New Researchers Carry Industry Momentum

ATIONAL SORGHUM PRODUCERS

Fall 2012

Sorghum Succeeds in Dry Corn Belt

Grain Sorghum a Good Fit for North Carolina Basis Basics



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Gabriel Krishnamoorthy of Richardson Seeds/MMR Genetics in Vega, Texas, is one of several sorghum breeders moving the industry forward. There is a new breed of sorghum researchers in private industry. These gentlemen are young, but their education gives them an understanding of the molecular tools that will increase sorghum yields. Read more on p. 12.

Photo by Jennifer Blackburn



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Editor's Desk

It's Time for Sorghum

Provide the state of the last couple of years about growth in the sorghum industry. Sure, there are the obvious factors of high grain prices and the crop's drought tolerance during two excruciatingly dry years across America's heartland that have given the crop some steam to move forward. But there is something else. There is momentum.

You can't always hear or see momentum, but you can feel it.

I am a sports junky, and I'm always amused at how powerful momentum can be in a game, regardless if we are talking about football, baseball, basketball, golf...you name the sport, momentum plays a role.

Momentum can seem like an unstoppable, irreversible force—a game-changing home run, a pick six in football, or a clutch three pointer in basketball can all put teams on a downhill run to victory.

Sometimes, it takes the execution of just the right plays by a team to take control of the momentum and win the game. In the sorghum industry, National Sorghum Producers is working to precisely execute the right plays and hit those home runs for the industry.

Whether it has been pushing for advanced biofuels status for grain sorghum under the Renewable Fuel Standard, which could be a game-changer for the sorghum industry, or fighting for crop insurance, or helping to start a national checkoff program for sorghum—the right pieces of the puzzle are falling into place. The stars are aligning. And that's not by accident. NSP has worked hard to draw up a game plan to put Team Sorghum in a position to succeed, and when the game plan is executed, momentum picks up. As you will read in this issue of *Sorghum Grower*, this industry has momentum. It is sorghum's time to shine and to reach its potential as a sustainable, watersipping crop.

This momentum extends beyond the Sorghum Belt. Farmers in states like North Carolina that have not traditionally grown sorghum are benefiting from



the crop's versatility and hardiness. There is new blood in private industry sorghum breeding programs. As grain sorghum nears the finishing line in achieving advanced biofuels status, NSP is clearing the path to get the same classification for biomass and sweet sorghums. The role of sorghum as a nutritious human food source continues gaining ground.

We have mentioned before that NSP is an organization that can do a lot with a little. We have a small staff, but we're a staff that believes in what we do. We believe in this crop and that it can be a profitable, sustainable option for farmers.

Just look at the headlines in food, agriculture and biofuel publications and websites – sorghum is a part of the conversation. Industries are taking notice of the potential of this versatile crop.

We're no longer in the dugout, or even in the on-deck circle. Sorghum is up to bat, and it's time to knock it out of the ballpark.

Lindsay Kennedy is the editor of Sorghum Grower Magazine and external affairs director for the National Sorghum Producers. Contact her at lindsay@sorghumgrowers.com and follow NSP on Twitter @SorghumGrowers.

NSP Update

Making a Case for Biomass Sorghum

NSP pursues advanced biofuels status for biomass sorghum, files petition with EPA

By Lindsay Kennedy

A ational Sorghum Producers has submitted a petition to the Environmental Protection Agency seeking approval of biomass sorghum as an eligible feedstock for a renewable fuel pathway for cellulosic ethanol using already-approved biochemical and thermochemical processes.

As we have stated in past issues of *Sorghum Grower*, NSP has already gone



through this process with the EPA as it relates to grain sorghum. At press time, NSP was still awaiting for final word from EPA as to grain sorghum's status as an advanced biofuel.

A Viable Option for Biofuels

Biomass sorghum brings several important advantages to the Renewable Fuel Standard 2 (RFS2). Against the

backdrop of this year's historic drought and the resulting devastation of the Midwestern corn crop, the introduction of a highly drought-resistant feedstock like biomass sorghum would bring major benefits.

Biomass sorghum's short establishment period ensures a quick contribution to ramping up the overall RFS2 production volumes, specifically in relation to cellulosic volumes. This short establishment period also makes biomass sorghum an ideal rotational crop for both producers and ethanol facilities. Biomass sorghum allows for better cultivation practices and maximum facility utilization and production output.

The crop can be grown on the same land as other cellulosic feedstocks, including switchgrass, while requiring less water and fewer nutrients, resulting in a more sustainable crop for the future.

The EPA's approval of biomass sorghum as an eligible cellulosic biofuel feedstock could add a critical feedstock option with significant benefits to the RFS2 and opportunities for farmers and producers of ethanol.

Comparable Advantages

In recent years, switchgrass has received considerable publicity as a viable cellulosic biofuel option. However, when you look at the numbers, biomass sorghum has the advantage when compared to switchgrass when considering the amount of inputs required to produce a crop.

As a dedicated energy crop, biomass sorghum has a life cycle greenhouse gas (GHG) emission avoidance percentage that performs comparably to the GHG avoidance of switchgrass and miscanthus, which have already been approved as eligible feedstocks for cellulosic ethanol pathways.

The average yield for biomass sorghum is estimated to be 10.77 dry tons per acre, which is 135 percent of the 2022 switchgrass yield as published by EPA in the RFS2 final rule.

In the petition submitted to EPA, NSP referenced three studies that examined biomass sorghum and perennial grasses, which includes switchgrass and miscanthus. In all cases, the biomass sorghum outyielded both switchgrass and miscanthus. According to a 2007 study conducted in Kansas, biomass sorghum yielded 11.96 dry tons per acre compared to switchgrass at 1.83 dry tons per acre and miscanthus at 1.47 dry tons per acre (in establishment years for both grasses). As expected in 2008, the perennial grass yield increased significantly with the switchgrass yielding 4.10 dry tons per acre and the miscanthus yielding 5.71 dry tons per acre. However, biomass sorghum in 2008 yielded 9.99 dry tons per acre—244 percent of the switchgrass yield and 175 percent of the miscanthus yield. In a similar study conducted in Michigan, biomass sorghum yielded 8.5 dry tons per acre—193 percent more than both switchgrass and miscanthus, which yielded 4.4 dry tons per acre.

Processing Infrastructure Already Exists

The composition of biomass sorghum is very similar to other lignocellulosic feedstocks, such as switchgrass and corn stover. Therefore, NSP anticipates cellulosic ethanol producers will be able to process biomass sorghum by us-

Yield Comparison of Cellulosic Ethanol Feedstocks

	Kansas ¹ 2007	Kansas ¹ 2008	Michigan ² 2010
	dry tons/acre		
Biomass Sorghum	11.96	9.99	8.5
Switchgrass	1.83	4.10	4.4
Miscanthus	1.47	5.71	4.4

1 Propheter, J.L., S.A. Staggenborg, X. Wu, and D. Wang. "Performance of Annual and Perennial Biofuel Crops: Yield during the First Two Years." Agronomy Journal (Vol 102, Issue 2, 2010).

2 Pennington, Dennis. "Photoperiod sensitive sorghum for bioenergy." MSU Extension

ing the existing biochemical and thermochemical processes used with switchgrass and will not need additional or modified equipment in order to process biomass sorghum into ethanol. Approval of biomass sorghum as an eligible feedstock for cellulosic ethanol will give refiners another domestically grown feedstock option.



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North Carolina is the fastest growing sorghum producing state in the country. How did a state better known for tobacco, cotton and soybeans gain such an acreage increase? It starts with the market.

By Lindsay Kennedy

n average of 15,000 acres of grain sorghum have been grown annually in the state of North Carolina over the last 10 years. In 2010, less than 0.05 percent of the state's commodity cash receipts came from grain sorghum. But this year, 70,700 acres of grain sorghum were planted in the Tar Heel State.

What changed?

Murphy-Brown LLC, a livestock production subsidiary of Smithfield Foods and one of the largest swine feeders in the world located in Warsaw, N.C., began looking for an alternative local feed source due to skyrocketing corn prices and years of failed corn crops in the region. In an effort to expand local grain production and reduce the amount of grain the company had to rail in from the Midwest, Murphy-Brown launched a pilot program in 2011 that offered contracts to farmers to grow grain sorghum.

"We are encouraging farmers who do not achieve profitable corn yields to consider switching to sorghum, which costs less to produce than corn, and should produce more consistent yields in difficult production years," said Joe Szaloky, vice president of procurement and business development for Murphy-Brown, in MB Grain's June newsletter.

Murphy-Brown bought sorghum at 88 percent of the price of corn from participants in last year's pilot program. In 2012, they increased that amount to 95 percent of the harvest cash price of corn to their contracted sorghum growers.

The swine feeding company will purchase about 80 percent of the 70,700 acres of grain sorghum grown in North Carolina this year. They even started their own sorghum yield contest for growers who contracted at least 5,000 bushels of grain with Murphy-Brown, offering prizes that include a new John Deere Utility Gator.

"We are committed to sorghum and to providing a market for sorghum grown in North Carolina," said Josh Gaddy, Murphy-Brown agronomist. "We are doing what we can to encourage production where it makes sense."

I think we're just starting to scratch the surface with what this crop can do here.

Parkton, N.C., farmer Lance Herndon participated in Murphy-Brown's pilot program in 2011 by planting 200 acres of sorghum. He was so impressed with sorghum's durability he tripled his acreage in 2012.

"The first time I had even seen sorghum was when I opened up the first bag of seed to plant it last year," said Herndon, who also grows wheat, corn, rye and coastal Bermudagrass. "We had horrible growing conditions last year in our area with extreme drought and three straight weeks of 100-degree temperatures, and the sorghum held up very well. We were tickled with how resilient the crop is."

Using Sorghum to Control Weeds

Glyphosate-resistant palmer amaranth, commonly known as pigweed, has caused plenty of problems in North Carolina soybean and cotton fields. Introducing sorghum into crop rotations has made a big impact on weed control.

"Pigweed has been a problem on our farm for years," Herndon said. "We have had resistance to ALS herbicide and glyphosate. Sorghum allows us to use different modes of action and different varieties of chemicals to control weeds. We now have a very limited pigweed population after adding the crop into our rotation."

Herndon used 30-inch row spacings on his first sorghum crop but adjusted to 15-inch spacings in 2012 as an added method of weed control.

"The narrower spacing helped create a canopy quicker, which was a big factor in controlling pigweed," Herndon said. "The 15-inch spacing does limit your ability to go back with a direct herbicide spray to some degree, but if you get a residual herbicide activated with some rain, it still works well."

The second-year sorghum grower was also pleased with the Huskie herbicide he applied to 100 acres of his crop, which killed 6-inch tall pigweed.

Charles Rose, who farms in Nash County, N.C., grew grain sorghum for the first time this year, planting 180 acres of the full season variety Dekalb DKS 53-67 and 40 acres of Sorghum Partners KS-310 as a double crop behind cucumbers.

"This was my first experience ever with sorghum," Rose said. "We averaged a little over 90 bushels per acre on the full season acres, and I was really pleased with that. I didn't really know what to expect, but that was more than my goal."

Josh Gaddy, Murphy-Brown Agronomist

Rose, who raises tobacco, sweet potatoes, cotton, soybeans and cucumbers on his farm 40 miles northeast of Raleigh, N.C., said the rotational benefits and harvest timing of sorghum lured him to the crop in addition to the market opportunity provided by Murphy-Brown.

"We needed something in our rotation with soybeans and cotton that we could combat the weed pressure we are facing," Rose said, "and sorghum has been a really good fit for that."

Sorghum has also given Rose some flexibility when harvesting his fall crops.

"I'm trying to do all of my harvest with one combine, and I have had to hire someone to help me to harvest all of my soybeans," he said. "If I shift some of those soybean acres to sorghum, I can go ahead and harvest that crop in September and October and get a little bit of work out of the way since we don't start soybean harvest here until around Oct. 20."

Lessons Learned

Like Rose and Herndon, many North Carolina farmers are new to grain sorghum. Murphy-Brown has worked with North Carolina State University and the Sorghum Checkoff to provide growers with the information they need to produce their first grain sorghum crop successfully, including production guides and field days showcasing which varieties and production techniques work best for the area.

Gaddy said last year's crop helped them make adjustments to be more successful this year.

"We really learned a lot last year," Gaddy said. "We jumped the gun and harvested some of our sorghum too early last year, which created some issues during harvest and handling. We have learned to wait until moisture is 20 percent or below before starting harvest to make the harvesting operation go smoother. We are still learning what the best plant populations and varieties are for our area but hope to have a better handle on that once we see all of the results from this year's crop."

Rose took a conservative approach to his first sorghum crop, because he didn't know what to expect.

"The main thing I would have done differently is apply fungicide as an across the board treatment," Rose said. "After getting one year behind us, we see we can make a bigger investment in the crop and hopefully pick up a few more bushels when it comes time to harvest next year." For Herndon, last year's sorghum crop was a valuable learning experience.

"We have learned a lot about the crop after last year," he said. "The big thing was our timing on weed control – what works best, the right height to use certain chemicals, things of that nature."

Encouraging Yields

Making adjustments along with favorable weather have made 2012 a successful year for grain sorghum North Carolina and other Mid-Atlantic states.

"We are seeing excellent yields this year," Gaddy said. "Yields are 70 to 100 bushels per acre, which is better than anything we had last year. We're having a better growing season, and we're figuring out how to do things better."

With those yields and the price of grain, Gaddy said sorghum is returning \$200-plus per acre on marginal land.

Herndon was able to make a great crop last year even on his marginal land with harsh weather.

"We increased our sorghum acres this year and put it on better land where we normally plant corn and soybeans, and yields look really good, averaging in the 80s," Herndon said.

A Reputable Market

There is no doubt Murphy-Brown's commitment to sorghum was the key driver in the crop's acreage increases in the Mid Atlantic region.

"Murphy-Brown has a reputation of stability in the area," Rose said. "We have seen a lot of hog and poultry companies come and go, and when you are marketing grain with someone, especially if you are doing forward contracts, you want to know the company you're contracting with is going to be there when you're ready to deliver your grain."

Herndon said sorghum has been a welcomed crop option for the area market.

"Any time you have an additional crop you can grow, it is always a positive," he said. "Murphy-Brown has been very helpful with all aspects of the crop, from planting to market."

Drying Facilities

Murphy-Brown is not only encouraging sorghum production in the region, but they are also improving their facilities to better accommodate the crop. The company has invested in expanding their grain drying capacity and has made changes to delivery procedures to make grain deliveries faster and more efficient.

"We are encouraging farmers to harvest their grain sorghum crop earlier and at higher moisture levels rather than letting it dry in the field," Gaddy said. "We also adjusted our drying charge scale and moisture penalties to benefit farmers who harvest the crop earlier."

From a farmer's perspective, Rose said the added drying capacity will be key to making sorghum work for the area because of its environment. The yearly risk of crop-destroying fall hurricanes places urgency on getting the crop out of the field as early as possible.

"Murphy-Brown is encouraging growers to be speedy with their harvests even if they have to run it through the dryer," Rose said. "Most people buying grain want to stay as far away from high moisture grain as possible, but they have been very good to work with when you have a high moisture load."

Is Sorghum Here to Stay in N.C.?

"I think if commodity prices remain good, we will probably increase our sorghum acreage next year," Rose said. "I am excited to see what the future holds for sorghum in this area because we have a long history of losing money farming corn here."

As long as companies like Murphy-Brown and other large livestock companies continue buying sorghum, Herndon thinks the crop definitely has long term potential for North Carolina growers.

"It is a great crop for the area," he said. "There is a lot of land in our region that works well for sorghum that is just not suitable for corn."

The first-year success for farmers who grew grain sorghum this year in the Mid Atlantic will go a long way toward the crop being there in the future.

"We have a lot of guys who are tickled to death with sorghum," Gaddy said. "They are really pleased with the crop, and that is really encouraging to me. I think we're just starting to scratch the surface with what this crop can do here."

Mid-Atlantic growers can find more information about sorghum production, including planting, fertilization, insect and disease management, harvesting, budgets and more in the Mid-Atlantic Grain Sorghum Production Guide produced by the Sorghum Checkoff, NC State, North Carolina Cooperative Extension and the N.C. Small Grain Growers Association. Visit SorghumCheckoff.com to download the guide, email info@sorghumcheckoff.com for a hard copy, or access the guide on your mobile device at sorghum.mobi.

Capitol Hill

The Farm Bill's Many Phases

By Jennifer Blackburn

et's talk farm bill—an expression used by umpteen thousand people in and out of the agriculture and food sectors, some of who are frankly tired of talking about it. The process keeps limping along, and while some people live for the process, others are ready to throw their hands in the air and be done with it. However, it's far too important to just throw away, and agriculture has been tasked with a fiscal responsibility and a responsibility to America's farmers and ranchers to provide certainty for the next five years.

This time last year we had the **I'll Show You Farm Bill.** Congress passed legislation in late July 2011 enacting the Joint Select Committee on Deficit Reduction and agriculture leadership jumped at the chance to write its own story to contribute to deficit reduction on farmers' terms. Agriculture banded together and quickly negotiated policy with a resulting farm bill package designed to cut \$23 billion from agriculture spending over the next 10 years. The process was swift, and NSP worked vigorously with congressional staff and members, running analysis on policy options for sorghum growers and hoping for its passage. However, the Deficit Committee failed, sending agriculture committee leaders back to the drawing board.

The next period of the farm bill process became known as **The Elusive Farm Bill**. Agriculture leadership appraised the agreed upon package from the Super Committee process as a solid foundation of ideas to craft yet another farm bill package. They slowed things down at the beginning of 2012 and decided heading to the countryside and talking to America's farmers and ranchers was the best way to craft farm policy. Sorghum was represented in different locations across the U.S., and NSP continued meeting with agriculture committee leadership and staff. A Sept. 30 farm bill expiration and Nov. 6 election on the horizon gave each chamber a goal, but the timeline for a completed package remained elusive through the spring.

In the last issue of *Sorghum Grower*, we compared the complete Senate version of the farm bill and the bill that was passed out of the House Agriculture Committee, but that is as far as the bill got as days in legislative session became fewer. Congressmen went home for recess, and the 2008 Farm Bill expired on Sept. 30, thus giving the process a new title—**The Farm Bill That Almost Could**. So what's next? Are we looking at **The Last Chance Farm Bill** that may result from a Lame Duck session? Maybe. Maybe not.

The current farm bill process has seemed long and tedious, and while expiration of current policy will have limited effect until Jan. 1, 2013, fear over its expiration in September has been casted in the eye of many. This is not the first time a farm bill has expired. The 2002 Farm Bill expired Sept. 30, 2007, and the first extension was not signed into law until Dec. 26, 2007. Subsequently, five additional extensions of the 2002 Farm Bill were enacted before the 2008 Farm Bill was completed, but ag leaders got there.

Farm bill coverage has expanded significantly this time and garnered attention from those very much outside the circle of agriculture. The hashtag #farmbill has been a trending topic on Twitter, and education about this keystone piece of legislation has never been more important. Regardless, ag has been through this before and has the unique ability to push aside banter and blame across party and chamber lines to reach bipartisan accomplishment. Have faith in the leaders of the greatest industry in the world—agriculture—and be assured NSP will continue to advocate for the interest of sorghum growers and the good of agriculture overall when this process finally unfolds.



BREED

by Jennifer Blackburn

New researchers carry industry momentum forward

he sorghum industry is moving forward at a record pace. Research, education and time are being invested in the industry like never before, and this added excitement has brought several new faces to the research front. There is a new breed of sorghum researchers we would like to introduce. These gentlemen are young, but their education gives them an understanding of the molecular tools that will increase sorghum yields.



Ryan Bading, Monsanto

Ryan Bading is currently the grain sorghum breeder and station manager at the Monsanto Sorghum Research Station in Bishop, Texas, and has worked there since 2008. As the sorghum breeder, Bading oversees both the nursery and yield testing programs for the Monsanto Bishop station. The main objectives of the Bishop breeding and research program are to develop superior hybrids and inbred lines for the South and Central Texas regions, as well as those that can be adapted to the entire U.S. sorghum growing region. Bading grew up in Central Texas in the Geronimo community and attended Texas A&M University.

Both of Bading's grandfathers farmed in Central Texas, and his dad helped with the farm, which enabled him to be involved in grain sorghum production early in life. He initially became interested in the science and genetics that went into developing new hybrids as he attended field days while working on the farm for his grandfather. These interests led him to pursue a career in the seed industry. Because agriculture had always been a large part of his life and he knew how important sorghum is to South and Central Texas, a career in sorghum breeding was a natural fit for Bading.



Matt Bartek, Chromatin

Matt Bartek began working for Chromatin in Oct. 2012 and is responsible for breeding toward product development involving sweet sorghum. He is originally from Schulenburg, Texas. He moved to College Station to attend Texas A&M in 2002 after completing his associate's degree in turfgrass at Texas State Technical College in Waco. While working as a grounds keeper for the TAMU Athletic Department, he received his bachelor's degree in Agronomy in 2008. Bartek's interest in plant breeding began following an undergraduate class in plant breeding and after a meeting with Dr. Bill Rooney, he knew he wanted to work in sorghum research. In 2008 he began his master's degree in sorghum breeding and genetics under Dr. Bill Rooney and graduated in 2010.

After graduation, he stayed in the sorghum breeding program and is currently completing his dissertation writing over his research involving intergeneric hybrids and photoperiod sensitive sorghums. Bartek said the part he enjoys most about working with sorghum is the vast genetic diversity within the crop and the many current and potential end uses. He said the most amazing part is that most of the genetic diversity is untapped, so researchers like himself have a large amount of potential for all areas of research within the crop.



Ben Beyer, Advanta

Ben Beyer was born in Houston and grew up in Hillsboro, Texas. He had grown up with friends whose parents farmed but never really saw the industry's diversity until he began working as an IPM field scout at 17-years-old, which he feels was his first real introduction to agriculture in America. Beyer saw the difference among varying cotton and grain sorghum variety trials and saw this as a chance for someone whose parents did not farm to have a place in the agricultural industry.

Beyer obtained a bachelor's degree in plant and environmental soil science from Texas A&M in 2005 with a minor in genetics. From there he went to attend Colorado State University where he received a master's degree in plant breeding and genetics under Dr. Scott Haley. He then returned returned to College Station for his Ph.D. under Dr. Wayne Smith of the TAMU Cotton Improvement Lab. The last two years of his program, he moved into a research associate position and worked under both Dr. Smith and Dr. Steve Hague. Beyer has now worked for Advanta since Sept. 2012. He said he is looking forward to the improvements to sorghum Advanta has envisioned and the role sorghum can play in water savings, especially in limited irrigation regions such as West Texas.



Dustin Borden, NexSteppe

Dustin Borden began working in 2011 for NexSteppe Inc. in Hereford, Texas, breeding sorghum for energy production. He started his career in sorghum breeding as an undergraduate student worker in Dr. Bill Rooney's sorghum breeding program at Texas A&M in 2005 and graduated with his bachelor's degree in agronomy in 2007. After graduation, Borden remained in the sorghum breeding and genetics program at TAMU, working full-time as a research assistant and taking graduate classes parttime. Upon completion of his graduate studies in 2011, Borden started working for NexSteppe focusing specifically on breeding sorghum for energy production.

Borden says he is excited about the future of the sorghum industry and the impacts it could have on sustainable energy production. He said sorghum's ability to adapt to different climates and its drought tolerant traits make it unique. He also enjoys the genetic variation sorghum possesses, which he said allows sorghum to respond and display unique results.



Chad Hayes, USDA-ARS

SORGHUM Grower Fall 2012

Chad Hayes grew up in Plainview, Texas, which allowed him to be involved in sorghum research from a very young age. His father worked for Dupont Pioneer for many years and those experiences with him in the field motivated him to continue his education in sorghum breeding and genetics. The ability to use the most advanced scientific tools and techniques available today to help a farmer's bottom line has always appealed to Hayes. Summer-time jobs with Dupont Pioneer and Texas AgriLife Research gave him the foundation to pursue his interest in plant breeding and genetics.

Hayes worked with the USDA-ARS sorghum breeding program in Lubbock, Texas, from 2005-2012 as a student. After earning his Ph.D. in 2012, he is now a full time employee at the Lubbock ARS station. The vast amount of genetic variation available in sorghum is what Hayes enjoys most about his job, and sorghum specifically. He says whatever agricultural need may exist today (drought tolerance, bioenergy, water conservation), sorghum can play a vital role in providing these key traits to the global marketplace. With new research initiatives being created like the United Sorghum Checkoff Program, Hayes feels sorghum's future is looking more and more promising as a multi-purpose crop that can have a big impact on farmers and the planet.



Yedilaklil Hunde, Richardson Seeds/MMR Genetics

Yedilaklil Hunde joined MMR Genetics/Richardson Seeds in June 2012. He is charged with developing and evaluating sorghum parental lines and hybrids suitable for the US and international markets. He completed his Ph.D. at West Texas A&M University in May 2012, where he studied under the guidance of Dr. B.A. Stewart. As part of his research he evaluated the water use efficiencies of brown and non brown midrib sorghum varieties. Yedilaklil was born in Ethiopia and spent most of his formative years in Kenya. He has a keen interest in increasing the utility of sorghum as a food, feed and energy crop.

His interest in sorghum piqued while working with an aid agency in Southern Sudan. The diversity, utility and resilience of sorghum he witnessed convinced him that it could and should play a major role in satisfying the world's demand for food and feed. He is especially interested in improving the productivity of areas where water is the main limiting factor to agricultural production. He believes sorghum has an inherent advantage in such areas and will work on developing hybrids with better adaptability and yield stability. He is based at the Vega, Texas, research facility.



Gabriel Krishnamoorthy, Richardson Seeds/MMR Genetics Gabriel Krishnamoorthy is from New Delhi and Shillong, India, and studied in universities in his native country. He earned a Ph.D. in plant breeding and genetics at Texas A&M, where he was a graduate research assistant in Dr. Bill Rooney's sorghum breeding program. His dissertation research was a study of hybrid vigor between elite sorghum lines that comprise potential heterotic groups. In 2007, he joined the team at Richardson Seeds/MMR Genetics as a sorghum breeder. He works on developing grain, forage and sorghum-sudangrass hybrids at the facility in Vega, Texas.

He sees great promise in sorghum as a crop species whose potential has not yet been fully exploited and is excited about the possibilities of expanding its range of utilization by tapping its unique diversity and its suitability for a myriad of specialized applications across the range of feed, food, energy and more. He is also optimistic about the possibilities of extending the geographic range of cultivation of sorghum by taking advantage of the genetics for adaptability to environmental conditions and biotic stresses that currently are limiting factors. He considers himself fortunate to be a part of a close-knit industry that values and encourages a tradition of cooperation.



Kerry Mayfield, Chromatin

Kerry Mayfield grew up in South Texas. His grandfather farmed and grew sorghum when he was a child, and he said he always felt sorghum was the most attractive crop grown in the Coastal Bend region. Mayfield said the diversity of the crop and developing uses are some of the best characteristics sorghum has, along with the exposed fruit, which allows you to see the entire product. It is a very visual crop he said.

Mayfield received his bachelor's degree in plant breeding from Texas Tech University in 1997 while working for Cargill Hybrid Seeds. There he was a research assistant working to develop new hybrid sorghum combinations and sorghum germplasm. He attended Texas A&M where he received a master's degree and Ph.D. both in plant breeding. During this time Mayfield worked for Texas AgriLife Research as a research assistant and associate on maize breeding and genetics. Mayfield has also previously worked for Triumph Seed Company as a sorghum breeder and now works for Chromatin. He began his career there in April 2012 and is responsible for the forage and biomass sorghum breeding program.



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SORGOnomics[®]



By Lindsay Kennedy

Dr. G.A. "Art" Barnaby, risk management extension specialist at Kansas State University, answers your questions about grain sorghum basis basics.

What is basis?

Basis is calculated by subtracting the nearby futures price from the cash price. 'Nearby' is defined as the futures contract closest to the expiration without going into the delivery month. Basis captures the effects of local supply and demand, as well as transportation costs on commodity prices.

How does basis work for sorghum?

Sorghum basis is priced off of the corn futures contract. Elevators and other grain buyers will use the corn contract to hedge their inventory if they are holding sorghum. So, it is the difference between the cash price at that location versus the board price.

Why isn't sorghum on the Chicago Board of Trade?

There is simply not enough volume of grain sorghum to be traded on the CME. In the futures market, liquidity is really important, and you get liquidity with volume. Grain sorghum was traded at Kansas City at one point, but because of the liquidity issues, grain buyers continued to use the corn contract, which suggested the basis risk between corn futures and cash sorghum wasn't anything that couldn't be managed.

How does basis vary across the Sorghum Belt?

Basis is going to vary for a number of reasons. It depends how close you are to markets. For example, if sorghum gets approved as an advanced biofuel, I would expect the basis to get much stronger to the point it might even exceed corn prices in some areas close to ethanol plants where sorghum is produced. Another example would be a situation we had a couple years ago where Mexico was allowing the importation of U.S. sorghum for livestock feed but not corn. Corn and sorghum prices became very close in South Texas.

How is basis related to supply and demand?

In effect, your cash price represents local supply and demand, and the CME is more of a national and international price. For example, if you are in an area where there has been a drought, and there is a lot of cattle feeding or ethanol plants, those operations either have to shut down or truck in grain. The grain merchandiser then has to pay the transportation cost, and as a result of that low grain supply and high demand, the basis shrinks. The cash becomes very high relative to the futures at that point, because you have to pay enough in cash to pay for what it costs to truck it to the buyer. So, it's more of a local cash supply situation.

How do changes in the market impact basis?

The short crop in the Corn Belt this year is a supply issue that supports a strong sorghum basis. If grain sorghum is approved as an advanced biofuel, you would assume that would increase demand and make the basis stronger. The shipping of sorghum to Mexico for cattle is an example of a stronger basis that was demand driven. So any of those factors, especially local conditions, are going to drive that number more than anything else. If you've got a really big crop and the elevators are stacking grain out on the ground, you don't even have to ask what the bid is for grain—you know the basis is going to be really wide. They'll buy it, but only at a really reduced cash price, which means a weak basis.

How does basis change throughout the year?

In general, basis is typically weaker at harvest time when farmers are selling grain off the combine. Then it tends to get stronger toward the end of the crop year. It also depends on what is going on in the Corn Belt and in the rest



of the world. This year, for example, the drought in the Corn Belt has resulted in a pretty strong sorghum basis this summer.

How does on-farm storage benefit a producer in relation to basis?

In the case of harvest time, elevators are buying grain at its weakest basis—the lowest cash relative to futures. If you have on-farm storage, you don't have to deliver your grain at harvest time. You can retain it and wait for the basis to get stronger before you make the cash sale. That is where on-farm storage pays for itself. And, depending on your setup, you could potentially eliminate your wait time at the elevator if you have got your own facilities, and you can keep the combines moving.

Describe how basis can affect producer profitability.

The stronger the basis, the higher your cash price is relative to the board. So, if you can pick up an additional \$0.15/bu, those additional dollars can add up just off of managing basis. There are many farmers who sell grain this way. For example, because of on-farm storage and a farmer's ability to manage basis, their decision to sell is often driven by how strong the basis is. When the basis is strong, the local market is telling the farmer it needs grain, and it is bidding the cash price up to get it.

Is there a relationship between basis and crop insurance?

The short answer is no. Both corn and sorghum crop insurance set their price elections based off of the CME. The farmer's actual selling price does affect his insurance indemnity calculation. However, since sorghum is not traded on the CME, RMA uses an average basis from multiple locations to arrive at a percentage of the corn price election for sorghum. NSP helped develop this calculation methodology, which has considerably increased the sorghum price election compared to the historical RMA calculation.* Historically, sorghum has gotten shortchanged on the price election used in crop insurance.

* See "Crop Insurance Changes Pay off for Sorghum" in the spring 2012 issue of Sorghum Grower.

what?

Basis is calculated by subtracting the nearby futures price from the cash price, where nearby is defined as the futures contract closest to the expiration without going into the delivery month. Basis captures the effects of local supply and demand, as well as transportation costs on commodity prices.

what is **?** your basis

Kansas State University's AgManager.info site has an interactive crop basis tool that can be used to examine historical weekly nearby basis for sorghum, corn, soybeans and wheat for various locations in Kansas, Nebraska, Missouri, Oklahoma and parts of Colorado and Texas.

Use the AgManager Interactive Basis Tool online at http://www.agmanager.info/ marketing/basis/tools.

Sorghum Markets

Health Benefits Sparking Interest in Sorghum

By Robert Jones

dietary staple in many countries around the world, food-grade sorghum is a largely untapped market here in the United States. Globally, about 50 percent of sorghum is consumed by humans, but in the U.S. less than 2 percent of grain sorghum is used for human consumption.

Among many of its unique traits, sorghum is probably best known for its inherent gluten-free qualities. Celiac disease, a condition that afflicts up to 18 million Americans, damages the lining of the small intestine as a result of eating gluten, which is found in wheat, barley, rye and oats. This has led to strong growth in the gluten-free market, in which sorghum is becoming major player. This, among other factors, has led to increased research and development activities from companies looking into the hybrid opportunities that could potentially find their way into farmers' fields.

Grain of a Different Color

Food-grade sorghum differs from standard grain sorghum most notably in the color of the grain. Standard grain sorghum features dark red seeds, while most foodgrade sorghum has a lighter color, usually tan or white in hue. However, scientists have recently discovered that some darker colored sorghums may contain valuable health properties.

Some special varieties have been shown to provide an excellent source of bioactive compounds, which are naturally found in plants and have been used medicinally since the ancient Greeks. These compounds, found in dark sorghums, are a great source of antioxidants, which are essential in fighting illness and disease.





Light or dark, food-grade sorghum provides plenty of opportunity in the human food market.

Potentially Powerful Properties

Researchers are able to develop specific varieties that contain beneficial attributes and bioactive compounds such as antioxidants, polyphenols and flavonoids. At Texas A&M University, a new hybrid called "Onyx" features extremely dark grain that is specifically selected for its potential health benefits.

It is sorghum's disease-fighting power that particularly interests one scientist in southeast Texas.

Nancy Turner, Ph.D., associate professor at Texas A&M and nutrition researcher, is currently studying specialty sorghum varieties thought to provide excellent health-promoting properties. Her experiments show that bran isolated from sorghum grain containing high levels of bioactive compounds is capable of suppressing colon inflammation in animal trials.

"Black sorghum varieties seem to be very effective at suppressing inflammatory bowel disease and colon cancer," Turner said.

Turner attributes sorghum's chemical characteristics that make the plant fungal resistant in the field to its ability to protect against these diseases. Even after the milling process, whole grain flour made from sorghum grain still retains and provides its natural disease fighting and bacteria-controlling characteristics into the human body.

Through a collaborative study with University of Nebraska and Kansas State University researchers, Turner has also conducted a human trial focused on physiological responses to diets that include sumac sorghum flour and brans. This study shows this sorghum can affect metabolism, which may help with a variety of diseases. Though Turner said she is still characterizing data, she did conclude that a diet rich in sorghum grain products containing high levels of dietary fiber and bioactive compounds could promote digestive health by affecting colon bacterial populations and preventing inflammation leading to cancer.

To find food products made from sorghum, check out the Sorghum Connections Directory at SorghumCheckoff.com.



CLOSING IN the CORN BELT







by Jennifer Blackburn

he Corn Belt has its name for a reason, but two years of above average temperatures and below average rainfall are testing the sustainability of its Corn Belt label.

For one Missouri farmer, these dry times have greatly affected his profit margins and putting pencil to paper has caused him to gradually increase grain sorghum acres on his 4,400acre farm, which in the past has been mostly planted to corn and soybeans. His area experienced a dry winter and subsequently had little subsoil moisture going into planting season in the spring. Following a much needed rain at the beginning of May, he was unable to finish planting corn until May 15 and planted sorghum immediately after that.

"The drought had a terrible impact on the corn I planted in May, and I chopped it for silage because it was making anywhere from 0-30 bushels," Curtis said. "The milo I planted the same day on the same soil type made 70 bushels.

"I can't really pencil out the corn on a lot of the farm land that I have," said Chris Curtis, a fifth-generation farmer from Osborn, Mo. "Milo is just something you can count on, and you're guaranteed to haul something."

Acres Rise

According to the United States Department of Agriculture National Agricultural Statistic Services, total sorghum production in Missouri has climbed to 3.3 mil-



production in Missouri Looking to his final field to harvest, Curtis expects to average 65 bu/ac this year.

lion bushels this year from 2.3 million bushels in 2011, and harvested acres are set to increase by more than 22,000 acres. Curtis currently raises 500 acres of sorghum, a number he reached after increasing production annually since he first began growing it on two acres in 2003. He plans to increase acres again next year.

According to Curtis, the drought began in his area August 2011, and he harvested crops for 45 consecutive days with no interruption of rainfall.

equipment I have and still have 100 percent yield potential with my milo up until the first of June," Curtis said.

ltch of Rich

Curtis entered the National Sorghum Producers Yield and Management Contest last year for the first time and became a national winner, taking home second place in the no-till, non-irrigated division with a yield of 149.02 bushels per acre. His recent success with grain sorghum has

"When you're looking at 20-bushel corn and 70-bushel milo, your input costs are drastically lower, plus you have the added residue left behind from milo. It's hard not to plant more of it."

Curtis also said yield potential is not lost with sorghum because the planting window is much longer than that of corn.

"I can farm more ground with the

20

started to increase interest among some of his neighbors, but he said there are still some naysayers.

"A lot of people around here will give you horror stories about grain sorghum, saying it can [lodge] and it itches," Curtis said. "I tell everybody that it's the itch of money and they need to get used to it—it's the itch of rich as one neighbor calls it."

Curtis said a great deal of land in the Conservation Reserve Program is being taken out that he feels should be left in CRP, but it is an area farmers can benefit from planting sorghum.

"Milo is a crop everyone needs to look at on this more marginal land," he said. "There is a lot of room to profit raising milo up here."

On-Farm Storage Advantage

According to Curtis, he is only one of about three producers in a 60-mile radius that grows grain sorghum, and locations to market his grain have become limited. However, Curtis utilizes on-farm storage to effectively market his grain.

"You must have on-farm storage if you're going to raise milo here," Curtis said of his regional market situation. "It's just not something you can take to your local coop and dump anymore."

Curtis said on-farm storage also opens his harvest window, giving him greater flexibility with the capacity to use drying equipment.

"I can start harvest wet, and if Mother Nature doesn't cooperate, that's fine," he said. "We can get a crop out, handle it, dry it, put it in the bin, and worry about the rest when we need to."

Curtis said he has gradually built bins and increased his drying capacity by allocating a certain amount of his profit each year to on-farm storage. "In my opinion, on-farm storage is something you have to invest in, just like you would anything else," he said.

On-farm storage also enables Curtis to build yield history for his grain sorghum, countering one hurdle many farmers face in his region—a lack of yield history for crop insurance.

"Many producers in the area feel more comfortable with 70 percent coverage on their corn APH [annual production history] of 110 bushels rather than taking the risk of planting sorghum," Curtis said. "I like having something to haul, and I like my checks coming from the grain elevators, not the insurance company."

Conservation Counts

Another investment and priority for Curtis is conservation and stewardship of the soil. He practices no-till farming and said the added soil moisture he is able to retain each year is significant.

"This year we've received maybe 5 inches of rain when typically our annual average is 34 inches," he said, "and that's where I've really seen the no-till paying dividends up here."

Curtis planted his sorghum into soybean stubble and planted his seed much deeper this year, which paid off. He said he had sorghum seed lay in the ground for 30 days before a small rain finally helped it to sprout, and it eventually all made a head. Even with significantly less rain, his yield contest plot this year harvested a yield of 147 bushels per acre.

"With the circumstances of the drought, I was still able to produce a really good yield," Curtis said. "Milo proved to me this year it needs very little moisture to survive."

Curtis said 20 years ago every farm was a great farm, but he feels conservation and no-till farming is the only way to provide sustainable farm land for the future.



The ability to haul and store his own grain enables Curtis market his crop more effectively. (Photos courtesy of Maddee Moore)

"If you don't protect what's there, then why farm at all?" 🝃

Sorghum Checkoff Launches Leadership Sorghum Program

The development of the next generation of leaders for the sorghum industry is currently underway with the creation of a new program from the United Sorghum Checkoff Program called Leadership Sorghum. Fifteen sorghum producers from eight states were selected for Leadership Sorghum Class I and will be immersed in many segments of the sorghum industry throughout the 16-month program.

Through Leadership Sorghum, participants will gain an understanding of how sorghum moves through the value chain, how checkoffs and interest organizations interact on behalf of the industry, and what the future holds for the crop. The program will also provide professional development training and networking opportunities.

The program's first session was held Sept. 4-6 in the Texas Panhandle, introducing Class I to the sorghum seed industry and public research.

in Hereford. The group also heard presentations from Advanta and longtime sorghum researcher Fred Miller from MMR Genetics.

Fall 2012 NEVIS

"This has been a great session," said Mike Baker, a member of Leadership Sorghum Class I and a sorghum producer from Trenton, Neb. "I am surrounded by 14 other producers from around the nation in this class who all bring different perspectives on the sorghum industry. This has been a great learning experience so far, and I hope to get a better understanding of the sorghum industry as a whole."

The second session will be held Nov. 26-28 in Kansas, the No. 1 sorghum-producing state in the U.S., with a focus on domestic sorghum markets and public research.

For more information about the Leadership Sorghum program, a complete schedule for Class I, or for Class II application information, visit SorghumCheckoff.com/leadership.

"The Texas Panhandle is essentially ground zero for grain sorghum seed production with an estimated 90 percent of the crop's seed coming from the region," said Bill Kubecka, Sorghum Checkoff chairman and producer from Palacios, Texas. "The area provides a great opportunity to exhibit these important segments of the sorghum industry to this first class of Leadership Sorghum, and I think it was a great area to kick off this exciting new program."

While in the Texas Panhandle, Class I was given an overview of the Sorghum Checkoff and other interest organizations and made stops at the USDA-Agricultural Research Service station in Lubbock, Chromatin's nursery in Idalou, Pioneer's research facility in Plainview, Richardson Seed in Vega and NexSteppe



Leadership Sorghum Class I: (Back row) Tanner Ehmke, Stephen Bigge, Johnnie Tyndall, Josh Levin, Joey Rieder, Pat Damman, Paul Morris, Luke Sayes, Seth Martin. (Front Row) Matt Splitter, Martin Kerschen, Jordan Shearer, Mike Baker, Adam Schindler and Shayne Suppes.

Meet Class I

We will be featuring members of Class I in the next several issues of Sorghum Checkoff News. For a complete list of Leadership Sorghum Class I, visit www.sorghumcheckoff.com/leadership.

Tanner Ehmke Healy, Kansas

Tanner Ehmke works his family farming operation near Healy, Kan., where he and his family typically plant around 2,000 acres of grain sorghum each year.

Ehmke's family has been growing sorghum since the 1950s, and he says sorghum is a great rotational crop with wheat in their area.



"We market our sorghum to local elevators and feedlots," Ehmke said. "We also grow wheat, rye and triticale for seed production using no-till and reduced-till farming methods."

Adam Schindler Reliance, South Dakota

Adam Schindler and his family annually plant around 600 acres of sorghum on their farm near Reliance, S.D. Schindler's family has been growing sorghum for more than 50 years, first planting it in the early 1960s.

Adam grows sorghum because of its versatility, which yields well in drought and does extremely well in years of plentiful moisture.



"Our family farm is a registered South Dakota Century farm where in addition to sorghum, we grow wheat, corn, sunflowers and soybeans. We use strictly no-till farming methods, employing the use of Shelbourne stripper heads and cover crops."



Check out highlights from the first session of Leadership Sorghum at YouTube.com/sorghumcheckoff

Paul Morris Hubbard, Texas

Paul Morris and his family farm near Hubbard, Texas, where they plant around 2,000 acres of sorghum each year. Morris' family has been growing sorghum off and on for 20 years.

He said it fits in well with his operation, and grain sorghum's water efficiency adds tremendous value.

"We market sorghum at our

local elevator, which can buy, sell and store about 1.4 million bushels of grain," Morris said. "We farm cotton, wheat, corn and milo on about 5,000 acres and run a cow/calf operation."

Martin Kerschen Garden Plain, Kansas

Martin Kerschen runs a family farming operation near Garden Plain, Kan., where he and his family grow about 600 acres of grain sorghum.

Kerschen has been growing sorghum for almost 40 years and normally markets his sorghum at local coops but hopes to work with ethanol plants in the future.



Kerschen said sorghum works well as part of his crop rotation with wheat and soybeans.

"Grain sorghum gives good profits, good rotation options and a good workload spread," Kerschen said. "Its drought tolerance is also a valuable trait in our operation."

paid advertisment

New Herbicide Proving Beneficial for Growers

A new over-the-top herbicide labeled for grain sorghum is helping many producers control pesky weeds and improve yields. Bayer Crop Science's Huskie was approved for use in grain sorghum July 2011 and could be a great weed control option for producers.

Farmers who have used Huskie on their sorghum this year have seen positive results with the new herbicide, which can be applied for control of broadleaf weed species.

Troy Skarke, a sorghum farmer in Claude, Texas, said he decided to use the product on his own early variety sorghum after the Sorghum Checkoff funded several trials for the herbicide on his land. So far, he has been very pleased with the results.

"I sprayed three weeds that often give sorghum producers trouble – devil's claw, Russian thistles and bindweed," Skarke said. "I ran a combination of Huskie and atrazine over the top while the sorghum was about 14 inches tall and had fantastic results."

While Huskie is a new choice for sorghum producers, it does have a history of proven success. Used in wheat since 2008, Huskie has good post-emergence control on Palmer ameranth and other pigweed species no taller than 4 inches.

Developed for broadleaf weed control, Huskie is a particularly good option for producers in cotton country



Troy Skarke, a sorghum grower from Claude, Texas, saw success with Huskie herbicide on his 2012 grain sorghum crop.

because, unlike 2,4-D or dicamba, Huskie drift will not cause any harm to nearby cotton operations.

Although, Huskie herbicide can have the tendency to "burn" sorghum slightly for a short time after application, Texas AgriLife researchers found the damage was only minor discoloration in 4-leaf sorghum, with little evidence of injury persisting past three weeks. Far less burning has been observed in 8-leaf stage sorghum. This is still far less than the injury potential from 2,4-D or dicamba.

Skarke says his crop quickly made a full recovery.

"There was not much harm to the milo," he said. "It turned a little bit white for about 10 days, but it came out of it."

Huskie herbicide presents producers with all the upside of 2, 4-D, but none of the downside of detrimental drift or damage to the sorghum crop itself, reports Texas AgriLife. When used with a tank mix of atrazine, Huskie is especially effective and should typically be applied in sorghum at 13 to 16 fluid ounces per acre.

Skarke said he was extremely pleased with the unexpected results he got from the new herbicide.

"Huskie did a terrific job for us," he said. "In fact, from what I observed, I got better milo yields from the fields where I sprayed Huskie than from the fields where I didn't. Next year, I will certainly use it again."

Huskie also performed well in climates opposite of the High Plains.

Josh Gaddy, agronomist for Murphy Brown LLC, said he used Huskie for the first time on his sorghum crop this year after a successful first season in 2011. This year, after planting 1,500 acres of grain sorghum, Gaddy said he has seen fantastic results with Huskie on Palmer ameranth and other pigweed species prevalent in that region.

"With Huskie we've got a safe, over-the-top herbicide that gives us great control of the Palmer amaranth problem we have," Gaddy said.

Gaddy also said he's using Huskie because he believes some other herbicide options like 2,4D do not provide the same level of effectiveness that Huskie does.

"If we had sprayed 2,4-D, we probably wouldn't have been able to control all the weeds that Huskie did," he said, "and the threat of drift to other fields would have been greater as well."

Agriculture Secretary Reappoints Sorghum Checkoff Directors

Agriculture Secretary Tom Vilsack announced Sept. 19 four appointments to the Sorghum Promotion, Research, and Information Board.

"These appointees represent a cross section of the sorghum industry, and I am confident that sorghum producers will be well served by them," Vilsack said.

Reappointed directors include Bill Greving, Prairie View, Kan., Greg Shelor, Minneola, Kan., and Bill Kubecka, Palacios, Texas. Newly appointed director David Fremark of St. Lawrence, S.D., will hold an At-large position on the board for the next four-year term.

The board is structured so that the state with the largest production is allocated five positions, the state with the second largest production is allocated three positions, and the state with the third largest production is allocated one position. There are four at-large national positions that at least two representatives must be appointed from states other than the top three sorghum producing states. The appointees will serve terms of three years.

The Sorghum Checkoff extends its appreciation to outgoing board member Jerry VanZee from Platte, S.D., for his dedication and service to the sorghum industry.

The 13-member board is authorized by the Commodity Promotion, Research, and Information Act of 1996. The Secretary selected the appointees individuals nominated by certified producer organizations.

SORGHUM CHECKOFF MISSION:

Investing your Sorghum Checkoff dollars to increase profitability for the sorghum industry.

CONTACT US:

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South Dakota Farmer Appointed to Sorghum Checkoff Board of Directors

USDA recently announced the appointment of David A. Fremark of St. Lawrence, S.D., to Sorghum Checkoff board of directors. Fremark will hold one of the five Atlarge positions representing sorghum producing states.

"I'm honored to be given the opportunity to represent South Dakota sorghum farmers on the USCP board," Fremark said. "We run a diverse operation and I think my experience with various methods of crop production and marketing will bring a unique perspective to the board of directors."

Fremark is a third-generation farmer from Central South Dakota. In addition to their farming operation, they run a cow/calf herd and beef finishing yard with a 6,000 head capacity. He said sorghum is a staple in their operation because of its versatility. Grain and forage are an important part of their rations, but some of their grain is sold to various industries.

"We grow sorghum because input costs are much lower than corn, and the returns are potentially greater," Fremark said. "If you have moisture deficit, you will be very glad you planted sorghum."

Sorghum Industry Events				
Nov. 15-16	International Sorghum Genomics Workshop, Atlanta, Ga.			
Nov. 27-29	Leadership Sorghum, Session II <i>Kansas</i>			
Nov. 27-29	Amarillo Farm & Ranch Show Amarillo, Texas			
Dec. 11-13	USCP Board of Directors Meeting Lubbock, Texas			
Jan. 11-12	Enid Farm Show Enid, Okla.			

SHORTCUTS

Commodity Classic is Around the Corner

The 2013 Commodity Classic will be held Feb. 28 through March 2 in Kissimmee, Fla. Classic is the once-a-year, can't-miss event for America's sorghum, soybean, corn and wheat farmers. You'll see the latest innovations first-hand. Hear game-changing ideas from the people who created them. Meet growers and ag leaders from across the nation. Talk one-on-one with top agribusiness representatives at the incredible trade show. If you're passionate about agriculture, this is the place for you.

NSP will hold its annual Sorghum General Session, featuring the hottest topics in the sorghum industry and how they impact you, the farmer. Catch NSP Chairman Terry Swanson during Classic's alwaysimpressive general session, or stop by the NSP booth in one of the largest farmer-led tradeshows in the nation, featuring more than 250 exhibitors. Winners of NSP's 2012 Yield and Management Contest will also be honored at our annual awards banquet.

Visit www.CommodityClassic.com for more information. We'll see you there!

Watch for State Hyrbid Yield Trial Results in the Next Issue of *Sorghum Grower*

The next issue of *Sorghum Grower* magazine—winter 2013 will highlight grain sorghum hybrid yield trial results from several states across the Sorghum Belt. This will mark the third year NSP has provided a comprehensive listing of these yield results, which aim to give farmers a resource when selecting hybrids for the 2013 growing season.

Conducting grain sorghum yield trials in your state? Send results to *Sorghum Grower* Editor Lindsay Kennedy at lindsay@sorghumgrower.com.





Photos from the Field

Scott Hermes from Cooke County, Texas, sent in these photos from his 2012 sorghum crop. Looks like he has some good help in the field from his daughter, Lindsay! Thanks Scott for sharing your photos.

Have you taken photos from your sorghum harvest this year? We would love to see them. Send them to lindsay@ sorghumgrowers.com and we will share them on our Facebook page or in the next issue of *Sorghum Grower Magazine*.



SORGHUM Grower Fall 2012

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