

Diplodia Ear Rot



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DISEASE FACTS

- Caused by the fungus Stenocarpella maydis, previously known as Diplodia maydis.
- Wet weather during grain fill and upright ears with tight husks promote Diplodia.
- Pathogen can cause ear rot, stalk rot and seedling blight.



- · Corn is the only known host.
- Wet weather plus moderate temperatures allow infection to occur if spores are present from early silking until two to three weeks after silking.
- Diplodia is highly dependent on quantity of infected, unburied corn residue (stalks, cobs and kernels).

DISEASE SYMPTOMS

- Early infected plants have tan spots on husks or bleached husks that are obvious from a distance.
 - Husks on severely infected plants dry down well before the rest of the plant.
- White mycelial infection progresses from base of ear to tip.
- Extensive mycelial growth causes ears to remain erect and husks to bind tightly to ear.
- Rotted seed may germinate prematurely (vivipary).
- Later-infected plants are less damaged and may show no obvious symptoms on husks.



IMPACT ON CROP

- Infection can reduce grain quality and yield due to lower kernel size and test weight.
- If infection occurs early, some ears may not produce harvestable grain. Less damage results if ear is more developed when infection occurs.
- Fungal growth is most common during milk, dough and dent stages.
- Mycotoxins are not associated with this disease but some animals may reject infected feed.





MANAGEMENT

- Hybrids differ in their susceptibility to Diplodia ear rots, but all will show some damage under severe conditions
- Harvest seriously infected fields early and dry grain to below 15% moisture (below 13% for storage through the following summer).
- Cool infected grain below 50 °F as quickly after harvest as possible and store at 30 °F.
- Clean grain after drying and before storing to remove lighter, damaged kernels, cobs and fines.
- Diplodia development on ears in field can worsen in the bin if grain is not dried properly.
- Screen grain and store the most infected grain separately to help avoid putting the whole bin at risk.

The foregoing is provided for informational use only. Please contact your sales professional for information and suggestions specific to your operation. Product performance is variable and depends on many factors such as moisture and heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. Individual results may vary. CF200902

