Producers Should Check Corn's Stalk Strength Before Harvest

LEXINGTON, KY.

Continuous wet weather coupled with cool temperatures has led to an increased disease presence which could cause weak corn stalks. As harvest begins, producers need to check their crop for stalk strength, said extension specialists in the University of Kentucky College of Agriculture.

"Abundant moisture and cool temperatures this summer caused heavier ears and lighter stalks in many fields," said Chad Lee, UK grains crops specialist. "If we were to get heavy wind or rain, it could cause lodging in those weaker stalks."

"It is always a good idea to scout for lodging potential as a corn crop matures. However, this year, the risk of disease-induced lodging is higher than normal in Kentucky," said Paul Vincelli, UK extension plant pathologist.

Many different factors can cause stalks to weaken. One of the more prevalent causes this year is the presence of Southern rust in lateplanted fields. The disease is widespread across the state and is pretty aggressive in some fields. This disease weakens stalks and could result in lower test weights for some producers.

"Southern rust is probably in every field in the state; however, it varies greatly in severity from field to field and county to county," Vincelli said. "It happened to blow in from the South earlier than normal this year and is more widespread that I've ever seen it. Fortunately, generally cool temperatures have helped keep this from becoming a more serious problem."

Another disease producers should scout for is

Diplodia ear rot. Vincelli said Diplodia ear rot is common throughout the state because many hybrids are not resistant to it, but it does appear more in fields with continuous corn or notill corn. The disease attacks ears, but fortunately, it does not produce mycotoxins that are harmful to animals and humans. It also attacks stalks, increasing the plant's susceptibility to lodging.

Some fields, especially those that were saturated for a significant amount of time, could have weaker stalks due to a nitrogen deficiency, Lee said. When the ground is wet for a period of time, nitrogen can be released into the atmosphere via denitrification.

To check stalk strength, producers should walk through a field and push the stalks about 8 to 12 inches from vertical. If the stalk breaks, it's more prone to lodging. If producers find 10 to 15 percent of the stalks in a field are prone to lodging, they should harvest the field early.

In addition to an increased lodging risk, wet conditions and cool temperatures have hindered corn's ability to naturally air dry in the fields.

"Producers need to make sure their dryers and bins are in good shape," Lee said. "Relying on field drying of corn is going to be extremely risky this year. Farmers will likely need to harvest early and artificially dry grain."

He added, in some of the early harvest reports, corn moisture levels were around 22 percent. Ideal corn moisture levels are around 14 to 15 percent. Δ







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