

MESSENGER-INQUIRER



University of Kentucky
College of Agriculture,
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Cooperative Extension Service



Farm Update
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AGRICULTURE & NATURAL RESOURCES
EDUCATION

Clint Hardy
Davieess County Extension Office

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Estimating Yields at this Time in the Season

Corn is near the end of its growing season and will soon reach physiological maturity, the stage in which no additional weight can accumulate in the kernels. This stage is commonly known as black layer because when it occurs, a blackened area of senescence can be discovered on the tip of the kernel after removal from the cob. The “black layer” is an indication that no additional nutrients can be added to the kernel. Black layer can occur anywhere from 25% to 40% moisture but the average is 30%. The cost of propane and natural gas have drastically increased in the past few weeks so I doubt many will begin harvest before corn has field-dried to less than 25% moisture. For those who will harvest high-moisture corn in the final days of August and early September, make absolutely certain the crop has reached black layer or you could lose yield. After black layer occurs, corn will generally field dry a half moisture point each day in typical environmental conditions.

This crop has endured quite a few challenges. Much of the corn crop was not planted until May, a few weeks later than the traditional “ideal” planting window for our area. The latter half of June and early weeks of July presented weather more typical of late July and August. The earliest planted corn tasseled and pollinated during the extremely hot, dry period and complete pollination failed in many fields. Ironically, rains did return and temperatures declined,

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providing a better pollination opportunity for later-planted corn. The rains continued and many low-elevation corn and soybean fields across the county became flooded or severely waterlogged.

The yield outcome of corn and soybean fields will be the most random than we have had since 2018. That year presented summer weather patterns similar to 2022 and yields were all over the board for corn and soybeans. Some fields yielded great, the next field might have been 20% less. The combines will provide the real data but there are easy calculations for estimating corn and soybean yield. The more locations measured across the field will provide more useful results for a whole field average but it is very accurate for each location measured within the field.

For corn in 30" rows, measure a length of row 17'5". Count the number of harvestable ears and multiply that number by 1,000 to get a harvest population estimate. Collect every fifth ear and average the number of rows on the ears and the number of kernels in each row on the ears, then multiply those numbers to get the average number of kernels on the ears. Next, multiply the number of kernels per ear by the harvest population, then divide by 80,000 to get an estimated bushels per acre.

For soybeans in 15" rows, count the number of plants in rows on each side of an 8'8.5" length, multiply the total by two, then multiply the result by 1,000 to estimate the harvest population. Remove every tenth plant and count the number of pods. Multiply the pod number by 2.5 for the total seeds per plant. Multiply the total seeds per plant by the harvest population to get the total seeds per acre. Divide the total seeds per acre by 180,000 to get an estimated bushels per acre. Estimating yield is time-consuming but is accurate for the area sampled. The more areas sampled provide a more realistic overall yield expectation.

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Commercial Poultry Production Meeting

A poultry production meeting and trade show for commercial poultry producers will be held at Meyer Creek Park in Calhoun this Tuesday, August 30 from 8:00 a.m. to 2:00 p.m. High temperatures earlier this summer have been difficult for farms to manage. There is a fine line between keeping the houses at a comfortable temperature while not increasing humidity to a counterproductive level. Dr. Michael Czarick, University of Georgia Extension Engineer for Poultry Facilities, will be speaking on building ventilation and humidity management. Call the Mclean County Extension Office at 270-273-3690 to register. Lunch will be provided.

Ag Expo Planning

The Ag Expo Committee has begun planning for the 2023 event. Please take a few moments to complete a short survey found on my website at <https://daviess.ca.uky.edu/agexpo>. Your feedback will help the committee plan an event you won't want to miss!

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