

Stalk Rot

Overview

Stalk rot diseases in corn, which are caused by many bacteria and fungi, are common. Most fields are impacted to some extent, with stalk rot diseases resulting in a yield loss of approximately 5% per year. Stalk rot can be more common in high-yielding hybrids that produce large and heavy ears.

What you should know

- Factors that stress corn throughout the growing season can lead to stalk rot.
- Stalk rot can lead to yield loss due to premature plant death or lodging.
- Plants with prematurely rotted stalks produce lightweight, poorly filled ears due to limited access to carbohydrates.
- Plant wilting is often the first symptom. Look for prematurely dead plants and stalk lesions. The most common symptom of stalk rot is the disintegration of internal tissue, which gives corn a shredded appearance.
- Scout for stalk rot before blacklayer and continue weekly until harvest.
- Test at least 100 stalks for intactness. Pinch each stalk between the lower nodes or push each plant to see if it remains upright.
- If more than 10–15% have soft stalks or lodge easily, those fields should be scheduled for the earliest possible harvest.

Action steps

1. **Reduce crop stress:** Avoid or minimize stress throughout the growing season to prevent stalk rot. Rotate crops to reduce the buildup of inoculum.
2. **Select appropriate hybrids:** Select hybrids with good stalk strength, staygreen and lodging scores. Consider hybrids with in-plant insect protection. Plant as recommended for the specific hybrid and environment.
3. **Fertilize appropriately:** Proper fertilization, with a balance of potassium to nitrogen, makes corn less susceptible to stalk rot.



Lodging is a common indicator of stalk rot.



30-Second Summary

- Stalk rot diseases occur in nearly all corn crops, leading to a 5% yield loss.
- High-yielding hybrids are more susceptible to stalk rot.
- If stalk rot is present in more than 10–15% of corn, plan to harvest those fields early.
- Minimize crop stress and select hybrids that are tolerant to stalk rot to reduce losses.

NOTES:
