findings From the KansCAT Database

PROJECT SUMMARY

Few farmers have the information or ability to quantify the effectiveness of various farm practices in improving soil health and water quality. This project, titled "Community and market partnerships to leverage the creation and application of a technology platform, KansCAT, for conservation of soil and water systems in Kansas," consists of three objectives aimed at addressing this problem. These objectives include 1) deploying a database for storing and assessing practice information, 2) increasing literacy of farmers and conservation partners using this information and 3) leveraging conservation practices for value in carbon-focused ethanol markets.

Partners in this project include National Sorghum Producers, Natural Resources Conservation Service, the United Sorghum Checkoff Program, Kansas Sorghum, Kansas Department of Agriculture, Kansas State University, Conestoga Energy Partners, Western Plains Energy, and Field to Market. In addition to partners, the project surveyed numerous farmers growing crops on approximately 80,000 acres covering 79 percent of the U.S. sorghum ethanol demand shed and 100 percent of the Kansas ethanol demand shed.

The project saw dozens of educational pieces disseminated to various stakeholder groups including and especially farmers. Young and beginning farmers in particular were targeted for education that would drive positive natural resource outcomes. In keeping with this, social media and podcasts were the centerpiece of the project's outreach effort. To learn more visit *https://www.sorghumgrowers.com/kanscat/*.

FINDINGS

In addition to the need to understand current practices to improve environmental outcomes in the future, it is important to know farmers' footprints given their growing importance in environmental services markets. For example, nitrogen application and energy usage are just two of many important variables under the California Low Carbon Fuel Standard, the framework under which most sorghum ethanol is marketed.

Key findings from the project include a weighted average nitrogen application rate (for irrigated and dryland acres) of **0.75 pounds per bushel**, a minimum tillage adoption rate of **89.6 percent** and a dryland farming practice adoption rate of **93.6 percent**. These values make Kansas sorghum farmers among the best in the U.S. in terms of conservation and sustainability practice adoption and environmental stewardship. In particular, few farmers till less than those in Kansas, and this adds to air quality, water quality, and soil carbon sequestration in Kansas.

EXPOSURE FOR YOUNG CONSERVATIONISTS

In addition to targeting young farmers for education that would drive positive natural resource outcomes, this project featured a landmark partnership between National Sorghum Producers, Kansas Sorghum and Kansas State University. The partnership created the Conservation and Sustainability Fellowship which saw two outstanding young conservationists work directly with participating farmers to collect information for the KansCAT database. These fellows were managed day-to-day by Kansas Sorghum and upon completing their fellowship took an active role in mentoring other young conservationists at Kansas State University.

RECOMMENDATIONS TO PRODUCERS

Improving Soil Health by Building Residue and Breaking Monocultures

- The addition of sorghum to a rotation with key Sorghum Belt cash crops, cotton or soybeans, coupled with no-till practices provides ground cover that reduces both wind and water erosion.
- Sorghum residue provides protection to next year's seedlings subject to damage from blowing soil particles following emergence.
- Sorghum residue captures water from rain and snow events allowing for more water stored in the soil profile that can be used by the following crop, particularly in semi-arid regions such as the Sorghum Belt.
- Nematodes rob yield from crops like cotton and soybeans. Crop rotation is one of the best ways to reduce soil nematode populations to an acceptable level. Sorghum is a nonhost to soybean cyst, root knot and reniform nematodes, and this fact makes it a smart choice to be rotated with cotton and soybeans.
- Soil-born diseases such as Verticillium wilt and black root rot in cotton build with each consecutive cotton crop. Rotation with sorghum breaks this cycle by reducing these pathogen populations.
- Insect pest populations are reduced when crops like cotton and soybeans are grown in rotation with sorghum.
- Rotating to sorghum allows for use of different herbicides that are beneficial in controlling problem weeds in other crops and reduces the development of resistant weeds.
- The fibrous root system of sorghum improves soil physical properties resulting in a stabilizing effect that prevents erosion.

Reducing Irrigation Water Use and Improving Water Use Efficiency

- Sorghum is more drought tolerant than corn and typically yields better under high water demanding environments where water sources are limited.
- It typically takes at least six inches of water before a sorghum plant will begin to make grain. In contrast, 10-11 inches is needed before corn produces grain.
- Irrigation water resources can be reserved or managed more effectively by planting sorghum on a portion of irrigated acres that would otherwise be planted to corn or cotton and ether banking the water savings or using the water on the remaining corn or cotton acres more effectively.
- Water-use efficiency of both sorghum and a neighboring corn or cotton crop sharing the same irrigation system can be improved by planting the crops in a way that allows each to reach their peak water demand at different times. Irrigation water can then be diverted to each crop at its critical water demanding stage.

This material is based upon work supported by the Natural Resources Conservation Service, U.S. Department of Agriculture, under NR196215XXXXC010. Any opinions, fundings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture. USDA is an equal opportunity provider and employer.

ACRES, AFFINITY FOR SORGHUM ASCEND

By Haleigh Erramouspe

Heath Heinrich sat in his combine on a sorghum field just south of Lubbock, Texas. As he moved up and down rows of dryland sorghum, listening as the grain began to fill up the tank behind his seat, he watched the pounds per acre gradually uptick on the screen.

"Why sorghum right now?" said Heinrich as he gestured to sorghum stalks moving through the header. "Well I like sorghum on any year, but this year it just really came together. We had timely rains and the price is right. Having above average yields with a price where it is, is phenomenal, and that's what we're experiencing right now."

Increased acres, yields and exports have created a perfect storm for the sorghum industry. Acres are up this year, and the large majority of the Sorghum Belt is experiencing better than average yields with the 2021 crop. With an increasing supply, China continues to buy large quantities of sorghum, along with other countries stepping up to make purchases.

On Sep. 10, USDA released its monthly World Agriculture Supply and Demand Estimate report increasing estimated planted grain sorghum acres to 7.3 million acres, a sharp uptick from 5.9 million acres last year. This is a 12 percent increase over the August report and a 24 percent increase from the previous year.

The two largest grain sorghum producing states, Kansas and Texas, planted 3.6 million and 2.2 million acres—an increase of 20 and 26 percent, respectively, over the last year.

"It's clear the sorghum acres are up this year," the Sorghum Checkoff Director of Agronomy said. "As you travel from the Texas Panhandle north up into Kansas, you can easily see there is more sorghum in the fields."

This acreage increase comes after Chinese demand for sorghum was up significantly in the 2020/2021 marketing year, which ended Sept. 30. National Sorghum Producers Executive Vice President John Duff partially attributed a predicted jump in acres for the 2022 crop year to continued export demand, saying this past marketing year was the second largest in total exports to China that the U.S. sorghum industry has seen.

"We saw a lot of excitement about sorghum this year because of the market," Duff said as he ran calculations on the most recent weekly sorghum export data. "China is back in a big, big way. They, of course, have been back in the market since the 2018 settlement of the anti-dumping and countervailing duty cases and when the U.S.-China Phase One trade agreement took effect in 2020. Our acres show that, and sorghum exports are up more than they have been in the past six years."

China broke its previous records of both weekly sorghum purchases and deliveries not once, but twice in the past 18 months. The current record was set on April 15 of this year with 33.8 million bushels delivered in a single week, shattering the previous record set in August 2020 by more than 10 million bushels. China also purchased 33.8 million bushels the same week, topping the previous record, also set in August 2020, by nearly 2 million bushels.

While high prices and export demand certainly play a role in planting decisions for the next year, Heinrich said those are not the only factors that will likely lead to him keeping sorghum in his cropping rotation for the next planting season.

Heinrich said adding sorghum to his rotation allowed him to replenish organic matter in the soil on land where cotton has been grown for many years. Gesturing to a field of irrigated cotton just to the south of his dryland sorghum, he said he grew sorghum on it the summer before and wheat in the winter, which allowed him to build nutrients back in the soil and improve the quality of his summer cotton crop this year on a limited amount of irrigation.

Heinrich also said summer sorghum allows him to harvest earlier in the season than a cotton crop, giving him more time to get everything into good shape to transition into wheat in a timely manner.

While the market for most crops is good right now, Heinrich said the increasing prices for inputs, including fertilizer prices that more than doubled in the past year, will influence his plans for the next planting season, as well. He said if prices work out, he will likely keep sorghum and wheat in his rotation because the two crops do not require as much fertilizer or other chemicals as cotton or corn.

"The idea of a lower input crop this next year," Heinrich said, "is more appealing to me than trying to swing for the moon on something when I have no idea what the input costs are going to be."

Heinrich said sorghum is a solid investment for his operation, considering the price and availability of chemicals, the price sorghum is fetching in the market and the quality yields his family's farm is seeing this year. He said sorghum is a better bet for his bottom line, and if the positive trend in the market continues, then he will absolutely be planting a sizable amount of sorghum next year. "We've had some phenomenal yields [with sorghum]," Heinrich said, "and it's at an amazing price. It's an all around win on sorghum this year."

▲ HEATH HEINRICH celebrates a phenomenal yield on his dryland sorghum near Lubbock, Texas.

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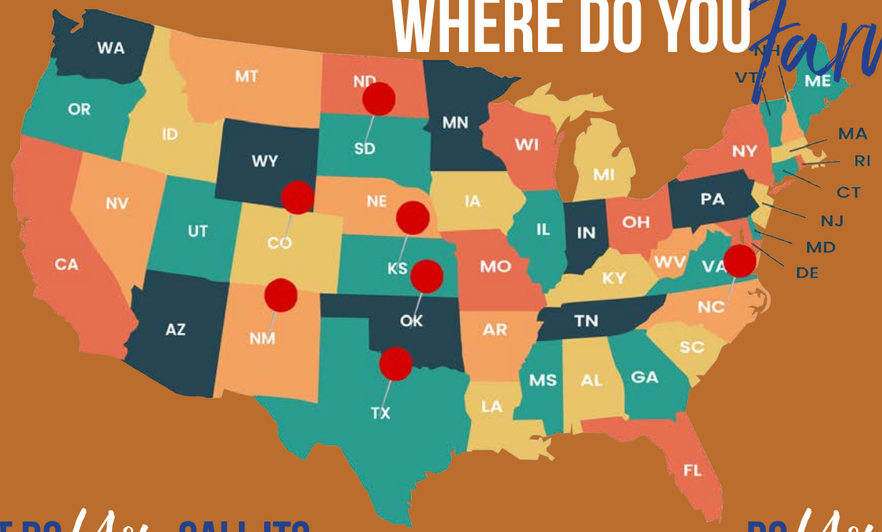
WHERE DO YOU *Farm?*



WHAT DO *You* CALL IT?

MILO	85.7%
SORGHUM	14.3%

DO *You* USE....

82.1%	BUSHELS
17.9%	POUNDS

FAVORITE *Time of Year* TO WORK

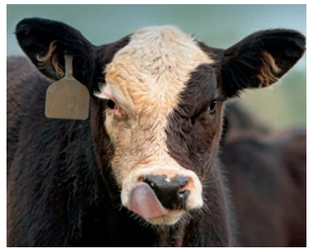
21.4%

17.9%

60.7%

TOP 3 FAVORITE WORK *Pants*

FAVORITE *Equipment*



The Truth About Tannins

By John Duff

Tannins are largely a mystery to many sorghum farmers. Most know they help keep birds from feasting on sorghum and the associated palatability reduction in tannin sorghum can be detrimental in the marketplace. But what are tannins, how common are they and can they be an asset?

USDA Agricultural Research Service Research Sorghum Geneticist Chad Hayes, Ph.D., shed some light on these questions and explained some exciting new research where tannins are being used in the effort to fight cancer.

Anti-Cancer Properties Research

"There's some very interesting research showing that sorghum has anti-cancer properties," Hayes said. "Phytochemicals—like tannins—concentrated in sorghum bran coupled with the fiber within the grain have been shown to reduce the risk of colon cancer. It's easy to decorticate the bran and use it as an additive in many food and feed applications."

Hayes also noted the ease with which sorghum breeders can naturally affect tannin genes, giving seed companies ultimate control over the levels of tannin in sorghum.

"We understand quite a bit about the genetics of sorghum tannins," Hayes said. "Historically, breeders would select against tannins, but in fact, many favorable breeding lines from around the world are high in tannin. We have the ability today to use both traditional and molecular breeding techniques to produce sorghum hybrids with just the right amount of tannin for specific markets, or none at all as with commercial sorghum produced in the U.S."

Historical Tannin Presence in the U.S.

While high-tannin sorghum for nutraceutical applications is an exciting development in sorghum research, National Sorghum Foundation Chairman Larry Lambright said, despite some misconceptions, tannin sorghum has not been grown in significant quantities in the U.S. in several decades.

"To the extent that it's even grown in the U.S.," Lambright said, 'it would be 100 percent channeled into specialty health markets and thus will never be found in the commercial sorghum supply chain originating in the U.S."

The reason there has been very little tannin sorghum grown in the U.S. is because it can pose problems for trade due to its lack of palatability and digestibility in the animal feed market. Lambright said it is important for sorghum farmers to tout the fact that commercial U.S. sorghum has no tannins. After setting the record on this point straight, Lambright jumped into the chemistry behind tannins.

What Are Tannins?

"Tannins are phenolic compounds," Lambright said. "Originally, tannin hybrids in the marketplace were intended for bird resistance. Tannin hybrids also tend to accumulate less surface mold and degrade less often under high moisture situations just prior to harvest. They aren't perfect in this regard, but they do tend to be better than non-tannin hybrids."

"The birds don't like tannin because it's bitter," he said. "If there's nothing else for them to eat, they'll do damage, but they prefer not to feed on it. Similarly, it decreases the rate of gain in animals."

Often, darker hybrids are thought to exhibit higher levels of tannin. Lambright characterized this as a common misconception.

"Grain color is not an indication of tannin," Lambright said. "A lot of the tannin types are brown or even a dark purple, but white sorghum can be high in tannins, as well. The compound is held in the testa layer or seed coat. In some cases, it can be visible—and particularly in white hybrids or parent lines. The compound is held in the testa layer beneath the seed coat. You can use a knife or your thumbnail to remove the seed coat and reveal the testa."

Tannins in Other Countries

While the U.S. has greatly steered clear of tannins in commercial sorghum, other countries like Mexico, on its west coast, utilize tannins to repel bird populations. Argentina is also a common source of tannin sorghum for that same reason.

"Argentina historically has grown tannin sorghum to help with bird issues, and there's still a high percentage of their crop that's high in tannins," Lambright said. "They still export a lot of their tannin sorghum. They do have some hybrids that are not high in tannins, but most of those are used domestically. And these statements were especially true in past years."

Now you know the truth about tannins. Strong agronomic management and the elite genetics, coupled with U.S. sorghum absent from tannins, produce high quality grain for both domestic and international end-users.

As for domestic, specialty markets, will tannins be the ticket for future sorghum health claims? Only research and time will tell.

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A Deep Connection

Upland Habitat and Grain Production Fit Hand-In-Hand

Compiled by NSP & USCP Staff

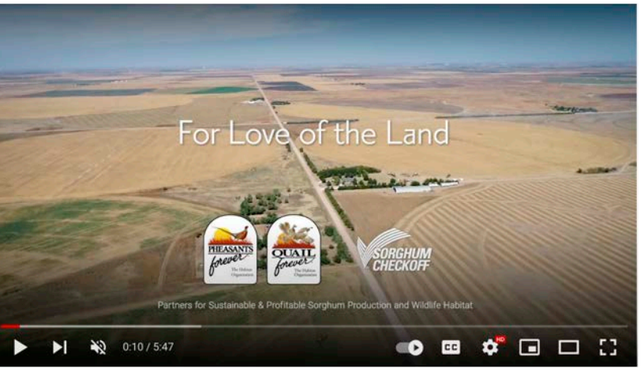
Pheasants Forever and Quail Forever recently partnered with the United Sorghum Checkoff Program to offer conservation cost-share opportunities for sorghum producers in western Kansas. The new sustainability initiative—Sorghum for BIRDS (Building Innovative, Resilient, and Diverse agricultural Systems)—targets low performing acres by offering growers a one-time incentive payment to apply targeted conservation practices in tandem with sorghum production.

Committed to showcasing the nexus between upland bird habitats and sorghum production, Pheasants Forever and Quail Forever and the Sorghum Checkoff launched the Sorghum for BIRDS initiative over a 15-county region in Kansas to help achieve mutual goals for landscape-level sustainability and profitability in the heart of America's Sorghum Belt. Paired with a wide variety of targeted conservation practices, the program is designed to provide increased technical support for sorghum growers to enhance upland bird habitat while improving farm-level profitability and sustainability outcomes.

"Sorghum has such an important role to play in sustainable farming systems, especially on the High Plains," Sorghum Checkoff Sustainability Director Kira Everhart-Valentin said. "Its resource-conserving nature makes it a key contributor to healthy soils and the protection of precious water sources, while its wildlife-friendly characteristics help to support diverse ecosystems. Sorghum is good for birds and good for farms, and we're very excited about this opportunity for growers to bring more value to their operations."

Pheasants Forever and Quail Forever hired Brittany Smith as a precision ag and conservation specialist in June to work one-on-one with growers to help them identify strategic opportunities for the implementation of conservation practices in a way that contributes to the farm's environmental sustainability, while also improving the operation's profitability and bottom line.

"Sustainability begins with profitability, which is why our new initiative is groundbreaking for western Kansas. Sorghum for BIRDS is an incredibly exciting opportunity to reach new growers and help connect them to cost-share programs they may not otherwise be aware of," Smith said. "My role is to help producers identify conservation options that address profitability and sustainability throughout the entire farm. Working one-on-one with growers, Pheasants Forever and Quail Forever will help implement innovative solutions from start to finish."



▲ FOR LOVE OF THE LAND highlights the partnership between sorghum farmers, the Sorghum Checkoff and Pheasants Forever and Quail Forever. Watch the video at YouTube.com/sorghumcheckoff.

Conservation Programs that Pay

Beyond the Sorghum for BIRDS initiative, the conservation partnership with Pheasants Forever and Quail Forever offers National Sorghum Producers members additional opportunities, as well. Sorghum farmers can receive free conservation planning services for acres currently not enrolled in sorghum production through Pheasants Forever and Quail Forever's regional biologists. This is achieved through existing conservation programs authorized through the farm bill.

Pivot corners, buffers and other hard-to-farm areas can help producers achieve sustainability outcomes for wildlife, water resources and soil conservation while contributing to bottom-line profitability across the farm. These free, on-farm acreage analyses can be performed by contacting a Pheasants Forever or Quail Forever Conservation Operations team member.

SORGHUM FOR BIRDS INITIATIVE GUIDELINES

Financial Incentives

Whole-field practices: $5/acre (soil health crop rotations including sorghum, soil health assessment, reduced tillage, etc.)

Cover crops: $15/acre

Edge-of-field practices: $25/acre (perennial cover such as field borders, filter strips, playa buffers, pivot corners, etc.)

Up to $1,000 for the adoption of advanced irrigation water management technology. Sorghum for BIRDS payments will be offered IN ADDITION to any conservation program payments received.

Project Area

Sorghum for BIRDS is open to all irrigated and dryland acres on which sorghum is actively included in the crop rotation within the following Kansas counties: Rooks, Osborne, Trego, Ellis, Russell, Scott, Lane, Ness, Rush, Barton, Finney, Hodgeman, Pawnee, Gray, and Ford. Applications from outside the project area will be approved on a case-by-case basis.

Requirements

Sorghum must be included in the rotation on the acres enrolled.

Field-level profitability analysis (precision data is not required to complete this analysis) to identify conservation opportunities.

Implementation of a new conservation practice on the field enrolled.

Growers must allow ongoing monitoring and data collection from the enrolled field(s) for 3 years. Data will only be collected from enrolled fields and will not be shared publicly.

For more information about applying for Sorghum for BIRDS or enrollment opportunities, visit *https://pheasantsforever.org/kansasbirds* or contact Brittany Smith, Kansas Precision Ag & Conservation Specialist, by email at *bsmith@pheasantsforever.org* or by phone at 316-302-4467.

To learn more about the partnership between Pheasants Forever, Quail Forever, and the United Sorghum Checkoff Program, watch the partnership video on YouTube or contact Kira Everhart-Valentin, Sustainability Director for USCP, at *kira@sorghumcheckoff.com* or (620) 874-8195.

NEWSLETTER

sorghumcheckoff.com | Fall 2021

Cost Saving Strategies for Sorghum as Fertilizer Prices Soar

By Sorghum Checkoff Agronomy Director Brent Bean, Ph.D.

One of grain sorghum's strengths is that it typically takes less capital to grow compared to other summer crops. However, with all commodities input costs expected to increase this coming year, growers should be looking to manage expenses wherever possible.

Profile soil sampling is often stressed at grower meetings but seldom put into practice. Sampling for deep nitrogen in the soil profile, especially for fields located in the Great Plains, should be beneficial. Every pound of nitrogen in the second and third foot of soil can be credited against the total amount that needs to be applied as fertilizer. When compared to the current price of fertilizer, soil sampling could prove to be better for producers' bottom lines.

Rather than applying all recommended fertilizer preplant, producers should consider applying nitrogen fertilizer in multiple applications. In addition to reducing the chance of overapplication, this practice, from a cost standpoint, allows growers to match the amount of fertilizer applied to later growing conditions that determine potential yield. Consider applying 50 percent of nitrogen fertilizer preplant and 20 percent at planting. Assess growing conditions 20-30 days after emergence and adjust the remaining amount of fertilizer to be applied accordingly.

Pre-season weed control during the winter and early spring months is critical in all crops. Controlling weeds prior to emergence is ideal. Atrazine is still very hard to beat for pre-emergence weed control and should be included in most early pre-plant applications. Weed control is ALWAYS easier and less costly when the weeds are small. It is recommended producers scout fields and apply appropriate herbicides early. Use a combination of herbicides, but be selective. There are many new products on the market, some more costly than others. Keep in mind these are all mixes of old herbicides, and do not overspend on unproven products. A two or three way mix of some proven post emergence products such as paraquat, dicamba, 2,4-D and fluroxypyr (Starane Ultra, others) will go a long way. Although glyphosate resistance of some broadleaf weeds is widespread, the herbicide should be considered if grassy weeds are present.

Since post herbicide options are limited in sorghum, a good pre-emergent program at, or just after, planting is an absolute must. The most common pretreatment is atrazine combined with either s-metolachlor or acetochlor. Although the effectiveness of s-metolachlor or acetochlor with atrazine may vary slightly, depending on the weeds present, their effectiveness is similar enough that the cost of each should be considered. Compare the cost of both name brands and generics, but make sure the concentration and active ingredients are the same. If atrazine cannot be used because of soil type or crop rotation restrictions, consider using Verdict plus Outlook. This is a combination of the active ingredients saflufenacil (Sharpen) and dimethenamid (Outlook).

Once the sorghum has emerged, scout fields early for weed control issues. Similar to preplant weed control, it is much more cost efficient to control small weeds than large ones.

Seeding rate is generally not the place to try and save costs. However, growers should not plant a higher seeding rate than is necessary given the yield goal of a particular field. See the Sorghum Seeding Rates link on the Sorghum Checkoff Agronomy Insights web page at *SorghumCheckoff.com* for more information.

From an insect control standpoint, scout early and know the economic thresholds for when an insecticide application is needed. In areas where sugarcane aphids have been an issue, consider planting a little earlier than normal, and use a sugarcane aphid-tolerant hybrid. This does not guarantee that an insecticide application will not have to be made, but research has clearly shown the value in these practices.

For growers who are irrigating, there are two sorghum growth stages most affected by water stress. The first occurs approximately 24-30 days after emergence with the initiation of the formation of the sorghum panicle. At this stage, the number of seeds per panicle is determined. The second key stage is at boot—just before heading and flowering. Irrigating at these stages will result in the most return per dollar spent on watering costs.

WHAT'S INSIDE

SORGHUM THE SMART CHOICE

Hailey Gilbreath Joins Sorghum Checkoff as New Communications Manager

The United Sorghum Checkoff Program recently named Hailey Gilbreath as the program's new communication manager. In this role, Gilbreath will provide and implement strategic communications planning for all Sorghum Checkoff communications. She will also assist in other related duties of the information, communication and education (ICE) department and organizational programs and projects for the Sorghum Checkoff.

"We're excited to have Hailey join Team Sorghum," Sorghum Checkoff Director of Communications Clint White said. "She brings great passion and knowledge of digital marketing with a well-rounded communications background which will strengthen our communications efforts."

Gilbreath has a bachelor's degree in agricultural communications from Missouri State University. Before joining the organization, she managed digital marketing and social media efforts at Bedford Camera & Video and prior to that, Bulkloads.com.

"This is truly an exciting opportunity for me," Gilbreath said. "Coming from a livestock background in cattle, I'm thrilled to be a part of the grain and crop industry. My passion lies in helping farmers tell their story, and I can't be more thankful to have a hand in doing that for the sorghum industry."

MACEY MUELLER

KIM BALDWIN

KEVIN PHIGODA

ADAM SCHINDLER

Sorghum Producers Appointed to the Sorghum Checkoff Board of Directors

U.S. Department of Agriculture (USDA) Secretary Tom Vilsack recently announced the appointment of four members to serve on the United Sorghum Checkoff Program board of directors. All four appointees will serve three-year terms starting December 2021 and ending December 2024.

Macey Mueller from Halstead, Kansas, was appointed to a Kansas seat. Macey, her husband and four children farm sorghum, soybeans and wheat. They also raise Red Angus cattle and operate a livestock auction company. Meeting producers, learning about marketing opportunities and developing new ways to market sorghum are just a few of the reasons why Macey said she is looking forward to serving on the Sorghum Checkoff board.

Kim Baldwin, from Inman, Kansas, will fill the Kansas seat on the board. Kim, her husband and two children farm sorghum, corn, wheat, soybeans and popcorn. Kim was a member of Kansas Agriculture and Rural Leaders (KARL) Class XV and is an active supporter of Inman FFA where she volunteers to coach students and serve on the alumni board. She is also a volunteer with CommonGround, a group for women in agriculture who discuss farming with consumers and mom groups.

Kevin Pshigoda is a fourth generation farmer who resides in Perryton, Texas, and farms roughly 12,000 acres of sorghum, wheat, corn and soybeans with his father and two children. Kevin is also a past graduate of Leadership Sorghum Class IV. He will fill the Texas seat on the board.

Adam Schindler currently serves as the Secretary for the Sorghum Checkoff board and was recently re-appointed to his second three-year term as an at-large director. Adam is a fifth generation farmer from Reliance, South Dakota, where his family farm is a registered South Dakota Century Farm. The Schindlers grow sorghum, winter wheat, spring wheat, corn, sunflowers and soybeans in addition to running a cow/calf operation with several hundred head. Adam is a graduate of Leadership Sorghum Class I and served on the National Sorghum Producers Legislative Committee prior to joining the checkoff board.

The 13-member board is authorized by the Commodity Promotion, Research, and Information Act of 1996. The Secretary selected the appointees from sorghum producers nominated by sorghum certified producer organizations or qualified state organizations. To learn more about Sorghum Checkoff leadership, visit *SorghumCheckoff.com*.

Sorghum Industry Partners with University of California to Advance Sorghum

The United Sorghum Checkoff Program, the University of California, Merced, and the University of California Division of Agriculture and Natural Resources recently announced a five-year partnership to promote drought resilience in sorghum and increase demand for the cereal crop in biofuel and bioproduct markets.

Efforts for the partnership will primarily be conducted at the Kearney Agricultural Research and Extension Center located south of Fresno, California. However, the partnership includes faculty and researchers at UC Merced and the results will benefit sorghum producers throughout the country.

"We are excited to launch such a unique program aimed at helping address the world's pressing water issues while at the same time increasing demand for a drought-tolerant crop like sorghum," Sorghum Checkoff Executive Director Norma Ritz Johnson said. "This program is in perfect alignment with the Sorghum Checkoff's goal of increasing sorghum producer profitability as drought and water scarcity is a challenge faced by most sorghum producers in the U.S. Furthermore, with the recent renewed focus on renewable energy production, promoting a versatile crop like sorghum in biofuel and bioproduct markets is a timely endeavor."

The program represents the first collaboration of its kind between the Sorghum Checkoff and the University of California, and key activities will include breeding, gene discovery, phenotyping and research related to the impacts of roots, soil microbes, photosynthesis and management on drought resilience as well as biofuel and bioproduct usage.

"We look forward to the vital research this partnership will support and the benefits it will yield for the sorghum industry as well as natural resource management," UC Agriculture and Natural Resources Vice President Glenda Humiston said. "We are pleased to partner with Sorghum Checkoff and UC Merced to help advance sorghum as food, feed and biofuel."

Thomas Harmon, professor and chair of UC Merced's Department of Civil & Environmental Engineering added, "UC Merced is growing its research and teaching in sustainable agriculture, as evidenced by our future Experimental Smart Farm. We are excited by this novel and potentially game-changing partnership!"

The resources from the partnership will be used to hire a program leader, provide capital for program activities and support ongoing research over the next five years. Overseen by an advisory committee, the program leader will actively seek additional funding for projects that serve the objectives of this program and to extend the life of the program beyond 2026.

SORGHUM INDUSTRY EVENTS

Nov 25-26	**Thanksgiving**	*Office Closed*
Dec 7	**Leadership Sorghum Program III**	*Lubbock, TX*
Dec 7-9	**Sorghum Checkoff Annual Board Meeting**	*Lubbock, TX*

For more events, visit sorghumcheckoff.com/calendar

USCP MISSION

The Sorghum Checkoff commits to reveal the potential and versatility of sorghum through increased shared value.

SORGHUM THE SMART CHOICE

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KANSAS GRAIN SORGHUM
Growers Working Together

Sorghum *Update*

Brought to you by the Kansas Grain Sorghum Commission

Leadership Transitions Retain Farmer Focus

By Adam York

This past year, the summer and fall seasons have seen the Kansas Grain Sorghum Commission reflect on the momentous marketing year for the crop in our state. Consequently, the Commission has propelled that momentum into new fiscal year investments for sorghum improvement and profitability. In recent months, your farmer-commissioners have elected new leadership at its summer board meeting in Manhattan followed by an annual budget meeting in September, in which the Commission approved a new budget for Fiscal Year 2022 in the amount of $1,010,589. The Kansas Grain Sorghum Commission is committed to sorghum promotion, research, and information designed to strengthen, expand, and develop new foreign and domestic markets for sorghum.

In a press release following the fall budget meeting, the Commission's recently-elected Chairman, Kevin Kniebel, a farmer near White City, stated, "This budget reflects not only the momentum of the crop, but also a continued focus on research results and making a difference for farmers. Increasingly, the Commission is driving results through research in the areas of genetic markers, practical applications and market priorities. Also, the Kansas State University sorghum breeding program is delivering results through private companies and beyond." With young farmers working sorghum into their rotations and seasoned farmers expanding acreage in the state this year over previous years, Chairman Kniebel also noted, "Importantly, this year's budget includes increased promotion and outreach opportunities to educate growers regarding timely crop technology and industry advancements as well as informs the general public about grain sorghum's important economic and environmental roles within our state."

Chairman Kniebel took the helm of the Kansas Grain Sorghum Commission this summer following Stephen Bigge's six-year chairmanship. Commissioner Bigge, a farmer near Stockton, accepted the nomination for Vice Chairman and will serve at that post for the remainder of his term. In the Commission's 2020 Annual Report delivered to the Kansas Legislature's House and Senate Agriculture Committees earlier this year, former Chairman Bigge reflected on his time leading the Commission, "We turned the corner on key investments and saw basis at extraordinary levels driven by demand. We also brought on board several new farmer leaders to help us move forward." He stated, "Sorghum in Kansas is on solid ground."

As the healthy transition to new farmer leadership helps guide the Kansas Grain Sorghum Commission's strategic focus on delivering added value to your sorghum crop, we invite you to become involved in the process, especially as Kansas farmers themselves undertake the integral responsibility of electing new commissioners to represent them each year. Farmers can also be on the lookout for more developments and updates in our 2021 Annual Report to be released later this winter and made available to the public at *KSGrainSorghum.org*. We look forward to growing our industry together with you.

Kansas Grain Sorghum, PO Box 618 Colwich, KS 67030
785-477-9474, www.ksgrainsorghum.org

paid advertisement

SPRUCE YOUR SEASONS WITH **SORGHUM**

The holiday season is here! There are items to bake and decorating to do, filling our homes with the warmth, smells and feelings of harvest, Thanksgiving and good cheer that make the season so special. We often tout how versatile sorghum is, and the same can be said for your home. Get your bread pan ready and save a few panicles from the combine. Sorghum is the perfect addition to sprucing up your home and recipes this holiday season.

MAKE THIS RECIPE

BANANA BREAD

WHAT YOU'LL NEED:

3 cups Nu Life Market Gluten-Free All-Purpose Flour
1 tsp baking soda
4 ripened bananas, mashed
½ tsp salt
½ tsp vanilla
½ cup palm shortening
1 cup sugar

DIRECTIONS:

Preheat the oven to 350°F. Grease a loaf pan and set aside. In a large bowl, combine Nu Life Market's Gluten-Free All-Purpose Flour, baking soda, and salt.

In a separate bowl, cream together palm shortening and sugar. Stir in eggs, vanilla and mashed bananas until well blended.

Pour the batter into the prepared loaf pan. Bake for 60 minutes or until a toothpick inserted into the center comes out clean. Then, set aside on a rack to cool for 15 minutes. Remove from pan and cool completely on a wire rack before slicing.

DECORATE WITH SORGHUM

This holiday season, decorating is made easy with sorghum. With the various colors, textures, height and eye-appeal it exhibits, a simple arrangement containing sorghum will add the perfect amount of unique decoration to a space.

To create an arrangement, you will need sorghum from a craft store or fresh from the field and other traditional arrangement aspects such as flowers and grasses to fill your designated vase. Once your internal components are obtained, place them in the vase, and set the arrangement in an area that needs decoration.

Whether you use sorghum as the main component of the arrangement, or as accent detail, it will assist you with ensuring the arrangement catches the essence of fall and your guests' attention. When taking your sorghum from the field, wrap the heads in newspaper to dry down. This also helps them retain their shape. Sorghum already comes in a variety of warm colors, but you can also spray paint them to match any centerpiece you create centered around the colors of fall.

As the seasons and holidays designed to mingle with others approach, having a unique the smell of fresh, warm and gluten-free banana bread, visitors are bound to sit and stay awhile.

Team Sorghum Updates, Celebrations and 2022 Sorghum PAC Series

By Taylor Rankin

Haleigh Erramouspe

Jessi Lopez

Amanda Garcia

Team Sorghum Staff Updates

Haleigh Erramouspe was recently selected to a joint position as executive director for the New Mexico Sorghum Association and Colorado Sorghum Association. She will fulfill these roles while continuing to work part-time as communications coordinator for the association. Erramouspe has her bachelor's degree in agricultural communications and is currently finishing her master's degree in the same discipline at Texas Tech University. She has worked for NSP since she began as a communications intern in 2018.

NSP also hired Jessi Lopez for the role of administrative manager. Lopez, who has more than 14 years of administrative and financial experience, will be responsible for office management, accounts payable and receivable and assisting with event planning.

Lopez replaces Amanda Garcia, who now works full time as office manager for Sustainable Crop Insurance Services (SCIS), a for-profit subsidiary of NSP. Garcia also leads management of the NSP Yield Contest.

Duff and Hoeffner Celebrate 10-Year Work Anniversaries

Two Team Sorghum members are celebrating their 10-year work anniversaries this fall—John Duff (August) and Ian Hoeffner (November)! Duff began working for NSP as an intern after completing two internships in Washington, D.C. Duff is a valuable and diverse member of the team, having served as the renewables director for the Sorghum Checkoff, a crop insurance agent with SCIS and strategic business director for NSP. Currently, he holds the role of executive vice president for both NSP and the Sorghum Checkoff.

John Duff

Ian Hoeffner

Hoeffner, an equally valuable asset to the industry, arrived at Team Sorghum after serving as senior server administrator for a telecommunications company. Hoeffner is a talented software developer and data analyst who has completed many technical analysis projects and built tools and information platforms for NSP, USCP and SCIS. He keeps the office secure, our internet working and is a fantastic cook!

Congratulations to both of these team members on this important milestone, and thank you for all you do to make the sorghum industry better!

Mark Your Calendars for the 2022 Sorghum PAC Series

National Sorghum Producers announced it will host three fundraisers for the 2022 Sorghum PAC Series. Sorghum Partners and ADAMA US are the premier sponsors.

The first two events in the series will be the return of the annual Sorghum PAC Casino Night and Auction held during Commodity Classic in New Orleans March 10-12, 2022, with an online auction hosted by Big Iron Actions. NSP will also host the second annual Sorghum PAC Golf Tournament on April 30, 2022, at the Wellington Golf Club in Wellington, Kansas.

SORGHUM PAC
nsp political action committee
2022 SERIES

The Sorghum PAC promotes worthy legislators who understand and advocate on behalf of sorghum priorities, and it serves as an influential alliance of NSP members and sorghum associations working to uphold and protect the interest of sorghum farmers across the country. More information about the Sorghum PAC can be found at *SorghumGrowers.com/sorghum-pac/* or by contacting Sorghum PAC Events Coordinator Jamaca Battin at *jamaca@sorghumgrowers.com*.

Sorghum Shortcuts

Yield Contest Harvest Reports Due

Applications for the 2021 Sorghum Yield Contest are coming to a close. The annual Sorghum Yield Contest allows the sorghum industry to recognize the best growers from across the country. Winners will be recognized in New Orleans at the 2022 Commodity Classic. **Don't forget!** All forms, including harvest forms, must be submitted no later than Dec. 1, 2021. To enter and view official contest rules visit, *sorghumgrowers.com/yieldcontest/*.

BASF Scholarship Announcement

The National Sorghum Foundation and BASF are accepting applications for a joint scholarship, and the deadline is just around the corner! A $2,500 scholarship will be awarded in January 2022 for the 2021-2022 academic year. To apply, candidates must be a child or grandchild of a National Sorghum Producers member and be pursuing an undergraduate or graduate degree in an agricultural related curriculum. Undergraduate applicants must be entering at least their second year of college during the 2020-2021 school year.

Applications must be postmarked by Dec. 1, 2021 and include the following:

- Completed application
- Official transcript
- At least two letters of recommendation
- A headshot photo for media release

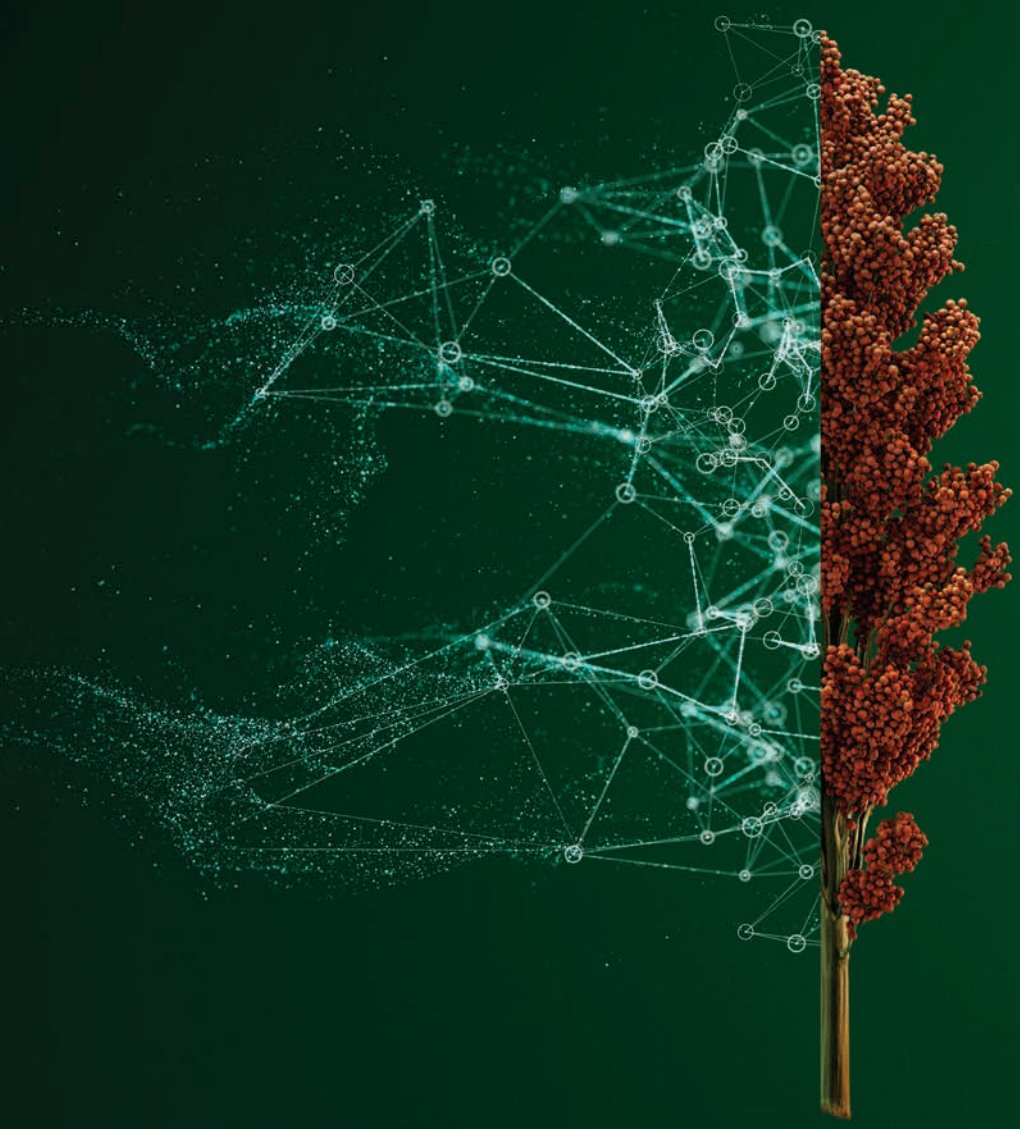
To inquire about your membership status, you can call the National Sorghum Producer office at 800-658-9808. For more information about the scholarship and application forms, visit *SorghumGrowers.com/foundation-scholarships/*.

The National Sorghum Foundation was established to aid and promote higher education in agriculture, more specifically, to promote the study of sorghum and its impact on agriculture. Producers, researchers, and private industry collectively funded the Foundation endowment to enhance the awareness of sorghum as the fifth most important cereal crop in the world today.

SICNA Save-the-Date

Mark your calendars! The Sorghum Improvement Conference of North America (SICNA) is slated to be held March 28-30, 2022, in the Dallas-Fort Worth area. SICNA's mission is to promote communication and collaboration in research and development among sorghum researchers and stakeholders with universities, research centers, public institutions and private entities. It strives to link scientists and researchers with sorghum producers and industry representatives to help drive innovation and discovery in response to the industry's greatest challenges.

For questions related to the event, please contact Sarah Sexton-Bowser at 785-477-6018 or *sarahann@ksu.edu*. *SICNA.net* will be updated closer to time, and information to past participants and the sorghum research community will be distributed at a later date.



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