

## **Extension Agronomy**

# eUpdate

## 05/18/2018

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.

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#### 1. Severe weather update: Widespread hail on May 14

On Monday, May 14, a thunderstorm developed outside of Denver metro and moved several hundred miles east/southeast through the day into western Kansas - dropping severe hail nearly the entire way (Figure 1). Hail that is 1 inch in diameter or greater is considered severe and will do damage to roofs, crops, vehicles, and even people. Hail also fell across central/east Kansas on this same day. However, this event was much more sporadic.



Figure 1. Storm Prediction Center (spc.noaa.gov) severe storm reports from Monday, May 14, 2018. Hail is marked by a green "H", wind - blue "W", and tornado - red "T".

Unfortunately for the narrow swath in western Kansas, this severe storm consisted of hailstones near the size of baseballs (2.75 inches). In combination with this large hail, strong winds of 40+ mph occurred with some gusts reaching up to 50 mph (measured at Lane Mesonet station, <u>mesonet.ksu.edu</u>). These winds increase the force of the hailstones impact resulting in increased damages - as was seen in wheat fields in the path of the storm (Figure 2). For wheat, this is poor timing due to the lack of time to recover before a typical June harvest. The hail damage is compounded by the pre-existing drought and freeze impacts many areas have already seen this year.

#### KansasWheat @KansasWheat · May 15



Impact of last night's hail storms just west of Dighton in Lane County. #wheat #kswx



Figure 2. Wheat damage in Lane County observed by Kansas Wheat (@kansaswheat) on Tuesday, May 15, 2018.

The swath of hail across western Kansas was also visible on satellite images. Infrared satellite band detects the temperature of the earth. With copious amounts of hail residing on the ground behind the storm and clear skies, the cooler temperatures associated with the hail was easily observed from space (Figure 3).



#### NWS Dodge City 🥏 @NWSDodgeCity · May 14

An amazing image from GOES 16 satellite imagery tonight. Check out the white streak! That is all the (cold) hail that piled up with the thunderstorm from Colorado through Scott and Lane counties. We received a report of 6" of baseball size hail in Lane county. Amazing! #kswx



#### Figure 3. GOES East satellite imagery via National Weather Service in Dodge City (@NWSDodgeCity). Green represents the clouds associated with the persistent storm moving eastward. Arrows point out the swath of cooler temperatures left behind from the hail.

#### Meteorology behind a hailstorm

It is very rare for a storm to travel this far, especially of this magnitude, for the majority of its life. Such storms are called *supercells* and are known for a long-lived, persistently rotating updraft - typically responsible for the most severe weather: large hail, damaging winds, and tornadoes. That strong rotating updraft is ideal to suspend hailstones, allowing them to accumulate more layers, becoming larger, until they are either thrown or fall out of the updraft.

Thunderstorms need four main ingredients in order to develop and survive: moisture, instability, lift, and shear. On Monday, shear was the biggest player with Effective Bulk Shear 50+ knots (kt) during the afternoon/evening (Figure 4). An environment 25-40 kt (or more) is needed for supercell development, which was easily achieved during this event.



Figure 4. Effective Bulk Shear as observed with the Storm Prediction Center (spc.noaa.gov) mesoanalysis data.

Lastly, instability in the corridor of the storm's track ranged from 1,000 - 2,000 joules per kilogram (J/kg). This is measured as the Convective Available Potential Energy (CAPE) as seen in Figure 5 below. While this isn't incredibly high, it was focused in an area of very cold temperatures aloft. By pushing hailstones into colder air, the super-cooled cloud droplets can accumulate more effectively, thus creating larger stones. On this day, temperatures around 18,000 feet ranged between -12 to -14 degrees F, while at 10,000 feet temperatures ranged from 8-10 degrees F. Therefore, with a strong updraft, upper level temperatures well below freezing were reached, optimizing hail growth.



180514/2200 MLCAPE (contour) and MLCIN (J/kg, shaded at 25 and 100)

## Figure 5. Convective Available Potential Energy (red lines) of the layers optimized by the thunderstorm (Mixed Layer) via the Storm Prediction Center (spc.noaa.gov).

While these are only a few factors, they played a significant role in developing and sustaining this hailstorm. The storm, like most severe weather in the Plains, was very isolated and didn't have substantial spatial coverage outside the narrow corridor. Most significant impacts were quite localized, especially from north to south with sharp cut-offs.

#### From the Kansas Mesonet

Lastly, there was an interesting observation from weather stations across the region that were impacted either directly or indirectly. All measured a significant rapid drop in temperature associated with either hail, cloud cover, or cold outflow winds (Figure 6).



## Figure 6. Kansas Mesonet stations observed a substantial drop in temperatures (shaded area) from west to east with storm's passage at Wallace, Leoti, and Lane stations (mesonet.ksu.edu).

Another interesting perspective is melting hail. Hail accumulates in the rain gauge orifice and must melt before being measured. Temperatures were above-freezing, however, melting is a much longer process due to the dense nature of hailstones. Therefore, light moisture was measured for up to 20 minutes after the event despite rainfall having already ended (Figure 7).



Figure 7. Orange-shaded time period represents actual duration of the storm (15 minutes) while the blue-shaded period is the additional 20 minutes of melting hail. Data from the Lane Mesonet station (mesonet.ksu.edu).

Christopher Redmond, Kansas Mesonet <u>christopherredmond@ksu.edu</u>

Mary Knapp, Weather Data Library mknapp@ksu.edu

#### 2. Update on alfalfa insect activity in Kansas

Most alfalfa monitored in north central Kanas in the last week has started flowering and swathing seems to be well underway. Alfalfa weevil infestations, which we sampled throughout NC KS, never did exceed an overall 30% infestation level (using the cut stem bucket shake method). This year, any time larval numbers started increasing, a sub-freezing cold spell came through and killed many newly hatched larvae.

Since alfalfa fields were not treated for alfalfa weevils, they are currently a great place for many beneficial insects. Uncut fields sampled in the last week had healthy populations of pea aphids as well as a few spotted alfalfa aphids.





However, as beneficial populations increase, these aphid populations are rapidly declining. Presently there are many lady beetles, both larvae and adults, and more adults will be active very soon as there are also many pupae. There are also significant numbers of parasitic wasps parasitizing these aphids as indicated by many mummies.









Additionally, there are a few green lacewings present. All this beneficial insect activity results in aphid populations declining significantly in the fields we sampled. On 11 May, pea aphid populations averaged 50-60/stem, dropping to 6-7/stem on 16 May. Hopefully, after swathing, the beneficials will still be present in sufficient numbers to continue providing aphid control but fields should still be monitored. For more information relative to alfalfa insect management, please refer to the 2018 Alfalfa Insect Management Guide: https://www.bookstore.ksre.ksu.edu/pubs/mf809.pdf

#### Grasshoppers

Very small grasshopper nymphs were first detected this past week. Grassy areas, waterways, and field borders will have the small grasshoppers first and thus should be monitored weekly to determine grasshopper densities.



Jeff Whitworth, Extension Entomologist jwhitwor@ksu.edu

Holly Davis, Research Extension Associate holly3@ksu.edu In 1982, British entomologist H.L.G. Stroyan distinguished a subspecies of *Metopolophium festucae*, *sensu stricto*, as *Metopolophium festucae* (*M.f.*) *cerealium* based on morphological (structural) characteristics. While *M.f. sensu stricto* infests various wild grasses and is only incidental on grain crops, *M.f. cerealium* is a potentially significant pest of cereals, especially wheat. Although this aphid complex has been present in North America since the 1970s, it was not until 2011 that significant *M. f. cerealium* infestations of wheat (as well as barley and oats) were discovered in the Pacific Northwest. The winged adults are pale yellowish with dark markings on the dorsal surface (Figure 1), whereas apterae (wingless) are pale yellow, similar in color to sugarcane aphids, but with a longer, less globular body shape (Figure 2).



Figure 1. Winged adult of M. festucae.



#### Figure 2. Wingless M. festucae.

On the morning of May 17, 2018, we collected a number of winged *M. f. cerealium* using a sweep net in wheat plots at the Agricultural Research Center-Hays. Other aphids present included *Sitobion avenae* and *Rhopalosiphum padi*, but all three species were present in low numbers, and were accompanied by the usual complex of aphid predators. It should also be noted that apterous (wingless) *M. f. cerealium* were not found, so the winged forms are most likely very recent migrants. It is quite possible that existing biological controls will maintain this new aphid below economic levels along with all the other species present in wheat, but farmers should be vigilant for possible outbreaks in particular fields, especially later-maturing varieties that will give the aphids more time to feed and increase their numbers. It is also possible for these aphids to move to spring oats and barley after winter wheat matures.

J.P. Michaud, Professor of Entomology, K-State Agricultural Research Center-Hays jpmi@ksu.edu

#### 4. Kansas weather outlook for summer 2018

The Climate Prediction Center has released the Summer Outlook. In general, the outlook has a slightly increased chance of warmer-than-normal temperatures for the period of June through August. That is an average of the 3-month period, so a warm start doesn't eliminate a cool end to the season. Warmer than normal temperatures are expected remain through the end of May. The Climate Prediction Center's one-month outlook for June calls for an increased chance of above normal temperatures state wide.



## Figure 1. Summer temperature outlook on the left (CPC); Kansas normal summer average temperatures on the right (Weather Data Library).

Normal highs in mid-July (middle of the summer) range from 90 degrees F at Concordia to 94 degrees F at Elkhart.

The precipitation outlook is less clear. There are equal chances for above- or below-normal precipitation across the state. In western Kansas, that amount ranges from 7.39 – 8.75 inches, while in eastern Kansas, the amount ranges from 13 inches to over 15 inches.



## Figure 2. Summer precipitation outlook on the left (CPC); Kansas normal summer precipitation on the right (Weather Data Library).

The El Niño Southern Oscillation (ENSO) is expected to be neutral throughout the period. The La Niña conditions, with cooler waters, have faded. There is a slight chance for an El Niño developing in the fall. El Niño conditions frequently favor higher-than-normal precipitation in the Plains.

The warmer-than-normal temperature outlook is driven mainly by decadal (10-year) patterns. Note that this is the average of the three-month period, and doesn't eliminate the possibility of colder-than-normal conditions during the summer months. The precipitation outlook is driven mainly by the sea-surface temperature and constructed analog models. Keep in mind, the skill with both outlook products is weakest with neutral ocean temperatures and doesn't account for individual events such as a thunderstorm or tropical system that produces a heavy rainfall event. Warmer-thannormal temperatures would increase the opportunity for late-planted spring crops to mature before the first frost, but could increase the evaporative demand and have flowering/grain-fill occur under less favorable conditions.

Mary Knapp, Weather Data Library mknapp@ksu.edu

Christopher Redmond, Kansas Mesonet Christopherredmond@ksu.edu

#### 5. 2018 Field Pea and Wheat Plot Tour - June 14

Rawlins County Extension will be holding a field pea and wheat plot tour on Thursday, June 14.

Topics to be discussed include:

- End-use options
- Variety information
- Disease pressures
- Weed control prior to harvest

Speakers include Erick DeWolf, KSU Plant Pathologist, and Lucas Haag, Northwest Area Agronomist. Refreshments and sandwiches will be served in the field. For an accurate meal count, please RSVP by Monday, June 11 at 785-626-3192.

#### • Field Pea Plot – 4:00 pm

Directions: From the intersection of highways 36 and 25 in Atwood, go north on Hwy.
25, 4 miles. Pea plot is located on the east side of the road, just after Kastens' grain bins.

#### Wheat Plot – 5:30 pm

Directions: From the intersection of highways 36 and 25 in Atwood, go north on Hwy.
25, 6 miles to Road X. Turn left (west), plot is located on the south side of Road X.



## 2018 Field Pea & Wheat Plot Tour

## Thursday June 14, 2018

4:00pm–Field Pea Plot 5:30pm – Wheat Plot

## Directions to Plots:

• **Directions to Field Pea Plot:** From the intersection of highways 36 and 25 in Atwood, go north on Hwy 25, 4 miles. Pea plot is located on the east side of the road, just after Kastens' grain bins.

#### Directions to Wheat Plot:

From the intersection of highways 36 and 25 in Atwood, go north on Hwy 25, 6 miles to Road X. Turn left (west), plot is located on the south side of Road X.

#### Speakers Include:

Erick DeWolf, Professor of Plant Pathology

Lucas Haag, Area Agronomist



**Rawlins County** 

## Topics Include:

End Use Options, Varieties, Disease Pressures, Weed Control Prior to Harvest

### Refreshments and sandwiches will be served in the field

Join us for a combination plot tour, RSVP's requested by Monday June 11<sup>th</sup> at 785-626-3192 (for meal count).

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 LOCAL NAME, PHONE NUMBER.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity provider and employer.

#### 6. K-State Wheat Plot Tours for May 21-25 and May 29-June 1

The weeks of May 21-25 and May 29-June 1 features 31 wheat plot tours in Kansas. Producers wanting to learn about the different varieties can choose to attend one (or several) plot tours in their county or agricultural district.

The plot tours generally include a discussion of wheat conditions across the state, as well as tips on what to look for when selecting wheat varieties. New and upcoming varieties are discussed, as well as older and more established ones, and a discussion of how all these varieties are responding to this growing season's conditions.

#### For the week of May 21-25, the plot tour locations include:

Monday, 5/21/2018, 9:00 a.m. Location: Reno Co., Nickerson Contact: Darren Busick, 620-662-2371, darrenbusick@ksu.edu Directions: 1/2 mile west of Sego Road on 56th street near Nickerson.

Monday, 5/21/2018, 12:00 p.m.

Location: Reno Co., Haven

Contact: Darren Busick, 620-662-2371, darrenbusick@ksu.edu Directions: 2.5 miles south of 50 highway on Mayfield Road near Haven.

#### Monday, 5/21/2018, 6:00 p.m.

Location: Sumner Co., Belle Plaine

Contact: Randy Hein, 620-326-7477, rvhein@ksu.edu Directions: Meal – 1459 E.  $60^{th}$  Avenue North, Southeast of Belle Plaine Plot – 1 ½ mile east, ¾ mile south of address, west side of road

Tuesday, 5/22/2018, 7:30 a.m. Location: Labette Co., Parsons Contact: Lyle Lomas, 620-421-4826, llomas@ksu.edu Directions: Kansas State University's Southeast Research and Extension Center, 25092 Ness Road.

#### Tuesday, 5/22/2018, 8:30 a.m.

Location: Sedgwick Co., Andale Contact: Zack Simon, 620-200-0413, zsimon@ksu.edu Directions: More details soon

Tuesday, 5/22/2018, 8:30 a.m. Location: Ellis Co., Hays Contact: Guorong Zhang, 785-625-3425, gzhang@ksu.edu Directions: K- State Agricultural Research Center-Hays. 1232 240th Ave, Hays, KS 67601

Tuesday, 5/22/2018, 10:30 a.m. Location: Sedgwick Co., Clearwater

Contact: Zack Simon, 620-200-0413, zsimon@ksu.edu Directions: More details soon

#### Tuesday, 5/22/2018, 5:00 p.m.

#### Location: Reno Co., Hutchinson

Contact: Jane Lingenfelser, 785-317-3391, jling@ksu.edu Directions: K-State South Central Experiment Field, 10620 S. Dean Road

#### Tuesday, 5/22/2018, 6:00 p.m. Location: Sumner Co., Caldwell

Contact: Randy Hein, 620-326-7477, rvhein@ksu.edu Directions: From Caldwell, west on Bluff City Rd, ¼ mile north of town, west side of road, south of cemetery.

#### Wednesday, 5/23/2018, 10:00 a.m. Location: Comanche Co., Coldwater

Contact: Aaron Sawyers, 620-582-2411, asawyers@ksu.edu Directions: 8 miles north of Coldwater HWY 183, east of Clark and Alice Smith's house. Meal to follow tour.

#### Wednesday, 5/23/2018, 4:00 p.m. Location: Finney Co., Garden City

Contact: A.J. Foster, 620-276-8286, anserdj@ksu.edu Directions: Spring Field Day. K-State Southwest Research-Extension Center. 4500 E. Mary Street, Garden City, KS 67846

#### Wednesday, 5/23/2018, 6:00 p.m.

#### Location: Sumner Co., Conway Springs

Contact: Randy Hein, 620-326-7477, rvhein@ksu.edu Directions: From Conway Springs, go north to 140 Ave N, east ¾ mile, plots south side of road

#### Thursday, 5/24/2018, 8:30 a.m.

#### Location: Dickenson Co., Solomon

Contact: Tom Maxwell, 785-309-5850, tmaxwell@ksu.edu Directions: Located 3 miles west of Solomon on Old Hwy 40, then 2 1/2 miles south on Gypsum Valley Road

#### Thursday, 5/24/2018, 11:00 a.m.

#### Location: Saline Co., Mentor

Contact: Tom Maxwell, 785-309-5850, tmaxwell@ksu.edu Directions: Located ½ mile west of Mentor at intersection of Old Hwy 81/Mentor Rd

#### Thursday, 5/24/2018, 2:00 p.m.

#### Location: Ottawa Co., Minneapolis

Contact: Tom Maxwell, 785-309-5850, tmaxwell@ksu.edu Directions: Located 1 ½ miles west of K-106 Highway on Justice Rd

#### Thursday, 5/24/2018, 6:00 p.m. Location: Barton Co., Susank (RSVP by 5/22)

Contact: Stacy Campbell, 620-793-1910, scampbel@ksu.edu Directions: from Hoisington go N. on blacktop--Susank Rd. at Susank go 4 miles E. on the blacktop, turn N. onto NE40 Ave. go 1 mile N. to NE 200 Rd., turn E on 200 and go about 3/8 mile. Meal will follow plot tour at the Beaver Volunteer Fire Dept. Station

#### For the week of May 29-June 1, the plot tour locations include:

#### Tuesday, 5/29/2018, 9:00 a.m.

#### Location: Smith Co., Smith Center

Contact: Sandra Wick, 785-282-6823, swick@ksu.edu Directions: South of Smith Center on Hwy 281 to 190 Road, 4 mi east to T road, 1 mile south then ½ mile east on north side.

#### Tuesday, 5/29/2018, 10:30 a.m.

#### Location: Smith Co., Smith Center

Contact: Sandra Wick, 785-282-6823, swick@ksu.edu Directions: 1.5 miles east of Junction Hwy 281/36 on the north side. LUNCH following plot tour at 12:30 pm ½ miles west of Osbourne on Hwy 24 at Solomon Rapids Seed.

#### Tuesday, 5/29/2018, 10:30 a.m.

#### Location: Jewell Co., Jewell

Contact: Sandra Wick, 785-282-6823, swick@ksu.edu Directions: North of Jewell on Hwy. 14 to K Road, then 3 miles west on the north side. Lunch to follow plot tour at the BLUE water tower at the Jewell Park Shelter House.

#### Tuesday, 5/29/2018, 10:30 a.m.

#### Location: Ellsworth Co., Lorraine

Contact: Sam Lincoln, 785-472-4442, samlincoln@ksu.edu Directions: From Lorraine, 2.75 miles west on Ave V, 1 mile south on 7th Road. Plots are on the east side of the road. Sponsored lunch to follow at the Central Plains Coop in Lorraine.

#### Tuesday, 5/29/2018, 1:30 p.m.

#### Location: Osborne Co., Osborne

Contact: Sandra Wick, 785-282-6823, swick@ksu.edu Directions: East of Hwy 271/24 junction to 60 Road, then ½ mile south on east side.

#### Tuesday, 5/29/2018, 4:30 p.m.

#### Location: Mitchell Co., Beloit

Contact: Sandra Wick, 785-282-6823, swick@ksu.edu Directions: South of Beloit on Hwy 14 to X road, then 4.5 miles west, on the north side of road. Supper to follow plot tour at the Fletchall house.

#### Wednesday, 5/30/2018, 8:30 a.m.

#### Location: Rush Co., LaCrosse

Contact: Chris Long, 785-798-3921, clong@ksu.edu Directions: From LaCrosse, go 7 miles west on Hwy 4, continue west 1 1/2 miles on Ave L, plot is on the south side.

#### Wednesday, 5/30/2018, 1:00 p.m.

#### Location: Ness Co., Ness City

Contact: Chris Long, 785-798-3921, clong@ksu.edu Directions: From Ness City, go 7 miles south on Hwy 283 to 60 Rd, west 7 miles to L Rd, south 1 1/4 miles, on east side.

#### Wednesday, 5/30/2018, 6:00 p.m.

#### Location: Lane Co., Dighton

Contact: Chris Long, 785-798-3921, clong@ksu.edu Directions: From Dighton, go 7 miles west on Hwy 96, turn south on Eagle Rd for 2 miles, turn back west, plot is on the south side.

#### Wednesday, 5/30/2018, 6:30 p.m.

#### Location: Riley Co., Randolph

Contact: Greg McClure, 785-537-6350, gmcclure@ksu.edu Directions: Bruce Kaump Farm – from Randolph, 5 miles north on Hwy 77, then 2.25 miles east on Rose Hill Road.

#### Thursday, 5/31/2018, 8:30 a.m.

#### Location: Rooks Co., Between Stockton and Plainville

Contact: Cody Miller, 785-543-6845, codym@ksu.edu Directions: More details soon

#### Thursday, 5/31/2018, 11:00 a.m.

#### Location: Rooks Co., Phillipsburg

Contact: Cody Miller, 785-543-6845, codym@ksu.edu Directions: More details soon

#### Thursday, 5/31/2018, 6:00 p.m. Location: Ellis Co., Victoria

Contact: Stacy Campbell, 785-628-9430, scampbel@ksu.edu

Directions: From I-70 take the Victoria exit 168 go 2.5 miles N. on Cathedral Ave./HWY 255, turn W. onto Fairground Rd. go 1.5 mile. From Catharine go ½ E. turn S. onto 310, go 1 mile and turn E. onto Fairground Rd., go 1.5 miles. Meal will follow at the city park, beside the swimming pool on Iron Street.

#### Friday, 6/1/2018, 3:00 p.m.

#### Location: Harvey Co., Harvey

Contact: Ryan Flaming, 316-284-6930, flaming@ksu.edu Directions: S Hillside Road and SE 96th street.

#### Friday, 6/1/2018, 6:00 p.m. Location: Harvey Co., Harvey

Contact: Ryan Flaming, 316-284-6930, flaming@ksu.edu

Directions: Delange Seed meal to occur at Camp Hawk, located on SW 36th street. From the junction of I-135 and 36th St. turn west on 36th St. and go 2 miles. The wheat plot will follow the meal, and is located at SW 48th and Meridian St., approximately 1/2 mile west of Camp Hawk then south 3/4 mile on the west side of the road.

The eUpdate will highlight upcoming tours each week in its regular Friday edition.

Romulo Lollato, Extension Wheat and Forages Specialist lollato@ksu.edu

Erick DeWolf, Extension Wheat Pathologist dewolf1@ksu.edu

\*Please note the corrected directions to the Kingman County location – Kathy Gehl, eUpdate Editor

The latest research and production information on winter canola will be featured at K-State Research and Extension (KSRE) field days on May 18 and May 30, 2018.

The field days are opportunities to see winter canola variety trials and producer fields, said Mike Stamm, K-State canola breeder. New and experimental varieties will be on display and a discussion will be held on the challenges of the current growing season.

"The production year has not been without its struggles, starting with dry conditions for establishment last fall and expanding drought" said Stamm. "We want to reassure producers that there are benefits to growing canola in rotation even in the years when we know production is going to be down."

With harvest season approaching, harvest management options will also be discussed.

The dates, location, and schedule for the field days are:

- May 18 Kingman County\*
  - The program begins at 9:00 a.m. at the variety trial and demonstration plots, three miles south of Norwich and one-half mile **WEST** on SE 160th St., just off of KS-2 highway. New cultivars and production practices will be discussed. Refreshments will be provided. <u>Please RSVP to Jake Renner, jwrenner@ksu.edu, or by calling 620-532-5131 by Wednesday, May 16.</u>
- May 30 Harper County
  - The program begins at 11:00 a.m. at the variety demonstration plot located 1.5 miles east of Danville on US-160 highway. Lunch is sponsored by Progressive Ag Coop. <u>Please RSVP to Monte Hampton at 620-561-1088.</u>

For more information, contact Mike Stamm at 785-532-3871 or mistamm@ksu.edu.

#### 8. Spring Field Day: South Central Experiment Field, May 22

The Spring Field Day at the South Central Experiment Field will be held May 22, starting at 5:00 p.m. The event will be held at 10620 South Dean Road, Hutchinson, Kansas.

The main topics will include:

- Wheat Varieties Allan Fritz, K-State Wheat Breeder
- Cover Crops for Weed Suppression Anita Dille, K-State Weed Ecologist
- Water Quality Concerns in South Central Kansas Nathan Nelson, K-State Soil Fertility and Nutrient Management
- Economic Status of Farms in South Central Kansas in 2017 Bryan Manny, Kansas Farm Management Association

More information about the field day is available by calling Jane Lingenfelser at 785-532-7251, or <u>jling@ksu.edu</u>. A meal will follow the field day program.



## SPRING FIELD DAY

South Central Kansas Experiment Field Hutchinson, Kansas



May 22, 2018 5:00 p.m.

Location: 10620 South Dean Road, Hutchinson Dinner will follow program.

Field Day Topics

- Wheat varieties..... Allan Fritz, KSU Agronomy
- Cover crops for weed suppression...... Anita Dille, KSU Agronomy
- Water quality concerns in south central Kansas...... Nathan Nelson, KSU Agronomy
- Economic status of farms in south central Kansas in 2017..... Bryan Manny, Kansas Farm Mgmt Assoc.

\*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, or a dietary restriction, please contact Jane Lingenfelser (785) 532-7251.

#### 9. Spring Crops Field Day: Southeast Research and Extension Center, May 22

The Southeast Research and Extension Center in Parsons will host a Spring Crops Field Day on Tuesday, May 22 to update producers in the region on the latest information on wheat varieties, crop production, and disease management.

The field day starts with registration and a complimentary breakfast courtesy of several sponsors from 7:30 to 8:30 a.m. at the Southeast Research and Extension Center, 25092 Ness Road, (immediately south of U.S. Highway 400), Parsons, Kansas.

The program includes:

Wheat Variety Plot Tour – Allan Fritz, K-State wheat breeder, Lonnie Mengarelli, K-State research assistant, and seed company representatives

**2018 Grain Markets: Outlooks and Strategies** – Dan O'Brien, Extension Agricultural Agronomist, K-State Research and Extension

Managing Root Diseases of Soybean in Kansas - Chris Little, Plant Pathologist, K-State

**Timing of Side-dress Applications of Nitrogen for Corn Grown in Different Tillage Systems** – Dan Sweeney, Soil and Water Management, K-State Southeast Agricultural Research Center

There is no cost to attend. In the event of rain, the program will be conducted indoors. Please contact Marla Sexton at 620-820-6133 for more information.

#### 10. Spring Field Day: Southwest Research and Extension Center, May 23

The Southwest Research-Extension Center will host its Spring Field Day on Wednesday, May 23. Registration and introductions will begin at 4:00 p.m. The event will conclude at 7:00 p.m. with supper. The Center is located at 4500 E. Mary Street, Garden City, Kansas.

The Spring Field Day is an annual event hosted at the Southwest Research and Extension Center for more than a decade. It provides an opportunity for K-State researchers to engage with local producers, provide updates, and receive feedback on the status of current research programs.

Producers attending the field day will learn about wheat and canola varieties and agronomy management practices to maximize productivity.

This field day provides a platform to keep producers up-to-date on new research and technology and serves as a medium for dialogue between researchers and producers. Producers should consider this conference as an opportunity to refresh basic principles and to learn new principles they can apply to their own situation.

The event is free and supper will be provided courtesy of industry supporters. Continuing education credits have been applied for and should be available at this meeting.

Advance registration is important to ensure supper will be available for all attendees. Please contact Ashlee Wood at 620-276-8286 or email <u>awood22@ksu.edu</u> by **5 p.m. on May 18** to register.

For more information on the program, contact A.J. Foster at 620-276-9164, or email anserdj@ksu.edu.

#### SOUTHWEST RESEARCH-EXTENSION SPRING FIELD DAY MAY 23, 2018 4:00 - 7:00 PM (CST)

#### K-State Southwest Research-Extension Center 4500 E. Mary Street, Garden City, KS 67846



<u>Topics & Tours to be covered include:</u> Wheat Variety Tour Canola Variety Tour Agronomy Management Discussion (fertility, wheat protein, fungicide, weeds, insects, irrigation, PGR etc.)



#### Cost: None - Sponsored Supper Provided

Advance registration is required by May 18, 2018 RSVP online at <u>http://www.southwest.k-state.edu</u> or contact Ashlee Wood by email <u>awood22@ksu.edu</u> or call (620)276-8286

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

#### SPONSORED BY:



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