

# Impact of the Cold 2009 Growing Season, Hailstorms, and Storage Problems on DDGS Quality

*Fuel Ethanol Workshop*

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# Corn Crop Summary

## Quantity and Quality

- Quantity above trendline
- Quality
  - Wet: >20%M, Much greater ECB
  - Light: Test Weight ~ 52 lb/bu, no increase
  - Low protein: <7.5% (15%M)
  - Storage time: ~50% of normal
  - Damage: ~ 3-5%, normal = 1-2%

# “Sac to Grundy” storm

- August 9, 2009
- Travelled ~150 miles; 900,000 acres
- Hail swath ~10 miles wide; middle 3 miles (~30%) had 100% damage

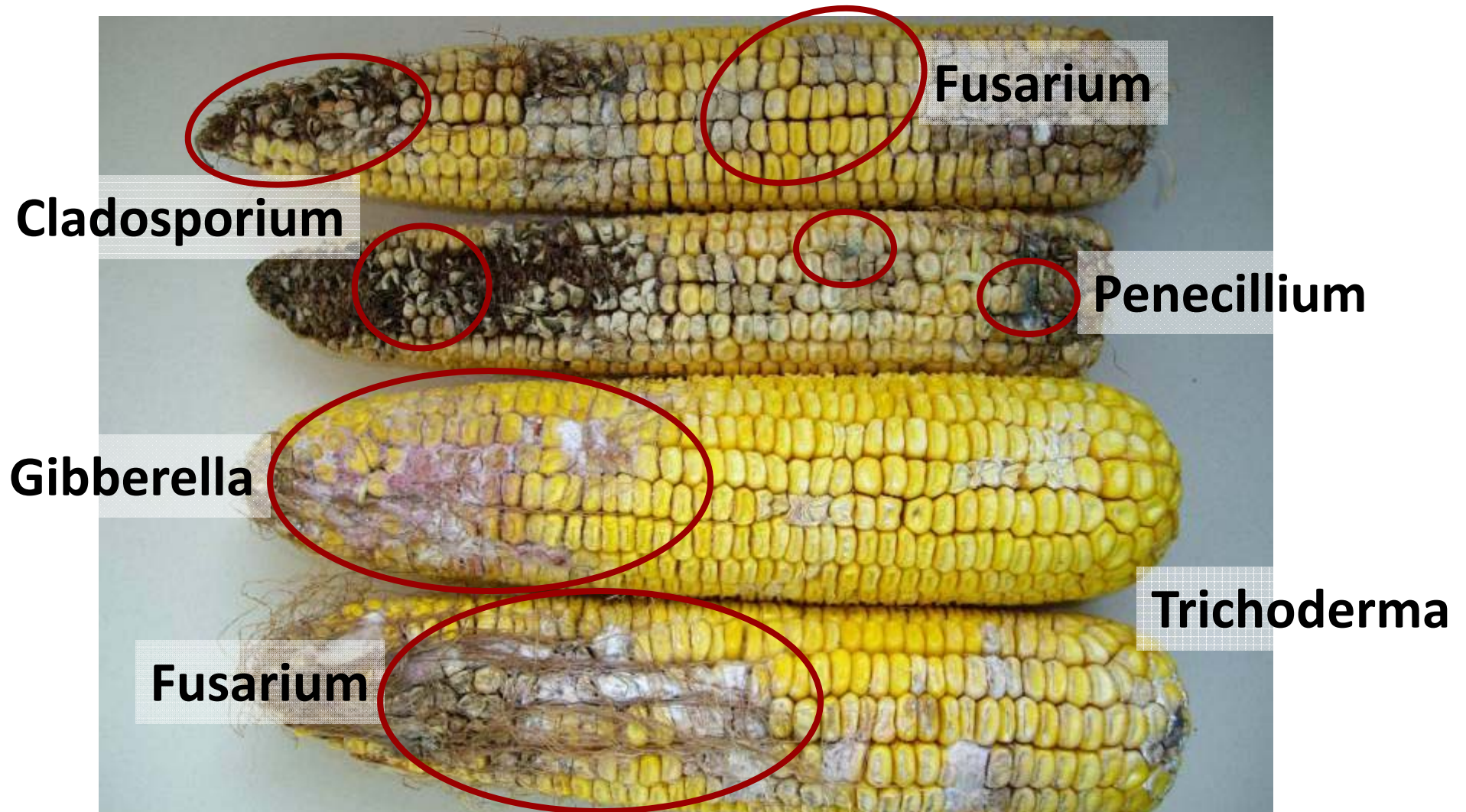


# Hail damage, Sac County, 8-09-2009



Photos courtesy: Mark Licht, ISU Extension

# Ear rot assessments – percent severity; rot present



# Corn, NE Iowa, January 2010





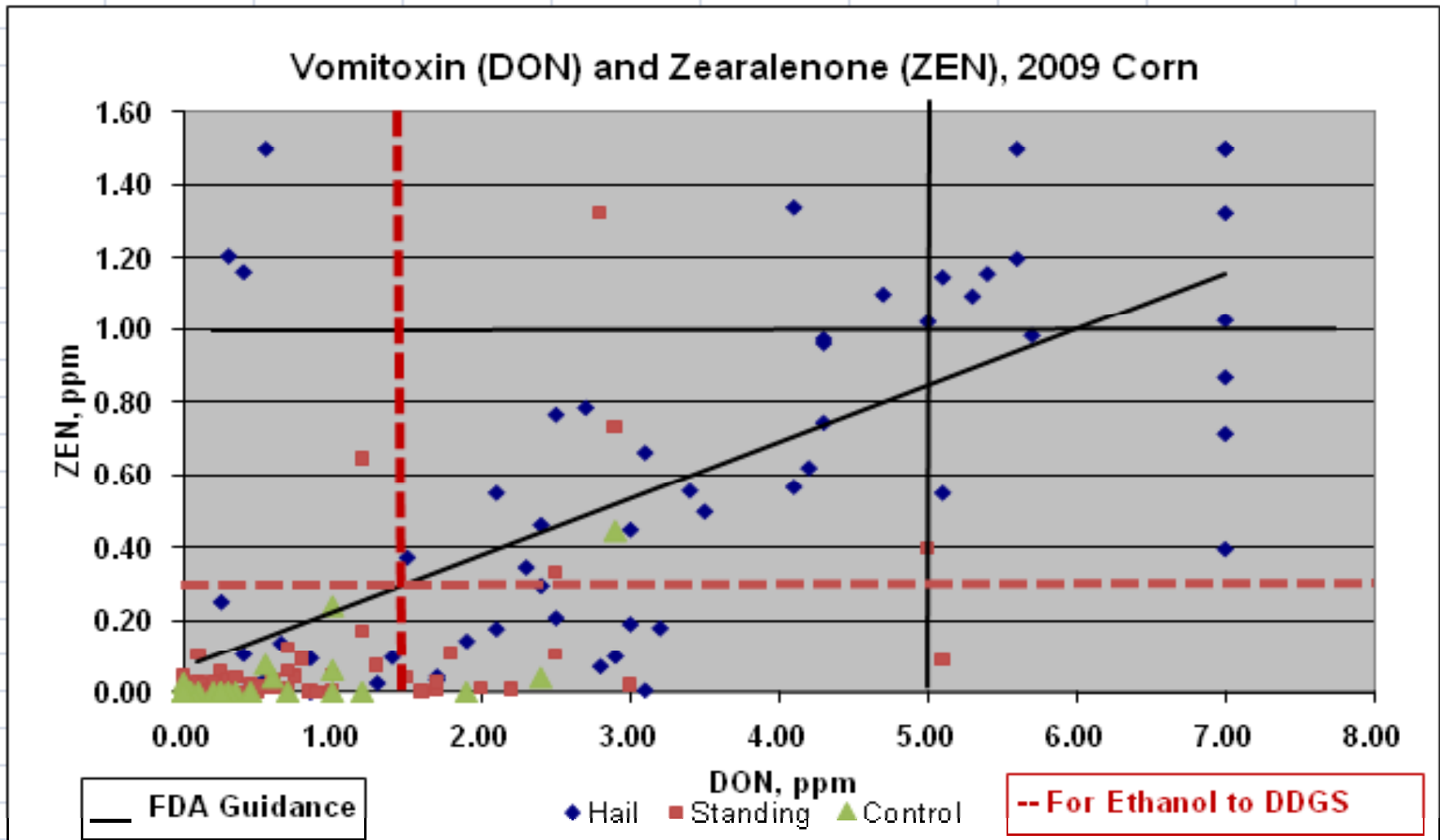
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# Ear Rot Summary


	Mean ear rot severity (%) (Range)	Ear rots present
<b>Hail damage samples</b> (N=56)	11.8 (0 – 53.4)	Fusarium* Gibberella* Cladosporium, Penecillium
<b>Background samples</b> (N=27)	3.3 (0 – 16.4)	Cladosporium* Fusarium, Gibberella
<b>Standing corn samples</b> (N=72)	24.0 (0.2 - 83.8)	Cladosporium* Fusarium, Gibberella

\* Predominant ear rot present

# DON and ZEN in 2009 Corn from Iowa



# Summary

- Weather conditions created several issues for the 2009 corn crop.
- Hail, delayed maturity, early snowfall
- Problems in the fall: Increased toxins
- Problems overwinter: Increased mold
- Toxin monitoring likely routine practice
- Strain on grain logistics with yield 
- Other agronomic practices affect outputs as well.

# Thoughts

- Could delayed or prevented harvest be a covered loss in MPCCI?
- Field loss can be adjusted accurately.
- Propane is cheaper than corn
- Preharvest scouting/risk assessment; connects with food safety needs.
- Presampling for process uses?

# Where To Find Us..

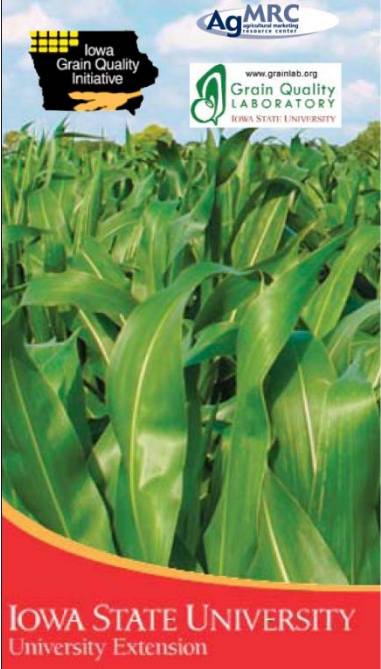


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