

Hot, Dry Weather May Have Weakened Corn Stalks

LEXINGTON, KY.

Wind gusts around 40 miles per hour caused lodging in some Central Kentucky corn fields the weekend of Aug. 13. Much of the damage occurred on corn stalks that already were weakened by dry weather. As harvest nears, producers, especially those in abnormally dry areas, need to check their corn's stalk strength and harvest weaker stands first, said Chad Lee, grain crops specialist in the University of Kentucky College of Agriculture.

"Lack of water compromised the damaged stalks," he said. "The stalks were very susceptible to strong winds or other weather events that could have knocked down corn."

Corn stalks can be compromised if dry conditions occur during seed development. This can cause the crop to stop taking in nutrients. With no other source of nourishment, the seeds may have pulled nutrients from the stalks in order to complete development.

While much of the state received ample rainfall this spring, farmers in the Purchase Area, along the Tennessee border and other pockets throughout the state have been abnormally hot and dry. This was especially true during July, which was a critical time for kernel development.

To check for stalk deterioration, farmers need to grab a plant at chest height, pull it toward them until it is at an angle and let go. If the stalk snaps back and stands up, it is strong. It's weak if it falls over. If farmers discover 10 to 15 percent of stalks in a field are weak, that field should be scheduled to harvest first. If these fields were to get heavy rain or strong winds before they are harvested, lodging

could occur. This would make harvest difficult and possibly cause crop losses.

While corn can recover from lodging in early developmental stages, much of the corn that lodged in Central Kentucky was in the R5 or dent stage.

"This corn is too far along in development to recover from the damage," Lee said.

With 28 percent of the state's corn already at the dent stage and 48 percent in the R4 or dough stage as of Aug. 15, monitoring stalk strength will be important to maintaining yield



potential.

Lodged corn will not dry down quickly and is at risk of developing ear molds or mycotoxins. This corn needs to be harvested as soon as it reaches R6 or blacklayer stage for grain. The corn will need to be dried in a bin due to its high moisture content. △