



## Extension Agronomy

# eUpdate

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*09/04/2020*

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](mailto:kgehl@ksu.edu), or Dalas Peterson, Extension Agronomy State Leader and Weed Management Specialist 785-532-0405 [dpeterso@ksu.edu](mailto:dpeterso@ksu.edu).

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<b>1. Winter canola planting considerations.....</b>	<b>3</b>
<b>2. Alfalfa management: Deciding on last cutting this fall.....</b>	<b>8</b>
<b>3. Learn about the rate of dry down in corn before harvest.....</b>	<b>10</b>
<b>4. Evaluation of cool-season cover crop varieties.....</b>	<b>14</b>
<b>5. Don't miss the 2020 Kansas Soybean Yield and Value Contests.....</b>	<b>17</b>
<b>6. 2021 soybean planting intentions survey - Producer input requested.....</b>	<b>18</b>
<b>7. Kansas Bankers Association Conservation Awards Program .....</b>	<b>19</b>

## 1. Winter canola planting considerations

Winter canola cultivars exist today that make production possible across much of Kansas. When a winter-hardy cultivar is planted at the right time into good soil moisture, plant development is optimized and the crop will have the best chance at surviving the extremes of the Kansas climate.



The planting window for winter canola arrives in Kansas by early September. Here are some key points to ensure a successful start to the 2020-2021 growing season.

### **Variety Selection**

- Variety selection should be based on the following traits: winter survival, yield, oil content, herbicide tolerance, disease resistance, maturity, lodging susceptibility, and shatter tolerance.
- Producers also have the option of selecting either open-pollinated varieties or hybrids.
- Winter hardiness should be the number one consideration if the crop is being grown in a new area.
- The majority of the varieties grown in the southern Great Plains are open pollinated. These varieties consistently overwinter and have considerable yield potential. Roundup Ready herbicide tolerance is available in open-pollinated varieties.
- More hybrids are being grown in the region. Hybrids tend to have larger seed size for easier seed metering, vigorous fall and spring growth, and greater yield potential in non-limiting environments. Clearfield herbicide tolerance is available in hybrids.
- Varieties with tolerance to carryover of sulfonylurea (SU) herbicides applied to a previous crop (e.g. Finesse) can be planted in the fall to avoid the long plant-back restrictions these herbicides have for canola.
- Consider selecting two or more varieties with differing relative maturities to spread out

harvest operations and reduce risk.

## Site Selection

- Although canola grows over a wide range of soil textures, well-drained, medium-textured soils are best. Soils where water stands for several days or those prone to waterlogging are poor choices.
- The soil pH should be between 5.5 and 7.0. Soil pH correction with lime should be considered when growing canola in soil with low pH (less than 5.5).
- Be mindful when planting canola following crops like sunflower, soybean, alfalfa, or cotton. These crops share similar diseases with canola. Planting canola continuously is not recommended and it is not insurable. Plant canola after grass crops such as wheat or corn because these crops do not share diseases with canola.
- Canola will perform best when adequate time is given after the preceding crop to allow for soil moisture recharge and weed control, and where there is adequate time to get the canola planted early enough to help the plants survive over winter.
- Avoid fields with heavy winter broadleaf weed pressure if possible. If planting where heavy broadleaf weed pressure exists, consider planting a Roundup Ready cultivar.
- Grassy winter annual weeds are easily controlled by using herbicides that are labelled for conventional, Roundup Ready, or Clearfield canola.
- Make sure you are aware of the herbicide history of potential sites. Winter canola cultivars are sensitive to SU and triazine herbicide carryover. These products have long plant back restrictions (often 18 months or greater). Be especially cautious about herbicide carryover restrictions when following corn.

## Seedbed Preparation

- Weeds must be controlled chemically, mechanically, or with a combination of both methods prior to planting because canola seedlings are not competitive with weeds.
- Open-pollinated varieties typically range from 100,000 to 125,000 seeds per pound and hybrids range from 70,000 to 100,000 seeds per pound. Because of its small seed size, a properly prepared seedbed is critical for successful canola establishment.
- A level, firm seedbed with adequate moisture within the top inch is preferred. A seedbed with many large clumps results in poor seed placement and seed-to-soil contact. An overworked seedbed may be depleted of moisture and will crust easily, potentially inhibiting emergence. In addition, this could promote deep placement of the seed.
- No-till planting is an option, and some long-term no-till producers have produced canola successfully. With proper settings, no-till planting usually results in very good stands. However, maintaining stands over the winter can be difficult with low disturbance in heavy residue cover. This problem has been overcome by burning surface residue immediately before planting or by using a more aggressive residue manager that removes residue from the seed row. Research in south central Kansas indicates that even with good winter survival, no-till canola yields under heavy residue were lower than where residue was burned or where tillage has been performed.
- No-till producers should ensure that drills and planters are properly set and consider using a setup that creates a more disturbed seed row. Using a high-disturbance opener (such as a coulter, residue manager, or hoe-type opener) in no-till can improve winter survival and result in yields comparable to those obtained in tilled fields.
- If using tillage, perform the most aggressive tillage as early as possible, with each succeeding

tillage operation being shallower than the last. Incorporate fertilizer and herbicide with the last tillage operation. Some producers perform one aggressive tillage operation as early as possible and then control newly emerged weeds chemically. Planting into this “stale” seedbed will help ensure adequate moisture for establishment.

### **Seeding Date, Rate, Depth and Row Spacing**

- The general rule is to plant canola six weeks before the average date of the first killing frost (28 degrees F) in central and south central Kansas, or six to eight weeks for southwest and northern Kansas. This allows adequate time for plant canopy development and root growth to improve winter survival. Planting too late will result in small plants with inadequate reserves to maximize winter survival. Planting too early may result in excessive growth that can deplete soil moisture. Excessive growth may also elevate the growing point or crown too far above the soil surface, increasing the chance of winterkill. This can be a problem when heavy residue remains in the seed row without correct management.
- In northern Kansas, winter canola should be planted by September 15 and in central Kansas by September 25. In far south central Kansas (Barber, Harper, and Sumner counties), winter canola should be planted by October 1 and in southwest Kansas by September 15 to avoid problems with winterkill.
- The most recent 3-month outlook from NOAA projects an increased chance of warmer-than-normal temperatures through November. The precipitation outlook is for below-normal precipitation across the state.
- Winter canola will compensate for a poor plant stand; however, it is important to obtain as uniform a stand as possible to facilitate optimum plant development, winter survival, weed control, and uniform plant maturity. A seeding rate of 3.5 to 5 pounds per acre (approximately 350,000 to 500,000 seeds per acre at a 100,000 seeds per lb seed size) is recommended for open-pollinated varieties in narrow row spacing. Because of the higher seed costs of hybrids, it is recommended to plant them on a pure live seed basis. The recommended seeding rate is 250,000 to 300,000 pure live seeds per acre in narrow rows.
- More producers are experimenting with canola planted in 30-inch rows. Producers are able to obtain more accurate depth control, precision seed metering, and residue removal from the seed row with row crop planters. Generally, yields may be slightly reduced moving from 15 inches to 30 inches under dryland conditions. However, producers are able to reduce their seeding rate to 1.5 to 3.0 lb per acre (about 135,000 to 270,000 pure live seeds per acre at a 90,000 seed per lb seed weight). Planting an open-pollinated variety or hybrid with prolific branching will also increase the profitability of canola planted in 30-inch rows.
- It is important to check drill calibration. Some drills may require a speed reduction kit to obtain the optimum rate without damaging seed. Some producers planting on 7.5-inch spacing will plug every other row unit and plant on 15-inch spacing so the drill does not have to be slowed as much.
- Seed placement is critical for successful germination, emergence, and stand establishment. Optimal germination occurs with seed placed ½ to 1 inch deep. Under drier conditions, canola may be planted deeper (not greater than 1.5 inches), but delayed emergence and reduced vigor may occur. Soil crusting following a heavy rain can result in a poor stand. Canola emergence can be greatly reduced when using a deep furrow opener followed by a heavy rain prior to emergence, since soil can fill in the furrow, resulting in a deeper than intended seeding depth.
- To ensure proper seeding depth, producers must plant slower than when planting wheat (preferably 5 mph or slower). Finally, it is important to check seeding depth in each field.

- Rows spaced between 7.5 and 15 inches allow for rapid canopy closure (improved light interception) and weed control. Yields are similar with row spacings in this range.
- Plant-to-plant uniformity at emergence is critical for optimum plant development, overwintering, and weed control.

## Plant Nutrition and Soil Fertility

- Soil testing, including a profile sample for nitrogen (N) and sulfur (S), is an important tool in determining fertilizer needs. If you have questions, contact your local Extension office. All nutrient applications should be made based on soil test recommendations. Canola fertility recommendation programs can be found at: <http://www.agronomy.ksu.edu/soiltesting/>
- Fertility needs are similar to winter wheat; however, canola needs slightly higher N and S levels.
- Applying high rates of fertilizer in-row at planting is not recommended because canola is sensitive to ammonia and salt damage (phytotoxic effects). However, research by Oklahoma State indicates that a low rate of DAP or MAP (30 to 40 lb/acre of product) is beneficial and not detrimental to yield. The best management practice for banding fertilizer should separate the fertilizer from the seed by two inches to avoid direct contact. Pre-plant broadcast application is also acceptable.
- *Lime*: Apply lime so that pH is in the range of 5.5-7.0 and early enough so the lime has time to react.
- *Phosphorus (P) and Potassium (K)*: No added P is required if the P soil test is above 30 ppm. Additional K should be applied if soil test levels are less than 125 ppm.
- *Sulfur (S)*: Canola requires more S than wheat because of its high content of sulfur-containing proteins. Sulfur deficiencies are most common on coarse-textured and low-organic-matter soils. Sulfur can be applied at any time from pre-plant until the canola plant breaks dormancy in late winter. Apply S based on the soil test recommendation. Sulfate-sulfur (SO<sub>4</sub>-S) soil tests should be above 10 ppm or fertilizer should be applied. If no soil test is available, an application of 20 lb/acre S is recommended.
- *Nitrogen (N)*: Pre-plant N applications must be carefully balanced, as too little or too much fall-applied N may negatively affect winter survival. One-third to one-half of total N (based on expected yield) should be fall-applied. At least 30 lb/acre but no more than 80 lb/acre of actual N is the general rule for fall applications. Winter survival, plant vigor, and yield potential can decrease without applying fall N.

## Weed Management

- A clean seedbed is critical to establishing winter canola. Small canola seedlings compete poorly with established weeds. However, once a good stand and canopy are established, canola suppresses and outcompetes most winter annual weeds.
- No matter what herbicide program you use, the most important thing to remember is to control weeds early in the fall.
- Trifluralin and ethalfluralin are effective at controlling many problem winter annual weeds pre-plant, but each requires mechanical incorporation.
- Grass herbicides such as Select Max, Assure II, and Poast are labeled for cool-season grass control in canola.
- Roundup Ready (glyphosate tolerant) canola varieties are available, providing excellent control of many problem weeds. Glyphosate is not labeled for application once the plant has

bolted after dormancy.

- Clearfield canola varieties are available and provide another herbicide resistance option for controlling winter annual grasses.
- Before applying any herbicides, care must be taken to ensure there are no traces of problem herbicides, such as sulfonyleurea herbicides, in the sprayer equipment.

### **Insect Management**

- An insecticide seed treatment is highly recommended for control of green peach aphids and turnip aphids through fall and early winter.
- Monitor canola stands for the following fall insect pests: grasshoppers, diamondback moth larvae, flea beetles, aphids, and root maggots. Several products are labeled and provide good to excellent control.

### **Disease Management**

- The best control of canola diseases is achieved through careful rotation. Canola should not be planted on the same field more than once every three years and should never be planted continuously.
- Blackleg (*Leptosphaeria maculans*) is the most serious disease threat to canola. Maintaining proper rotation intervals, planting disease-free seed, and using fungicide seed treatments are important management practices to slow the spread of blackleg.
- Damping-off of young seedlings, which resembles the pinching of the stem at or just below the soil line, is caused by several fungi including *Pythium*, *Fusarium*, and *Rhizoctonia*. A fungicide seed treatment can lessen the effects of these soil-borne diseases.

For further information, see the *Great Plains Canola Production Handbook*. Contact your local Extension office for a copy or download it online:

<https://www.bookstore.ksre.ksu.edu/pubs/mf2734.pdf>.

Also see the *Canola Growth and Development* poster, available on the web at:

<https://www.bookstore.ksre.ksu.edu/pubs/MF3236.pdf>.

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## 2. Alfalfa management: Deciding on last cutting this fall

Alfalfa will quit growing after the first hard freeze in Kansas which occurs, on average, around October 15, but can be as early as October 1 or late as November 1. The timing of the last two cuttings impacts the winter survival and productivity of the stand in the following year.

The last cutting, prior to fall dormancy, should be made based on expected crown regrowth rather than one-tenth bloom because of the decreasing photoperiod. The last cutting should be made so there will be 8 to 12 inches of foliage, or 4 to 6 weeks of growth time, before the first killing frost. This should allow adequate time for replenishment of root reserves. Which means the second to final cutting should occur around September 1.

At this stage of the growing season, alfalfa plants need to store enough carbohydrates to survive the winter. If root reserves are not replenished adequately before the first killing freeze in the fall, the stand is more susceptible to winter damage than it would be normally. That could result in slower greenup and early growth next spring, and in some cases stand loss due to winter kill.

The final cutting should occur right after the first killing freeze, before too many of the leaves have dropped. Producers should be prepared to enter the fields as soon as soil moisture conditions allow. After a killing freeze, the remaining forage (if any) can be hayed safely. However, the producer should act quickly because the leaves will soon drop off.





**Figure 1. Alfalfa stand with approximately 12 inches of top growth prior to winter dormancy. The last cut in this stand was performed early September, and this photo was taken late October. This stand will be hayed immediately following the first killing frost. Photo by Romulo Lollato, K-State Research and Extension.**

### **Consider soil sampling alfalfa fields now**

Late fall is also a great time of the year to soil sample alfalfa ground. This timing allows for an accurate assessment of available soil nutrients and provides enough time to make nutrient management decisions before the crop starts growing in the spring. Key soil tests include pH, phosphorus, and potassium, and to a lesser extent, sulfur and boron. In particular, potassium is highly related to winter survival so it's important to make sure to have optimum range of potassium in soil before entering winter. When sampling for immobile nutrients, sampling depth should be six inches, while mobile nutrients (sulfur) should be sampled to 24 inches.

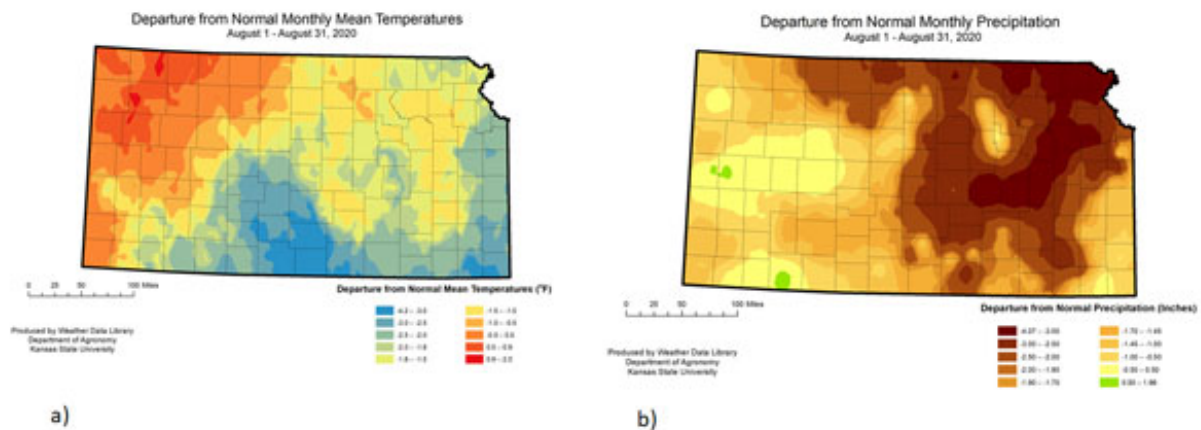
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### 3. Learn about the rate of dry down in corn before harvest

The latest USDA-National Agricultural Statistics Service Crop Progress and Condition report for Kansas classified near 56% of the corn crop as 'good' or 'excellent' condition. Overall, 28% of Kansas' corn is mature with 4% harvested.

The weather conditions experienced from late July to end of August are critical for corn as related to the grain-filling rate and determining final grain weight. Temperature and precipitation have split across the state, with cooler-than-normal conditions in the south central and southeast, while warmer conditions have dominated in the west (Figure 1a). Most of the state had below-normal precipitation, despite isolated pockets of heavier precipitation (Figure 1b).

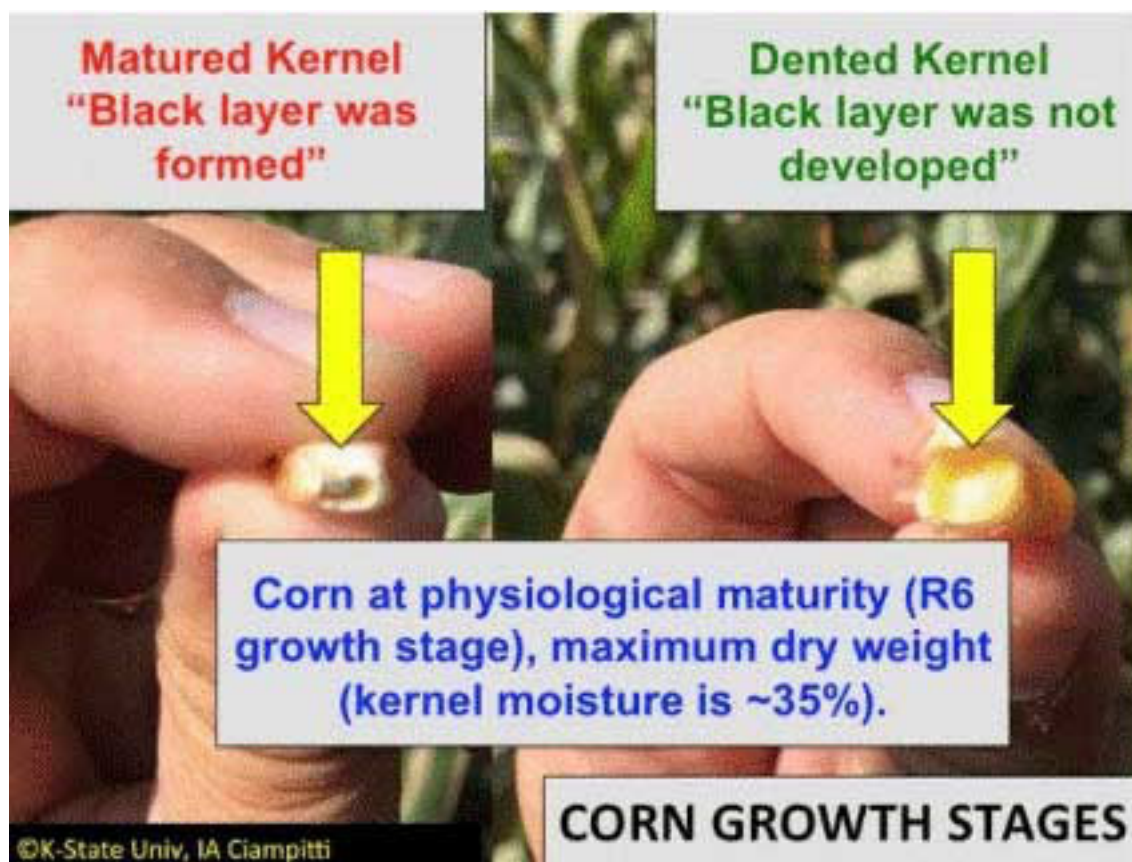


**Figure 1. a) Departure from normal temperatures; b) Departure from normal precipitation. Maps by Kansas Weather Data Library.**

In recent years, a common question from producers relates to the dry down rate for corn when approaching the end of the season. Based on previous information, the average dry down rate depends on the weather, primarily temperature and moisture conditions – but it might range from 1% in late August to less than 0.5% per day in October.

The weather outlook for September calls for an increased chance of cooler-than-normal temperatures with chances for below-normal precipitation for all but the southeastern corner of the state.

Grain water loss occurs at different rates but with two distinct phases: 1) before "black layer" or maturity (Figure 2), and 2) after black layer. For the first phase, Table 1 contains information on changes in grain moisture from dent until maturity of the corn.



**Figure 2. Corn at dent and black layer growth stages. Photo and infographic prepared by Ignacio Ciampitti, K-State Research and Extension.**

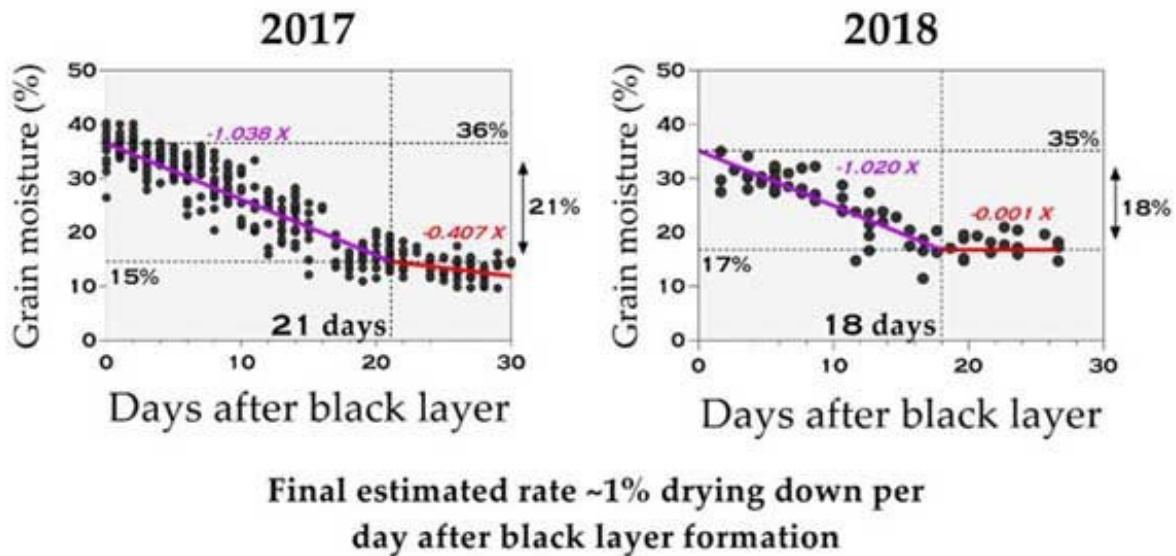
R Stage	Moisture %	Dry Matter (% of Total Dry Weight)	Average per Substage	
			Growing Degree Days, °F	Days
5.0	60	45	75	3
5.25 (¼ milk line)	52	65	120	6
5.5 (½ milk line)	40	90	175	10
5.75 (¾ milk line)	37	97	205	14
6.0 (Physiological maturity)	35	100		

<sup>1</sup>Abendroth, L.J., R.W. Elmore, M.J. Boyer, and S. K. Marlay. 2011. *Corn Growth and Development*. PMR 1009. Iowa State Univ. Extension. Ames Iowa.

**Table 1. Growth stages, moisture content, and total dry matter progression for corn from late to physiological maturity. Extracted from K-State Research and Extension publication MF3305 (Ciampitti, Elmore, Lauer, 2016).**

To properly address questions from many producers on the rate of dry down, a study is underway to investigate the grain dry down rate from the moment of “black layer” until commercial harvest grain

moisture was reached. For the conditions experienced in 2017 and 2018 seasons (from late August until mid-September), the overall dry down rate was around 1% per day (from 36-35% to 15-17% grain moisture) – taking an overall period between 18-to-21 days (Figure 3).



**Figure 3. Grain moisture dry down (purple line) across three hybrids and N rates near Manhattan, KS during 2017 and 2018. Horizontal dashed lines marked the grain moisture at black layer formation and grain moisture around harvest time for each year\*. Graph prepared by Ignacio Ciampitti and Javier Fernandez, K-State Research and Extension.**

\*Note: It is desired to reach harvest with 15.5% grain moisture to maximize the final grain volume to be sold, thus the importance of timing harvest with the right grain moisture content.

The dry down process can be delayed by:

- Low temperatures
- High humidity
- High grain moisture content at black layer (38-40%)

It is expected that the dry down rate will decrease to <0.5% per day for late-planted corn entering reproductive stages later in the growing season. Expect a similar decrease for corn that was exposed to late-season stress conditions (e.g., drought, heat). Under these conditions, maturity may be reached with high grain water content and the last stages after black layer formation could face lower temperatures and higher humidity. These main factors should be considered when the time comes to schedule corn harvest. You can track temperature and humidity levels on the Kansas Mesonet web site at <http://mesonet.k-state.edu/weather/historical/> by selecting the station and time period of interest.

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## 4. Evaluation of cool-season cover crop varieties

An excellent new publication has been released from the USDA Natural Resources Conservation Service Plant Materials Program that may be of interest to cover croppers in Kansas. The publication summarizes a 2-year evaluation of 56 commercially available varieties of black oats, black seeded oats, cereal rye, crimson clover, daikon radish, hairy vetch, red clover, and winter/field pea.

Similar to the variety trials for commodity crops like corn and wheat, this study aims to assist farmers in making informed decisions on planting the best-adapted cover crop variety for their location and cropping system.

### Study procedure

Cool-season, annual, cover crop varieties were evaluated at NRCS Plant Material Centers in Manhattan, KS, Elsberry, MO, and East Lansing, MI. Replicated plots were drilled in the fall. Legumes were inoculated prior to planting. Non-legumes were fertilized with 40 lbs. N/acre, and all varieties received 60 lbs P/acre and 30 lbs. K/acre for both study years. A more detailed description of the procedure is included in the publication.

Cover crop varieties were evaluated for:

- **Quick fall cover**—Emergence at 14 days after planting: Excellent >90%, Good 61-90%, Fair 25-60%, Poor <25%,
- **Fall stand quality**—Yes is >65% emergence at 28 days after planting,
- **Winter survival**—Plant survival rating of Excellent >75%, Good 50-75%, Marginal 25-50%, Poor <25%,
- **Maturity date**—Days after planting to 50% bloom, data was grouped over the region by <235=Early, 235-250=Mid, >250=Late to identify varietal differences, and
- **Disease and insect ranking**—Damage observed was None, Low, Moderate, or High.

### Cover crop performance and results

Each type of cover crop (black oats/black seeded oats, cereal rye, crimson clover, daikon radish, hairy vetch, red clover (shown in Figure 1), and winter/field pea) is summarized and includes a description with photos, benefits, performance rankings (outlined above) by variety, and expected adaption.

The full publication is available online at:

[https://www.nrcs.usda.gov/Internet/FSE\\_PLANTMATERIALS/publications/natpmtn13590.pdf](https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/natpmtn13590.pdf)

## CRIMSON CLOVER

**Description:** cool season annual legume. Plants are generally densely hairy with a rosette of upright, usually unbranched stems, reaching 1 to 3 feet tall supported by a central taproot and many fibrous roots. Flowers produce nectar and pollen that attract European honey bees, as well as a wide variety of native bees.

**Benefits:** N source, improves organic matter and soil structure, erosion control, weed suppressor, livestock forage, pollinator habitat.



*Crimson clover*

### Performance of Crimson Clover Varieties

Cover Crop	Quick Fall Cover <sup>1/</sup>	Fall Stand Quality <sup>2/</sup>	Winter Survival <sup>3/</sup>	Maturity Date <sup>4/</sup>	Disease Ranking <sup>5/</sup>	Insect Ranking <sup>5/</sup>
AU Robin	Good/Fair <sup>a</sup>	Yes/No <sup>b</sup>	Excellent/Marginal <sup>c</sup>	Early	Low	Low
AU Sunrise	Good/Fair <sup>a</sup>	Yes	Excellent/Good <sup>d</sup>	Early	Low	Low
AU Sunup	Good/Fair <sup>a</sup>	Yes/No <sup>b</sup>	Excellent/Marginal <sup>c</sup>	Early	None	Low
Contea	Good/Fair <sup>a</sup>	Yes/No <sup>b</sup>	Excellent/Poor <sup>e</sup>	Early	Low	Low
Dixie	Good/Fair <sup>a</sup>	Yes/No <sup>b</sup>	Excellent/Good <sup>d</sup>	Early	Low	Low
Kentucky Pride	Good/Fair <sup>a</sup>	Yes/No <sup>b</sup>	Excellent/Good <sup>d</sup>	Early	None	None

<sup>1/</sup>Quick fall cover—Emergence at 14 days after planting: Excellent >90%, Good 61-90%, Fair 25-60%, Poor <25%; <sup>2/</sup>Fall stand quality—Yes is >65% emergence at 28 days after planting; <sup>3/</sup>Winter survival—Plant survival rating of Excellent >75%, Good 50-75%, Marginal 25-50%, Poor <25%; <sup>4/</sup>Maturity date—Days after planting to 50% bloom: <235=Early, 235-250=Mid, >250=Late; and <sup>5/</sup>Disease and insect ranking—Damage observed was None, Low, Moderate, or High.

<sup>a</sup>Good to excellent quick fall cover in MI 2016-2017 and MO in 2017-2018, fair to poor in KS; <sup>b</sup>Unacceptable fall stand quality in KS; <sup>c</sup>Excellent to good winter survival in KS and MI 2016-2017; poor in KS in 2017-2018 and marginal in MO; <sup>d</sup>Excellent to good winter survival in KS and MI 2016-2017, poor in KS in 2017-2018, and good in MO; <sup>e</sup>Excellent to good winter survival at all locations except KS in 2017-2018.

**Expected Adaptation:** Most crimson clover varieties had good, quick fall and acceptable fall stand quality in Elsberry, MO and East Lansing, MI. Winter survival varied among varieties across locations and years but was generally good to excellent. Days to maturity (50% bloom) were similar among varieties across locations. Disease and insect problems were low to none.



*Late fall growth of crimson clover plots in Elsberry, MO (left). AU Sunrise blooming in Mid-April in Elsberry, MO (right).*

**Figure 1. Example of the cover crop performance and results for crimson clover. Each crop evaluated in the 2-year study has a similar summary included in the publication. Screenshot from USDA-NRCS Plant Materials Technical Note No. 2**

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[www.agronomy.ksu.edu](http://www.agronomy.ksu.edu) | [www.facebook.com/KState.Agron](https://www.facebook.com/KState.Agron) | [www.twitter.com/KStateAgron](https://www.twitter.com/KStateAgron)

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## 5. Don't miss the 2020 Kansas Soybean Yield and Value Contests

All soybean growers in Kansas are invited to participate in the 2020 Kansas Soybean Yield and Value Contests. As harvest progresses, those interested in competing may collect relevant records for one entry per field, and submit entries postmarked no later than **Dec. 1**.

The contests are an incentive for farmers to maximize soybean yield and protein and oil contents. They also provide an opportunity to share production practices that achieve high levels of yield and value.

Per yield contest rules, one entry per field is allowed. Eligible fields must consist of at least five contiguous acres as verified by the Farm Service Agency, GPS printout or manual measurement. A non-relative witness, either Kansas State Research and Extension (KSRE) personnel or a specified designee, must be present at harvest and should ensure that the combine grain hopper is empty prior to harvest. Official elevator-scale tickets with moisture percentage and foreign matter included must accompany entries to be considered.

Four categories - **conventional-till dryland, no-till dryland, conventional-till irrigated and no-till irrigated** - are considered for the contest, with dryland entries further divided into eight districts based on field location. A farmer may enter multiple categories.

The Kansas Soybean Commission provides monetary awards to yield contest winners. The highest dryland and irrigated yields in the contest each will receive a \$1,000 award. The overall winner could earn an additional \$1,000 for achieving or surpassing 100 bushels per acre. In each district, first place receives \$300, second will earn \$200, and third will receive \$100. No-till on the Plains supplies additional awards in the no-till categories.

The value contest allows for one entry per individual and is a statewide contest that recognizes the top three contestants. Entries consist of a 20-ounce sample of seed sent to KSA; these samples are analyzed by Ag Processing Inc. for protein, oil and additional qualities to calculate a value.

Farmers are welcome to enter the just the yield contest, just the value contest, or both. The results are shared at the Kansas Soybean Expo, which is scheduled for January 6, 2021.

Contest rules and entry information is available at [www.kansassoybeans.org/contests](http://www.kansassoybeans.org/contests). Interested individuals can also call the Kansas Soybean office at 877-KS-SOYBEAN (877-577-6923) or contact their local KSRE offices.

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## 6. 2021 soybean planting intentions survey - Producer input requested

The Agronomy Extension specialists at Kansas State University need your help!

We are looking for information from soybean producers across the state about their planting intentions the 2021 growing season. Participation in this very quick survey will help in the planning of our fall and winter extension presentations. This survey is completely anonymous. A summary of the results may be shared as research findings to help other Extension programs.

If you are willing to participate, you can find the survey here: [2021 Soybean Planting Intentions Survey](#).

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## 7. Kansas Bankers Association Conservation Awards Program

Nominate a deserving Kansas producer or landowner for the 2020 Kansas Bankers Association Conservation Awards Program. This year, the Kansas Bankers Association, K-State Research and Extension, and the Kansas Department of Wildlife, Parks, and Tourism have announced six award categories:

- **Energy Conservation**
- **Water Quality**
- **Water Conservation**
- **Soil Conservation**
- **Windbreaks**
- **Wildlife Habitat**

The purpose of this program is to stimulate a greater interest in the conservation of the agricultural and natural resources of Kansas by giving recognition to those farmers and landowners who have made outstanding progress in practicing conservation on their farms. In 2019, 210 Kansas producers and landowners were recognized through this program.

Nominations can be made by any person in the county. They should be sent to the County Extension Agricultural Agent or the Kansas Department of Wildlife, Parks, and Tourism District Biologist by **December 4, 2020.**

The K-State Extension agent for Agriculture and Natural Resources, or the Extension Coordinator, is designated Chairperson of the committee to select persons to receive awards.

For more information, see:

<http://www.agronomy.k-state.edu/extension/kansasbankersaward/kansas-bankers-awards.html>

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