Cooperative Extension Service

Hickman County Agriculture and Natural Resources Newsletter

April/May 2024

Cooperative Extension Service

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

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities accommodated with prior notification.

Lexington, KY 40506

Early Morning Temperatures Apr 22 May Impact Some Wheat Growing Areas in KY

Carrie Knott, Extension Grain Crop Agronomist

Across Kentucky, virtually all the wheat crop is late boot, heading or in many areas beginning to flower. The early morning low temperatures Apr 22 were quite literally frosty. In some areas, the low temperatures (Figure 1; Table 1; Table 2) were in the range that could potentially cause damage to the wheat crop (Table 3). Although the minimum air temperature recorded at 2.0 meters may not have fallen to or below the critical temperatures that may cause wheat damage, it is likely that the temperature was lower at the height of the wheat heads as illustrated for many of the KY Mesonet Temperature Inversion sites (Table 2). Therefore, it will be important to scout for freeze damage prior to making decisions on the profitability of applying wheat head fungicides this year.

It will take at least five to seven days with high temperatures of at least 40°F to be able to see damage. Given this week's forecast, we should be able to easily see freeze damage as early as Monday April 29.

For a visual guide to identify freeze damage refer to AGR-253: Identifying Damage and Estimating Yield Reductions following a Spring Freeze in Winter Wheat.

For videos demonstrating how to assess freeze damage at different growth stages visit the following:
jointing (https://www.youtube.com/watch?app=desktop&v=oaPiOU-s-Ro)
flowering (https://youtu.be/u0DUgEa23bE)
during grain fill (https://youtu.be/OhcqjeiIE8s).

2024 Crop Protection Network Virtual Crop Scout School Webinars Available

The 2024 Virtual Crop Scout School webinars are now available for viewing on the Crop Protection Network (CPN). The scout school consists of over 30 webinars from crop protection specialists across the United States. Webinars are available from multiple extension specialists at the University of Kentucky, including JD Green, Edwin Ritchey, Kiersten Wise and Travis Legleiter.

These are short and focused webinars that cover the basics for pest management and agronomic topics that are relevant to farmers, crop consultants, industry, extension personnel and others. The webinars can be used as training tools for new personnel, or as a knowledge refresher for more experienced professionals.

Dr. Kiersten Wise
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Maximizing Value: 2024 Spring Application of Broiler Litter for Grain Crop Production

Author(s): Jordan Shocklev
Published: March 28, 2024

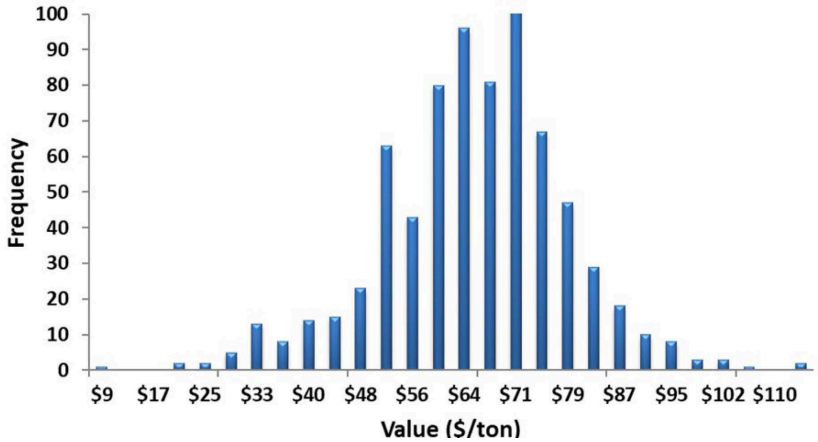
Spring is here and grain producers across the state are gearing up for planting. One of the many decisions producers have to make before planting is in regard to their nutrient management plan. Broiler litter provides a great opportunity as a complete fertilizer and is being produced and used throughout the state in grain production. However, the value of broiler litter can vary greatly depending on the management practices, nutrient content of the litter, soil test data and commercial fertilizer prices.

Spring application of broiler litter maximizes plant available nitrogen resulting in the maximum economic value of broiler litter. As mentioned in previous issues, the average nutrient content of a ton of broiler litter in Kentucky (as received) is 50 lbs of nitrogen, 56 lbs of phosphorous, and 47 lbs of potassium. In addition to three macronutrients, broiler litter contains other beneficial elements such as micronutrients (zinc and copper), other secondary macronutrients (calcium carbonate, magnesium, and sulfur), and organic matter which are difficult to quantify in value. For this analysis, the three primary macronutrients (N, P2O5, and K2O) will be used to determine the value of broiler litter. If your soil test recommendations supported the application of broiler litter and you applied or plan on applying this spring, that is equivalent to 50% commercial nitrogen, 80% commercial phosphorous and 100% commercial potassium per ton of broiler litter (as received). Therefore, the nutrients that would be available to the crop from an average ton of broiler litter in Kentucky would be 25 lbs of nitrogen, 45 lbs of phosphorous, and 47 lbs of potassium. With current fertilizer prices of $564/ton for Urea ($0.61/lb N), $760/ton for DAP ($0.59/lb P2O5), $505/ton for potash ($0.42/lb K2O), and $13.50/ton for lime (at the quarry), the average expected value of broiler litter is $64/ton. Therefore, if you can buy broiler litter and have it delivered and spread for less than $64/ton this Spring, broiler litter is a better economic option than commercial fertilizer. Last year, with considerably higher fertilizer prices, the nutrient value of an average ton of broiler litter was $73/ton. But remember, broiler litter nutrient content will vary (see max and min values in Table 1). Figure 1 applies current fertilizer prices to each broiler litter sample submitted for analysis to illustrate the range and frequency in the value of a ton of broiler litter. Given the wide range in value, make sure you measure broiler litter for nutrient content to understand what you are receiving and avoid the risk of overpaying for broiler litter.

Table 1: Sample statistics for the nutrient content of broiler litter samples (n=740)

	N (lbs/ton of litter)	P_2O_5 (lbs/ton of litter)	K_2O (lbs/ton litter)
Average	50	56	47
Minimum	7	4	2
Maximum	186	124	109

Figure 1: Variation in value of broiler litter samples given current commercial fertilizer prices and 50% N, 80%P2O5, and 100% K2O plant available nutrients (n=740)



Since the value of broiler litter is dynamic and always changing, a decision tool is available so grain producers can enter soil test data, nutrient content of measured litter, commercial fertilizer prices, and management practices to determine the value of boiler litter. Tools for applying litter to both grain crops and land in hay/pasture/silage are available and can be found on the Agricultural Economics website for **budgets and decision tools**.

Martin-Gatton College of Agriculture, Food and Environment | Grain and Forage Center of Excellence

UPCOMING EVENTS

Wheat Field Day
May 14, 2024

KATS Crop Scouting Workshop
May 21, 2024

KATS Soil Properties & Their Impact on Delivering Water & Nutrients
June 6, 2024

Drone Pilot Certification Workshop (Madisonville)
June 10 & 11, 2024

Pest Management Field Day (IPM Grain Crops)
June 27, 2024

CORN, SOYBEAN & TOBACCO FIELD DAY
July 23, 2024

KATS Field Crop Pest Management & Spray Clinic
August 29, 2024

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Lexington, KY 40506

Disabilities accommodated with prior notification.

Slow Cooker BBQ Turkey Legs

Servings: 6 Serving Size: 6 ounces of meat

Cooperative Extension Service

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Cooperative Extension Service

For more information follow us at https://hickman.ca.uky.edu/ or Hickman County Cooperative Extension Service on Facebook

Agent for Agriculture and Natural Resources

Ingredients:

- 2 wild turkey legs with thighs
- 1/4 teaspoon ground pepper
- 1/4 cup ketchup
- 1 8-ounce can no-salt-added tomato sauce
- 1/4 cup water
- 1/4 cup brown sugar
- 2 tablespoons prepared yellow mustard
- 3 tablespoons vinegar
- 2 teaspoons paprika

Directions:

1. Wash,hands with warm water and soap, scrubbing for at least 20 seconds, especially after handling raw meat.
2. Season turkey meat with pepper and place in 6-quart slow cooker .
3. To make sauce, combine the remaining ingredients and stir well.
4. Pour sauce over turkey.
5. Cook, covered, in slow _cooker on low for 7 hours, or until meat is tender and falls off the bone or has reached an internal temperature of 165 degrees F.

Source: Cook Wild Kentucky Project

370 calories; 4.5g total fat; lg saturated fat; 0g trans fat; 170mg cholesterol; 470mg sodium; 12g total carbohydrate; lg dietary fiber; 9g sugars; 7g added sugars; 72g protein; 0% Daily Value of vitamin D; 4% Daily Value of calcium; 15% Daily Value of iron; 15% Daily Value of potassium.

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Equal Opportunity Office, Martin-Gatton College of Agriculture, Food and Environment, University of Kentucky, Room S-105, Agriculture Science Building, North Lexington, Kentucky 40546,

the UK Office of Institutional Equity and Equal Opportunity, 13 Main Building, University of Kentucky, Lexington, KY 40506-0032 or

US Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410.

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RETURN SERVICE REQUESTED

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