

Southwest Iowa Crop Update: September 24, 2008

Corn Stand-ability

Cornfields I have scouted this past week have two forms of stand-ability problems: rooting and stalk quality. Corn plants either have stalks that seemed to be very weak and/or are very shallow rooted plants.

I am sure most of us have observed areas in the fields that seemed to dry down more quickly than the rest of the field. What I have observed in these areas are much smaller plants, restricted root growth, sidewall compaction, small ears, and N deficiency. This may be a cumulative response to all of these items I listed or just one. Many of the plants can be pulled very easily with one hand. Two different rooting patterns I see are roots only 4" deep, or the classic "tomahawk" root symptom. Stalk quality observed is more of a function of the corn plant "cannibalizing" the stalk for nutrients that were translocated into the grain. Simply pressing the stalk between your forefinger and thumb is a good test. After finding weak stalks, I split them. For the most part I have not observed discolored nodes or piths. Discolored and rotted piths would indicate stalk diseases present causing a decrease in stand-ability. What does this mean? If you have corn that is lodging, find out why. Is it lodging at the soil or are the stalks breaking over.

Determining Harvest Loss

While harvesting crops we sometimes observe more than anticipated harvest loss. Some harvest loss is inevitable while most of it can be managed by correct settings on your harvest equipment.

To accurately determine harvest loss, construct a piece of wire that contains 10 square feet inside its frame. Most commonly, a piece of No. 9 wire is bent into a 30" by 48" rectangle. Dimension does not matter as long as 10 ft² is the area inside. Randomly place the wire rectangle out in a pre-harvested area and count the corn kernels or soybeans within the wire rectangle.

Corn:

Every 20 kernels of corn in 10 ft² is one bushel loss

Every ear in 125' of 30" corn is equivalent to one bushel loss

Soybeans:

Every 40 soybeans in 10 ft² is one bushel loss

The other rule of thumb that works the same is based on one square foot.

1 bushel of corn = 2 kernels/ft²

1 bushel of soybeans = 4 beans/ft²

Palle Pedersen has been taking out a number of soybean plots across Iowa and is finding bean size is small enough to force him to turn down his fan speed 30 percent this year.

Below are websites with suggestions on how to keep harvest loss to a minimum

http://extension.agron.iastate.edu/soybean/production_combineset.html

<http://www.extension.iastate.edu/nwcrops/reducing-harvest-losses.htm>

Corn Grain Dry Down

On average, corn will dry down about .3-.8% per day here in Iowa. Under perfect conditions it is possible for corn to dry 1% per day.

Have a good and safe harvest this weekend.