

Partnership Perk



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Schedule Corn Harvest to Manage Stalk Lodging

Stalk rots

All corn plants start to decay after maturity as part of a natural process of recycling organic matter and nutrients. The fungi that do this recycling are present in every cornfield. However, when the decaying process occurs before physiological maturity—as stalk rot—it represents a disease problem with potential economic effects.

Although late-summer rainfall has reduced the risk of stalk rot in many areas, some fields that experienced stress around pollination this year may bear examination for stalk strength. The chance of stalk rot becoming an economic problem increases when plants experience stress during the growing season, including too much or too little rainfall, hail, wind or insect damage.

Stalk rot fungi infect stressed plants through the roots or through insect wounds. The fungi first attack pith tissue in the interior of the corn stalk. The outer rind of the corn stalk eventually will also decay. Diseased stalks may have only half or less of their original strength. If harvest is delayed or high winds occur diseased plants easily lodge, and as lodging increases harvest losses increase dramatically.

Check for stalk rot by pinching the lowest aboveground internode. At least 100 plants scattered throughout the field should be checked. If more than 15 percent of the stalks are rotted (stalks easily crushed), harvest should be scheduled as early as possible to reduce significant losses. There can be some economic trade-off with increased drying costs for early harvested grain, but field scouting is the best guide for potential losses.

Long story short:

Scout, ideally about 40 to 50 days after the silk date, especially targeting areas that remained dry in August.

Source: Alison Robertson, ISU Department of Plant Pathology

Additional information can be found in the Iowa State University Extension publication *Corn Stalk Rot in Iowa* (IPM 50). Copies are available for \$1 at County Extension Offices or directly from the Extension Publications Distribution Office (515) 294-5247.