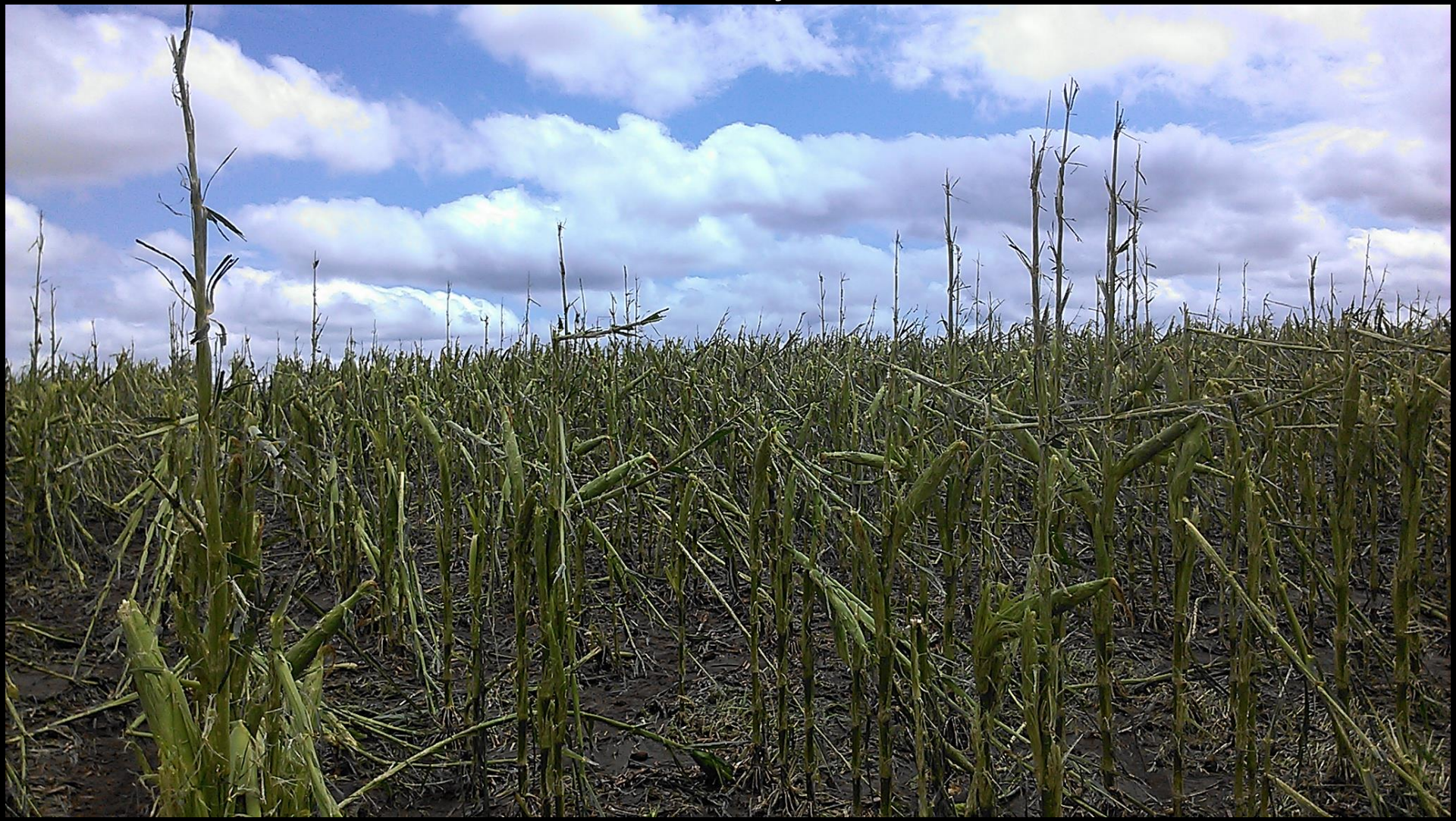
After the Storm: What to Expect Based on Previous Storms

Jenny Rees

Nebraska Extension Educator

Corn field hail damaged in 2013 in August 1 storm. Corn was brown silk to blister and bean R5 when that storm took out 1/3 of Clay County. Some fields like this were totaled out and others were kept. Really depends when you get in field with crop insurance adjuster.



Fungicide was applied to fields like these with more leaf tissue remaining since it was so early in the season. It helped in keeping leaves green and not dying so quickly and also helped with stalk strength.

We’re not recommending fungicide app for this particular storm since one week later we’re at ¼ milk.

4 days post-storm.
Stalk rot setting in.

Upper picture 2 days post-storm, hail damage to kernels.

Lower picture 4 days post-storm. Mold setting in.

The ‘blessing’ in this storm is the later growth stage we’re currently at (less kernel moisture) to not see this kind of mold even 7 days post-hail.

Same plants. Left pic: non-hailed side.

Right pic: hailed side.

Same ears 6 days post-hail.

Left no hail damage.

Right, hail damage with mold.

33 days post-storm.

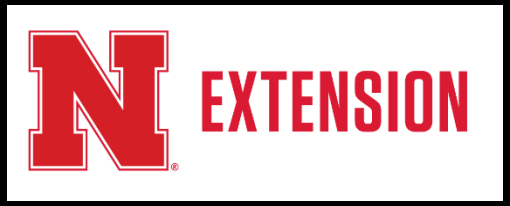
Left ear sprouted kernels due to hormone imbalance of increased gibberellic acid.

Right ear: diplodia overtook ear and was biggest grain quality problem. No mycotoxins associated with it.

Grain quality was biggest problem. Fusarium was found in isolated portions of ears-has the potential to create the mycotoxins vomitoxin and fumonisin. This ear is covered in diplodia with sprouted kernels. Diplodia creates light-weight ears and kernels and can explode within storage. It needs to be kept at 13% moisture in storage. We recommend scouting fields for the worst-affected portions of fields and worst-affected fields. Harvest them first and fill your contracts with those portions instead of binning that grain. Also check with crop insurance regarding how they handle grain quality-do they take samples before it goes in bin? Do they go off COOP samples?

Soybean was at R5. At R5, soybeans cease to produce any new nodes. New regrowth may be seen from lower axillary buds (as seen in this photo). You may even see flowers but there's not enough daylength for pod or seed production to affect yield. So the key is how any pods attached the plant are able to fill. Grain quality not an issue with beans as moldy beans are so small and light-weight they blow out the combine. Bigger problem was mature beans and 'lima' beans that created dockage.

Most severely affected fields started turning brown and dying. Because this hadn't been experienced before, not all fields like this were totaled out even though they didn't end up yielding more than 2-5 bu/ac. This is a great option for flying in or drilling a cover crop such as oats. These can also be grazed if a cover like oats or a different small grain is added into it. If want potential grazing into spring, could do a mix of oats and rye where the oats would winterkill and rye can be grazed in spring. The rye could also keep cover over the ground in winter.



Jenny Rees

@jenreesources

jrees2@unl.edu