Weekly ANR Colum

OSU Extension Clinton County

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Estimating Corn Yield Prior to Harvest

Fall sure is in the air! Today is cool, cloudy and the leaves are starting to change. You may be at home this weekend preparing to watch the Bengals game and hopefully eating some good snacks. Aside from football, with fall comes harvest. As you might already know, corn is king here in Clinton County, so let's talk a little bit about crop maturity and estimating corn yields prior to harvest.

Most of the corn in Clinton County falls between the dent (R5) and Physiological maturity (R6) stages this week. At the onset of denting, kernel moisture is around 59 percent, and it generally takes another 25 days for the corn to reach physiological maturity or what's known as developing black layer. Days until black layer formation after onset of dent varies especially in cool and wet periods where corn dry down isn't happening. Considering risk factors such as ear loss due to lodging or dropped ears, or the likelihood of wet weather that can cause ear rots, it's a good idea to harvest corn when its reached 24-25% Moisture. This grain will then be taken to the grain dryer and dried down below 15%.

Before harvest, it's a good idea to do a yield estimation. Yield estimates help farmers prepare for harvest season by anticipation of equipment, fuel and labor needs, making early marketing decisions, estimate crop insurance purposes, and to plan harvest and storage requirements.

Yield estimation steps –

1. Measure out 17 feet, 5 inches in 30-inch rows, or 23 feet, 9 inches in 22-inch rows and count the harvestable ears in the length of that row. (This is 1/1000th of an acre)
2. Husk every fifth ear, count the number of rows of kernels per ear, and the number of kernels per row.
3. Calculate the average number of rows per ear and kernels per row from the ears.
4. Multiply the average number of rows by the average number of kernels per row.
5. Multiply the kernels per ear by the number of harvestable ears in the 1/1000th of an acre. (This will estimate kernels per acre)
6. Divide the number of kernels per acre by 80 to get the estimate for bushels per acre. (We are assuming 80,000 kernels per bushel).