



## Extension Agronomy

# eUpdate

---

*01/26/2018*

These e-Updates are a regular weekly item from K-State Extension Agronomy and Kathy Gehl, Agronomy e-Update 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 Curtis Thompson, Extension Agronomy State Leader and Weed Management Specialist 785-532-3444 cthompso@ksu.edu.

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

---

<b>1. Topdressing canola: How to maximize the benefits.....</b>	<b>3</b>
<b>2. New herbicides and label changes for corn and sorghum in 2018.....</b>	<b>6</b>
<b>3. Update: Soybean School at Phillipsburg rescheduled for March 21 .....</b>	<b>10</b>
<b>4. La Nina outlook for February through April in Kansas.....</b>	<b>12</b>
<b>5. Prescribed Burning workshops scheduled for 2018.....</b>	<b>19</b>
<b>6. K-State Pre-plant Corn School, January 30, Parsons.....</b>	<b>20</b>
<b>7. K-State Pre-plant Corn School, February 1, Marysville.....</b>	<b>22</b>
<b>8. Western Kansas Forage Conference, February 21 in Garden City.....</b>	<b>24</b>
<b>9. Register by January 31 for the K-State Sorghum Schools in early February.....</b>	<b>26</b>

1. Topdressing canola: How to maximize the benefits

To maximize the yield potential of winter canola, producers should topdress with nitrogen, sulfur, and possibly boron in the winter. Producers should make topdress applications with consideration for the environmental conditions, the nutrients needed, and the application method.

Environmental conditions

The best time to topdress winter canola is during the rosette stage when the canola is dormant. Most years, this can easily be accomplished by topdressing in January or February, since temperatures are cold enough to keep canola from actively growing. If nitrogen is applied as a liquid when canola is green and physiologically active, be careful that the rate applied does not cause leaf burn. Both dry and liquid fertilizers are effective products.

Current conditions for most of Kansas are dry and warm. If temperatures remain above-normal for longer than a week during the winter months, canola could begin to show signs of regrowth. With the colder temperatures experienced around January 1 and the expanding drought conditions, stand thinning has been observed in a few fields, especially those that were smaller (6 leaves or less) going into the winter. It may be advisable to wait until canola is actively growing before topdressing in those fields where stand thinning is greatest. This will ensure that there is adequate spring stand to take to harvest.

Nutrients

A combination of nitrogen and sulfur can be used in the topdressing blend.

Nitrogen. About two-thirds of the total nitrogen needed by the canola crop should be applied as a winter topdress. This can be done at dormancy or just as plants begin to show increased growth, but before the plants bolt. Nitrogen uptake increases rapidly just before bolting. Topdress applications should be based on an updated assessment of yield potential, less profile residual nitrogen, and the amount of nitrogen applied in the fall.

Suggested nitrogen rates for five yield levels and a soil with 2 percent organic matter and varying residual nitrate-N levels is shown in Table 1.

For soils with 1 percent organic matter, add 15 pounds nitrogen for each yield and nitrate level and for soils with 3 percent organic matter, subtract 15 pounds nitrogen for each yield and nitrate level.

Table 1. Total nitrogen fertilizer needs for canola as affected by yield potential and soil test nitrogen levels in the southern Great Plains

Profile N test (lbs/acre)	Yield potential (lbs/acre)				
	1,500	2,000	2,500	3,000	3,500
0	75	100	125	150	175

20	55	80	105	130	155
40	35	60	85	110	135
60	15	40	65	90	115
80	0	20	45	70	95
100	0	5	25	50	75

Source: Great Plains Canola Production Handbook  
<http://www.ksre.ksu.edu/bookstore/pubs/mf2734.pdf>

Either solid or liquid forms of nitrogen can be used in the early spring. Once the weather warms and growth begins, applications using streamer bars or solid materials are preferred for broadcast applications to prevent/avoid leaf burn.

Controlled-release products such as polymer-coated-urea (ESN) might be considered on very sandy soils prone to leaching, or poorly drained soils prone to denitrification. Generally a 50:50 blend of standard urea and the coated urea -- which will provide some N immediately to support bolting and flowering and also continue to release some N in later stages of development -- works best in settings with high loss potential.

Sulfur. If canola is deficient in sulfur (S), the consequences can be very serious because the crop needs sulfur to produce oil and protein in the seed. For this reason, soils having less than 20 lbs/acre sulfate-S (10 ppm  $\text{SO}_4\text{-S}$ ) in the upper 24 inches should receive supplemental sulfur. A good rule to follow is to keep sulfur-to-nitrogen availability at a ratio of about 1 to 7. Another simple guideline is to apply 20 pounds S per acre, which will be sufficient for low and medium yield levels. Sulfur can be applied in the fall and incorporated into the seedbed or surface applied with N in the winter topdressing. Canola growers may consider using elemental S, or sulfate forms (e.g. ammonium sulfate, or liquid ammonium thiosulfate). Since elemental S must oxidize to become plant available, it should only be applied in the fall. Ammonium thiosulfate or ammonium sulfate can be applied in the spring or fall, but thiosulfate should not be topdressed directly on green tissue or placed with seed to avoid short-term phytotoxicity.

Boron. If deficient, boron is one micronutrient that can have negative consequences on canola yield. Typically boron deficiency is not something we have seen in Kansas. However, if there are micronutrients that could influence yield, then boron would be one of them. The most important thing is to know what your soil sample states. Applying boron may help to reduce flower abortion and enable efficient pod filling. However, there is not much room for error when comparing adequate boron fertility levels and toxic levels that might result from over application. Because of this, application rates of boron are often 1.0 lbs per acre or less. Soil and foliar applications of boron are effective. Foliar applications can be made with herbicides, and soil-applied boron can be either broadcasted or banded. Make sure applications are uniform across the field to avoid toxicity, and avoid contact with the seed for band-applied boron.

### **Application method**

It is important to avoid crushing winter canola with wide applicator tires. Crushed plants will lodge and maturity will be delayed, which can slow harvest and increase the risk of shattering losses. For this reason, applicators with narrow tires are preferred. Do not use high flotation tires. As for the question of whether broadcast or banding is best -- if temperatures are cold and the plants are dormant, topdress fertilizer can be broadcast. If temperatures are mild enough that the canola plants

have resumed active growth, it may be best to use streamer bars or some other form of banded application to avoid foliar burn.

Mike Stamm, Canola Breeder

[mjstamm@ksu.edu](mailto:mjstamm@ksu.edu)

Dorivar Ruiz Diaz, Nutrient Management Specialist

[ruizdiaz@ksu.edu](mailto:ruizdiaz@ksu.edu)

## 2. New herbicides and label changes for corn and sorghum in 2018

Although you may hear of new herbicides, more than likely it will be a combination of active ingredients that have been labeled previously. There are some significant changes that are occurring in some cases because certain herbicides have come off patent.

### **Harness MAX (Monsanto)**

Use: All field corn types or yellow popcorn.

Active ingredients (lb/gallon, mode of action number): Acetochlor (3.52 lb, 15) + mesotrione (0.33 lb, 27)

Use rate: 55 to 88 fl/a, 55 to 64 fl oz on coarse soils, 64 to 75 fl oz on medium soils or fine soils with less than 3% organic matter or 75 to 88 fl oz on fine soils with organic matter 3% or greater. When applying postemergence, treat weeds when they are 3 inches or less. If possible, apply with atrazine when using PRE or postemergence.

Timing: Apply from 29 days before planting or postemergence from emergence up to 11-inch corn.

Target weed species: Acetochlor (Harness) provides very good control of annual grasses and small seeded broadleaf weeds including the pigweeds. The addition of mesotrione and atrazine to Harness greatly improves control of kochia, velvetleaf, and several other broadleaf species and will improve control of Palmer amaranth and waterhemp.

Adjuvants: no restrictions when applied preemergence. Do not use MSO when applying postemergence. Do not apply with COC or nitrogen-based adjuvants when applying postemergence to yellow popcorn. Do not use COC, MSO, or nitrogen-based adjuvants when tankmixing with Liberty herbicide.

Comments: A maximum of 95 fl oz of Harness Max is allowed during a growing season.

### **Anthem Maxx (FMC)**

Use: All corn types

Active ingredients (lb/gallon, mode of action number): Pyroxasulfone (4.174 lb, 15) and fluthiacet (0.126 lb, 14)

Use rate: 2.5 to 6.5 fl oz applied PRE or 2 to 6 fl oz applied POST. When applying PRE, use 2.5 to 4 fl oz on coarse soils, 2.5 to 5.5 fl oz on medium soils, and 4 to 6.5 fl oz on fine soils. When applying POST, use 2 to 3 fl oz on coarse soils or up to 3.5 fl oz if coarse soil contains 1% or greater organic matter, 2.5 to 4.5 fl oz on medium soils, and 3.5 to 6.0 fl oz on fine soils.

Timing: May be applied in the fall for residual weed control or apply from 45 days before planting, or postemergence from emergence up to 4 collars visible on the corn plant.

Target weed species: Provides very good control of annual grasses and small-seeded broadleaf

weeds including pigweeds and kochia. Weed spectrum can be broadened with various tankmix partners.

Adjuvants: When applying postemergence to weeds, add COC, MSO at 1 to 2 pts/a or NIS at 0.25% v/v. Tank mix partner may limit which adjuvants may be used.

Comments: Anthem Maxx had double the amount of Pyroxasulfone compared to the Anthem formulation, however, the rate of fluthiacet (Cadet) in Anthem Maxx is 1/10th of what is in Anthem.

### **Anthem Flex (FMC)**

Use: All corn types

Active ingredients (lb/gallon, mode of action number): Pyroxasulfone (3.733 lb, 15) and carfentrazone (0.267 lb, 14)

Use rate: 2.75 to 7.28 fl oz. When applying more than 15 days before planting, use 3.5 to 4.5 fl oz on coarse soils, 4.5 to 5.5 fl oz on medium soils, and 5.5 to 7.28 fl oz on fine soils. When applying less than 15 days before planting, use 2.75 to 5 fl oz on coarse soils, 3.0 to 6.0 on medium soils, and 3.5 to 7.28 fl oz on fine soils.

Timing: Preemergence to corn only. May be applied from 45 days before planting but prior to corn emergence.

Target weed species: Provides very good control of annual grasses and small-seeded broadleaf weeds including pigweeds and kochia. Weed spectrum can be broadened with various tankmix partners.

Adjuvants: When applying postemergence to weeds, add COC, MSO at 1 to 2 pts/a or NIS at 0.25% v/v. Anthem Flex can be applied with liquid nitrogen. Using a compatibility jar test is recommended.

Comments: Anthem Flex contains carfentrazone (Aim) which makes it different than other "Anthem" formulations.

### **Enlist Duo (Dow AgroSciences)**

Use: Enlist corn

Active ingredients (lbs /gallon): Colex-D technology: 1.7 lbs dimethylamine salt of glyphosate acid and 1.6 lbs 2,4-D acid as a choline salt.

Target weeds: Glyphosate component will control many weed species that are susceptible to glyphosate, and the 2,4-D component will help manage several glyphosate-resistant broadleaf weeds, including pigweeds, marehail, morning glory, velvetleaf, and others. This product will be very weak on glyphosate-resistant kochia, but will contribute to Palmer amaranth management.

Use rate and timing: Use 3.5 to 4.75 pts/acre to corn no larger than V8 or 30 inches tall. Make 1 to 2

postemergence applications with a minimum of 12 days between applications. Enlist Duo may be used preemergence or postemergence. However, the total application cannot exceed 14.25 pts of Enlist Duo/acre per season.

Adjuvants/tankmix partners: No adjuvants currently listed in the label or online label. The following online site shows approved tankmix partners and approved nozzles.

<http://www.enlist.com/en/approved-tank-mixes>

Comments: Foreign export has been approved, thus Enlist corn hybrids will be available to growers for the 2018 season. Enlist Duo cannot be aerially applied. This product will reduce potential off-target movement of 2,4-D when used according to the label. **NOTE:** The gene in Enlist corn confers resistance to the “Fop” grass herbicides – fluazifop (Fusilade) or quizalofop (Assure II). Grass herbicides that will control volunteer Enlist corn include clethodim (Select Max and generics) and sethoxydim (Poast and generics). See label for use on Roundup ready corn.

### **Enlist One (Dow AgroSciences)**

Use: Enlist corn

Active ingredients (lbs /gallon, herbicide mode of action number): Colex-D technology: 3.8 lbs 2,4-D acid as a choline salt, 4.

Target weeds: 2,4-D will help manage several glyphosate-resistant broadleaf weeds, including pigweeds, marestail, morning glory, velvetleaf, and others. This product will be very weak on glyphosate-resistant kochia.

Use rate and timing: Use 1.5 to 2 pts/acre preemergence or postemergence to corn no larger than V8 or 30 inches tall. With drop nozzles Enlist one can be applied up to 48-inch corn. Make 1 to 2 postemergence applications with a minimum of 12 days between applications. The total application cannot exceed 14.25 pts of Enlist Duo per acre per season.

Adjuvants/tankmix partners: No adjuvants currently listed in the label or online label. The following online site shows approved tankmix partners and approved nozzles.

<http://www.enlist.com/en/approved-tank-mixes>

Comments: Foreign export has been approved, thus Enlist corn hybrids will be available to growers for the 2018 season. Enlist Duo cannot be aerially applied. This product will reduce potential off-target movement of 2,4-D when used according to the label. **NOTE:** The gene in Enlist corn confers resistance to the “Fop” grass herbicides – fluazifop (Fusilade) or quizalofop (Assure II). Grass herbicides that will control volunteer Enlist corn include clethodim (Select Max and generics) and sethoxydim (Poast and generics). See label for use on conventional corn.

### **Xtendimax (Monsanto) or FeXiphan (Dupont)**

Use: corn and sorghum

Active ingredients (lbs /gallon, herbicide mode of action number): 2.9 lb ae diglycolamine salt of dicamba with vapor grip technology, 4



Target weeds: dicamba should be included in a tank mix with other herbicides to help control emerged broadleaf weeds especially kochia and marestalk.

Use rate and timing: Use 11 to 22 fl oz applied PRE to corn planted at least 1.5 inches deep or postemergence to corn from emergence to 5 leaf or 8 inches tall. On corn planted in coarse soils or to corn postemergence from 8 to 30 inches tall, use 11 fl oz only. Use 11 fl oz at least 10 days before planting sorghum or postemergence to sorghum from 2 to 5 leaf stage but before sorghum is 8 inches tall.

Comments: There dicamba formulations will cause crop injury similar to other formulations of dicamba. They do not contain a safener to corn like Status or DiFlexx.

### **Engenia (BASF)**

Use: corn and sorghum

Active ingredients (lbs /gallon, herbicide mode of action number): 5 lb ae BAPMA salt of dicamba, 4

Target weeds: dicamba should be included in a tank mix with other herbicides to help control emerged broadleaf weeds especially kochia and marestalk.

Use rate and timing: Use 6.4 to 12.8 fl oz applied PRE to corn planted at least 1.5 inches deep or postemergence to corn from emergence to 5 leaf or 8 inches tall. On corn planted in coarse soils or to corn postemergence from 8 inches tall to 30 inches tall, use 6.4 fl oz only. Use 6.4 fl oz at least 10 days before planting sorghum or postemergence to sorghum from 2 to 5 leaf stage but before sorghum is 8 inches tall.

Comments: Engenia will cause crop injury similar to other formulations of dicamba. It does not contain a safener to corn like Status or DiFlexx.

### **Label changes - numbers in ( ) refer to the herbicide mode of action:**

**Liberty (10)** can now be applied in corn from 22 to 43 fl oz/acre on corn from emergence through the V6 stage. Use in conjunction with a preemergence herbicide program.

**Halex GT (9, 15, 27)** can now be used preemergence to grain sorghum. Use rates are from 4 to 6 pints. Remember, Halex GT contains glyphosate and must be applied before sorghum emerges.

Curtis Thompson, Weed Management Specialist and Extension Agronomy State Leader  
[cthompso@ksu.edu](mailto:cthompso@ksu.edu)

### 3. Update: Soybean School at Phillipsburg rescheduled for March 21

The Soybean School originally scheduled for January 22 in Phillipsburg has been rescheduled for **March 21, 2018**.

The one-day school will cover a number of issues facing soybean growers including: weed control strategies, production practices, nutrient fertility, and insect management.

#### **March 21 – Phillipsburg, KS**

Phillips County Fair Building, 1481 US-183  
Cody Miller, Phillips-Rooks District, [codym@ksu.edu](mailto:codym@ksu.edu), 785-543-6845

Lunch will be provided courtesy of Kansas Soybean Commission (main sponsor of the schools). The schools will also be supported by Channel Seeds. There is no cost to attend, however participants are asked to pre-register by **March 19**. Please re-submit your registration if you had signed up for the original date.

**Online registration is available at:** [K-State Soybean Schools](#)

You can also preregister by emailing or calling the local K-State Research and Extension office listed above.



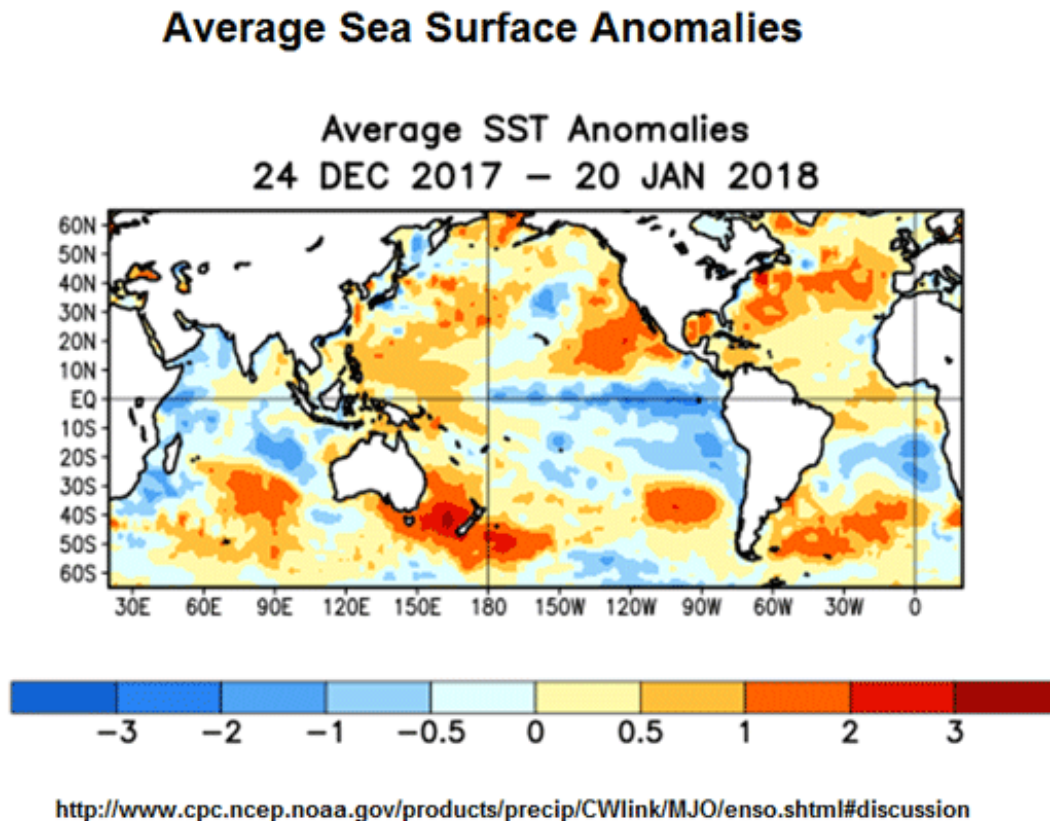
Ignacio Ciampitti, Crop Production and Cropping Systems Specialist  
[ciampitti@ksu.edu](mailto:ciampitti@ksu.edu)

Doug Shoup, Southeast Area Crops and Soils Specialist  
[dshoup@ksu.edu](mailto:dshoup@ksu.edu)

Stu Duncan, Northeast Area Crops and Soils Specialist  
[duncan@ksu.edu](mailto:duncan@ksu.edu)

#### 4. La Nina outlook for February through April in Kansas

An ENSO event is defined as period of five consecutive 3-month periods where the waters of the Pacific along the equator are either +0.5 degrees C warmer or -0.5 degrees C cooler-than-average. The warmer conditions are designated as an El Niño, while the cooler-than-normal state is called a La Niña. As indicated by the current sea-surface temperatures (Figure 1), a weak La Niña is present, and is expected to continue through the spring.

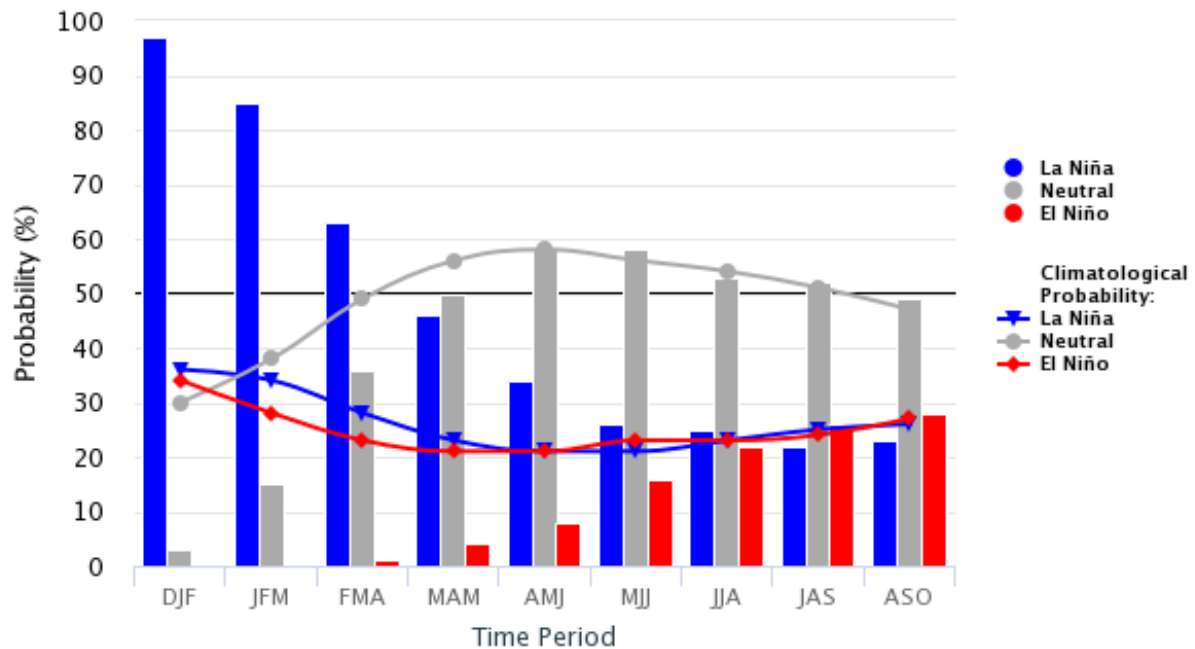


**Figure 1. Current sea surface temperatures (SST) from the Climate Prediction Center.**

The latest weekly Niño-3.4 index value was -0.8 degrees Celsius, and the Niño-3 and Niño-1+2 indices were at or below -1.0 degrees C during much of January. Based on the latest observations and forecast guidance, forecasters believe this weak-to-moderate La Niña (3-month Niño-3.4 values between -0.5°C and -1.5°C) is currently peaking and will eventually weaken into the spring (Figure 2).

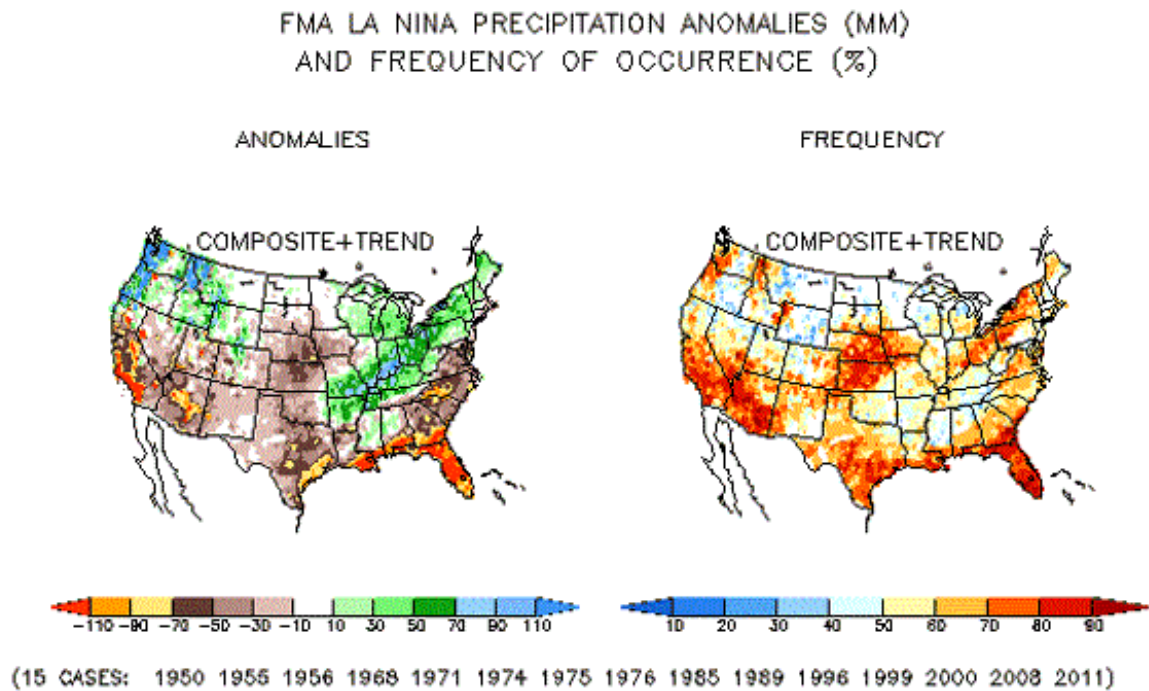
## Early-Jan CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly  
Neutral ENSO: -0.5 °C to 0.5 °C



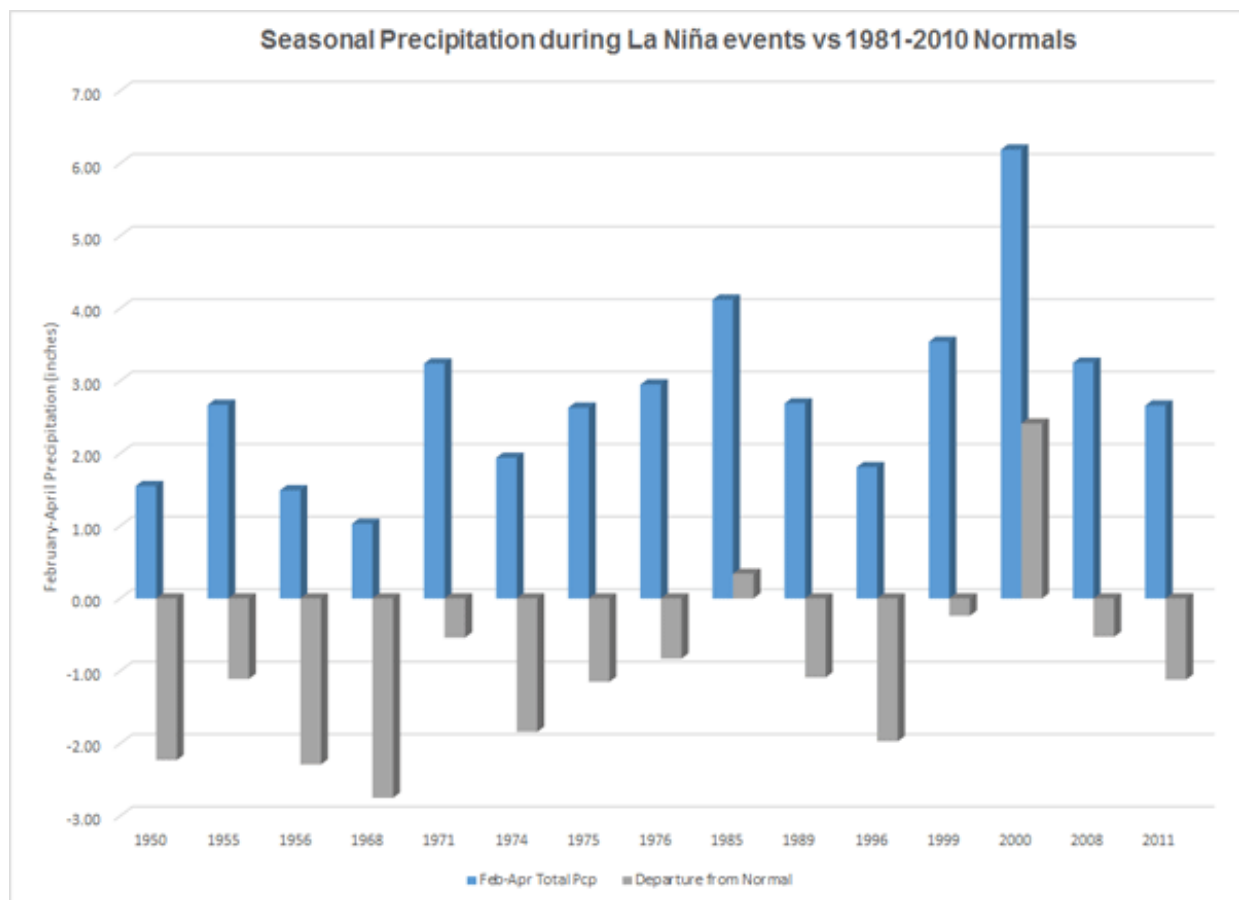
**Figure 2. ENSO Forecasts (Climate Prediction Center)**

Based on previous events, a La Niña is typically strongly associated with a drier-than-normal weather pattern.



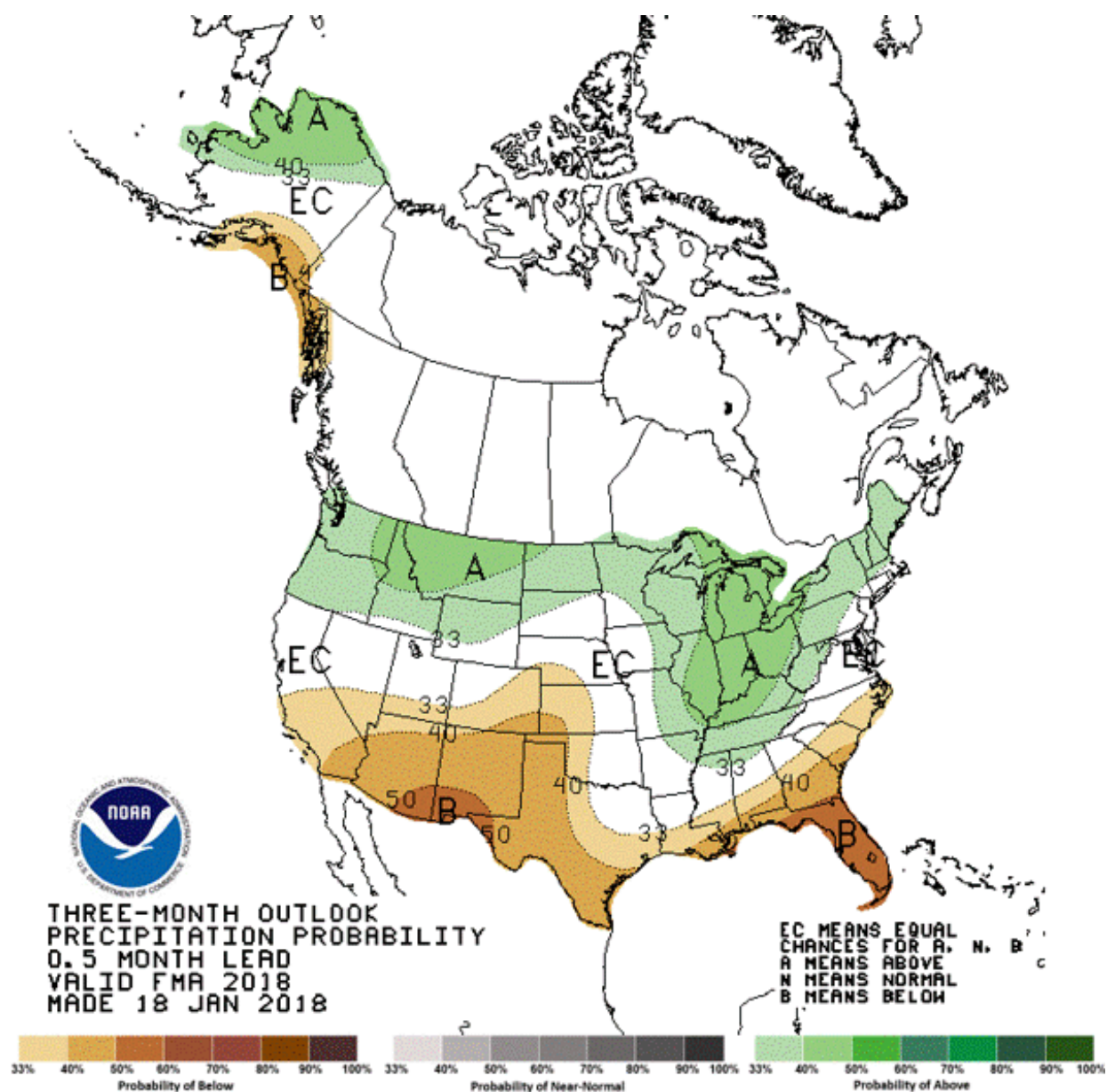
**Figure 3. Frequency and strength of precipitation anomalies during La Niña events (Climate Prediction Center)**

For Kansas, of the 15 La Niña events noted, only two events had a positive (above-normal) precipitation anomaly during the spring season of February through April. During the 2000 event, the February to April departure from the 1981-2010 normal was 2.41 inches, while the average deficit is -0.99 inches (figure 4).



**Figure 4. Precipitation departures from normal during La Niña events for Kansas. Weather Data Library**

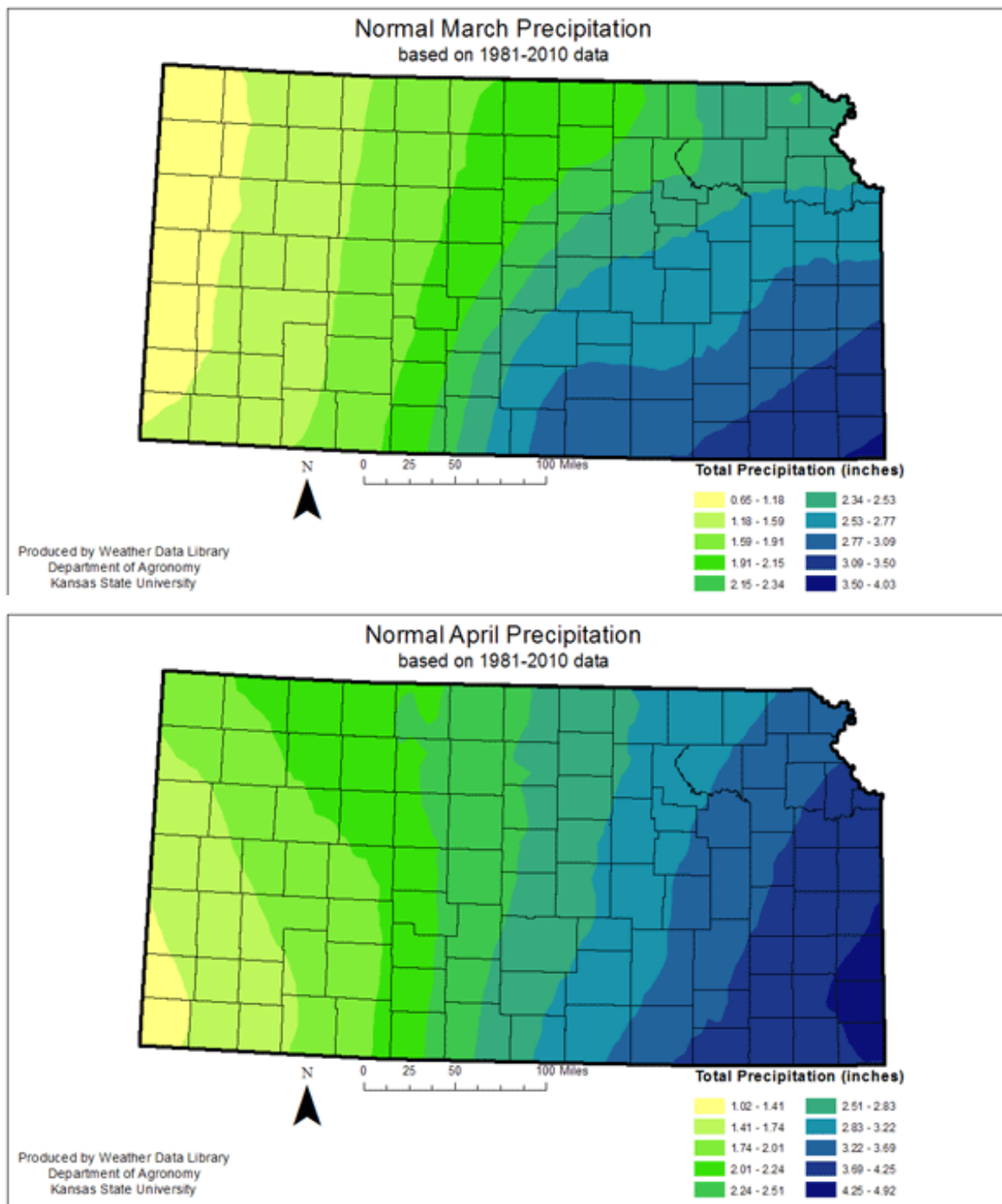
This pattern of a negative anomaly is one of the factors guiding the Climate Prediction Center's outlook for the period shown in Figure 5.



**Figure 5. Three-month precipitation outlook (Climate Prediction Center)**

As seen in the normal precipitation maps below, March and April are critical months for moisture. A dry pattern at this time will likely result in intensification of the current drought conditions.





**Figure 6. Normal precipitation in Kansas for March (upper) and April (lower) from 30 years of data.**

Mary Knapp, Weather Data Library  
[mknapp@ksu.edu](mailto:mknapp@ksu.edu)

Xiaomao Lin, State Climatologist  
[xlin@ksu.edu](mailto:xlin@ksu.edu)

## 5. Prescribed Burning workshops scheduled for 2018

Several Prescribed Burning workshops are currently scheduled for the remainder of the winter in Kansas, with the possibility of more upon request. The agencies involved include K-State Research and Extension, USDA-NRCS, USDA-FSA, Department of Wildlife, Parks, and Tourism, National Weather Service, and the Kansas Prescribed Fire Council.

Each workshop lasts about 4-5 hours and includes topics on reasons for burning, regulations, weather considerations, liability, burn contractors, equipment and crew, hazards, fuels, firebreaks, fire types and behavior, ignition techniques, and burn plans.

Contact Walt Fick at 785-532-7223 or [whfick@ksu.edu](mailto:whfick@ksu.edu) if you would like to host a prescribed burning workshop.

Workshop	Date	Location	Host/Contact	Agency	Phone	e-mail
Stafford Co.	Jan. 23	Hudson	Glenn Newdigger	KPFC	620-549-3502	gnewdigg@ksu.edu
Clay Co.	Feb. 20	Clay Center	Benjamin Hanson	FSA	785-632-3550	ben.hanson@ks.usda.gov
Reno Co.	Feb. 21	South Hutchinson	Jess Crockford	KPFC	620-669-8161	Jess.crockford@ks.usda.gov
Dickinson Co.	Feb. 26	Woodbine	James Coover	KSRE	785-263-2001	jcoover@ksu.edu
Saline Co.	Feb. 28	Salina	Tom Maxwell	KSRE	785-309-5850	tmaxwell@ksu.edu
Rooks Co.	Mar. 8	Stockton	Dorothy Heim	FSA	785-425-6302	dorothy.heim@ks.usda.gov

Walt Fick, Range Management Specialist  
[whfick@ksu.edu](mailto:whfick@ksu.edu)

## 6. K-State Pre-plant Corn School, January 30, Parsons

K-State Research and Extension will hold a Pre-plant Corn School on January 30 at the Southeast Research and Extension Center, 25092 Ness Road, Parsons, KS.

Registration begins at 8:30 a.m. with presentations to start at 9:00 a.m. The program will conclude with a lunch provided by Kansas Corn.

Featured topics include:

- Corn Cropping Systems
- Weed Control
- Soil Fertility

Speakers at the event:

- Dave Mengel, Soil Fertility Specialist
- Gretchen Sassenrath, Cropping Systems
- Doug Shoup, Southeast Area Agronomist
- Josh Coltrain, Wildcat Extension Agent



# Pre-Plant Corn School—Jan. 30, 2018

Southeast Research & Extension Center  
25092 Ness Rd, Parsons, KS

Registration begins at 8:30, Presentations begin at 9:00 and conclude with a Lunch sponsored by Kansas Corn.

**Topics Include:**

Corn Cropping Systems, Weed Control, and Soil Fertility.

**Presenters Include:**

Dave Mengel - Soil Fertility Specialist

Gretchen Sassenrath - Cropping Systems

Doug Shoup - Southeast Area Agronomist

Josh Coltrain - Wildcat District Extension Agent



K-State Research & Extension is an equal opportunity provider and employer

**K-STATE**  
Research and Extension

Wildcat District

## 7. K-State Pre-plant Corn School, February 1, Marysville

K-State Research and Extension will hold a Pre-plant Corn School on February 1 at the Helvering/Senior Center, 111 S. 8th Street, Marysville, KS.

Registration begins at 8:30 a.m. with presentations to start at 9:00 a.m. The program will conclude with a lunch provided by the sponsors. Please RSVP by January 26 at (785) 562-3531 or by email to [anastasia@ksu.edu](mailto:anastasia@ksu.edu)

Featured topics include:

- Weed control
- Planting practices
- Management practices
- Nutrient and N management

Speakers:

- Doug Shoup, Southeast Area Agronomist
- Ignacio Ciampitti, Crop Production and Cropping Systems Specialist
- Stu Duncan, Extension Agronomist
- Dorivar Ruiz Diaz, Soil Fertility and Nutrient Management Specialist



# Pre - Plant Corn School

**February 1**

**8:30 am – 1:00 pm**

Helvering/Senior Center  
111 S 8<sup>th</sup> St, Marysville, KS  
Lunch is provided.

No Cost to Attend.  
RSVP Required.  
Program starts at 9:00 am

Please RSVP by January 26 to:  
(785)562-3531 or [anastasia@ksu.edu](mailto:anastasia@ksu.edu)

## Topics

Weed Control  
Planting Practices  
Management Practices  
Nutrient and N Management

## Speakers:

Dr. Doug Shoup  
KSU Extension Weed Management State Leader

Dr. Ignacio Ciampitti  
KSU Crop Production & Cropping Systems

Dr. Stu Duncan  
KSU Extension Agronomist

Dr. Dorivar Ruiz Diaz  
KSU Soil Fertility & Nutrient Management

Thank you to our sponsors:



Marshall County

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact Anastasia Johnson, (785)562-3531.  
Kansas State University Agricultural Experiment Station and Cooperative Extension Service  
K-State Research and Extension 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](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)

## 8. Western Kansas Forage Conference, February 21 in Garden City

Kansas State University Research and Extension and the Kansas Forage and Grassland Council (KSFGC) in collaboration with a number of private forage industry supporters will be hosting the Southwest Kansas Forage Conference on February 21, 2018 at the Southwest Research-Extension Center in Garden City from 9:00 am-3:30 pm. The Southwest Research-Extension Center is located at 4500 E Mary Street, Garden City, KS, 67846.

Topics to be covered include:

- Impact of climate variability on western Kansas agriculture
- Nutritional value of forage sorghum
- Triticale forage production and variety selection
- Trucking and forage transportation rules and regulations
- Getting the most out of your silage
- Silage safety

This conference provides a platform to keep producers up-to-day on new research and technology development in the forage arena. Producers should consider this conference as an opportunity to refresh basic principles and to learn new principles that they can apply to their own situation.

Conference registration is \$25 per individual, and for an additional \$25 a farmer or rancher can support and gain the benefits of becoming a KSFGC member.

Online Conference Registration is available at <https://ksfgc.org/wkfc/>. The registration link can also be found at <http://www.southwest.k-state.edu/>. Advanced registration required by February 9, 2018.

Continuing Education credits have been applied for and should be available.

Please direct any questions to Mark Nelson at [info@ksfgc.org](mailto:info@ksfgc.org)



# 2018 WESTERN KANSAS FORAGE CONFERENCE

**FEBRUARY 21, 2018**

**SOUTHWEST RESEARCH-  
EXTENSION CENTER**

**4500 E Mary Street,  
Garden City, KS 67846  
9:00 A.M.—3:30 P.M. (CST)**

**Topics to be covered include:**

- Impact of climate variability on western Kansas agriculture
- Nutritional value of forage sorghum in silage feed production
- Triticale forage production, variety selection and future outlook
- Dairy Farmers of American Garden City Plant Update
- Trucking Laws
- Getting the most of your silage
- Silage safety

Online Conference Registration: <https://ksfqc.org/wkfc/>

Registration Link also @ <http://www.southwest.k-state.edu/>

Signup to Become Membership Online for an additional \$25.00  
@ <https://form.jotform.com/72816740441960>

*Presented by:*

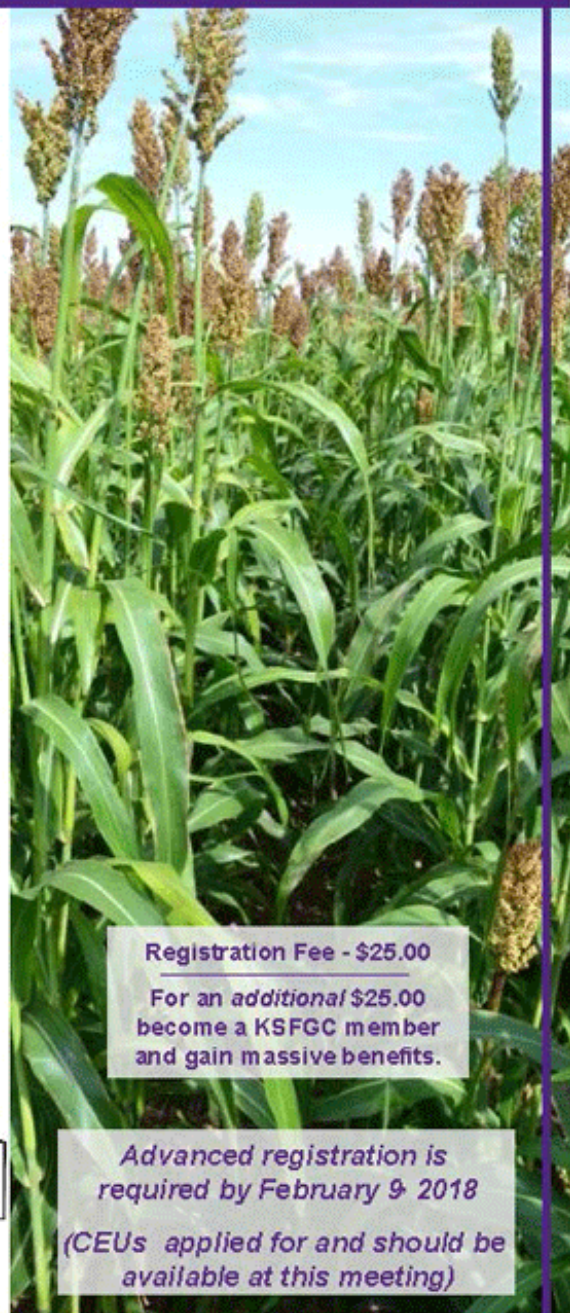
*K-State Research & Extension*

*Kansas Forage and Grassland Council*

**K-STATE**  
Research and Extension



Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, visual, or hearing disability, contact AJ Porter, 620-475-9164.  
Kansas State University Agricultural Experiment Station and Cooperative Extension Service  
K-State Research and Extension is an equal opportunity provider and employer.



**Registration Fee - \$25.00**

**For an additional \$25.00  
become a KSFGC member  
and gain massive benefits.**

**Advanced registration is  
required by February 9 2018**

**(CEUs applied for and should be  
available at this meeting)**

Kansas State University Department of Agronomy

2004 Throckmorton Plant Sciences Center | Manhattan, KS 66506

[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)

9. Register by January 31 for the K-State Sorghum Schools in early February



A series of three K-State Sorghum Production Schools will be offered in early February 2018 to provide in-depth training targeted for sorghum producers and key stakeholders. The schools will be held at three locations around the state.

The one-day schools will cover a number of issues facing sorghum growers: weed control strategies; production practices; nutrient fertility; and insect and disease management.

The dates and locations of the K-State Sorghum Production Schools are:

- **February 6** – Dodge City - Boot Hill Casino Conference Ctr., 4100 W Comanche St  
Andrea Burns, Ford County, [aburns@ksu.edu](mailto:aburns@ksu.edu), 620-227-4542
- **February 7** – Hutchinson – Hutchinson Community College, 1300 N Plum St  
Darren Busick, Reno County, [darrenbusick@ksu.edu](mailto:darrenbusick@ksu.edu), 620-662-2371
- **February 8** – Washington – FNB Washington 101 C Street, Box 215  
Tyler Husa, River Valley District, [thusa@ksu.edu](mailto:thusa@ksu.edu), 785-243-8185

Lunch will be provided courtesy of Kansas Grain Sorghum Commission. There is no cost to attend, but participants are asked to pre-register by January 31.

Online registration is available at: <http://bit.ly/KSSORGHUMSchools>

You can also pre-register by emailing or calling the nearest local K-State Research and Extension office for the location you plan to attend.

More information on the final program for each Sorghum School will be provided in upcoming issues

of the Agronomy eUpdate.

Ignacio Ciampitti, Cropping Systems Specialist  
[ciampitti@ksu.edu](mailto:ciampitti@ksu.edu)

Pat Damman, Kansas Grain Sorghum Commission  
[pat@ksgrainsorghum.org](mailto:pat@ksgrainsorghum.org)