

Disease Facts

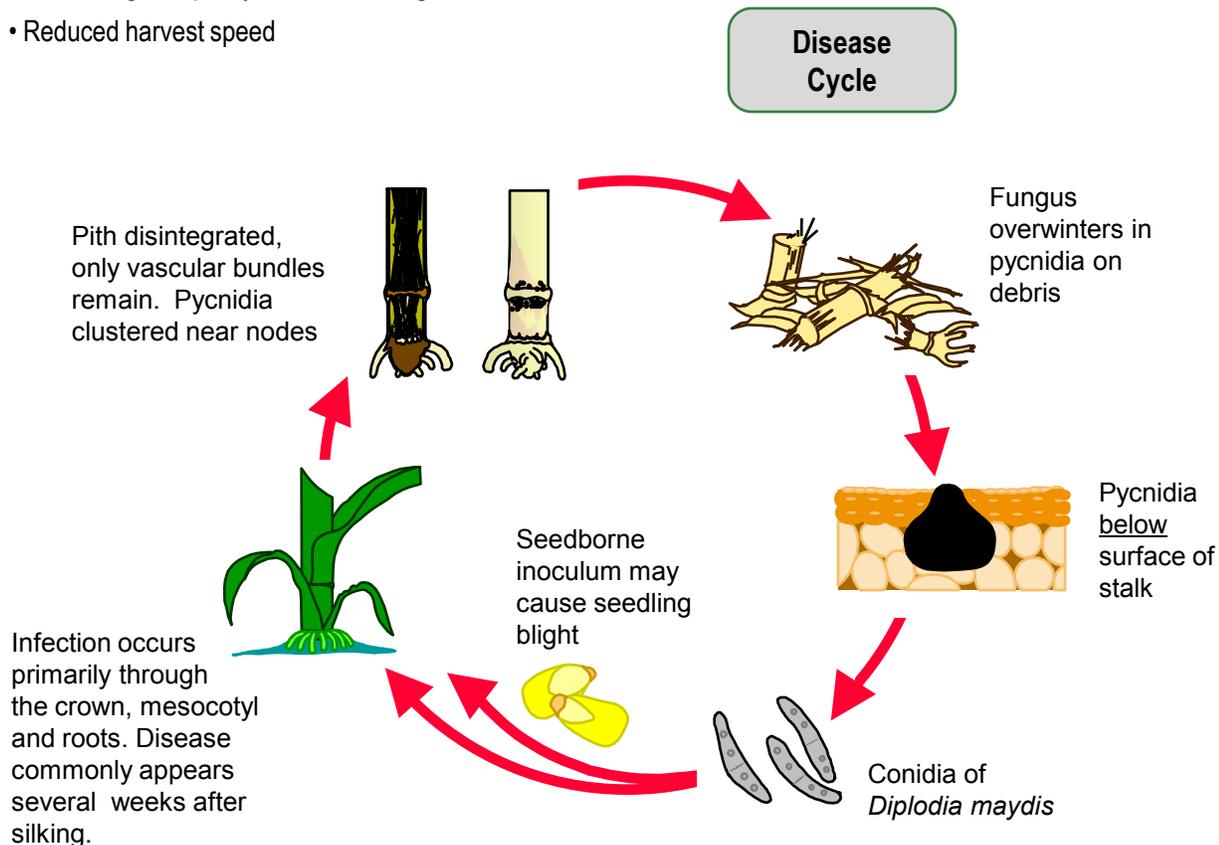
- Caused by *Stenocarpella maydis* fungus (formerly called *Diplodia maydis*)
- Corn is the only host of this pathogen
- Survives on corn stalk residues
- Spores are spread by wind or splashing rain
- Favored by warm, wet weather two to three weeks after pollination

Impact on Crop

- Yield reduction
 - Kernel weight (test weight) may be reduced due to premature plant death
 - Potential harvest losses
- Plant Lodging
 - Reduced grain quality if ears contact ground
 - Reduced harvest speed

Symptoms

- Diplodia stalk rot may first be evident when affected plants die suddenly during mid to late ear fill.
- Upon examination, dark brown lesions can be found extending in either direction from the node.
- Small black spots (pycnidia) may develop just beneath the stalk epidermis near the nodes. The black dots are not easily removed, which distinguishes Diplodia from Gibberella.
- Diplodia results in rotted stalks that are disintegrated and discolored (brown), allowing the stalk to be crushed or easily broken.
- Although the pith disintegrates, vascular bundles remain intact





Sections of corn stalk (above and below) showing diplodia stalk rot symptoms. Note pycnidia on corn stalk node.



Broken corn stalks due to Diplodia stalk rot infection (above and below). The Diplodia fungus also causes kernel and ear rot in corn.



Management

- Genetic resistance – choose hybrids with high scores for stalk strength
- Crop rotation - at least one year out of corn
- Tillage to help break down crop residue
- Maintain balanced fertility
- Use moderate plant population if field has a history of stalk rot or lodging
- Reduce plant stress if possible
- Control stalk-boring insects to prevent wounds stalk rot organisms can enter.
 - Pioneer® brand hybrids with Herculex® I or Herculex Xtra *Insect Protection* traits give excellent control of European and southwestern corn borer.

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