



Producer Information Guide

Every farmer has those burning questions about what decisions will make their farms more productive and profitable, but finding reliable, consistent answers for the scales and circumstances of our farms is a big undertaking. Most simply don't have the time and resources to add a layer of scientific experimentation to the demanding occupation of farming. **That's where the Kansas Farm Research Network (KFRN) comes in.**

What is KFRN?

KFRN is a pilot collaboration program between the Kansas Agricultural Research & Technology Association (KARTA) and K-State Research & Extension (KSRE). KFRN is a group of agricultural producers from across Kansas who conduct onfarm research projects at farm-level scale with the technical support of agricultural research professionals.



By bringing together the research expertise and human networks of each organization, KFRN simplifies the intellectual and labor demands of performing on-farm research. Plus, participants are encouraged to be involved in developing the research questions they tackle on their farms, guaranteeing an emphasis on the subjects that are top of mind for Kansas farmers.

Our Program Partnership





K-State Research & Extension is a statewide educational network of researchers and agents that addresses public needs by providing higher education and learning activities to farmers, ranchers, communities, youth, and families throughout Kansas.

The Kansas Research Ag and Technology Association is a non-profit organization of innovative people including farmers, researchers industry persons who share a common desire to learn more about production agriculture.

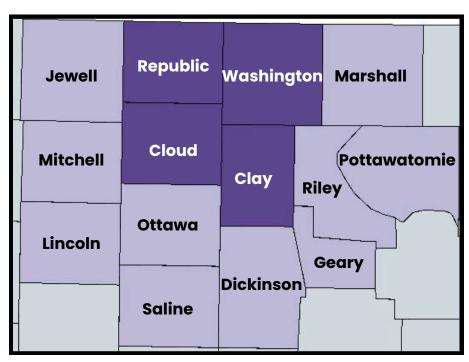
The KFRN Process



Extension
River Valley District

In the first year of KFRN,

assistance will be focused in the River Valley Extension District (RVED) (Clay, Cloud, Republic, & Washington Counties) and immediately surrounding counties. This will allow the support team to optimize their time serving participating growers while



adding depth to the portfolio of on-farm research in the region. Success in the first year will mean opportunity to expand KFRN to new regions of the state in future years. River Valley District will host a KARTA-sponsored Summer Research Assistant (RA) to perform critical recurring tasks like scouting fields, reporting observations, and compiling data.

Here's what it looks like to participate in KFRN:

- Interested growers **sign up** to participate and **submit** research question ideas (or use an experiment pre-designed by our team of K-State ag researchers) by Dec. 10, 2025
- KSRE staff work with growers to **identify research ideas** with broad applications & interest and form them into practical, on-farm scientific experiments



- Registered growers meet with KSRE staff and KARTA board members at the Kansas Agricultural Technologies Conference (Feb. 20, 2026) to finalize plans of action
- In Spring 2026, KSRE staff **connect** KARTA's Summer Research Assistant (RA) with registered growers to define technical support role for growers' research projects
- RA helps registered growers execute research plans by setting up treatments, taking measurements, compiling data, and reporting observations
- KSRE staff & RA assist registered growers to transform raw data into actionable results and report findings through presentations, publications, and public relations

KEY RESEARCH FEATURES

- Replicated: Successful research requires applying different field treatments within the same field replicated multiple times
- **Significant:** Scientific conclusions are only drawn if the difference in outcomes between treatments are *statistically significant*
- Reliable: When data and results reach scientific standards, they move beyond opinion and become knowledge
- **Shareable:** Reliable results can be compiled and presented with audiences everywhere to improve Kansas agriculture

KFRN is built to support each feature of onfarm research at every stage of the process.

Three potential randomizations for an on-farm trial with two treatments and three replications.*

	Plot 1	Plot 2
Replication 1	Treatment A	Treatment B
Replication 2	Treatment B	Treatment A
Replication 3	Treatment A	Treatment B
	Plot 1	Plot 2
Replication 1	Treatment A	Treatment B
Replication 2	Treatment A	Treatment B
Replication 3	Treatment B	Treatment A
	Plot 1	Plot 2
Replication 1	Treatment A	Treatment B
Replication 2	Treatment A	Treatment B
Replication 3	Treatment A	Treatment B

*Adapted from MF966: "Establishing On-Farm Demonstration & Research Plots" publication from K-State Extension

Research Project Options

Choose a pre-built research project that applies to your farm's cropping systems

OR

Submit your own research ideas when you SIGN UP, & we will help you develop a compatible experiment!

Pre-Built Research Opportunities

Wheat-Soybean Relay Project

Designed by: Dr. Rachel Cott

10/25 - Identify Farmer Collaborators

10/25 - Wheat Planting

4/26 - Soybean Planting

6/26 - Wheat Harvest

10/26 - Soybean Harvest

2/27 - Present results @ KATCON '27



Wheat-soybean relay cropping involves planting soybeans into standing wheat, so both crops share part of the growing season. This project's goal is to test if relay cropping can reduce yield loss commonly observed in double-cropped versus full-season soybeans.

3 Treatments:

- 1. Conventional soybeans
- 2. Relay-cropped soybeans
- 3. Double-cropped soybeans

2 Configurations:

- 1. Conventional wheat seeded
- 2. Relay wheat seeded with row skips at 15" or 30"
 - a. Soybeans planted in skip rows



<u>Targeted Herbicide Efficacy Project</u>

Designed by: Dr. Sarah Lancaster Identify Farmer Collaborators - 10/25

POST Application - 6/26

Harvest - 10/26

Present results @ KATCON '27 - 2/27

*Grower must have 2-boom/2-tank sprayer w/ targeted spray functionality

Targeted herbicide application is a weed

control approach that restricts chemical use to where weeds appear in the field by using digital imagery and machine learning. This project's goal is to evaluate weed control, crop

response, & efficacy from targeted herb--icide applications.

3 Treatments:

- 1. Broadcast all herbicides
- 2.Broadcast residual & target-apply postemergence herbicides
- 3. Target-apply all herbicides

Residual Herbicide Prescription Project

Designed by: Dr. Sarah Lancaster

10/25 - Identify Farmer Collaborators

12/25 - Create Weed Map Prescriptions

4/26 - Residual Application

5/26 - Planting

10/26 - Harvest

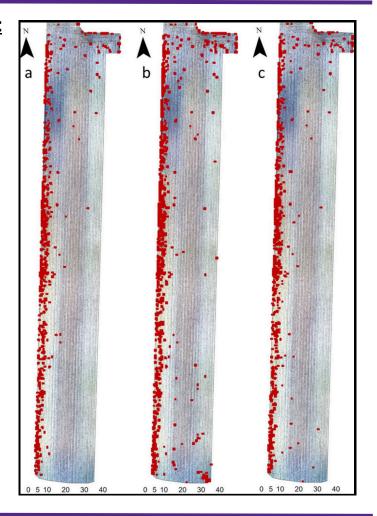
2/27 - Present results @ KATCON '27

*Grower must have '25 weed maps & VR spray capability

Prescription weed management utilizes digital weed maps to identify field areas with higher incidence of weed escapes. Growers can create variable rate herbicide prescriptions based on these maps. This project's goal is to compare levels of weed control between single rate and variable rate residual herbicide applications.

2 Treatments:

- 1. Single rate residual application
- 2. Variable rate residual application



For full project descriptions, visit: kartaonline.org/research

GET INVOLVED

Three Ways to Sign up Today!

Scan QR Code and Complete Form



Complete Attached Form and Mail to:

K-State Extension River Valley District 213 S 12th St., Clay Center, KS 67432 Call or Email KFRN
Extension Coordinator

Luke Byers

Agriculture & Natural Resources Agent River Valley Extension District

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Meet the KFRN Team

Kansas Agricultural Research & Technology Association

Darren Hofmann **President Riley County**



John West **Vice President Dickinson County**



Chris Lobmeyer Treasurer **Finney County**



Matt Splitter Board Member Rice County



Francis Kelsey **Board Member Shawnee County**







Kansas State University Research & Extension



Luke Byers, M.S. **Agriculture & Natural Resources Agent River Valley Extension District**



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KANSAS FARM RESEARCH NETWORK PARTICPATION FORM



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ADDRESS:			
PHONE:		TEXT? YES	NO
EMAIL:			
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heat-Soybean Relay Project	Targeted Herbicide Efficacy Project		
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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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