3 signs corn got enough nitrogen at harvest

Field scientist Mike Moechnig explains how you and your customers can tell their corn got enough nitrogen at harvest.

As harvest draws near, there's no doubt your customers will be thinking about their yield. How many bushels will they bring in this season? You know every kernel counts and that ear size and fill can make the difference between a banner year and a disappointment.

Knowing that, it's important to remember just how big a role nitrogen plays in determining ear size and fill. Having enough of the nutrient during the growing season helps ensure corn will develop the yield your customers want. So harvest is a great time to take a close look at the crop and see if it received the nitrogen it needed.

In-season signs

You likely helped your customers scout their corn and watched for nitrogen deficiency during the growing season. Corteva Agriscience Field Scientist Mike Moechnig says: While there are signs of nitrogen deficiency in season, there are also signs corn is getting the nitrogen it needs while growing. "Dark green color is likely the most prominent visual indication of sufficient nitrogen. There are even corn leaf color charts you can use to characterize the nitrogen status of crop plants," Moechnig says. "If corn leaves are green down to 3-4 leaves below the primary ear during early reproductive growth stages, then nitrogen was likely sufficient."

Hopefully, you were seeing that dark green color earlier this summer, and now the corn is starting to dry down as harvest time gets closer.

3 signs at corn harvest

Once harvest is officially here, you and your customers can look at their corn once again for signs it got enough nitrogen this season. Moechnig says there are three primary signs to look for:

1 - Good corn stands

Moechnig says that, near maturity, a lack of nitrogen may cause corn stalks to become brittle and break easily, so strong stalks are ideal.

2 - Good ear length

Moechnig explains that a lack of nitrogen may also cause corn ears to be shorter than normal, so you'll want a nice long ear.

3 - Good ear fill

Finally, Moechnig says the kernels will not properly fill out near the corn ear tip if nitrogen was lacking, so fully filled-in ear tips can signify optimized yield potential.

Moechnig says your customers don't just need to rely on their eyes to know if their corn got enough nitrogen. "Corn tissue tests can be used to determine if nitrogen concentration is within a range that is associated with what is considered optimum growth," Moechnig explains. "Stalk nitrogen tests can provide an indication if the plants received adequate nitrogen over the season."

Tissue tests are typically done multiple times throughout the growing season, but Moechnig says farmers can take advantage of testing at harvest as well.

He also recommends your customers protect their nitrogen investment from loss each season with a proven solution, such as N-Serve® nitrogen stabilizer or Instinct NXTGEN® nitrogen stabilizer. Both products protect nitrogen below ground, where up to 70% of nitrogen loss can occur from leaching and denitrification.

Knowing whether your customers' corn got enough nitrogen this season can help them plan to make the right inputs next year.

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