

August 24, 2011

### Pre-Harvest Corn Evaluation

There are many things to consider when conducting a pre-harvest evaluation of corn. This article will point out things to look for and also how to estimate pre-harvest yield. Usually, you look at fields planted first and harvest them in that order. However, due to different hybrid personalities, weather conditions and lodging issues, this does not hold true all the time.

Here are some items to try or consider when looking at fields for harvest:

- ◇ Push test—Try pushing the corn plant to the side to roughly a 30 degree angle and see if it breaks off. With the wind and disease pressure we have had this year there could be some stalk rot. These fields should be considered first to harvest.
- ◇ Root Digs—Take a shovel out and dig some roots! This opens up many visual symptoms of what could be going wrong with your corn and hybrids. This year, with moist planting conditions, we will be prone to lodging. Also, the high winds could affect standability. Look to see if you have rootworm feeding as this can cause corn go down as well. Symptoms of rootworm feeding include bruising on the roots as well as the loss of fibrous or fine root hairs.
- ◇ Cut Stalks—While you have the root dug up, cut the stalk in half. This will show the rind of the stalk and you can tell if it is thick or thin. If it is thin, then the plant will have standability issues and should be moved up on the list to harvest.
- ◇ Disease—Disease was quite prevalent in the area this year, so check the severity in your fields. If the pressure is high, move up when the field is to be harvested.

Some fields will be all right, but some may have one of these symptoms or all of them. These are just a few things to consider when making decisions about harvest and order.

Now here is a simple formula for yield estimates:

1. Count the number of kernels long on the ear.
2. Count the number of kernels around on the ear.
3. Then count 1/1000 of an acre for population. 30inch rows = 17ft 5inches/20 inch rows= 26ft 2inches
4. Then you take the number of kernels long, times kernels around, times population, divided by 90.

Example:

40 kernels long X 16 kernels around X 34 population / 90

$40 \times 16 \times 34 / 90 = 241$  bushels per acre yield estimate

