Issue 1057

K-STATE Research and Extension

Extension Agronomy

eUpdate

06/12/2025

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.

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1. Low levels of Tar Spot have been confirmed in Kansas

Tar spot of corn, a disease caused by the fungus *Phyllachora maydis*, was confirmed in Doniphan County, Kansas, on June 11, 2025. (Figure 1). These are the first documented reports of Tar Spot in the US for this growing season. Now is the time to intensify scouting efforts. If you wait until there is significant disease pressure in the upper canopy, a fungicide application may be too late. The early disease onset we're observing this year raises concerns about yield loss. Generally, early observations of tar spot have corresponded with high yield loss. Fields scouted this week were between the V3 to V10 growth stages, which increases the risk for disease spread and development. The recent rains likely helped to promote tar spot development.

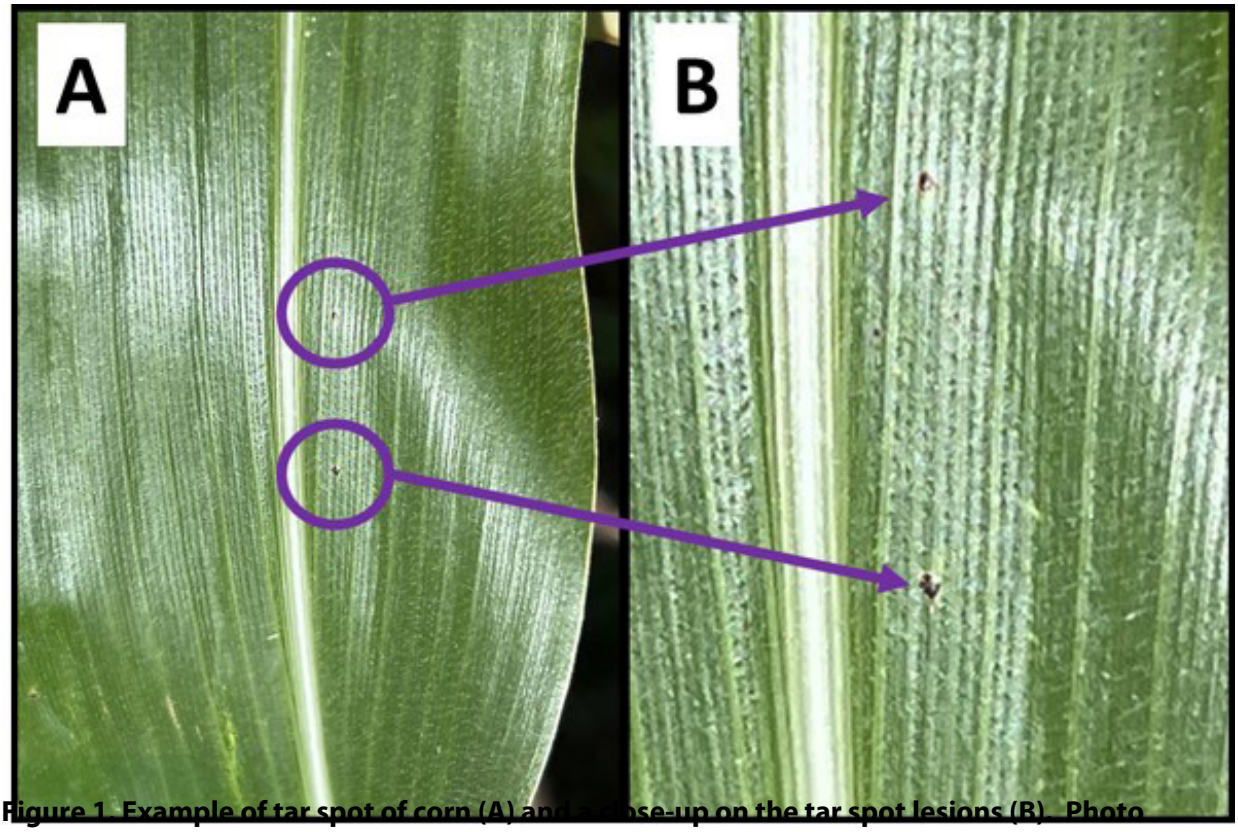

Figure 1. Example of tar spot of corn (A) and a close-up on the tar spot lesions (B). Photo courtesy of Rodrigo Onofre, K-State Research and Extension

Frequently Asked Questions about Tar Spot

How do I scout for Tar Spot?

Tar spot develops as small, black, raised spots (circular or oval) that develop on infected plants and may appear on one or both sides of the leaves, leaf sheaths, and husks. Spots may be found on healthy (green) and dying (brown) tissue. Tar spot can be easily confused with insect poop, which can appear as black spots on the surface of the leaf. If you would like assistance in confirming tar spot, you can contact Dr. Rodrigo Onofre at 785-477-0171, your local county extension office, or the K-State Plant Disease Diagnostic Laboratory at https://www.plantpath.k-state.edu/extension/plant-

disease-diagnostic-lab/.

Is there a history of Tar Spot in this field or neighboring fields?

Tar spot overwinters on infested corn residue on the soil surface, which serves as a source of inoculum for the subsequent growing season. Spores can be dispersed by wind and rain splash, and can move to nearby fields if conditions are favorable.

What counties and when was Tar Spot reported in Kansas during the 2024 corn season?

During the 2024 corn season Tar spot was confirmed in Doniphan (5/27/2024), Atchison (6/4/2024), Jefferson (6/14/2024), Nemaha (6/18/2024), Brown (7/8/2024), Jackson (7/18/2024), Coffey (8/22/2024), Woodson (8/22/2024), Pottawatomie (8/23/2024), and Riley (9/18/2024) counties. Overall, during the 2024 season, Tar Spot prevalence and severity were much lower than in the 2023 season. However, several growers in the northeast part of Kansas reported severe yield impact.

What growth stage is the field?

Research has shown that making an application just after first detection and at or after VT is effective if lesions are detected early. If you wait until there is significant disease in the upper canopy, then a fungicide application may be too late. A guide for determining the growth stages in corn is available at https://bookstore.ksre.ksu.edu/pubs/MF3305.pdf.

How does moisture influence disease development?

The recent rains likely helped to promote tar spot development. Additionally, irrigated corn may be at particularly high risk for yield or silage loss. Forecasted rainfall and high humidity will favor tar spot development and spread.

Should I apply a fungicide?

Fungicides are an effective tool for controlling tar spot if they are timed properly. Research has shown the best return on investment from a fungicide application on corn occurs when **fungal diseases are active** in the corn canopy. A **well-timed, informed fungicide application** will be important to reduce disease severity when needed, and we recommend holding off until the disease is active in your field and corn is at least V10 growth stage. Scouting will be especially important if wet weather continues. There are several fungicides that are highly effective at controlling tar spot when applied from tassel (VT) to R2 (milk). I would recommend picking a product with multiple modes of action. The National Corn Disease Working Group has put together efficacy ratings for fungicides labeled for the control of tar spot can be found at the Crop Protection Network website at https://cropprotectionnetwork.org/publications/fungicide-efficacy-for-control-of-corn-diseases.

If there is high disease pressure early in the season, a second application may be warranted. Fields should be scouted 14-21 days after the first application to see if the tar spot has become active again. Fungicides will not provide benefits after R5. Always consult fungicide labels for any use restrictions prior to application.

Where has tar spot been reported in the 2025 season?

In cooperation with K-State Plant Pathology Department, the Kansas Corn Commission has launched an online Corn Disease Resource Center (https://kscorn.com/corndisease/) to help corn growers identify what diseases to watch for in their geographic area. Tar Spot has only been detected in one county in Kansas (Doniphan), making these reports the first across the US for this growing season (Figure 2).

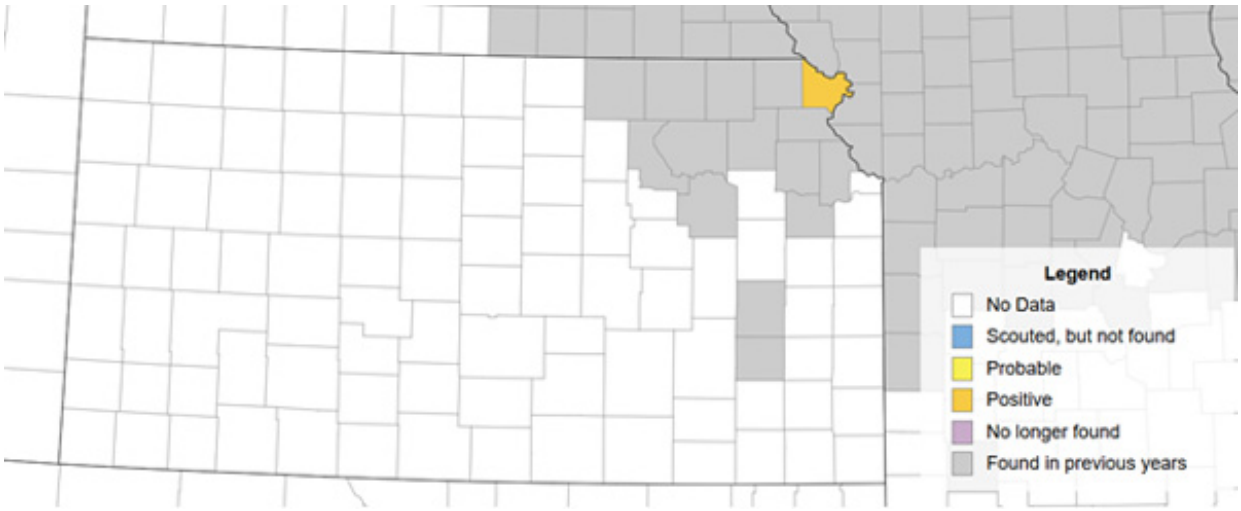

Figure 2. Tar Spot of Corn (Phyllachora maydis**) in Kansas in 2025. Source: https://kscorn.com/corndisease/**

Please help us track tar spot!

If you suspect a field has tar spot, contact Rodrigo Onofre directly at 785-477-0171 and/or submit a sample to the K-State Plant Disease Diagnostic Lab at https://www.plantpath.k-state.edu/extension/diagnostic-lab/documents/2021_PP_DiseaseLabChecksheet.pdf.pdf. This will help us monitor the situation in the state.

Rodrigo Onofre, Row Crop Plant Pathologist
onofre@ksu.edu

2. Considerations for replanting or late planting of soybeans

As of June 8, 2025, approximately 76% of soybeans had been planted, with 62% of the crop having emerged in Kansas (Figure 1). However, due to recent heavy rains across parts of the state, some producers may be considering replanting (Figure 2).

Figure 1. Soybeans planted late (June 2; left photo) versus earlier (May 5; right photo) into adequate soil temperature and moisture conditions in eastern Kansas. Photos by Tina Sullivan, K-State Research and Extension.

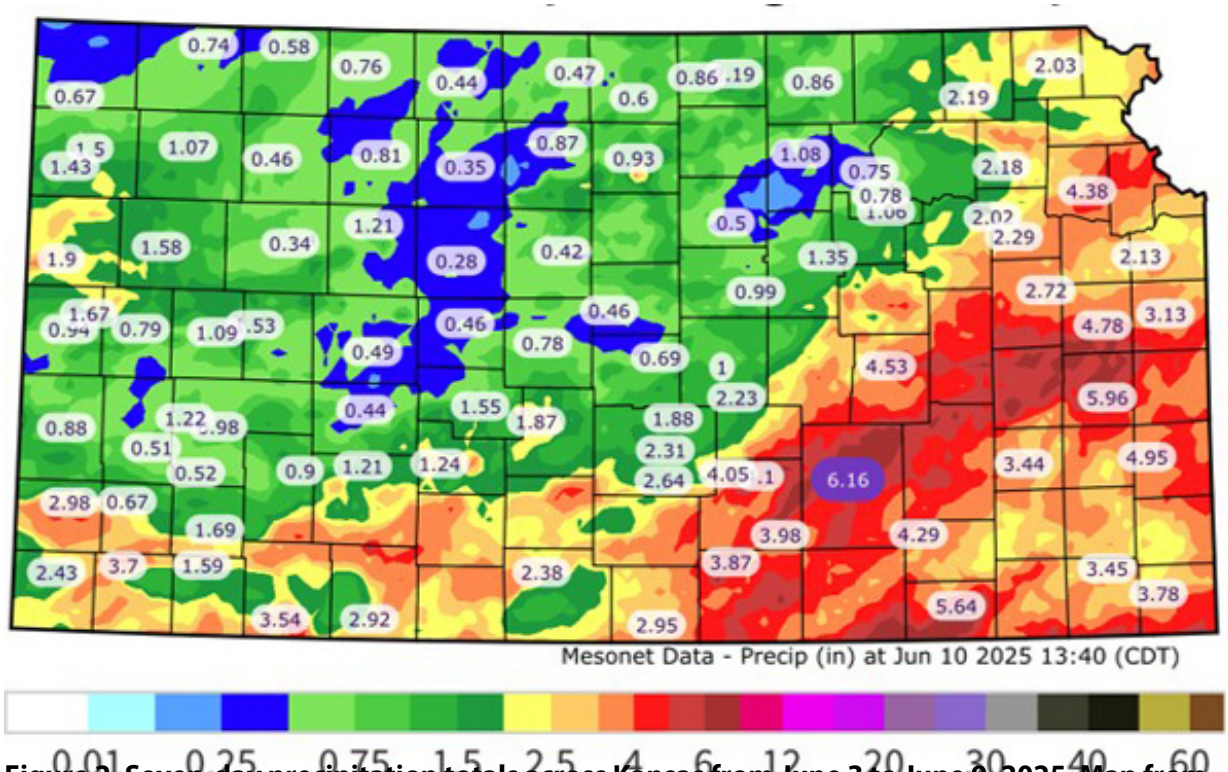

Figure 2. Seven-day precipitation totals across Kansas from June 3 to June 9, 2025. Map from the Kansas Mesonet.

Planting progress overview

Kansas farmers have been planting soybeans slightly earlier in recent years -- at a rate of about one-third day earlier every year (Figure 3). Statewide, the "50% planting date" mark has ranged from the end of May (for the most recent decade) to the first of June (in the 1980s). The earliest date at which half of all soybeans in the state were planted was May 12 in 2014, while the latest delay was June 28 in 1982.

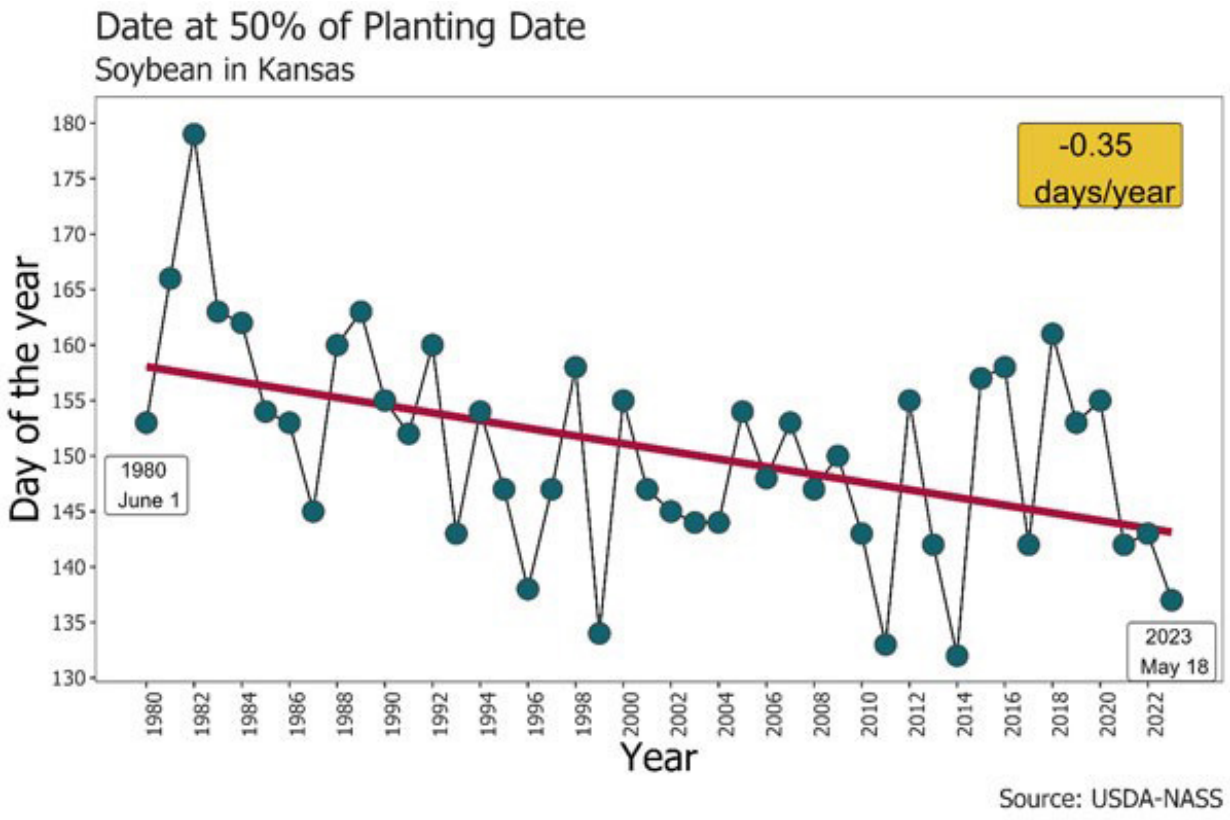

Figure 3. Trend in the date at which 50% of planting progress was achieved for soybean from 1980 to 2023 in Kansas (the last four decades of soybean progress in Kansas). Source: USDA-NASS.

As stated earlier, the latest USDA Crop Progress and Condition report (June 8, 2025) has soybean planting progress (76%) equal to the 5-year average, while emergence (62%) is ahead of the 58% average. However, the effects of recent heavy rains across parts of Kansas may have some producers considering replanting.

Considerations for replanting or late planting

The decision to replant can be difficult. Before replanting late, producers should consider plant population, distribution, and growth stage. Soybean emergence could be delayed or compromised in situations of excessive rainfall amounts in recent weeks. Replanting soybeans should be reserved only for exceptional cases of reduced plant population and stand disuniformity. Assessments should

be done a week or so after the initial damage to assess the overall condition of plants and potential issues related to lack of uniformity, which could be a problem when stands are severely reduced. Generally, if there are fewer than 50,000 to 60,000 healthy plants per acre, replanting may be warranted. However, this number may vary across the state with differences in expected yield. Producers must also consider weed management, seed and variety availability, the availability of insurance, and the actual cost to replant.

When replanting or planting late, producers should consider a few key management practices.

Planting date and maturity group

From mid-April to mid-July, we may expect maximum soybean yield in Kansas to be reduced by about 0.3 bu/a for each day of delay past mid-April, from yield levels of about 80-90 bu/a to ~50 bu/a.

When considering soybean maturity group, it is important to remember that soybeans flower in response to a combination of temperature and day length, so shifting to an earlier-maturing variety when replanting or planting late will result in very short plants with pods that are close to the ground. Planting a variety with the same or perhaps even slightly later maturity rating (compared to soybeans planted at a typical planting date) will allow the plant to develop a larger canopy before flowering. More information related to these topics is available at https://eupdate.agronomy.ksu.edu/article/soybean-planting-date-and-maturity-group-selection-635-4.

Seeding rate and row spacing

Increasing the seeding rate of late-planted soybeans by 10-20% compared to the optimal seeding rate allows for compensation in the shortened growing window. Under normal conditions, the same soybean cultivar planted early in the planting window will develop nearly 50% more productive nodes than when planted in late June: 19-25 nodes when planted early vs. 13-16 nodes when planted late. Information on late-planted soybeans across multiple row spacing suggests that narrow rows (e.g., 7" or 15" vs. 30") can hasten canopy closure, increasing season-long light interception, weed suppression, and potentially improving biomass and final yield. The likelihood of a positive yield response to narrow rows increases as the yield environment lowers, for example, with delayed planting. More on these topics is available at: https://eupdate.agronomy.ksu.edu/article/soybean-row-spacing-and-seeding-rates-what-works-best-in-kansas-635-5.

Key points

- Replanting is recommended only for exceptionally reduced populations and uniformity.
- If there are >50,000 to 60,000 healthy plants/acre, you may consider replanting.
- Plant a variety with the same or perhaps even a slightly later maturity rating.
- Increase the seeding rate of late-planted soybeans by 10-20%.
- Narrow row spacing may increase yield potential with late planting.

Tina Sullivan, Northeast Area Agronomist
tsullivan@ksu.edu

Logan Simon, Southwest Area Agronomist
lsimon@ksu.edu

3. Field bindweed control: What works and what doesn't

Field bindweed, a perennial vine in the morningglory family, is a persistent weed that infests millions of acres across the Great Plains. Previous research conducted over 12 years in Hays, Kansas, has shown that dense field bindweed infestations can reduce cereal crop yields by 20-50% and row crop yields by 50-80%.

Because field bindweed has long seed viability and tremendous food reserves stored in roots, a long-term management program is required for successful control. A single herbicide application will not eradicate established stands; instead, multiple chemical and/or mechanical control means are needed to manage bindweed populations. An effective long-term control program should prevent seed production, kill roots and root buds, and prevent infestation by seedlings. A good control program will include chemical, mechanical, and cultural strategies.

Prevention

Because field bindweed can be spread by seed, root fragments, farm implements, infested soil, and animals, prevention of infestations is critical and requires:

- Use of weed-free seed.
- Avoiding the introduction of field bindweed seeds in manure.
- Thoroughly cleaning harvesting, tillage, and other machinery before moving from infested to non-infested fields.
- Immediate control of new infestations that start in crop and non-crop areas.
- Clean field borders from field bindweed infestation (Figure 1).

Figure 1. Clean field borders are needed to prevent field infestations from lateral roots. Photo by Jeremie Kouame, K-State Research and Extension.

Competitive crops and early canopy closure as a management tool

Field bindweed requires high amounts of light. It cannot tolerate shading from tall competitive crops and is found primarily in crops with lower plant densities or with low leaf area indexes. Its presence and invasiveness are much lower in dense and healthy crops. Planting forage sorghum or sudangrass in narrow rows around mid-June, following intensive tillage, or using an herbicide provides excellent competition in areas where adequate soil moisture enhances rapid crop growth[1]. Even though grain sorghum is usually less effective than taller forage crops, narrow-row grain sorghum can also be used as a competitive crop. Combining closely-drilled, vigorously growing crops with herbicide treatments may increase control.

Chemical control

Several herbicides help manage field bindweed, even though a single herbicide application rarely eradicates established stands. Instead, multiple herbicide applications will generally be needed to reduce and suppress dense stands over several years. Because of its deep root system and perennial nature, long-term chemical control depends on movement through the root system to kill the roots and root buds.

The systemic herbicides most commonly used are glyphosate (Roundup or equivalent), auxin-type herbicides 2,4-D, dicamba (Clarity, others), picloram (Tordon), quinclorac (Facet, others), and their mixtures. Research in a winter wheat-fallow rotation with treatments applied in late summer or fall each year for two, three, or four consecutive years at the beginning and end of each fallow period showed that quinclorac + 2,4-D and picloram + 2,4-D consistently performed better when applied during the fallow period. Other studies in a winter wheat-fallow system showed that about one year after application, herbicide mixtures containing picloram provided the best control.

Recent research has shown that a premixture of 2,4-D+dicamba+dichlorprop (Scorch EXT) provided 93% bindweed control at 8 months after treatment, and was similar to picloram+2,4-D. This product has the added advantage of having shorter recropping intervals for many of our common crops when compared to picloram. Studies with this three-way mixture are ongoing.

Using contact herbicides such as paraquat or pyraflufen (Vida) will desiccate plant tissue contacted by the herbicide. Such products will provide short-term control of top growth but will not replace a systemic herbicide application.

Seedling control

Because seedlings develop a deep taproot and numerous lateral roots about six weeks after emergence and can re-establish under favorable conditions following top growth removal, it is advisable to control seedlings before this stage. Seedlings can be controlled by:

- timely inter-row cultivation,
- applications of 2,4-D or dicamba at 0.25 to 0.5 lb ai/acre in herbicide-tolerant crops, and
- hand removal within rows to prevent their establishment as perennial plants.

Tillage

Tillage may be used to destroy top growth and is most effective when sweep-type implements are

used to cut shoots from the roots approximately 4 inches below the soil surface. However, repeated tillage passes at three-week intervals are required to deplete the carbohydrate reserves in the roots, making this practice less desirable than herbicides, considering soil and water conservation concerns. According to previous research, tillage can influence field bindweed control by herbicides, but field bindweed vigor is also important, as summarized below.

Chemical control improved when vigorous plants are sprayed, but it is affected by tillage timing

Field bindweed control 10 months after application of glyphosate (3 lb/acre), 2,4-D (1 lb/acre), dicamba (1 lb/acre), or picloram + 2,4-D (0.25 + 0.5 lb/acre) is affected by the time of sweep tillage (Figure 2).

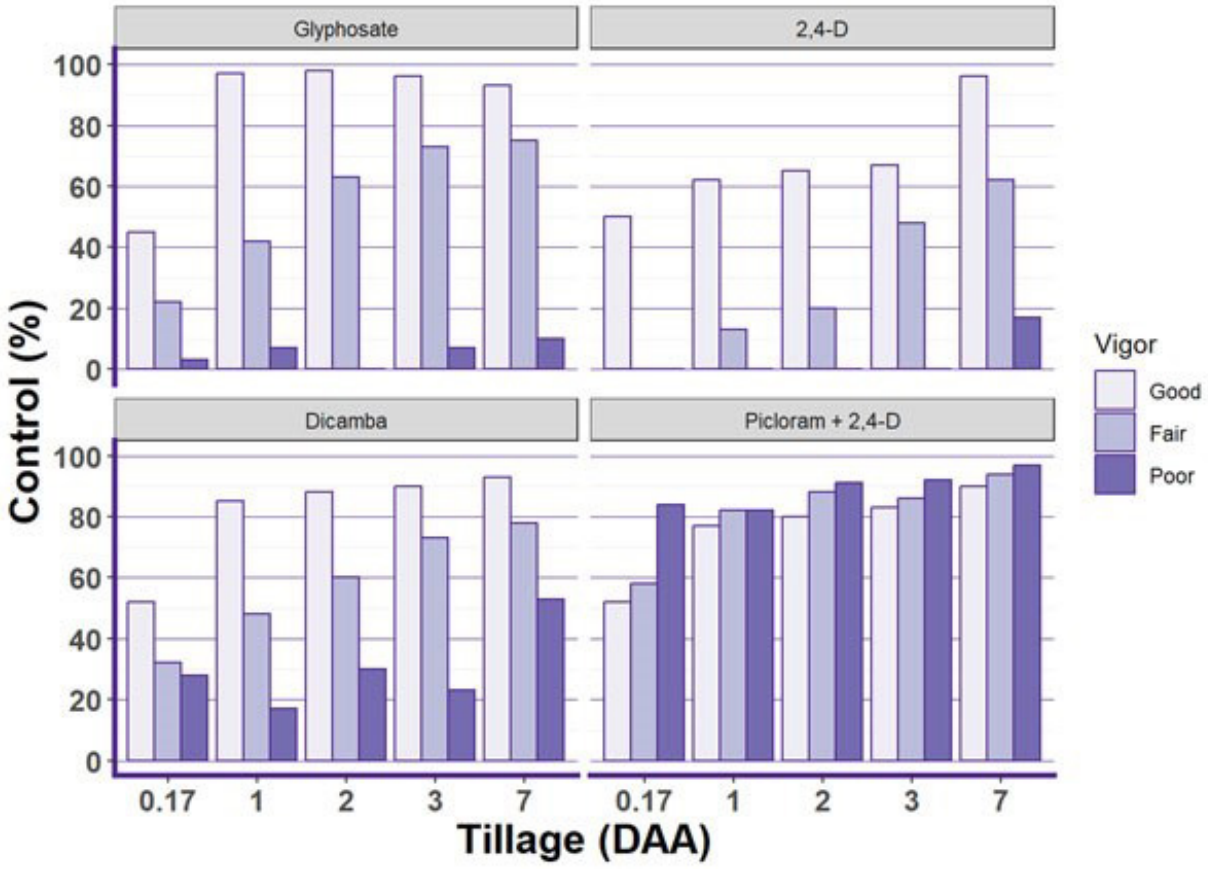

Figure 2. Field bindweed control as affected by sweep tillage at various times [0.17 (or 4 hours), 1, 2, 3, 7 days after herbicide application (DAA)] to plants with good, fair, or poor vigor, respectively (Graph created using data from Wiese et al., 1997)[5].

- **Glyphosate** provided excellent control (93 - 97%) of plants with good vigor if tillage was delayed 1 DAA, but the maximum control achieved for plants with fair vigor was about 75% when sweep tillage was delayed at least 3 DAA. Only minimal control was achieved for plants with poor vigor, regardless of tillage time.
- **2,4-D** provided excellent control (96%) of plants with good vigor when tillage was delayed 7 DAA, but the maximum control of plants with fair vigor was 62% when tillage was delayed 7

DAA. Little or no control of bindweed was achieved when 2,4-D was applied to poor vigor plants, even when tillage was delayed 7 DAA (17%).

- **Dicamba** provided good control (90 - 93%) of plants with good vigor when tillage was implemented 3 DAA, but the highest control achieved for plants with fair vigor was 78% when tillage was delayed 7 DAA. Only 23% control was achieved for plants with poor vigor when tillage was delayed 3 DAA, and reached 53% when tillage was implemented 7 DAA.
- **Picloram + 2,4-D**. Field bindweed vigor at the time of application had little effect on control. If tillage was delayed for at least 2 days after application, it did not affect control, which was 80 - 97% regardless of plant vigor. This mixture was the only herbicide program that provided control between 82 and 97% of poor vigor-rated plants regardless of tillage timing.

Fallow preceding wheat: Tillage or an herbicide application immediately after harvest could reduce seed production, weaken the plant, and increase the effectiveness of follow-up herbicide applications in the fall or spring. Picloram + 2,4-D at 0.25 + 0.5 lb/A should be applied at least 60 days prior to seeding winter wheat.

A **preharvest application** of 2,4-D ester can be used in wheat, oats, and barley crops after small grains have reached the soft dough stage.

Postemergence to corn and grain sorghum. Dicamba and 2,4-D may be applied in corn or grain sorghum, and products that contain quinclorac can be applied in a grain sorghum crop. Crop tolerance to these herbicides varies depending on the hybrid, environmental conditions, and growth stage at the time of application. Always check the relative tolerance of particular hybrids to herbicides prior to use.

For more detailed information, see the "2025 Chemical Weed Control for Field Crops, Pastures, and Noncropland" guide at https://www.bookstore.ksre.ksu.edu/pubs/CHEMWEEDGUIDE.pdf or check with your local K-State Research and Extension office for a paper copy.

The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply non-approval. Always consult the herbicide label for the most current use requirements and follow all label instructions.

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

Sarah Lancaster, Weed Management Specialist
slancaster@ksu.edu

Logan Simon, Southeast Area Agronomist – Garden City
lsimon@ksu.edu

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

4. World of Weeds - Devil's Claw

In response to a recent question, this World of Weeds article is focused on devil's claw (*Proboscidea louisianica*), also known as unicorn-plant or ram's horns (Figure 1). This annual plant is notable for its large leaves, aromatic foliage, and distinctive seed pods. It is a member of the Pedaliaceae family, which also includes the sesame plant (the source for sesame seeds and oil).

Figure 1. Devil's claw. Photo by Jeanne Falk Jones, K-State Research and Extension.

Ecology

Devil's claw is a native of the southwestern United States and Mexico. It currently can be found across the continental U. S. and into southern Canada, and has been introduced into Europe, Asia, South Africa, and Australia. Devil's claw is considered a declared pest (noxious weed) in some regions of Australia. Native Americans utilized the seeds for food, and the dried fruits in basketry and for making dye. Fresh fruits of devil's claw have also been pickled and eaten, similar to okra. In Oklahoma, devil's claw at 4,200 and 11,000 plants per acre reduced cotton lint yields 46 and 96%, respectively. The succulent nature of the plant and the hard, wiry seed pods may interfere with

harvest or tillage operations. The dried fruits of the plant can also cause physical injury to livestock, especially around the nose and mouth.

Identification

Devil's claw is an annual broadleaf species that reproduces by seeds. It grows up to 4 feet tall, producing numerous erect or spreading fleshy branches. The large leaves are heart- or kidney-shaped, up to 7 inches long, and as wide as 8 inches (Figure 2). A long stalk (petiole) connects the leaves to the stems. Both the stems and leaves are covered with glands that produce a sticky, foul-smelling sap. Flowers are large (up to 2 inches), pale pink to white, and funnel-shaped. Yellow lines and reddish spots typically adorn the throats of the flowers (Figure 3). Large, curved seed pods up to 4 inches long are produced and covered with a fleshy outer rind. At maturity, the rind sloughs off, revealing a woody endocarp containing the seeds.

Figure 2. The flowers, large leaves, and immature seed pod of devil's claw. Photo courtesy New Mexico State University.

Figure 3. Close-up of devil's claw flower showing the red spots on the upper petals and yellow lines on the lower petals. Photo courtesy New Mexico State University.

Research from Oklahoma indicated that devil's claw plants can produce more than 8,500 seeds per plant when grown in the absence of competition. At maturity, the endocarp splits from the tip into two sharp, curved horns or claws (Figure 4-top). The dried fruits catch on the legs of animals or on machinery, which aids in the dispersal of the seeds. Seeds are relatively large, black, and rough-coated (Figure 4-bottom).

Figure 4. Mature seed pod (top) and seeds of devil's claw (bottom). Photos by Jeanne Falk Jones and Patrick Geier, K-State Research and Extension.

Management

Depending on the crop being grown, several herbicide families have proven effective at controlling devil's claw. Group 2 herbicides such as imazamox (Beyond, others), prosulfuron (Peak), and halosulfuron (Permit) have shown good to excellent postemergence devil's claw control. Imazamox may be especially useful in sunflowers where broadleaf weed control options are limited. However, a Clearfield sunflower hybrid must be planted in order to apply imazamox. The synthetic auxin herbicides (Group 4), such as 2,4-D, also provide good control where labeled. Glufosinate (Group 10) and glyphosate (Group 9) are effective when used in crops resistant to those herbicides. The PPO-inhibiting herbicides (Group 14) flumioxazin (Valor, others) have some preemergence activity on devil's claw, while lactofen (Cobra) provides excellent postemergence control in soybean. Premixtures that include a Group 15 (S-metolachlor, acetochlor, others) along with a Group 27 herbicide (mesotrione, others) provide good to excellent devil's claw control when applied preemergence or early postemergence. Examples of these premixes include Acuron, Lumax EZ, Harness Max, and Storen.

More information about devil's claw control can be found at:

https://bookstore.ksre.ksu.edu/pubs/2025-chemical-weed-control-for-field-crops-pastures-rangeland-and-noncropland_CHEMWEEDGUIDE.pdf

The use of trade names is for clarity to readers and does not imply endorsement of a particular product, nor does exclusion imply non-approval. Always consult the herbicide label for the most current use requirements.

References

Riffle, M. S. et al. 1990. Soil-water relations and interference between devil 's-claw (*Proboscidea louisianica*) and cotton (*Gossypium hirsutum*).

Stubbendieck, J. et al. 1994. Weeds of Nebraska and the Great Plains.

Patrick Geier, Weed Scientist, Garden City
pgeier@ksu.edu

Sarah Lancaster, Extension Weed Management Specialist, Manhattan
slancaster@ksu.edu

Jeanne Falk Jones, Multi-County Agronomist
jfalkjones@ksu.edu

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

5. Registration is open for the 2025 K-State/KARA Summer Field School

Kansas State University and the Kansas Agribusiness Retailers Association (KARA) are hosting two 2-day Summer Field School sessions on July 8–9 and July 10–11, 2025, at the K-State Agronomy Education Center (2213 Agronomy Farm Road), located just north of the K-State football stadium in Manhattan.

This year's program will spotlight soybean and cotton production, with comprehensive, hands-on sessions covering:

- Crop growth and soil fertility for soybeans and cotton production
- Herbicide symptomology and glufosinate optimization
- Weed identification
- Precision agriculture
- Soil health
- Crop diseases and insect management

Agendas for both sessions are included at the end of this article.

Registration Information

- **2-day program:** $220 (includes lunch both days)
- **1-day option:** $135 (includes lunch for that day)
- Earn multiple CCA and 1A credits (exact credit total forthcoming)

The complete program overview and registration link are available at the K?State Agribusiness Retailers site: https://www.ksagretailers.org/events-training/ksu-field-days/

Lodging & Details

Lodging options and additional information are listed on the registration page.

Note for KSRE agents: A special registration link will be shared via the Ag Agent email listserv shortly - please wait for that link before registering.

Peter Tomlinson, Environmental Quality Specialist
ptomlin@ksu.edu

Kansas State University/KARA Summer Field School (Session 1)

North Agronomy Farm, Manhattan, July 8-9, 2025

K-STATE Research and Extension

	Tuesday 7/8/2023		
7:45 AM	Registration – **North Agronomy Farm**		
8:20 AM	Welcome, Instructions		
	Group A	**Group B**	**Group C**
8:45 AM	**Crop Insect Pests** (Whitworth)	**Weed ID** (Dille & Cott)	**Cotton/Soybean Growth & Development** (Simon & Sullivan)
9:35 AM	**Crop Diseases** (Onofre)		
10:25 AM	**Break**		
10:40 AM	**Weed ID** (Dille & Cott)	**Cotton/Soybean Growth & Development** (Simon & Sullivan)	**Crop Insect Pests** (Whitworth)
11:30 AM			**Crop Diseases** (Onofre)
12:20 PM	**Lunch – North Agronomy Farm**		
1:10 PM	**Cotton/Soybean Growth & Development** (Simon & Sullivan)	**Crop Insect Pests** (Whitworth)	**Weed ID** (Dille & Cott)
2:00 PM		**Crop Diseases** (Onofre)	
2:50 PM	**Adjourn**		
	Wednesday 7/9/2023		
7:00 AM	Registration – **North Agronomy Farm**		
	Group A	**Group B**	**Group C**
7:30 AM	**Cotton/Soybean Fertility and Production** (Ruiz Diaz, Simon & Sullivan)	**Herbicide Symptomology** (Lancaster)	**Precision Ag** (Joshi)
8:20 AM		**Optimizing Glufosinate** (Lancaster)	**Soil Health** (Obour)
9:10 AM	**Break**		
9:25 AM	**Precision Ag** (Joshi)	**Cotton/Soybean Fertility and Production** (Ruiz Diaz, Simon & Sullivan)	**Herbicide Symptomology** (Lancaster)
10:15 AM	**Soil Health** (Obour)		**Optimizing Glufosinate** (Lancaster)
11:05 AM	**Lunch – North Agronomy Farm**		
11:55 AM	**Herbicide Symptomology** (Lancaster)	**Soil Health** (Obour)	**Cotton/Soybean Fertility and Production** (Ruiz Diaz, Simon & Sullivan)
12:45 PM	**Optimizing Glufosinate** (Lancaster)	**Precision Ag** (Joshi)	
1:35 PM	**Break**		
1:50 PM	**Core Hour**		
2:40 PM	**Adjourn**		

Kansas State University/KARA Summer Field School (Session 2)

North Agronomy Farm, Manhattan, July 10-11, 2025

K-STATE Research and Extension

	Thursday 7/10/2023		
7:45 AM	Registration – **North Agronomy Farm**		
8:20 AM	Welcome, Instructions		
	Group A	**Group B**	**Group C**
8:45 AM	**Cotton/Soybean Fertility and Production** (Ruiz Diaz, Simon & Sullivan)	**Herbicide Symptomology** (Lancaster)	**Precision Ag** (Joshi)
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2:00 PM	**Optimizing Glufosinate** (Lancaster)	**Soil Health** (Obour)	
2:50 PM	**Adjourn**		
	Friday 7/11/2023		
7:00 AM	Registration – **North Agronomy Farm**		
	Group A	**Group B**	**Group C**
7:30 AM	**Crop Insect Pests** (Whitworth)	**Weed ID** (Dille & Cott)	**Cotton/Soybean Growth & Development** (Simon & Sullivan)
8:20 AM	**Crop Diseases** (Onofre)		
9:10 AM	**Break**		
9:25 AM	**Weed ID** (Dille & Cott)	**Cotton/Soybean Growth & Development** (Simon & Sullivan)	**Crop Insect Pests** (Whitworth)
10:15 AM			**Crop Diseases** (Onofre)
11:05 AM	**Lunch – North Agronomy Farm**		
11:55 AM	**Cotton/Soybean Growth & Development** (Simon & Sullivan)	**Crop Insect Pests** (Whitworth)	**Weed ID** (Dille & Cott)
12:45 PM		**Crop Diseases** (Onofre)	
1:35 PM	**Break**		
1:50 PM	**Core Hour**		
2:40 PM	**Adjourn**		

6. Help improve irrigation management for Kansas soybeans - Take this survey!

Much of the irrigation research in Kansas has focused on cropping systems in the western part of the state. However, as irrigated acres shift eastward, there is limited data on how irrigated soybeans are managed across Kansas, especially when it comes to yield and pest management. Even less is known about the practices farmers use on irrigated soybean fields.

We are conducting a survey targeting on-farm practices related to cropping, irrigation, and pest management. Your input will help guide future research and refine recommendations for more effective and sustainable soybean production.

This survey is part of a project supported by the Kansas Soybean Board.

Interested in sharing your experiences? Please follow the link or scan the QR code to access the questionnaire.

https://kstate.qualtrics.com/jfe/form/SV_eA7EnuS3HoLprYq

Tina Sullivan, Northeast Area Agronomist
tsullivan@ksu.edu

7. Survey data needed - Help shape forage extension programs in eastern Kansas

Forages—both native and tame—cover approximately 40% of Kansas and are essential to the state's cattle industry. Yet, despite their widespread use and importance, forage systems receive relatively limited research funding, particularly when it comes to management practices.

To better understand current production methods and improve extension programming across eastern Kansas, a short survey is being conducted. The survey asks about location (county), forage type, and key management practices.

If you are involved in forage production, we encourage you to share your insights. Please follow the link or scan the QR code to participate.

https://kstate.qualtrics.com/jfe/form/SV_26qsL4E8Ov7EhhQ

Tina Sullivan, Northeast Area Agronomist
tsullivan@ksu.edu