

Extension Notes

Personal Column for September 21, 2010

By Gary Hall, ISU Regional Extension Education Director

Harvest ALL Your Grain

Don't you hate it when you are combining a field, look over to the rows you just harvested and see bright yellow kernels of corn lying on the ground? Sure makes me cringe to see that lost corn on the ground especially with corn prices being so high.

We all know that leaving corn in the field during harvest always results in a yield penalty. On top of that downer is the ISU research suggesting that corn kernels left in the field may be one of the most likely sites for survival of the dreaded soybean sudden death syndrome (SDS) pathogens which could provide potential to harm next year's soybean crop.

Corn on the ground and SDS survival are both reminders to you as a combine operator of the need to take time to look on the ground behind the combine for those harvest losses. According to Mark Hanna, Extension Agricultural Engineer, over half of corn harvest losses occur at the cornhead and are not able to be measured by grain loss sensors on the rear of the combine. Just two corn kernels per square foot or a single three-quarter pound ear in 436 square feet (0.01 acre) equals one bushel per acre of corn loss (don't believe me? Take a look at the publication [Profitable Corn Harvesting, PM 574](#) available at your local Extension office).

In-field checks suggest that loss due to machine harvest should be no greater than one bushel per acre if corn is standing reasonably well. Be particularly aware of dropped ears as hundreds of kernels are lost in a single ear drop. Finding just one ear by kicking through residue in a 20 x 22 foot area behind an 8-row cornhead equals one bushel per acre loss. Ear-saver tabs or shields commonly found at the lower end of stalk rolls should be maintained and excessive harvest speeds avoided to keep your ear losses down.

Shelling of corn kernels when the butt end of the ear is allowed to contact stalk rolls is another common way kernels are left in the field. Deck or snapping plates that shield the stalk rolls should be adjusted appropriately for ear size in the field. A good starting point for today's corn hybrids is about 1 ¼ inch gap between plates to allow stalks to move through deck plates, but making sure the ears are snapped before contacting stalk rolls. You might even consider having a slightly wider gap at the top/rear of plates so that stalks don't wedge.

Those newer cornheads make it easy. The gap between deck plates can usually be hydraulically adjusted from the cab. So when conditions change you can make the adjustment quickly.

The key is to take a few minutes every once in a while to check and measure the losses on the ground. With no corn on the ground you can rest assured you won't see folks like me with a portable vacuum cleaner gleaning the fields trying to make a few dollars off of this high corn market.

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Adjust the gap between deck plates on the corn head to avoid shelling on stalk rolls.

