

STRAIT STRAIT KIN A Collaborative Innovation Network for Sorghum Traits

FROM SEED BANK TO SEED BAG

PUBLIC SECTOR



Research



Development

Trait identification

Mapping population

Trait field phenotyping Identify causal genetics

Optimize community discovery genomic resources Breeder marker development for basic science discovery

Introgression into compatible elite lines

Genetic marker for breeding

> Marker efficacy testing

PRIVATE SECTOR



Delivery



Commercialize sorghum traits

Critical feedback to public programs on impact

STRAIT KIN will advance sorghum trait technology with programming to

CONNECT

Annual exchange to evaluate public discoveries and developments and hear needs from private partners.

CATALYZE

Evaluate candidate markers for efficacy as a tool to develop sorghum traits for private partners.

CHARACTERIZE

Develop designer donor lines that optimize connection and catalyzation of sorghum traits across public and private R&D capacities.



How do you join the STRAIT KIN family?

- Set up a testing agreement with Sarah.
- Set up a phone call with the STRAIT KIN to participate in the 2023-24 winter testing.
- · Tell us what key traits your customers need.
- Join the Center for Sorghum Improvement Seminar listserv.

What is in the pipeline for 2023-24 traits?

- Biotic traits: sorghum aphid resistance and striga resistance
- Abiotic traits: early-season chilling tolerance and post-flowering drought tolerance (staygreen)
- Ideotype: stable plant height, maturity, and grain tannins

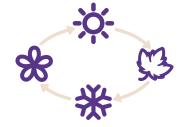
TIMELINE

Late Summer

Seed industry tour with public sector researchers

Spring

Deploy markers for commercial use



Fall

Meet to identify markers of interest and devise testing protocols

Winter

Sorghum marker testing for partners programs

THE TEAM



TERRY FELDERHOFF
Research Assistant Professor
Sorghum Molecular Breeding
Kansas State University



SANDEEP MARLA
Project Manager STRAIT KIN
Sorghum Molecular Genetics
Kansas State University



GEOFFREY MORRIS

Associate Professor

Crop Quantitative Genomics
Colorado State University



SARAH SEXTON-BOWSER

Managing Director

Center for Sorghum Improvement

Kansas State University