

January 2025 ISSUE

# AGRICULTURE & NATURAL RESOURCES NEWSLETTER



*Lindsay Arthur*  
Bourbon County Cooperative  
Extension Agent For  
Agriculture and Natural  
Resources

**UK** Martin-Gatton  
College of Agriculture,  
Food and Environment  
University of Kentucky.

**Bourbon County Extension Service**  
603 Millersburg Road Paris, KY 40361  
Office: (859) 987-1895  
bourbon.ca.uky.edu



## KENTUCKY PRIVATE PESTICIDE APPLICATOR TRAINING PROGRAM



University of Kentucky  
College of Agriculture,  
Food and Environment  
Cooperative Extension Service



**Limited seating  
available.**

**Call 859-987-1895  
to RSVP**

**January 24th  
9 AM**

**February 4th  
5:30 PM**

**This training also meets  
education requirement for CAIP.**

*Private applicator means a person is certified for Restricted Use pesticides for personal use.  
It does NOT cover commercial use of pesticides.*

## Upcoming dates:

- Jan. 20th - Office closed
- Jan. 24th- Pesticide training
- Jan. 27th- Grain Producer Seminar
- Jan. 29th - BQCA
- Feb. 4th - Winter Wheat Meeting
- Feb. 24th - BQCA
- Feb. 25th - Alfalfa & Stored Forages Conference
- Feb. 27th - Pastures Please

### Cooperative Extension Service

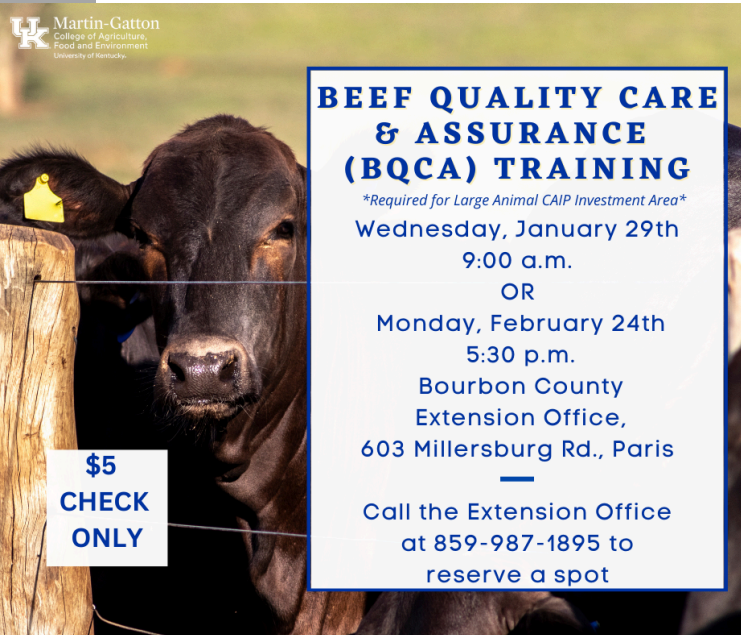
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

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Disabilities  
accommodated  
with prior notification.



**BEEF QUALITY CARE  
& ASSURANCE  
(BQCA) TRAINING**

*\*Required for Large Animal CAIP Investment Area\**

Wednesday, January 29th  
9:00 a.m.  
OR  
Monday, February 24th  
5:30 p.m.  
Bourbon County  
Extension Office,  
603 Millersburg Rd., Paris

Call the Extension Office  
at 859-987-1895 to  
reserve a spot

**\$5  
CHECK  
ONLY**

## 2025 WINTER WHEAT MEETING

**February 4, 2025**

**Bruce Convention Center**  
Hopkinsville, KY 42240

**9am-3pm central**  
Registration 8:30 ct

*CCA and Pesticide Credits pending.*

**What are We Learning From YEN in KY? - Phil Needham**

**Herbicide Residual Application Timing for Ryegrass Control - Dr. Travis Legleiter**

**On-farm Grain Fumigation Options - Josh Wilhelm**

**Dealing with DON: Management of Fusarium Head Blight and DON in Wheat - Dr. Carl Bradley**

**How Nitrogen and Sulfur Fertility Influences Wheat Grain Yield and Protein Content - Dr. Edwin Ritchey**

**Current Wheat Crop Update - Dr. Chad Lee**

**Wheat Varieties Tolerance to Metribuzin and Opportunities to Improve Italian Ryegrass Management - Dr. Samuel Revolinski**

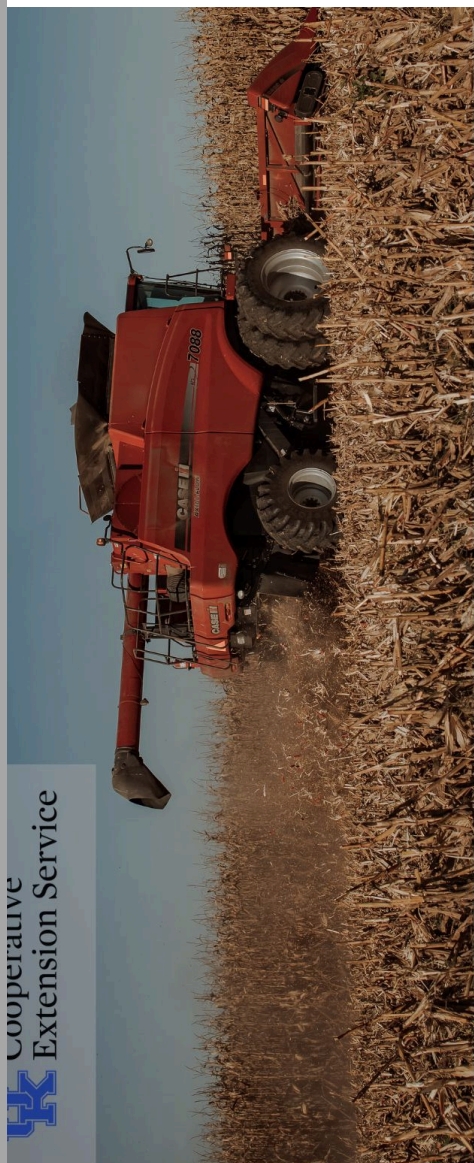
**Overview of Kentucky Wheat Yield Contest 2015-2024 - Dr. Mohammad Shamim**





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**Cooperative  
Extension Service**

# 2025 CENTRAL KENTUCKY GRAIN PRODUCER SEMINAR

**Monday January 27th, 2025 from 9:00 am - 12:00 pm**  
**Location: Scott County Extension Office**  
 1130 Cincinnati Rd. Georgetown, KY  
**Please RSVP: (502) 863-0984**  
**LUNCH WILL BE SERVED**

Dr. Chad Lee	Dr. Grant Gardner	Dr. Carl Bradley
Grain Crops Specialist	Agriculture Economist	Plant Disease Specialist

For more information and to RSVP contact  
the Scott County Extension Office at  
502-863-0984 or email  
brittany.brewer@uky.edu.

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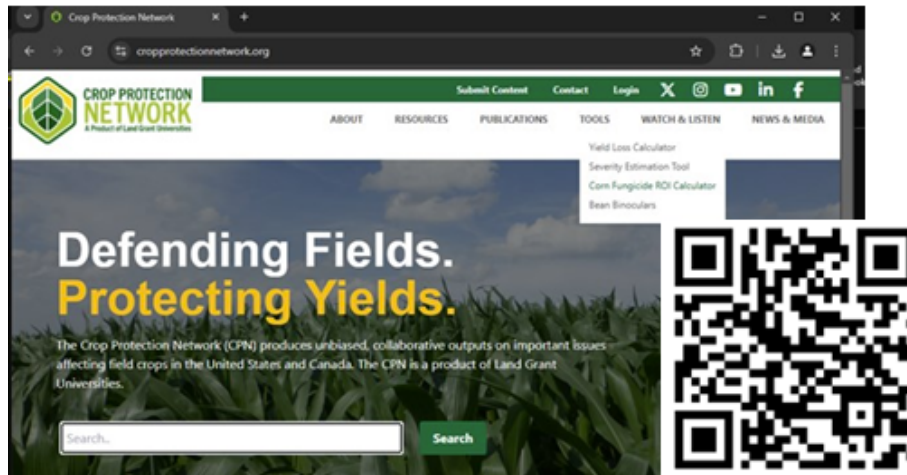


Disabilities accommodated with prior notification.

# A New Tool to Help with Corn Fungicide Decisions in 2025

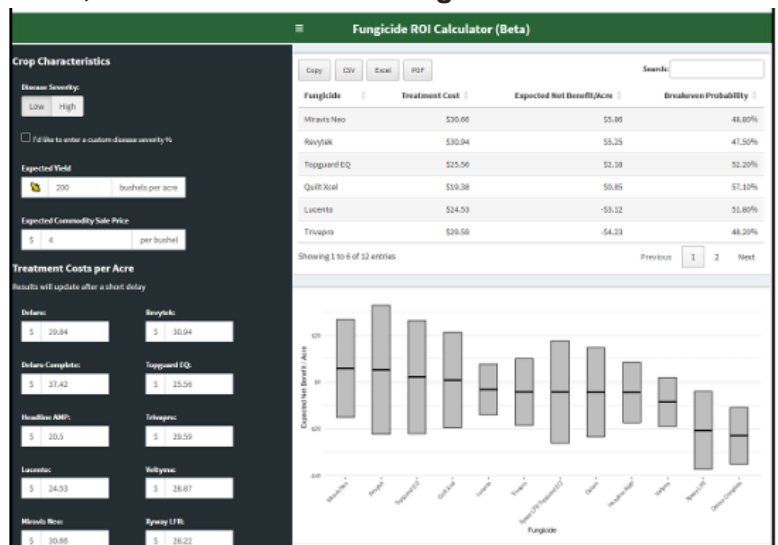
Dr. Kiersten Wise, Extension Plant Pathology

Farmers and other stakeholders have a new resource to help them make fungicide input decisions in corn. The interactive Corn Fungicide ROI Calculator is available through the Crop Protection Network website, <https://cropprotectionnetwork.org/fungicide-roi-calculator>. This calculator uses multiple years of University corn fungicide datasets from across 19 U.S. states and Ontario Canada to help predict the probability of a positive return on investment (ROI) for a range of fungicide products and economic scenarios in corn.



The tool, built in collaboration with the Crop Protection Network and the University of WisconsinMadison Data Science Institute, has over 1,100 data points and multiple Kentucky trials incorporated into the data set used for analysis. Southern rust and tar spot were prominent diseases in many of the trials included in the data set, which also increases the relevancy to Kentucky farmers, as these are diseases that can be economically important in Kentucky. The tool can be customized to reflect the user's expected yield, contracted or expected corn pricing, and actual fungicide costs from retailers or industry representatives. These customized numbers are used to calculate real estimates of ROI and the breakeven probability of specific products and expected yields, based on robust fungicide data sets. Results are based on a single fungicide application that occurs at tasseling/silking (VT/R1). The calculator will be updated annually with additional University data sets, improving its prediction accuracy and relevance over a broad geography. For questions on the calculator, contact Kiersten Wise, Extension Plant Pathologist at [Kiersten.wise@uky.edu](mailto:Kiersten.wise@uky.edu).

Figure 2. Example ROI calculated for an expected yield of 200 bushels per acre and an expected commodity sale price of \$4/bushel at a range of default fungicide prices.



# 2025 Horses & Horsemen:

Join us for the 18th annual

# PASTURES PLEASE!!

## Thursday, February 27



### Schedule:

5:30—Meal

6:00—Aerial Applications: Does a Drone Fit

— Brett Reese

6:30—Weeds to Watch Out For

— Dr. Bill Witt

7:00—Cost Share Opportunities for Horse Owners

— Krista Lea

## RSVP to 859-257-5582

**Fayette County  
Extension Office**

1140 Harry Sykes Way  
Lexington, KY 40504

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



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## January Tips & Tidbits

### Feeding your Horse

- A major cost of owning a horse is the feed.
- Setting up a suitable feeding program that meets the nutrient needs of your horses requires planning.
- All horses require a source of calories, protein, minerals, vitamins, and water. How much of each nutrient will depend on what the horse is doing.
- The horse at maintenance can be fed an all forage diet supplemented with salt and minerals.
- A lightly worked horse may require a concentrate added to its diet of hay and pasture to meet the extra calories needed for work.

### Feeding Considerations

- Determine nutrient needs based on the horse. Consider its age, its size, and the stage of production.
- Evaluate available feeds. What kind of forage do you have and how much? Will you need to supplement the forage with a concentrate?
- Decide if horses need to be grouped or fed as individuals. Consider how feeding practices can help you deal with either timid or aggressive horses.
- Provide all horses with adequate access to water. To see the different classes of horses refer to the appendix at the back of the calendar.

### Body Condition Score (BCS)

- Get to know your horse by assessing its body condition score, or the amount of fat it is carrying.
- Understand your horse's fat cover and adjust management practices according to your horse's needs.

- Assess fat both visually and by palpation in the six areas where horses accumulate fat: loin, ribs, tail head, withers, neck, and shoulders.
- Know what the BCS means. For example, a horse with a BCS of 4.5 or below may not have the needed fat stores to maintain health if stressed. A horse that is lactating, exposed to extreme cold, or under other severe stress will benefit from a condition score of 6 or 7.
- Remember that horses with high condition scores are predisposed to problems, but the problems are less immediate than those of a horse in poor body condition.
- Assess your horses' BCS in January to determine the effectiveness of diet changes you made in the fall and adjust accordingly to maintain your horses in the appropriate body condition.

See UK College of Agriculture, Food and Environment publications *Help! My Horse is Too Fat* (ASC-187) and *Help! My Horse is Too Thin* (ASC-188) for more information.

### Farrier

- Find a reliable farrier in your area and arrange for them to work on your horses needed.
- Most horses require hoof care every 6 to 8 weeks, either in the form of trimming or shoeing.
- Remember that regular foot care to prevent a problem is easier that trying to fix a problem.



## **Six easy steps to maximize your pasture success with clover frost seeding**

Kentucky's weather conditions are predictably unpredictable. During the Kentucky Forage and Grassland Council assembly in November, board members discussed a possible shift in optimal timing for frost seeding clover -- broadcasting red clover into winter wheat just before green-up -- due to the increasingly milder winters. With that said, be careful when making statements about Kentucky weather as weather variation complicates predicting the optimum period for frost seeding clovers.

As legumes, clovers are an essential part of a strong and healthy nitrogen cycle in grasslands. Distributing six pounds of red clover and one to two pounds of white clover over a grassy area with some bare soil in the later part of winter, combined with minimal competition control, can develop high-quality pasture. The advantages of cultivating clover are substantial, encompassing natural nitrogen fixation, and enhanced forage quality and yield. Particularly noteworthy is recent U.S. Department of Agriculture research indicating that red clover can significantly mitigate the vasoconstrictive effects of toxic endophyte tall fescue, making it an exceptionally valuable crop.

Frost seeding is a preferred establishment method due to its minimal equipment requirements. Typically, a small spinner seeder attached to a tractor or four-wheeler is all you would need for seed distribution. Red and/or white clover are well-suited for frost seeding as they exhibit rapid germination, shade tolerance, and vigorous root and shoot development in their seedling stages. Their small, smooth seeds are readily incorporated into the top quarter inch of soil through natural weather patterns or animal movement. Despite the numerous advantageous clover traits are for establishment, it is crucial to adhere to the fundamental requirements of forage establishment, even in low-input methods like frost seeding. These essentials include:

Conduct soil analysis and apply necessary nutrients. Clovers thrive in soil with a pH of 6.5 to 7 and medium to high levels of phosphorus and potassium. Nitrogen should only be added when diammonium phosphate is required for phosphorus provision.

Choose a high-quality variety. Opt for an improved variety with established performance and genetics. Selecting a superior red clover variety can yield up to three tons more hay per acre and extend the stand's lifespan compared to common, unclassified seeds. The University of Kentucky provides extensive yield data and persistence of white and red clover varieties for hay and pasture, available at [http://forages.ca.uky.edu/variety\\_trials](http://forages.ca.uky.edu/variety_trials). It is advisable to check with seed suppliers to see if your favorite variety is available.

Apply an adequate quantity of seed. Typical seeding rates range from 8 to 12 pounds of red clover and one to two pounds of white/ladino clover per acre. A reduced rate, such as six pounds of red and one pound of white clover, still results in over 55 seeds per square foot (37 red and 18 white).

Ensure seed contact with bare soil. Removing excess grass or thatch, revealing bare ground, is imperative before overseeding. A major cause of frost seeding failures is excessive ground cover. Farmers can achieve bare soil exposure through controlled cattle movement or mechanically using a chain harrow.

Achieve optimal seed-soil contact. Frost seedings rely on precipitation and the freeze-thaw cycle to integrate clover seeds into the top quarter inch of soil. Utilizing a corrugated roller post-seeding can further enhance soil contact.

Manage competition the following spring. Avoid additional nitrogen application on overseeded fields. Be prepared for timely mowing to control grass or weed overgrowth above the clover. Although clover seeds are inherently vigorous, controlling competition can expedite and improve establishment.

With careful attention to soil fertility, variety selection, seeding rate, seed placement and competition management, clover can be successfully frost seeded into existing grass pastures.

Source: Dr. Jimmy Henning, UKY Forage Specialist

# Plate it Up

## Kentucky Proud Recipe



### Cauliflower Mushroom Poppers

1 head cauliflower, chopped	¼ cup Parmesan cheese	1 teaspoon salt
60 whole baby Portabella mushrooms	¾ cup crushed bran flakes	¼ teaspoon pepper
1 cup nonfat plain yogurt	½ cup chopped red bell pepper	½ teaspoon garlic powder
½ cup reduced fat shredded cheddar cheese	½ cup chopped green bell pepper	Paprika

**Preheat** oven to 325 degrees F. **Grease** a 9-by-13-inch baking pan. **Steam** the cauliflower by placing in a saucepan in ½-inch of boiling water, cover with lid and cook for 5 minutes. **Drain.** **Place** cooked cauliflower in a bowl and **mash** using a potato masher. **Remove** the stems and **scoop** out the caps of mushrooms. **Chop** stems for later use. **Combine** yogurt, cheddar cheese, Parmesan cheese, bran flakes, bell peppers, salt, pepper and garlic powder in a medium

bowl. **Stir** in cauliflower and ½ cup of the reserved chopped mushroom stems. **Stuff** the cauliflower mixture into the hollowed mushroom caps. **Sprinkle** with paprika. **Bake**, uncovered for 20 minutes.

**Yield:** 20 servings, 3 mushrooms per serving

**Nutritional Analysis:** 45 calories, 1.5 g fat, 1 g saturated fat, 5 mg cholesterol, 200 mg sodium, 5 g carbohydrate, 1 g sugars, 4 g protein.

## Kentucky Cauliflower

**SEASON:** June, September, October and early November.

**NUTRITION FACTS:** Cauliflower is low in calories, with only 25 calories per half cup serving. It is very low in sodium and has no fat or cholesterol. A serving provides 10 percent of the Daily Recommended Value of folate, 8 percent of dietary fiber and potassium and 100 percent of the recommended amount of vitamin C.

**SELECTION:** Heads should be creamy white in color, firm and heavy. Look for tight, unblemished curds and fresh looking leaves and stalk.

**STORAGE:** Cauliflower may be stored for up to one week in a plastic bag in the refrigerator. Keep it dry and do not wash it until

ready to use. Any brownish colored bruises may be trimmed away before cooking.

**PREPARATION:** Cauliflower is best eaten raw or cooked barely tender and snowy white. It can be delicious, or it can be strong, mushy and beige in color if cooked for too long. Remove green stalks. Wash and soak, in cold salted water for 30 minutes. Leave the head whole, or break into florets. Cook covered in water until tender.

**PRESERVING:**

**Freezing:** Break flowerets into pieces about 1 inch across. Wash and blanch 3 minutes in boiling water, chill and drain. Label and date the package. Freeze immediately. Use all frozen produce within a year.

**KENTUCKY CAULIFLOWER**

**Kentucky Proud Project**  
County Extension Agents for Family and Consumer Sciences

University of Kentucky, Dietetics and Human Nutrition students

**October 2016**

**Source:** [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov)

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.  
<http://plateitup.ca.uky.edu>



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