

Harvesting Lodged and Down Corn



Stalk lodging and down corn can complicate harvest and lead to yield loss and storage issues. Effective harvest management can help minimize yield and storage losses in lodged and down corn.

What To Watch For

As corn nears maturity, stalk integrity can be reduced. Stalk strength is naturally reduced by cannibalization, which occurs when nutrients are moved from the stalk to kernels during grain fill. Additionally, stalk rots and secondary pathogens can diminish stalk quality. High winds can cause corn with weakened stalks to lodge, especially in fields where significant cannibalization and stalk rot infection has occurred.

Impact On Your Crop

Fields with considerable lodging can be a challenge to harvest efficiently. Most harvest loss occurs because ears of down corn never get into the combine. Harvest losses in down corn may be 10 to 15% even when care is taken during harvesting. Down corn is also at greater risk of poor drydown and other kernel problems. Lodged corn will be more likely to have molds or kernel sprouting if ears are in contact with the ground. The combination of variable grain moisture, possible kernel molds and kernel sprouting can increase the challenges of successfully storing the grain.

Tips To Manage

Start by inspecting fields to identify where corn is down and where it is standing. Check fields for stalk strength using the grab test. Grab the corn stalks at shoulder height, pull or push about 18 inches off center and release. If the corn stalks remain upright, stalk strength is good. If not, stalk strength is weaker. Also determine

the grain moisture in the fields. Knowing the percent of corn that is down or lodged as well as the grain moisture can help determine harvest order. Take into consideration that upright corn, depending on stalk strength, is also at risk of lodging. Fields with down corn can take three to four times longer to harvest than fields of upright corn. Therefore, it can be challenging to decide when to harvest the downed corn and the upright corn.

Fields with considerable lodging can reduce harvest efficiency. Harvesting as many of the down ears as possible requires slower speeds and patience.

There are several management tips to help increase the number of ears harvested by the combine:

- Reduce the combine speed.
- Harvest against the angle of lodged corn to help maximize lift into the header. If corn is all laying down in the same direction, the combine may work best when harvesting from the opposite direction.
- Operate the combine corn head as low as possible without picking up rocks or significant amounts of soil.
- Use corn reels to improve harvest efficiency.
- Harvest when dew is present to minimize fluff.
- Adjust the combine to help minimize broken kernels and fines as they can lead to spoilage in storage.
- Set the combine to blow out as much of the fines and foreign material as possible.
- Follow the operator's manual for cylinder adjustments, speed, and clearance settings suggested by the manufacturer.

Sources (verified 8/28/20)

Thomison, P. 2017. Tips to help farmers harvest down corn. Ag Professional. <http://www.agprofessional.com>; McNeil, S. and Montross, M. Corn harvesting, handling, drying, and storage. University of Kentucky Cooperative Extension. <http://www.ca.uky.edu>. Web sites verified 8/28/20.

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