

AGRICULTURE & NATURAL RESOURCES  
**NEWSLETTER**  
**NOVEMBER 2025****AGENT NOTES**

November rolls around and there is still field work to wrap up and winter preparations to complete. The local harvest of corn and beans looks to be lingering due to weather conditions and the uncertainty of markets. From reports there is a lot of variation of quality and yield, but most yields seem average at best. The last few days of October brought forth uncertainty to the cattle markets with rumors of increasing beef imports and a glimpse of hope that trade will open back for grain markets to recover and exports to increase. I can't go without saying this year has been trying on our farmers. As we approach the holidays be mindful of what we must be thankful for, whether it be another crop to harvest, our health, our families amongst all the hardships; perseverance and resiliency are the backbone characteristics that all agriculturalists possess, but we need to be there for each other and lift each other up. Final thoughts are although harvest season will wind down as the month progresses be mindful of those around you in agriculture give thanks and tell them how much you appreciate all they do so we can all reap the benefits of a safe and wholesome food supply. As always stay safe and HAPPY THANKSGIVING!!!

**Adam Thomas**LaRue County Extension Agent  
for Agriculture & Natural Resources Education  
[adam.thomas@uky.edu](mailto:adam.thomas@uky.edu)**CALENDAR  
OF EVENTS**

- November 6<sup>th</sup>-20<sup>th</sup> - North American International Livestock Expo, Louisville, KY
- November 11<sup>th</sup> - LaRue County Cattleman's Meeting 6pm. Extension Office
- November 27-28<sup>th</sup> - Thanksgiving Holiday- Office Closed
- December 3<sup>rd</sup>-6<sup>th</sup> - KYFB Annual Meeting- Louisville, KY
- December 9<sup>th</sup> - Tri-County Grain Day Program- Hardin County Extension
- December 9<sup>th</sup> - LaRue County Cattleman's Holiday Dinner 6pm Extension Office
- December 24<sup>th</sup> - Jan 2<sup>nd</sup> - Christmas and New Year's Holiday- Office Closed



## FORAGE

### *Timely Tips*

- Apply 30-40 lbs/N/acre to strengthen cool-season grass sods going into winter.
- If not already done, inventory hay and assess hay quality.
- Using a plate meter or grazing stick, estimate stockpile available for winter grazing.
- Adjust animal numbers or purchase additional hay to balance forage-feed supply to livestock needs.
- Graze crop residues and cover crops that will not overwinter. Be careful to avoid fields that contain johnsongrass that have recently frosted.
- Graze winter annuals that will not overwinter such as brassics and oats.
- Graze other winter annuals once they are 6-8 inches tall and are well anchored. Do NOT graze closer to 4 inches.
- Sugar content will rise in tall fescue with the cool temperatures and short days of fall. Alkaloid content of tall fescue can also be high in certain years, but will begin decline after a hard freeze.
- Talk with local conservationist about developing a grazing plan and cost-share opportunities.

## GENERAL LIVESTOCK

### *Reminders*

- Have your hay supply analyzed for nutritive quality and estimate the amount of supplementation needed. Consider purchasing feed now.
- Take soil tests and make fertility adjustments (phosphate, potash, and lime) to your pastures.
- This is a good time to freeze-brand bred yearling heifers and additions to the breeding herd.
- Graze alfalfa this month after a “freeze-down” (24 degrees for a few hours).
- Don’t waste your feed resources. Avoid excessive mud in the feeding area. Hay feeding areas can be constructed by putting rock on geotextile fabric. Feed those large round bales in hay “rings” to avoid waste. Concrete feeding pads could be in your long-range plans.

## Cattle Owners!

What’s buggin’ you  
and your cattle? We  
want to know!

Tell us about pests of your  
cattle to inform research and  
education in Kentucky



#### Investigators

Hannah Tiffin, PhD  
Assistant Professor  
Entomology Dept.  
MG-CAFE  
University of Kentucky

Kenneth Burdine, PhD  
Professor  
Agricultural Economics Dept.  
MG-CAFE  
University of Kentucky



Routine testing is free for  
LaRue County residents.

**FARM. GARDEN. LAWN.**

LaRue County Extension Service  
807 Old Elizabethtown Rd., Hodgenville



## UPCOMING WEBINARS

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### UK Beef Management Webinar Series

Registration is necessary, however, if you received this email directly from Darrah Bullock then you are already registered. If you received this from another source, or have not registered previously, then please send an email to [dbullock@uky.edu](mailto:dbullock@uky.edu) with Beef Webinar in the subject line and your name and county in the message. You will receive the direct link with a password the morning of each meeting. This invitation will directly link you to the site and you will be asked for the password which can be found just below the link. Each session will be recorded and posted for later viewing. All meeting times are 8:00pm ET/7:00pm CT. **Note: Meeting days have changed to the second THURSDAY of each month!!!**

November 13, 2025

**Winter Feeding Approaches: Matching Strategy to Your Herd and Resources** – Katie VanValin, Assistant Extension Professor, University of Kentucky

December 11, 2025

**Shooting the Bull: Answering all your Beef Related Questions!** – Updates and Roundtable discussion with UK Specialists

January 8, 2026

**Making the Most of the Good Years: Profits, Reinvestment, and Tax Management in Beef Cattle Operations** – Jonathan Shepherd, Agricultural Extension Specialist, University of Kentucky

February 12, 2026

**Impact of Bull Nutrition During Development on Semen Quality** – Pedro Fontes, Associate Professor, University of Georgia

March 12, 2026

**Bull Selection Practices in Kentucky: What are we Doing Right and What Could we Improve!** – Darrah Bullock, Extension Professor, University of Kentucky

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## CROP PROTECTION WEBINARS

*Preregistration is required.*

Register now for multiple webinars focusing on agronomic crops & integrated Pest Management. The University of Kentucky Martin-Gatton College of Agriculture, Food and Environment will present the 2025 Fall Crop Protection Webinar Series, hosted through Southern Integrated Pest Management Center. The series will begin at 10 a.m. ET/9 a.m. CT on Thursday October 30th and will continue consecutive Thursday mornings through November 20th at the same time. Each webinar will be one hour in length. Continuing or 4 CEUs total for participation in all four webinars; Kentucky pesticide applicators will receive 1 CEU in Category 1A (Ag Plant) for each webinar attended.



**Webinar #1: Oct. 30, 2025; 9 a.m. CT** — Dr. Carl Bradley, Extension Plant Pathologist  
Title: Research Update on Red Crown Rot of Soybean

Registration link: [https://zoom.us/webinar/register/WN\\_lvKR5RuTR7iSKizMCGh36e](https://zoom.us/webinar/register/WN_lvKR5RuTR7iSKizMCGh36e)



**Webinar #2: Nov. 6, 2025; 9 a.m. CT** — Dr. Raul Villanueva, Extension Entomologist  
Title: Delayed Appearance or Declining Insect Pest Numbers in Field Crops in Recent Years

Registration link: [https://zoom.us/webinar/register/WN\\_gmiW6VE5R5GzmJlulSbiDw](https://zoom.us/webinar/register/WN_gmiW6VE5R5GzmJlulSbiDw)



**Webinar #3: Nov. 13, 2025; 9 a.m. CT** — Dr. Kiersten Wise, Extension Plant Pathologist  
Title: Stopping Southern Rust: Scouting, Spraying, and Staying Ahead

Registration link: [https://zoom.us/webinar/register/WN\\_uRGIZOK-T1KCnRBvU3LscA](https://zoom.us/webinar/register/WN_uRGIZOK-T1KCnRBvU3LscA)



**Webinar #4: Nov. 20, 2025; 9 a.m. CT** — Dr. Travis Legleiter, Extension Weeds Specialist  
Title: Defense Wins the Ryegrass Battle

Registration link: [https://zoom.us/webinar/register/WN\\_X72Xki21OzGKix2BA9Ht6w](https://zoom.us/webinar/register/WN_X72Xki21OzGKix2BA9Ht6w)



THE KY INVASIVE PLANT COUNCIL PRESENTS

# 2025 INVASIVE PLANT CONFERENCE

**NOV 18, 9-3:30 ET**

EASTERN KENTUCKY UNIVERSITY  
PERKINS CENTER  
822 HALL DR, RICHMOND, KY 40475  
\$75, LUNCH & CEUS INCLUDED

MORNING TALKS  
POSTER SESSION (SIGN UP TO PRESENT)  
AFTERNOON FIELD TRIPS

REGISTER HERE



[forestry.ca.uky.edu/invasive-plant-conference](https://forestry.ca.uky.edu/invasive-plant-conference)

KENTUCKY

# Fruit & Vegetable Conference 2026

BOWLING GREEN, KY | JANUARY 11-13  
SLOAN CONVENTION CENTER

## REGISTER TODAY



<https://kentuckyhorticulturecouncil.ticketps.com/2026kyvattendee>




## DRONE PILOT CERTIFICATION WORKSHOP

AN INTENSIVE WORKSHOP TO PREPARE CANDIDATES FOR THE FAA'S PART 107 DRONE PILOT CERTIFICATION EXAM

**December 15-16, 2025  
Madisonville, KY**




Class size is limited!

Course: \$400  
Exam: \$175

<https://KATSDronePilotCertificationDec2025.eventbrite.com>

- All study materials included
- Lunch provided both days

**MORE INFORMATION**

Contact: Lori Rogers  
[lori.rogers@uky.edu](mailto:lori.rogers@uky.edu)  
270-365-7541 Ext 2137

**KATS.CA.UKY.EDU**

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Kentucky Agriculture Training School

**Cooperative Extension Service**  
Agriculture and Natural Resources  
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4-H Youth Development  
Community and Economic Development

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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.  
Lexington, KY 40506



## Winter Grain Day

College of Agriculture, Food and Environment  
Cooperative Extension Service

**Tuesday December 9th | 9 AM - 1 PM ET**

Hardin Co. Extension Office  
111 Opportunity Way, Elizabethtown, KY




Register [Here](#) by December 5th  
Or call/text: 270-765-4121  
Lunch provided by Hardin County Grain Committee



**Marketing Plans  
Risk  
Management**

Dr. Grant Gardner  
Ag Economist,  
Grain Crops  
UK College of Ag  
Food & Environment



**Seed & In-Furrow  
Treatments  
Grain Update**

Dr. Chad Lee  
Grain Crops  
Specialist  
UK College of Ag  
Food & Environment



**Ag Laws  
Right - of - Way  
Pesticide Laws**

Clint Quarles  
Legal Counsel  
Kentucky  
Department of  
Agriculture

**Cooperative Extension Service**  
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

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# LIQUID OR DRY FERTILIZER PRODUCTS & THEIR PLACEMENT: *What Matters & Why*

*Dr. Edwin Ritchey, UK Extension Soil Specialist and Dr. John Grove, UK Soils Research & Extension*

This newsletter starts by addressing the age-old question about different fertilizer forms and sources. We also discuss the various placement options. Many claim that a liquid fertilizer is more efficient and more available for plant use than a dry source. For example, liquid fertilizers are assumed to be immediately available to the plant while dry fertilizers must dissolve over several days/weeks/months before they can be taken up by the plant. There are also claims that it only takes a fraction of a liquid source to equal nutrient provision by a dry source. We will discuss these two points in more detail and then expand on some of the caveats that help these claims continue to circulate.

First, a pound of a nutrient is a pound of a nutrient, regardless of the source. The nutrient concentration is simply the nutrient weight per unit source weight. Using nitrogen (N) for this example, there are 34 lb N/100 lb ammonium nitrate, 46 lb N/100 lb urea, and 32 lb N/100 lb 32% UAN (urea ammonium nitrate) solution. The fact that 32% UAN solution is a liquid doesn't change things, other than how the calculation is made. There is about 3.5 lb N/gallon 32% UAN solution. To make this calculation one needs to know the N concentration (32%) and the product density (total weight per gallon – 11.06 lb).

The second part of the liquid versus dry discussion comes down to the difference in nutrient availability. Liquid fertilizers are often promoted as being more available to plants since the nutrients are already dissolved in the liquid source, unlike the dry solid form that must dissolve before being available for plant uptake. Dry forms do have to dissolve in the soil solution prior to being plant available. However, the time that is needed for urea and most other common fertilizers (i.e. ammonium sulfate, diammonium phosphate (DAP), monoammonium phosphate (MAP), muriate of potash, etc.) to dissolve is very short in the presence of soil water. This process usually takes minutes to hours, not days to weeks depending on soil moisture content. The amount of water needed for dry fertilizer dissolution is minimal. Regardless of the nutrient form there must be soil moisture sufficient for nutrient movement to the plant root. If sufficient water is available for nutrient movement to the plant root by mass flow or diffusion, there will be enough soil water to dissolve dry fertilizer particles. The difference in nutrient movement due to the initial fertilizer form (liquid or solid) is minimal and both forms are equally available and effective in providing crop nutrition.

One caveat to this discussion is related to some of the less common forms of fertilizers primarily used in organic crop production. These products are much slower to breakdown than many other "conventional" fertilizers. Rock phosphate contains around 25-40% phosphate ( $P_2O_5$ ) but only a fraction becomes available in a growing season. Rock phosphates are acidulated during processing to make MAP/DAP fertilizers, which greatly increases phosphate solubility and plant availability compared to the original rock phosphate. Further, the availability of phosphorus (P) from rock phosphate is increased with grinding to a finer particle size and application to acid soils but is still far less soluble than MAP/DAP. Another example is the potassium (K) fertilizer salts. Many K fertilizers are water-soluble, crystalline salts in nature. Muriate of potash (KCl) and potassium sulfate are good examples of highly soluble K fertilizers. Conversely, a slowly soluble K fertilizer would be greensand. Like rock phosphate, greensand is not highly soluble or readily plant available. These are very different from the dry fertilizer products commonly used in commercial agriculture.

A final consideration in this discussion is fertilizer placement. Fertilizer form and placement are strongly linked. Generally, fertilizer placement in a band, both on or below the soil surface, is easier with a liquid product than a dry product. The most common band applications occur at planting, either in the row (in-furrow) or 2 inches over from and 2 inches below the seed furrow depth (2x2). The placement of either dry or liquid fertilizers will provide equivalent amounts of available nutrient to the plant, assuming all other factors are the same. However, there are some different fertilizer properties to consider when banding nutrients, dry or liquid. In-furrow placement raises the potential for seed damage/delayed seedling emergence/reduced stand. Products like KCl (dry product) have a high salt index that can have detrimental effects on seed germination. A similar response due to high salt index can be observed with potassium thiosulfate (liquid product). Band applications of both products are based on pounds of K<sub>2</sub>O per acre, regardless of the form. Liquid sources are typically easier to handle in many situations and often require fewer stops at planting. Saddle tanks for a liquid source on the pulling tractor can often hold more fertilizer than dry fertilizer boxes on the planter.

Most micronutrients are available in both dry and liquid forms, but micronutrient source choices are more dependent on effective placement because of the small amount of nutrients needed to meet crop needs. Some dry micronutrient materials are difficult to use and spread via bulk blends. Dry micronutrients can be found co-granulated with either MAP or KCl, which improves their distribution spread as a bulk blend. More often water-soluble micronutrient production system. A liquid source may be favorable to a dry source when applying nutrients at planting or sidedressing, but plant availability will be similar regardless the form. When it comes down to using a liquid or dry fertilizer source, make sure to consider all the factors behind the decision: price and management options.

As the American poet Gertrude Stein said – a rose is a rose is a rose. The same generally holds true for fertilizer – fertilizer is fertilizer is fertilizer. When deciding which nutrient source to use, it simply comes down to two things. The first consideration is cost of different sources. Unless there is an agronomic performance reason or management advantage for one source to be a better choice than another, price matters. The second consideration is what works best in the individual operation, especially equipment considerations.

*Citation: Ritchey, E., Grove, J., 2025. Liquid or Dry Fertilizer Products and Their Placement: What Matters and Why. Kentucky Field Crops News, Vol 1, Issue 10. University of Kentucky, October 10, 2025. Photo by Matt Barton, University of Kentucky.*





# COVER CROP CONSIDERATIONS FOR 2026

*Dr. Chad Lee, UK Grain Crops Specialist*

*Dr. Erin Haramoto, UK Weed Science Research*

*Dr. Hanna Poffenbarger, UK Soils Research*

Farmers in Kentucky have been managing many fields no-till and low-till for decades. Cover crops are needed to help reduce soil erosion, especially when following soybeans. Soybean residue is decomposing by February in many fields, leading to soil erosion. The top priority of a cover crop in these fields is to reduce soil erosion.

## **Going with a Grain**

The best options for reducing soil erosion are the small grains – wheat, barley and cereal rye. These three crops usually have good seed quality, grow well in our fields and will produce root systems that help reduce soil erosion. Plant wheat, barley or cereal rye in October, preferably, or November with a drill with disk openers. The drill with disk openers will provide adequate soil-to-seed contact, which is necessary given the dry conditions this fall. Seeding rate can be between 40 to 60 lbs per acre, trending toward the higher rate with later plantings.

If the soil test calls for phosphorus to be applied, apply DAP (18-46-0) in the fall. That little bit of nitrogen with the DAP will help establish the cover crops.

Terminate the cover crop about 4 weeks before planting corn in the spring. Using a herbicide like glyphosate to terminate before planting corn will reduce potential competition with the corn crop. The remaining cover crop root system will stay mostly intact for at least 4 to 6 weeks following termination, helping to hold soil in place.

Using a single or mix of these cereal cover crops (wheat, barley and/or cereal rye) and terminating about 4 weeks before corn planting probably provides the best combination of inexpensive seed, success in establishment, and reduction of soil erosion. This approach will require an additional 20 to 40 pounds of nitrogen per acre in the following corn crop.

## **Other Species**

Legumes are often used to provide some plant available nitrogen to the following corn crop. Crimson clover and Austrian winter pea can be planted on the middle of October. Brassicas like radishes are reported to help with soil compaction in some cases. Brassicas should be planted in September for best results. If the legume is terminated early (4 weeks or so before planting), there is little to no nitrogen benefit to the following corn crop. Most radishes selected for cover crops in this region will be killed by freezing temperatures well before planting corn. Other brassicas like canola (or oilseed rape) will survive most winters in Kentucky.

Legumes and brassicas have many benefits, but are often slow to establish in fall and, with the exception of oilseed radishes, do not provide adequate groundcover on their own. Therefore, if the goal is to reduce soil erosion, legumes and brassicas should be mixed with a small grain cover crop. Glyphosate alone may not be sufficient to terminate the mixed species cover crops. If these mixes are terminated 4 weeks before planting corn, there is an expectation that an additional 20 to 40 pounds of nitrogen per acre is needed for the corn crop.



LaRue County

PO Box 210, 807 Old Elizabethtown Road

Hodgenville, KY 42748-0210

RETURN SERVICE REQUESTED

## VENISON CHILI



### Venison Chili

- 1 pound ground venison
- 1 large onion, chopped
- ½ green pepper, chopped
- 2 tablespoons vegetable oil
- 1 (16 ounces) can diced tomatoes
- 2 (16 ounces) cans chili beans, undrained
- 1 (8 ounces) can tomato sauce
- 1 bay leaf
- ½ teaspoon salt
- ½ teaspoon cumin
- ½ teaspoon garlic powder
- 1 tablespoon chili powder
- Black pepper to taste

In a Dutch oven or large skillet, brown meat, onion, and green pepper in vegetable oil. Add remaining ingredients. Simmer 1 hour on low heat, stirring frequently. Remove bay leaf before serving.

**Alternative to stove-top cooking:** use slow cooker set on high for 4 hours

**Yield:** 10 servings

Adapted from Wild Game: From Field to Table, Sandra Bastin, PhD, RD, Extension Food and Nutrition Specialist. Revised July 2007