Estimating Corn Yields Prior To Harvest

Agronomy Technical Bulletin Wayne Flanary, Agronomy Specialist, 7-27-2012

Sample several areas in the field to insure that you are measuring yields that represent the field. If fields are variable, increase the number of sampling sites within the field. To estimate yield from a sampling site within a field, use the following procedure. Caution: This is only an estimate and yields can be above and below actual yields.

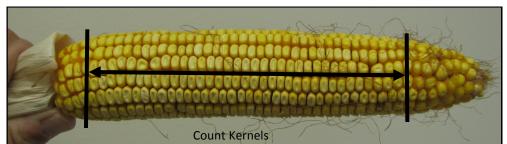
- 1. Measure off a length of row equal to $1/1000^{th}$ acre. For 30-inch rows, this is 17.4 feet.
- 2. Count and record the number of ears on the plants in the 1/1000th acre of row.

For example: 30 harvestable ears

3. For every fifth ear in the row, record the number of complete rows per ear and average number of kernels per row. Then multiply each ear's row number by its number of kernels per row to calculate the total number of kernels for each ear.

Use ears that are representative, do not use nubbins. Begin and end where there are complete rings of kernels around the ear.





- 4. Determine the average number of kernels per ear by adding all number of kernels on each ear and then divide by the number of ears.
- 5. Estimate the yield for each site by multiplying the ear number by the average number of kernels per ear and then dividing that result by the number listed in the table below which best fits your conditions.

| Growing Environment | Range in kernel number per bushel |
|---------------------|-----------------------------------|
| | (thousands) |
| Excellent | 75 to 80 |
| Average | 85 to 90 |
| Poor | 95 to 105 |

Example: Five ears with 400,525,450,550 and 480 kernels per ear, the average number of kernels per ear would be (400 + 525 + 450 + 550 + 480) divided by 5 = 481.

Use the number of ears counted such as 30 harvestable are at the first thousandth acre sampling site. The Yield would be (30 X 481) divided by 85 which equal 170 bu. per acre.

Adapted from: Nielsen, R.L. Estimating Corn Grain Prior to Harvest. Corny News Network.

URL: http://www.kingcorn.org/news/timeless/YldEstMethod.html