

Research

Cold Tolerance Research Yielding Promising Results

Improving farmers' yields and profitability is the No. 1 priority for the Sorghum Checkoff. Developing cold tolerant sorghum is just one of many research projects currently funded by the farmer-driven organization.

The development of a cold tolerant hybrid would allow farmers in northern regions to plant sorghum earlier in cooler soils, which would extend the growing season and allow for higher yield potential. In other areas planting early would allow producers to take advantage of spring moisture.

Gloria Burow of USDA-ARS in Lubbock, Texas, is the project leader for one of the projects funded by the Sorghum Checkoff. She said that the two-year program has produced some exciting results in the past several months. Burow said at this point in their research they have identified candidate female parents of cold tolerant hybrids.

"We have seen significant differences in early season performance of the offspring from different crosses," Burow said. "We have been testing in three different locations to determine the most effective parent for a cold

tolerant sorghum, and to give us an idea of how they perform in various regions."

Burow said the environmental conditions during their spring trials this year were excellent for screening early season cold tolerance for sorghum. These tests are helping researchers determine an appropriate female parent for the intended result of a cold tolerant hybrid.

The next step to commercializing a cold tolerant hybrid is to ensure the hybrid will continue to grow and produce profitable yield after germination.

"Cold tolerant sorghum has great potential to expand the sorghum market and potential to increase yields," said Jerry O'Rear, global sorghum research director with Advanta Seed. "Advanta is working with the Sorghum Checkoff and USDA-ARS to commercialize a cold tolerant hybrid, and while there are still obstacles to overcome, researchers are seeing exciting results."

While there is still work to be done until a commercial cold tolerant hybrid is available, researchers are getting warmer.

Kansas Grain Sorghum Commission Update

The Kansas Grain Sorghum Commission elected a new chairman of the board on Tuesday, Nov. 30, 2010. Clayton Short was announced as the new chairman on Dec. 1, 2010.

Officers for the KGSC are:
 Chairman – Clayton Short
 Vice-Chairman – Jeff Casten
 Secretary/Treasurer – Boyd Funk

"We are happy to have Mr. Short as our new Chairman, and glad to have Mr. Casten and Mr. Funk returning to the executive committee," said Jill Barnhardt, KGSC Administrator.

SORGHUM CHECKOFF MISSION:

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

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INDUSTRY EVENTS CALENDAR

Jan. 18	Cover Your Acres Winter Conference Oberlin, Kan.
Feb. 16-19	National Farm Machinery Show Louisville, Ky.
Feb. 25-26	Mid South Farm and Gin Show Memphis, Tenn.
Feb. 25-27	Western Farm Show Kansas City, Mo.
March 3-5	Commodity Classic Tampa, Fla.

Investing in Sorghum's Future

The Sorghum Checkoff was established in 2008 to improve the profitability of the sorghum industry through research, promotion and education. With your checkoff dollars, the Sorghum Checkoff is moving sorghum forward. So, what has been done in the last two years? We let the farmer ask the questions.

What is being done to create new foreign markets for my sorghum?

The Sorghum Checkoff has helped open new foreign markets in countries that have never previously imported sorghum.

"We have a product to sell and the more of that product we can export, the more value it will have back to the farm," said John Ballard, Claude, Texas, sorghum farmer.

The Sorghum Checkoff has hosted grain buyers from both new and existing sorghum importing countries, such as Mexico, Japan, Morocco, Saudi Arabia and Vietnam, which has resulted in a 16 percent increase in U.S. sorghum exports over the last two years.

"It's good to see the checkoff dedicate producers' dollars to market development, which is where I've seen the most obvious results so far," said Greg Graff, Marenthal, Kan., sorghum farmer. "We have already seen foreign purchases increase and have addressed domestic market issues. These are excellent examples of how the checkoff is spending funds to increase sorghum farmers' profitability."

What solutions are there for the weed and grass control problems in my field?

Post-emergent grass and weed control herbicide technology is just around the corner. The Sorghum Checkoff has sponsored field plots to showcase this new technology as a solution to your weed and grass problems. In addition, the checkoff is taking an active roll in developing best management practices to help growers get the most out of the new herbicide once it becomes commercially available in the next couple of years.

"Research dollars for sorghum were declining and the checkoff is putting dollars back into that," said Jim Sipes, Manter, Kan., sorghum farmer. "I think we will see the biggest benefit from research. One of the most difficult things in raising grain sorghum are the grassy weeds. There is some promising research coming out of the checkoff for herbicides."

My yields aren't where they need to be. What work is being done to increase yields?

Cold tolerance and drought tolerance are being researched using Sorghum Checkoff funds so that these hybrids can be found, commercialized and in growers' fields. The checkoff is working with both private and public sectors to make these hybrids a reality. In fact, this research has found a germplasm for cold tolerance that will allow sorghum to germinate and thrive at soil temperatures as low as 50°F.

continued on p. 3



Sorghum in Food Aid

Sorghum has been a staple food item in many countries for thousands of years and today serves as the second largest commodity in food aid. The Sorghum Checkoff is working to not only increase awareness, but to develop a better understanding of sorghum's nutritional benefits in food aid.

Food aid is a donation of agricultural commodities by non-profit organizations in the U.S. to people in developing countries around the world and serves as 10 percent of U.S. sorghum exports.

How food aid works

When a non-profit organization is determining what commodity to donate, they consider several factors, mainly what is accepted by the population and what has been used in the past. To find such commodities most use the USDA Commodity Reference Guide. However, most non-profits are not likely to choose a commodity they are not familiar with.

To educate these non-profit organizations, the Sorghum Checkoff produced a booklet of sorghum's nutritional benefits. By providing nutritional information to the right decision makers, the checkoff hopes to increase the amount of sorghum requested in food aid and increase demand for the sorghum industry.

Why Sorghum is a Good Choice

"Sorghum is rich in energy, vitamins and minerals and 100g meets 38 -118 percent of the World Health Organization's (WHO) Recommended Nutrient Intakes (RNI) for one to three year-old children for seven essential vitamins and minerals," said nutritionist E.C. Henley, Ph.D, R.D., L.D. "We want people to know that sorghum is nutrient rich, versatile and can easily be fortified with other commodities."

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Non-profit organizations that donate grain to these food-insecure countries match the foods to the recipients' nutritional needs and to their cooking conditions. Henley said that sorghum has a huge advantage in food aid because many countries are familiar with and know how to use it.

Promoting Sorghum in Food Aid

James Zenner is the CEO of JPZ Consulting, which specializes in global food security, said that in some cases a commodity like sorghum needs to be reintroduced to some non-profit organizations.

"There is a need to actively market sorghum and demonstrate how it fits into food baskets," Zenner said. "If you have a sound basis of nutritional knowledge, then it's only a matter of getting that information to the right people. Because everything is based on fact, a tool like the nutrition paper produced by the Sorghum Checkoff is very useful."

After the development of the sorghum nutrition information, the Sorghum Checkoff set out to bring that information to key decision makers in food aid non-profit organizations by hosting a gathering at the U.S. Grains Council conference in Boston, Mass. The purpose of this meeting was to inform food aid buyers of the value sorghum has to offer.

Tufts University has recently released guidelines for sorghum and soy fortified grits and the Sorghum Checkoff will work with other universities to develop new products based on these guidelines.

Sorghum Checkoff Executive Director Virgil Smail said based upon the positive response of food aid buyers attending the conference, he feels confident they will consider sorghum in the future.

"Food aid represents 10 percent of sorghum exports and the Sorghum Checkoff is working to guarantee a market for sorghum in food aid shipments," Smail said.

Investing in the Future, cont.

Has anything been done to encourage ethanol plants to use sorghum?

Absolutely. The Sorghum Checkoff is helping to bring growers and ethanol plants together to maximize the market potential for sorghum in the ethanol industry.

In addition, the checkoff has funded feeding trials on the performance of beef and dairy cattle fed wet distillers grains with solubles, a co-product created when sorghum is used to produce ethanol.

The goal of these trials is to prove sorghum is nutritious for beef cattle, which could increase the value of sorghum distillers grains being sold directly from ethanol plants and allow them to purchase more sorghum at a higher value.

Is the livestock industry utilizing sorghum more than they used to?

Livestock feeding guides containing updated information about the benefits of sorghum as a livestock feed were developed by the Sorghum Checkoff and are being distributed through out

the livestock industry. Both grain sorghum and forage sorghum are being recognized by livestock producers as a valuable feeding option.

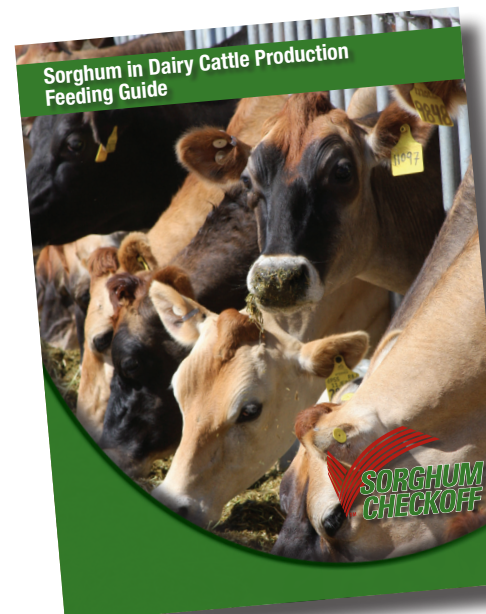
"Investing in the Sorghum Checkoff is like investing in your children and grandchildren," said Stan Fury, Broadview, N.M., sorghum producer. "It is the future. The checkoff is funding research on forage sorghum and promoting the crop through the new dairy feeding guide, which will be helpful to dairy producers and forage growers alike."

I need higher value market for my sorghum. What new markets are out there?

Sorghum is a gluten-free, high antioxidant food option. The Sorghum Checkoff is working to commercialize sorghum as a viable food product by working with the baking industry to meet consumer needs and increase demand for your grain.

"Even if it's a small percentage of the sorghum market, the gluten-free market is invaluable to sorghum, because we want continued expansion of markets," said Clayton Short, Assaria, Kan., sorghum farmer.

Market Development Update



Sorghum in Dairy Cattle Production Feeding Guide

The Sorghum Checkoff has released a *Sorghum in Dairy Production Feeding Guide* to better educate dairy producers about the feeding value of sorghum. These guides target dairy producers and contain information from the most effective forage processing methods to the value of distillers grains. The Sorghum Checkoff feeding guides tell exactly how to get the most out of feeding all types of sorghum in your dairy operation.

Dairy producers can request their copy of the *Sorghum in Dairy Production Feeding Guide* now. To request your feeding guide email the Sorghum Checkoff at info@sorghumcheckoff.com. You may also download your copy at www.sorghumcheckoff.com or call the Sorghum Checkoff office at (877) 643-8727.