



K-STATE
Research and Extension

Extension Agronomy

eUpdate

01/29/2026

These e-Updates are a regular weekly item from K-State Extension Agronomy and Kathy Gehl, Agronomy eUpdate Editor. All of the Research and Extension faculty in Agronomy will be involved as sources from time to time. If you have any questions or suggestions for topics you'd like to have us address in this weekly update, contact Kathy Gehl, 785-532-3354 kgehl@ksu.edu, or Dalas Peterson, Extension Agronomy State Leader and Weed Management Specialist 785-532-0405 dpeterso@ksu.edu.

Subscribe to the eUpdate mailing list: <https://listserv.ksu.edu/cgi-bin?SUBED1=EUPDATE&A=1>

1. Late Winter Kochia Control in Fields Going to Corn or Grain Sorghum.....	3
2. New K-State Extension Publication: Cover Crops for Protecting Water Quality.....	6
3. Don't miss the K-State Agronomy Science and Solutions Virtual Conference	8
4. K-State Crop Talk webinar series kicks off on February 10.....	12
5. K-State Forage Schools to be Held Across Western Kansas, Feb. 3-5.....	14
6. Great Plains Cotton Conference set for Feb. 19 in Pratt.....	17

1. Late Winter Kochia Control in Fields Going to Corn or Grain Sorghum

Last week, we shared some general information about applying [pre-emergence herbicides for kochia control](#). This week, we will focus on specific recommendations for fields going to corn or grain sorghum this growing season. Next week, we'll discuss fields going to soybean, sunflower, cotton, and wheat.

Kochia control in fields going to corn

Kochia starts emerging from early February to early March and continues into summer (Figure 1). It is critical to start the growing season with clean fields. Therefore, any effective kochia control plan for fields going to corn should include early spring application of a burndown herbicide with an effective soil-residual herbicide for controlling early flushes. For example, an application of dicamba alone can control susceptible kochia; however, a combination of 1 to 2 pints of atrazine and 8 to 16 oz. of dicamba will control existing broadleaf and grass weeds and could provide extended residual activity, often into late spring. This combination will address dicamba-resistant biotypes, but other options are needed for triazine-resistant biotypes.



Figure 1. A young kochia seedling in wheat residue. Photo by Sarah Lancaster, K-State Extension.

A [study published in 2019](#) by weed scientists from across the Great Plains reported excellent control (99%) of glyphosate-resistant kochia can be attained in corn with Degree Xtra followed by Impact, Verdict followed by Status, or Balance Flexx followed by Laudis + atrazine. These data support the recommendation to add atrazine to group 27 herbicides such as Balance Flexx or Laudis and are likely due to greater uptake of the group 27 herbicide. Data from Hays, KS, are shown in Figure 2. All

treatments evaluated provided acceptable control, except for Acuron applied pre-emergence followed by Liberty + Status + atrazine. Corn yields ranged from 88 to 111 bushels/acre, with the greatest yields obtained in corn treated with Verdict + atrazine pre-emergence followed by Liberty + atrazine, Roundup + Armezon Pro + atrazine, Liberty + Status + atrazine, or Roundup + Status + atrazine; Resicore + atrazine applied pre-emergence followed by Durango + atrazine; and Acuron applied pre-emergence followed by Roundup + atrazine. Pre-emergence programs based on Verdict plus atrazine could also be considered for fields going to grain sorghum.

Regardless of the herbicide program, frequent scouting is essential to ensure postemergence herbicides are applied when kochia is small.

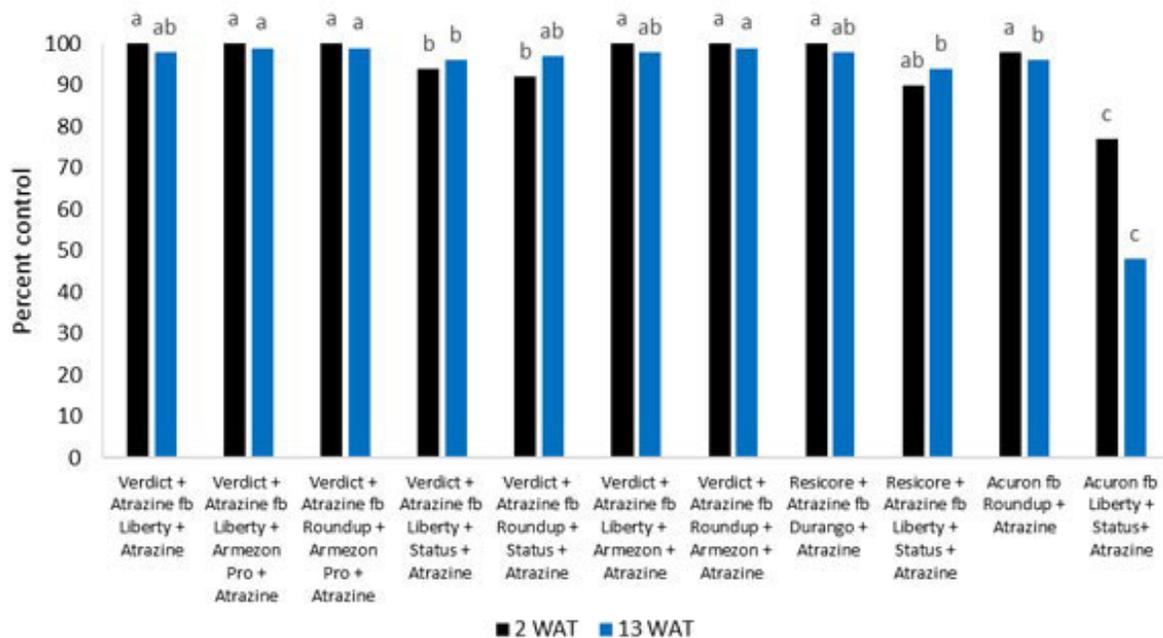


Figure 2. Kochia control in field studies conducted at Hays, KS. PRE, EPOST, and LPOST treatments were applied on April 23, June 11, and June 23, respectively. Similar letters indicate similar weed control.

Kochia control in fields going to sorghum

As sorghum planting in western Kansas generally begins in mid-May, conserving soil moisture by controlling kochia and other weeds before sorghum planting is of utmost importance. Like corn, kochia control in fields going to sorghum can be achieved with tank-mix application of dicamba (8 to 16 oz/a) with atrazine (1 to 2 pints/a) in early spring. If fields are infested with glyphosate-, triazine, and/or dicamba-resistant kochia, Sharpen (2 oz/a), Gramoxone (2 to 4 pints/a), or Reviton (1 to 2 oz/a) can also be used to control resistant kochia biotypes. Scorch or Scorch EXT may also be used prior to sorghum planting for kochia control. The sorghum plant-back for Reviton is 3 to 7 days, depending on rate, while a 60 plant-back period is required for Scorch EXT at 24 oz/A. Application of pre-emergence herbicides such as Degree Xtra (64 to 96 oz/a), Lexar (96 oz/a), or Verdict (5 to 10 oz/a) at planting is essential to help control kochia in sorghum. This is especially important as post-emergence control options are more limited in sorghum than in corn.

Sarah Lancaster, Weed Management Specialist
slancaster@ksu.edu

Jeremie Kouame, Weed Scientist – Agricultural Research Center, Hays
jkouame@ksu.edu

Patrick Geier, Weed Scientist – Southwest Research & Extension Center, Garden City
pgeier@ksu.edu

2. New K-State Extension Publication: Cover Crops for Protecting Water Quality

Cover crops are widely recognized for improving soil health and reducing erosion, but their role in protecting water quality is more complex and system-specific. A new K-State Extension publication, [Cover Crops for Protecting Water Quality](#), discusses how cover crops influence sediment (Figure 1), nitrogen, and phosphorus losses from Kansas cropping systems.

The publication highlights both the proven benefits of cover crops and the important trade-offs to consider. Additionally, readers will find a clear, research-based framework to help producers decide when and how cover crops can most effectively protect both soil and water resources (Figure 2). This decision-based approach helps producers and advisors evaluate their own fields, identify which water quality concerns are most relevant, and determine whether a cover crop is likely to be an effective tool within their overall conservation and nutrient management strategy.



Figure 1. Runoff event from a non-cover crop plot (left) and a cover-crop plot (right) in a corn production field. Runoff water from the cover crop plot is clearer than the no-cover-crop plot, visually indicating reduced sediment loss with the cover crop. Photos from K-State Department of Agronomy.

Will a cover crop improve water quality?		
Do I have high sediment loss risk?	Do I have high nitrate leaching risk?	Do I have high phosphorus loss risk?
Contributing factors <ul style="list-style-type: none"> • Intense early precipitation • Hilly or sloped land • Silty or sandy soil • Close to surface water, stream, or drainage ditches • Conventional tillage • Low ground cover cropping system 	Contributing factors <ul style="list-style-type: none"> • High soil test nitrate • Poor yield/ crop failure • Anticipating wet fall/winter • Sandy or coarse textured soil • Shallow soil profile, close depth to ground water 	Contributing factors <ul style="list-style-type: none"> • For particulate phosphorus loss, see sediment loss risk factors • High soil test phosphorus • History of broadcast applications of phosphorus • Recent surface phosphorus application to highly stratified soil test phosphorus (e.g., under long-term no-till)
A cover crop... <ul style="list-style-type: none"> • Reduces sediment loss • Reduces sediment-bound/particulate phosphorus loss 	A cover crop... <ul style="list-style-type: none"> • Uses nitrogen, reducing nitrate susceptible to leaching loss • Protects ground water quality 	A cover crop... <ul style="list-style-type: none"> • Reduces particulate phosphorus • Increases dissolved phosphorus • Should include right rate, right time, and right placement of phosphorus fertilizer

Figure 2. Situations leading to sediment, nitrate, and phosphorus losses, and ways a cover crop reduces the risk of loss. Graphic from [K-State Extension publication MF3686](#).

Read the full publication here:

https://bookstore.ksre.ksu.edu/item/cover-crops-for-protecting-water-quality_MF3686

Authors*

Megan Bourns, Former K-State Graduate Student

Nathan Nelson, Soil Fertility and Nutrient Management
nonelson@ksu.edu

Peter Tomlinson, Environmental Quality Extension Specialist
ptomlin@ksu.edu

**See publication for the full list of authors*

3. Don't miss the K-State Agronomy Science and Solutions Virtual Conference

Make plans to join us online for the **2026 K-State Agronomy Science and Solutions Conference: Research to Results**, a two-day virtual program designed to connect the latest K-State agronomy research with on-farm decisions.

Date and time

- **February 3–4**
- **11:00 a.m. – 1:00 p.m. (CST) each day**
- **Online via Zoom**

Each day will feature **four 30-minute presentations** from K-State specialists and collaborators, focused on practical strategies for crop production in Kansas. This conference is designed to address the full spectrum of Kansas crop production, with content relevant across all major crops. Planned topics include:

Tuesday, February 3

- Turning Farm Data into Decisions – Deepak Joshi
- Controlling Perennial Weeds – Jeanne Falk Jones
- Tilling Strategically for Soil Health, Crop Yield, and Weed Management – Logan Simon
- Managing Soil Fertility when Budgets are Limited - Dorivar Ruiz Diaz

Wednesday, February 4

- Irrigation Management – Tina Sullivan
- Spray Water Quality Effects on Weed Management – Jeremie Kouame
- Optimizing Residual Herbicides – Sarah Lancaster
- Soil pH and Soil Health – Peter Tomlinson

Participants can register for **one or both days**:

- **\$20 per day**, or
- **\$30 for both days**

You can register and pay online at <https://commerce.cashnet.com/KSUAGRONEXT> or by scanning the QR code below. Registered individuals will receive the Zoom connection information via a separate email.



Certified Crop Advisers (CCAs) can earn 0.5 CEUs per presentation, totaling 4 CEUs if attending all sessions over both days.

K-State Agronomy Science & Solutions Conference: Research to Results

Tuesday, February 3, and Wednesday, February 4

Virtual Event | 11:00 am – 1:00 pm each day



K-STATE AGRONOMY SCIENCE & SOLUTIONS CONFERENCE

RESEARCH TO RESULTS

RSVP online to receive the
Zoom link and reminders.

**\$20 per day or
\$30 for both days**

4 CCA/CEU credits available

The K-State Agronomy Science & Solutions Conference: **Research to Results** is a two-day virtual event featuring 30-minute presentations on topics relevant across all Kansas cropping stems, including corn, soybeans, wheat, and sorghum.

Topics Include:

- Turning Farm Data into Decisions
- Perennial Weed Control
- Strategic Tillage Decisions
- Irrigation Management
- Fertility Management When Budgets Are Tight
- Spray Water Quality
- Residual Herbicides
- Soil pH and Soil Health

To register, scan the QR code
or visit

commerce.cashnet.com/KSUAGRONEXT

Questions? Contact Kathy Gehl at
kgehl@ksu.edu



**KANSAS STATE
UNIVERSITY**

Extension

Sarah Lancaster, Extension Weed Specialist

slancaster@ksu.edu

Kathy Gehl, Extension Program Coordinator/eUpdate Editor
kgehl@ksu.edu

4. K-State Crop Talk webinar series kicks off on February 10

The popular K-State Crop Talk online webinar series is back and set to start on February 10, 2026. The Crop Talk series will highlight several topics important to crop producers in north central and northwest Kansas. Topics include flex leases, soil water availability, wheat breeding efforts on mosaic viruses, fungicides for corn and sorghum, and insect control. Continuing education credits will be offered, with one credit for each session.

Each webinar will begin at 12:00 pm (CST) and last until 1:00 pm, beginning with the first one on Tuesday, February 10.

Upon registration, participants will receive an email with instructions to attend via Zoom or YouTube. These virtual webinars are open to all and are free. Register online at <http://www.bit.ly/KSUCropTalk> or call your local extension office.

A complete list of webinars, with dates, topics, and speakers, is detailed in the flyer below.



CROPtalk

Broadcast Live from 12:00 – 1:00 pm CT
via Zoom and YouTube

February 10

Understanding Flex Leases

Robin Reid, K-State Extension Ag Economist

February 17

Available Soil Water At Planting and Related Management

John Holman, K-State Extension Cropping Systems Agronomist

Augustine Obour, K-State Professor of Soil Science

February 24

Wheat Conditions & Breeding Efforts on Mosaic Viruses

Allen Fritz, K-State Wheat Breeder

March 3

Fungicide Applications in Corn and Sorghum

Rodrigo Onofre, K-State Extension Plant Pathologist

March 10

What's Bugging You? Insects to Watch for in the Field

Anthony Zukoff, K-State Entomologist



Scan me!

Register to attend at
www.bit.ly/KSUCropTalk

Links for joining will be sent after registration.
One Certified Crop Advisor (CCA) Credit per session has been applied for.

KANSAS STATE
UNIVERSITY

Extension

If you have questions, please contact your local Extension agent or the K-State
Northwest Research and Extension Center at 785-462-6281.

Kansas State University is an equal opportunity provider and employer.

Kansas State University Department of Agronomy

2004 Throckmorton Plant Sciences Center | Manhattan, KS 66506

www.agronomy.ksu.edu | www.facebook.com/KState.Agron | www.twitter.com/KStateAgron

5. K-State Forage Schools to be Held Across Western Kansas, Feb. 3–5

Producers and ag professionals are invited to attend the **K-State Forage Schools**, a series of in-person meetings held across western Kansas from February 3–5. These programs will highlight recent research and practical considerations for integrating winter and summer forages into a variety of cropping and livestock systems.

Presentations will focus on how forages can fit into different operations, with an emphasis on research-based management strategies. Speakers include Augustine Obour, K-State soil scientist, and Logan Simon, K-State Southwest Area Agronomist. There is no cost to attend, and 2 CCA credits (Crop Management) have been applied for.

Meetings will be offered at multiple locations to improve accessibility. Dates and locations are detailed in the flyer below.

You can register at <https://bit.ly/ForageSchools> or by scanning the QR code in the flyer.

Logan Simon, Southwest Area Agronomist
lsimon@ksu.edu

Kansas State University Department of Agronomy
2004 Throckmorton Plant Sciences Center | Manhattan, KS 66506
www.agronomy.ksu.edu | www.facebook.com/KState.Agron | www.twitter.com/KStateAgron

Augustine Obour, Soil Scientist – Hays
aobour@ksu.edu

6. Great Plains Cotton Conference set for Feb. 19 in Pratt

Cotton producers, consultants, and ag professionals across Kansas and the surrounding Great Plains region are invited to attend the **7th Annual Great Plains Cotton Conference** on February 19, 2026, at the K-State Pratt County 4-H Building in Pratt, Kansas.

This one-day program will feature timely, research-based updates on cotton production, marketing, policy, and technology. Attendees will hear from university specialists, industry experts, and producers on topics including cotton policy and the Cotton Trust Protocol, harvesting practices to maximize lint value, marketing opportunities and risk management, weed management and herbicide resistance, soil fertility, insect scouting and management, and emerging UAV applications in cotton production.

The conference begins with a welcome reception on February 18 at Club D'Est (202 S. Main in Pratt) at 5:30 p.m.

Registration begins at 7:30 a.m., with the conference program starting at 8:15 a.m. and concluding at approximately 4:45 p.m. The agenda includes presentations from Kansas State University, Oklahoma State University, USDA-ARS, the National Cotton Council, and industry partners. A panel discussion on UAV technology will explore how drones may shape the future of cotton production in the region.

Lunch will be provided and sponsored by Phytogen, with opportunities throughout the day to visit sponsor booths and connect with industry representatives.

The conference is made possible through the support of numerous sponsors, including AgLogic Heartland Soil Services, Kansas Cotton Association, Next GINeration, Inc., Northwest Cotton Growers, Phytogen Cottonseed, Plains Cotton Cooperative Association, Southern Kansas Cotton Growers, TAMA USA, TEVA Corp, and Thrive Ag Services.

Conference details:

- **Date:** February 19, 2026
- **Location:** KSU Pratt County 4-H Building, 81 Lake Rd., Pratt, KS 67124
- **Registration:** 7:30 a.m. at the door
- **Program:** 8:15 a.m. – 4:45 p.m.

Producers and agribusiness professionals interested in staying current on cotton production practices, research advances, and market opportunities are encouraged to attend this annual event.

Logan Simon, Southwest Area Agronomist
lsimon@ksu.edu