<p>2020 Kansas Sorghum at a Glance</p>

- Farmers planted 3 million acres of sorghum in Kansas
- 2.8 million acres of sorghum were harvested
- 238 million bushels of grain sorghum were produced
- Farmers harvested an average of 85 bushels per acre

**Kansas Sorghum Market Outlook**

- 160 MBU Exports
- 44 MBU Feed & Residual
- 31 MBU Food, Seed & Industrial

“<strong>This year was still challenging from a budget standpoint, but 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. Sorghum in Kansas is on solid ground.”</strong>

Stephen Bigge
Chairman and Farmer
Stockton, Kansas

Farmers received an average farm price of $4.26 per bushel.
The U.S. Grains Council’s 2020 Virtual Grain Exchange brought foreign customers to the table in lieu of in-person trade teams. Chairman Bigge was part of the welcome address. The event tallied over 1,200 attendees, including 989 international participants from dozens of countries, interested in coarse grains and ethanol products. According to the U.S. Grains Council, this participation is two to three times more people than would have attended in person at Grain Exchange and field visits.

Nearly five million metric tons of U.S. sorghum, or 204 million bushels, were exported during the 2019-2020 marketing year. The top five exporters of U.S. sorghum were China, Mexico, Japan, Ethiopia and New Zealand, respectively. U.S. exports of sorghum to China from January to August 2020 totaled $617 million, up from $561 million for the same period in 2017-2018. The value of Kansas sorghum exports reached $466,300,000, a tremendous win for Kansas farmers.

Left to right: Clark Bibb, Coldwater; Max Tjaden, Clearwater; Stephen Bigge, Stockton, Chair; Mike Rosebrook, Beverly; Lonnie Wilson, Colby, Vice Chair; Kevin Harris, Abilene; Nathan Larson, Riley, Sec/Treas. Not pictured: Greg Graff, Leoti; Kevin Kniebel, White City; Mike O’Brate, Ingalls

Kansas growers gave $3.41 million in assessments to the Sorghum Checkoff in 2020. Kansas received $866,194.69 in passback dollars to invest in additional research, market development and education.

Top 5 U.S. Sorghum Exporters

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (in $)</th>
</tr>
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<tbody>
<tr>
<td>China</td>
<td>466.3 Million</td>
</tr>
<tr>
<td>Mexico</td>
<td>204 MBU</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td></td>
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<tr>
<td>New Zealand</td>
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Virtual Grain Exchange

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Leadership Sorghum

Six Kansans are members of the Sorghum Checkoff Leadership Sorghum Class V:
- Daniel Hopper, Leonardville
- Deanna Lanier, Valley Center
- Matt McCune, Plainville
- Brant Peterson, Johnson
- Brian Younker, Spearville
- Kirk Zerr, Quinter

Fueled by Ethanol

Kansas Grain Sorghum partnered with Kansas Corn in their Higher Blends Infrastructure Improvement Program (HBIIP) grants for three Kansas companies, which represents five locations. The Renewable Fuel Association also submitted for one Kansas company, representing four locations. All nine of these locations were selected for funding with locations across the state — from Moscow to Goodland to Horton. One location in Wichita has already completed installation and is now offering E15, E30, E50 and E85 blends. USDA will be making an additional $20 million available yet again this calendar year, and Kansas Grain Sorghum has identified at least one additional station to apply for these funds. As of now, more than 70 stations in Kansas are offering E15 and above ethanol blends.
Investing in the Future of Kansas Sorghum

In 2020, the Kansas Grain Sorghum Commission board invested in the following research and projects to help Kansas farmers gain more value:

- **DropXL Sorghum**: A trait technology package to deliver water-optimized sorghum varieties.
- **Breeding Sorghum for Improved Dryland Productivity and Utilization**: $100,000
- **Improving Chilling Tolerance in Grain Sorghum with Genomics-assisted Breeding**: $94,300
- **U.S. Grains Council**: $35,000
- **IGP Institute Market Development Grant**: $20,000
- **Kansas Water Technology Farm Partnership**: $8,000
- **HBIIP Ethanol Project**: $20,000

**Key findings and milestones of 2020:**
- DropXL identified sorghums with low water demand (2-5%).
- DropXL initiated new breeding populations with 350 crosses of elite parent lines and non-elite donor lines.

**DropXL Sorghum**

In 2020, DropXL Sorghum, a trait technology package for water-optimized sorghum in Kansas, continued to advance the trait of limited transpiration. A trait modeled to increase productivity of sorghum in Kansas environments by five bushels per acre while using less water.

**FarmUS**

The Kansas Department of Agriculture and Kansas State University were awarded a Federal State Market Improvement Grant by the USDA AMS. The project, FarmUS, farm to campus collaboration to access consumer markets on Kansas college campuses, leverages workforce development and student innovation to create new applications and market opportunities for sorghum and wheat. Ultimately, successful prototypes will debut in the food service programs for college campuses in Kansas.

A class taught by project team member, Dr. Kelly Getty, engages students in the research and development process for new and novel consumer products. In the case of this project, the consumers of interest happen to be college students just like themselves. The fall of 2020 was the first semester for incorporation of the FarmUS innovation experience into a senior level food science class. The project team, which included Kelly Whitehair with food service at K-State, are impressed with the concepts that students developed. In parallel to the class experience, the lab of Dr. Yonghui Li is exploring innovative approaches to functionality and sensory with uses of sorghum and wheat.

**Sorghum State Podcast**

Listen to full episodes of the Sorghum State Podcast from Kansas Grain Sorghum at ksgrainsorghum.org.

**STRAIT Delivers Sugarcane Aphid Markers**

The sorghum industry faces many challenges and opportunities, such as stress tolerance, grain quality and herbicide resistance, that could be addressed most rapidly and cost-effectively by using marker-assisted selection (MAS) in breeding programs for targeted traits. The Collaborative Sorghum Investment Program in collaboration with the research programs of Drs. Geoffrey Morris and Terry Felderhoff, launched the Sorghum Trait (STRAIT) effort. STRAIT aims to provide traits to bridge the gap in availability of crop technologies for grain sorghum. The first delivery of trait technology is a marker for use in the selection of tolerant sugarcane aphid sorghums. The markers have been tested by seven breeding programs, both public and private. The research of Morris and Felderhoff is supported by the Kansas Grain Sorghum Commission.
GROWERS WORKING TOGETHER