

# 2009 Corn Foliar Fungicides Application Timing Trial

South Central Ag Lab  
Clay Center, NE

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# 2009 Diseases

**Gray leaf spot (GLS) was moderately severe and was the predominant foliar disease at this location again in 2009.**





# 2009 Diseases

**Common rust developed, but remained at low incidence and severity at this location in 2009.**



# 2009 Diseases

**Eyespot and Physoderma brown spot were present in this trial, but at very low incidence and severity, thus not justifying ratings for these diseases at this location in 2009.**





# 2009 Foliar Fungicide Trials



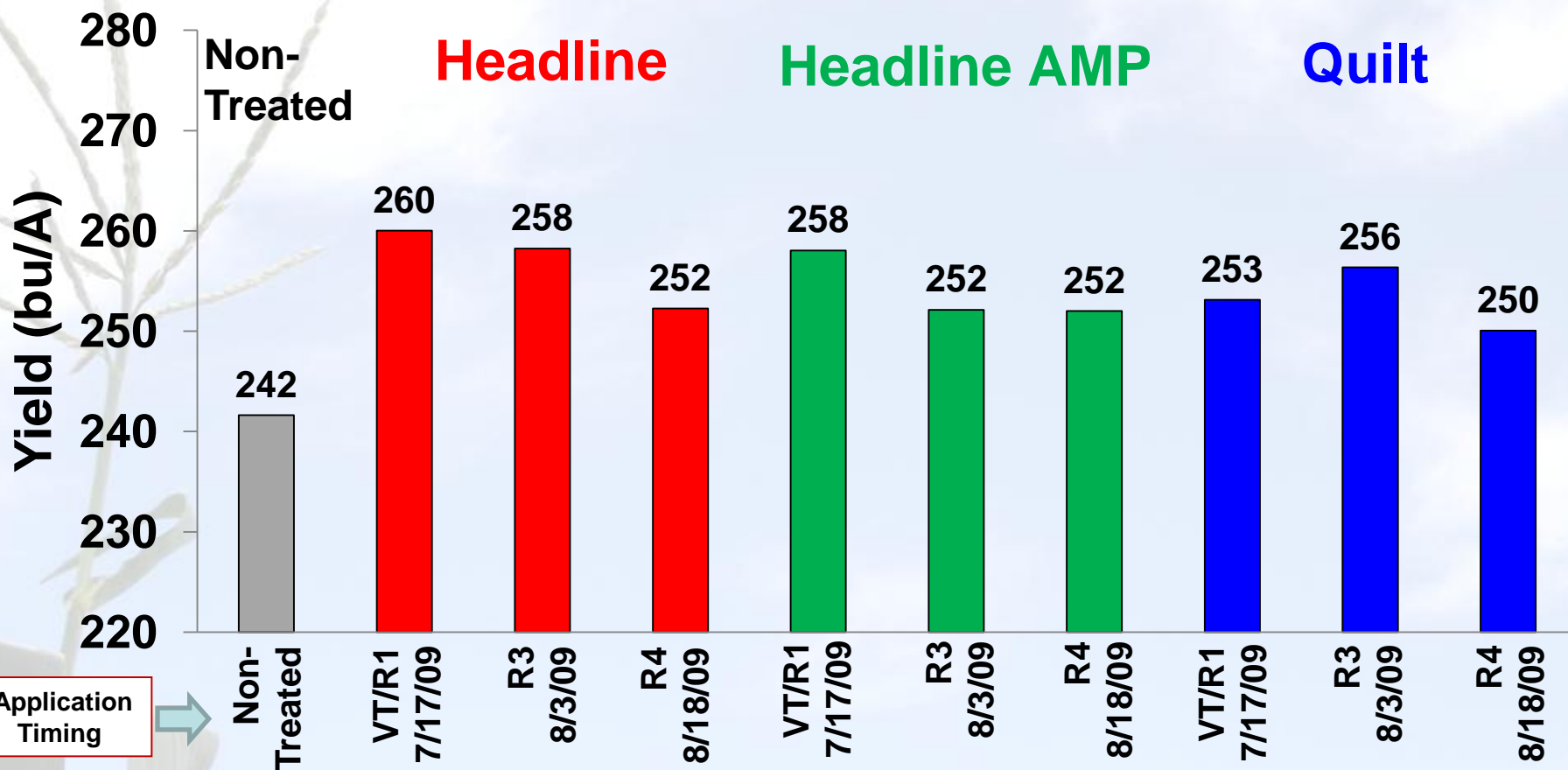
South Central Ag Lab, Clay Center, NE

- High clearance sprayer used
- Elevated disease risk:
- Continuous corn
- Two corn hybrids:
  - DKC 60-18 (GLS rating 7/fair)
  - DKC 62-54 (GLS rating 4/very good)
- Planting date: 5/6/09
- 6 reps
- 20 gpa
- Overhead sprinkler irrigated

# 2009 Fungicide Timing Trial in NE

Yield (bu/A)

DKC 60-18 (GLS rating = 7/fair)

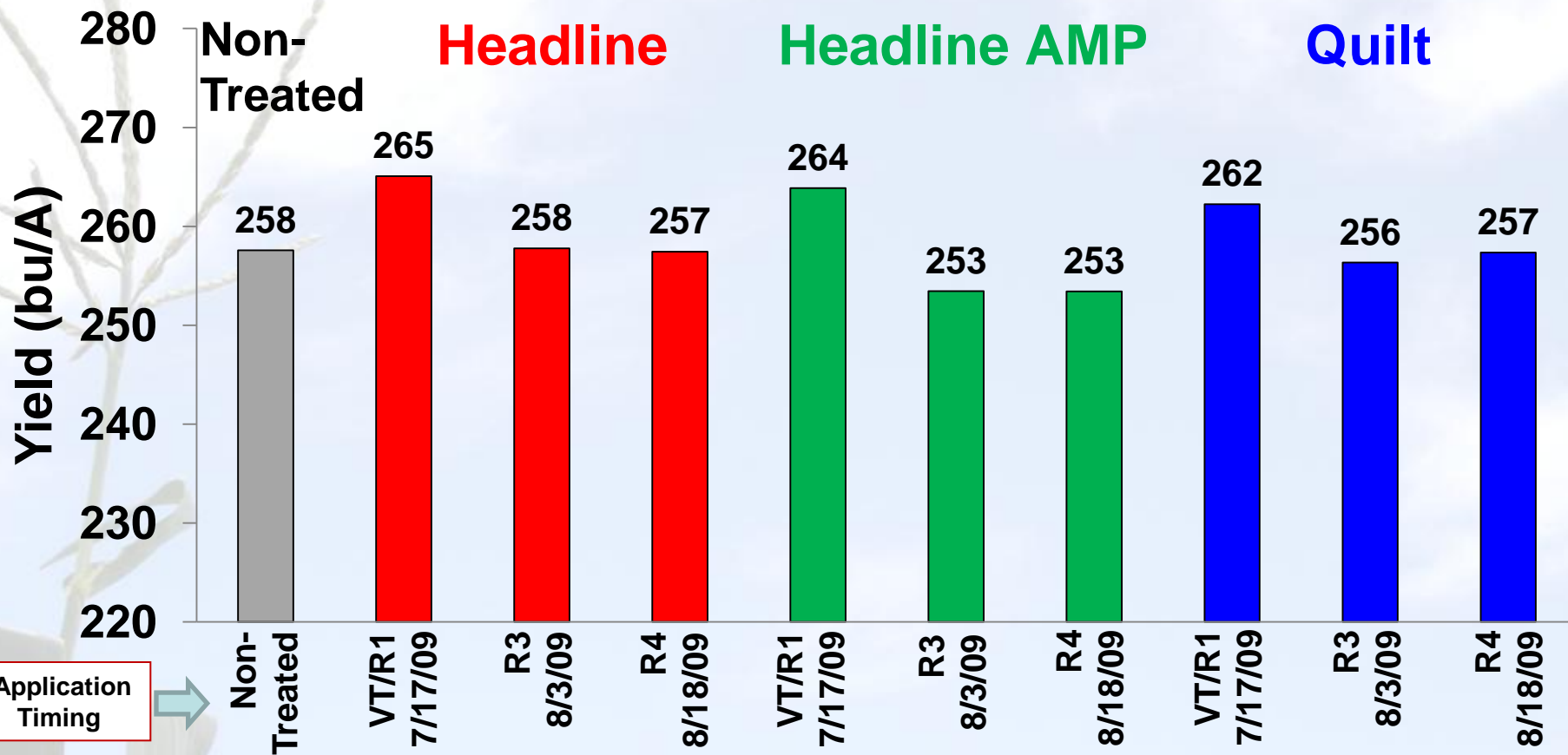


\*No statistical differences

# 2009 Fungicide Timing Trial in NE

Yield (bu/A)

DKC 62-54 (GLS rating = 4/very good)

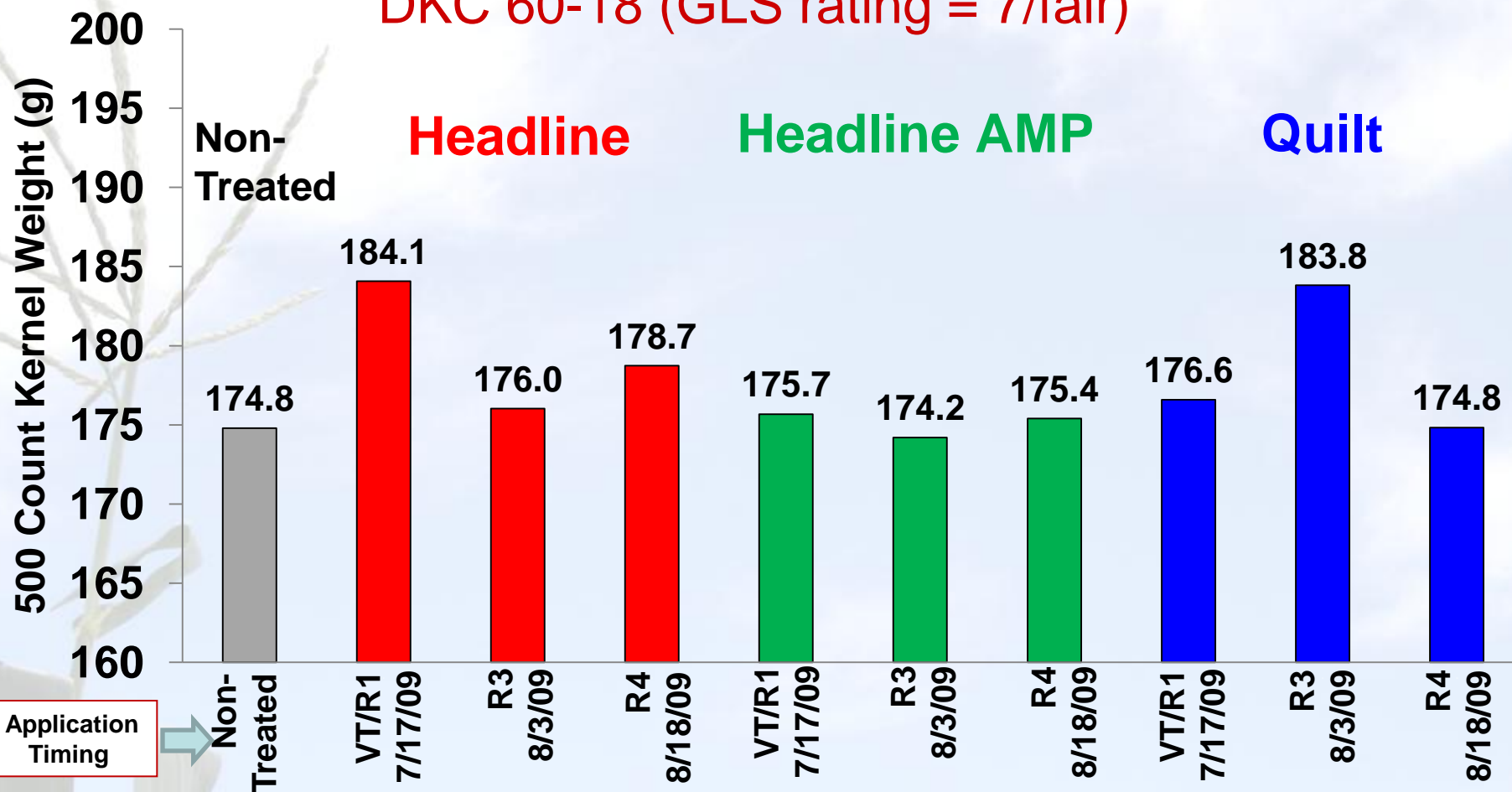


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# 2009 Fungicide Timing Trial in NE

500 Count Kernel Weight (g)

DKC 60-18 (GLS rating = 7/fair)



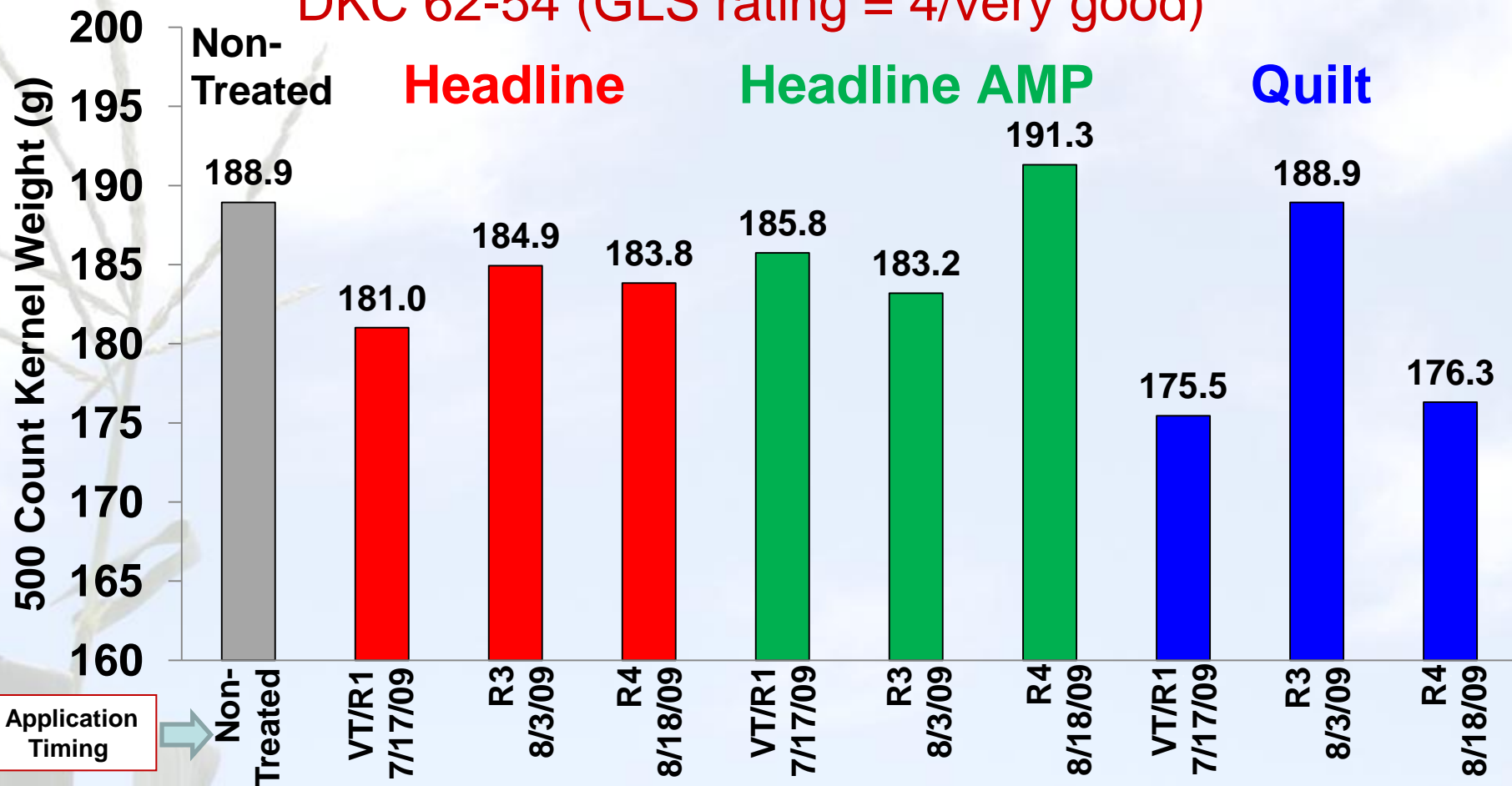
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500 Count Kernel Weight (g)

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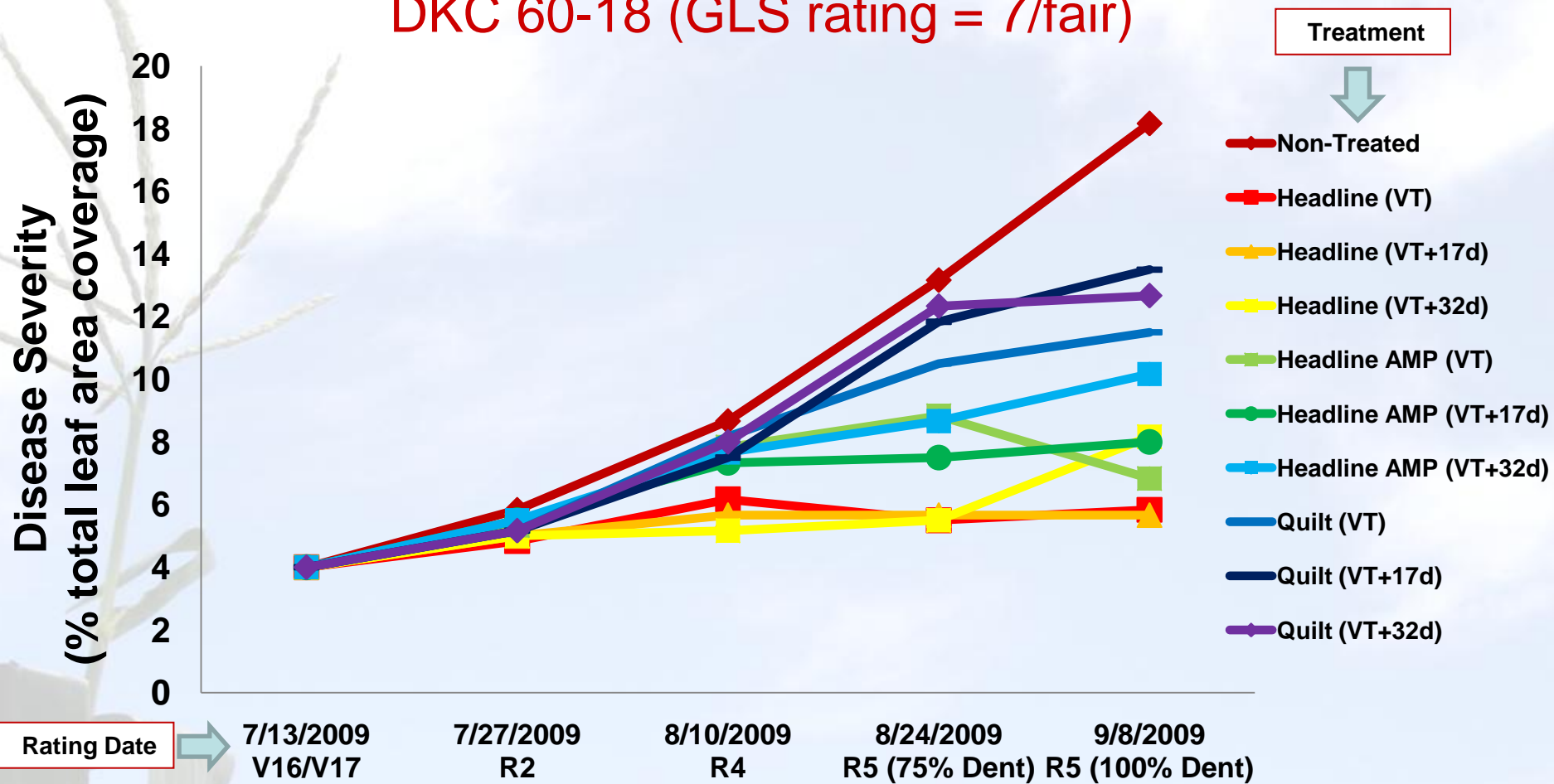


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# 2009 Fungicide Timing Trial in NE

## Gray Leaf Spot Disease Severity (%)

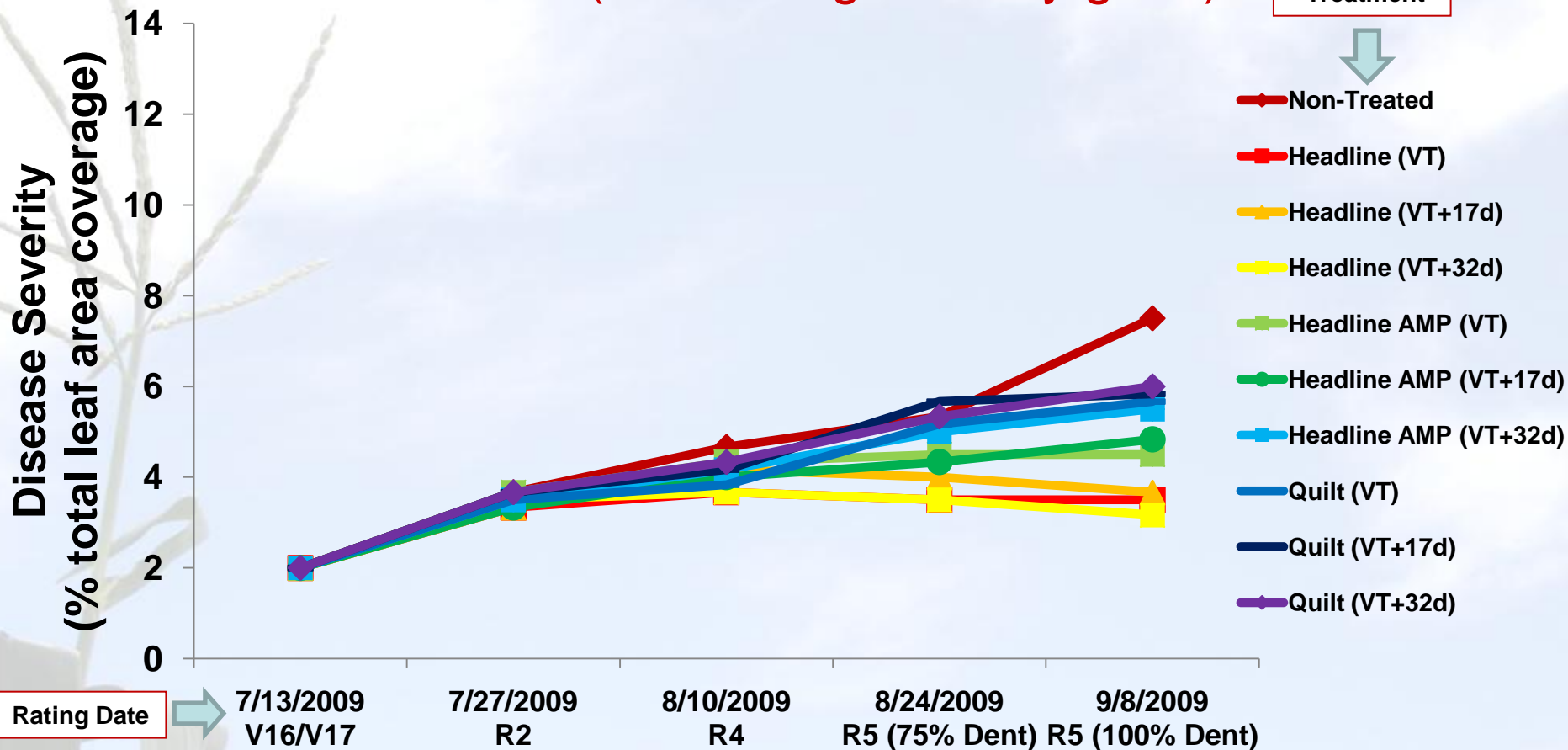
DKC 60-18 (GLS rating = 7/fair)



# 2009 Fungicide Timing Trial in NE

## Gray Leaf Spot Disease Severity (%)

DKC 62-54 (GLS rating = 4/very good)



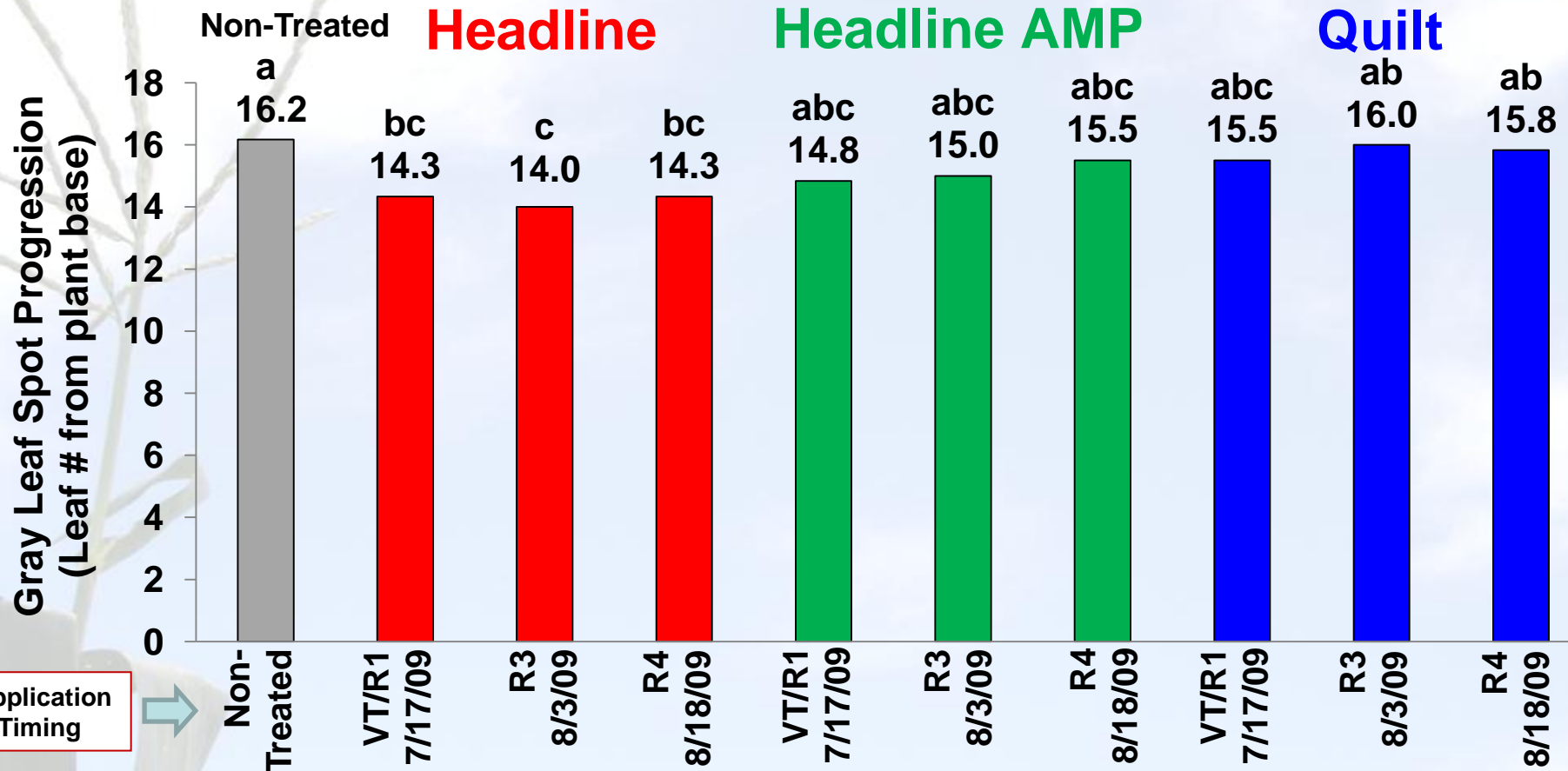


# 2009 Fungicide Timing Trial in NE

Gray Leaf Spot Progression up the plant (1-18 scale)

DKC 60-18 (GLS rating = 7/fair)

August 10, 2009 rating date (R4 reproductive stage)

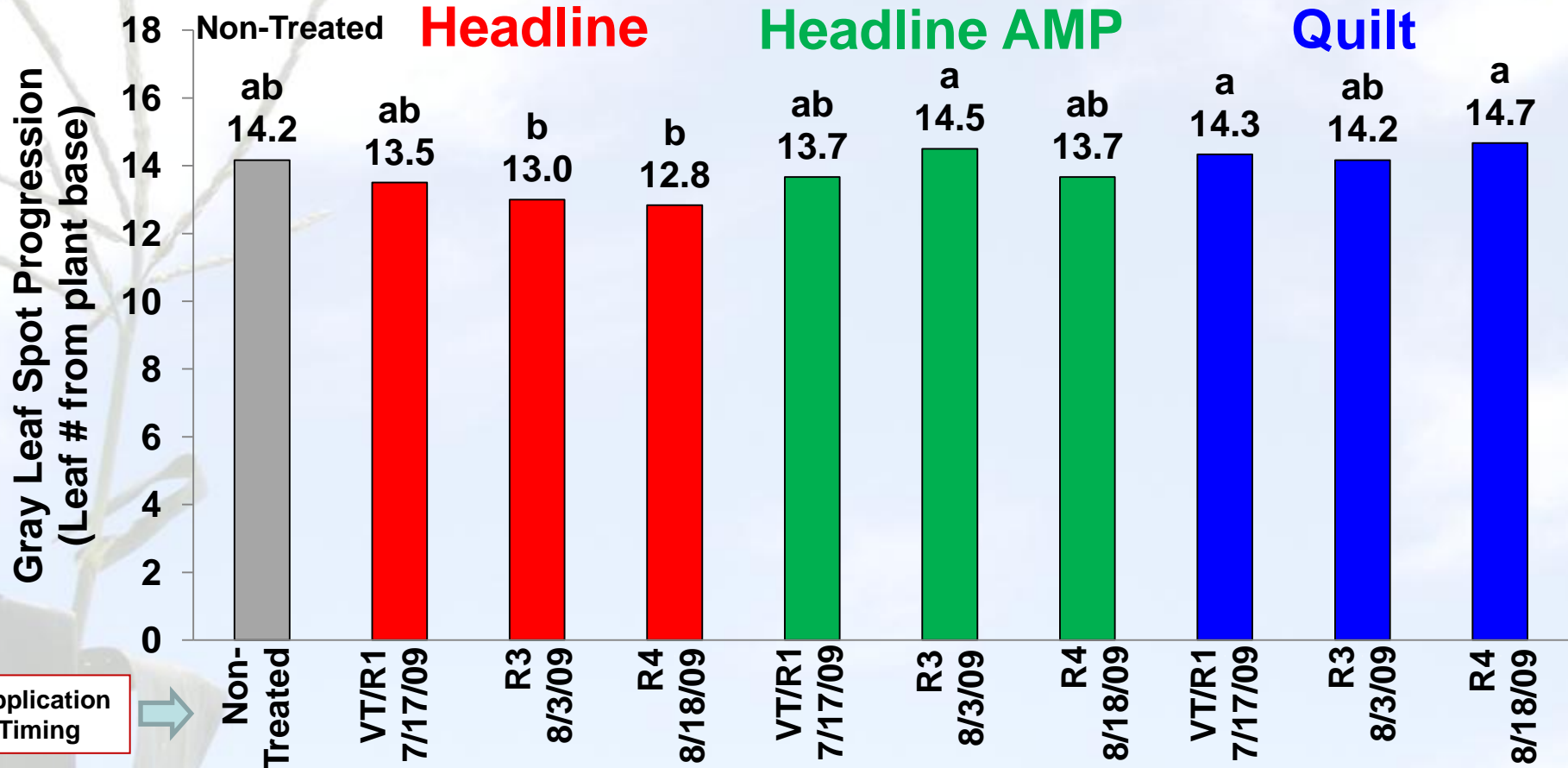


# 2009 Fungicide Timing Trial in NE

Gray Leaf Spot Progression up the plant (1-18 scale)

DKC 62-54 (GLS rating = 4/very good)

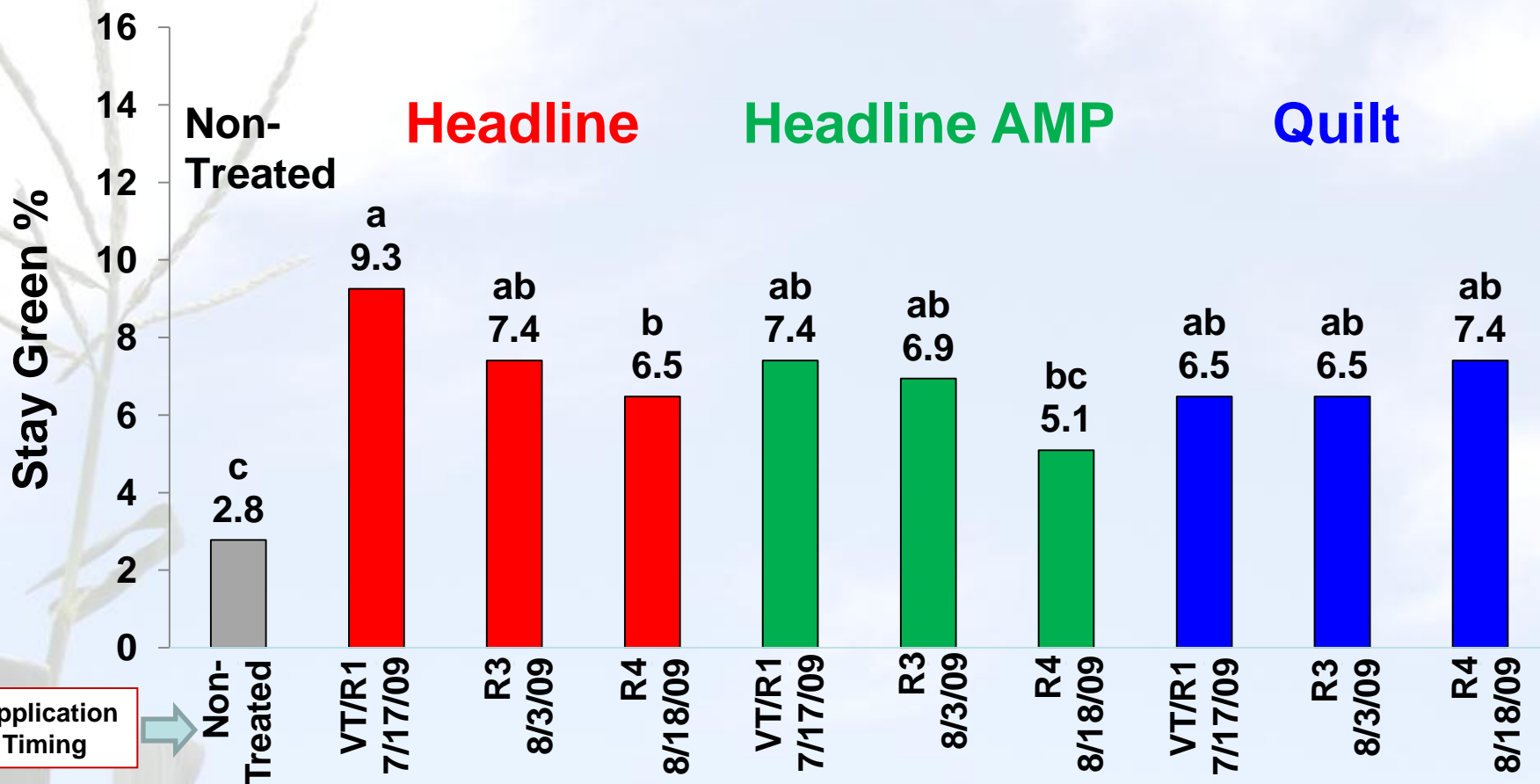
August 10, 2009 rating date (R4 reproductive stage)



# 2009 Fungicide Timing Trial in NE

Stay Green (%) assessed on October 14, 2009

DKC 60-18 (GLS rating = 7/fair)

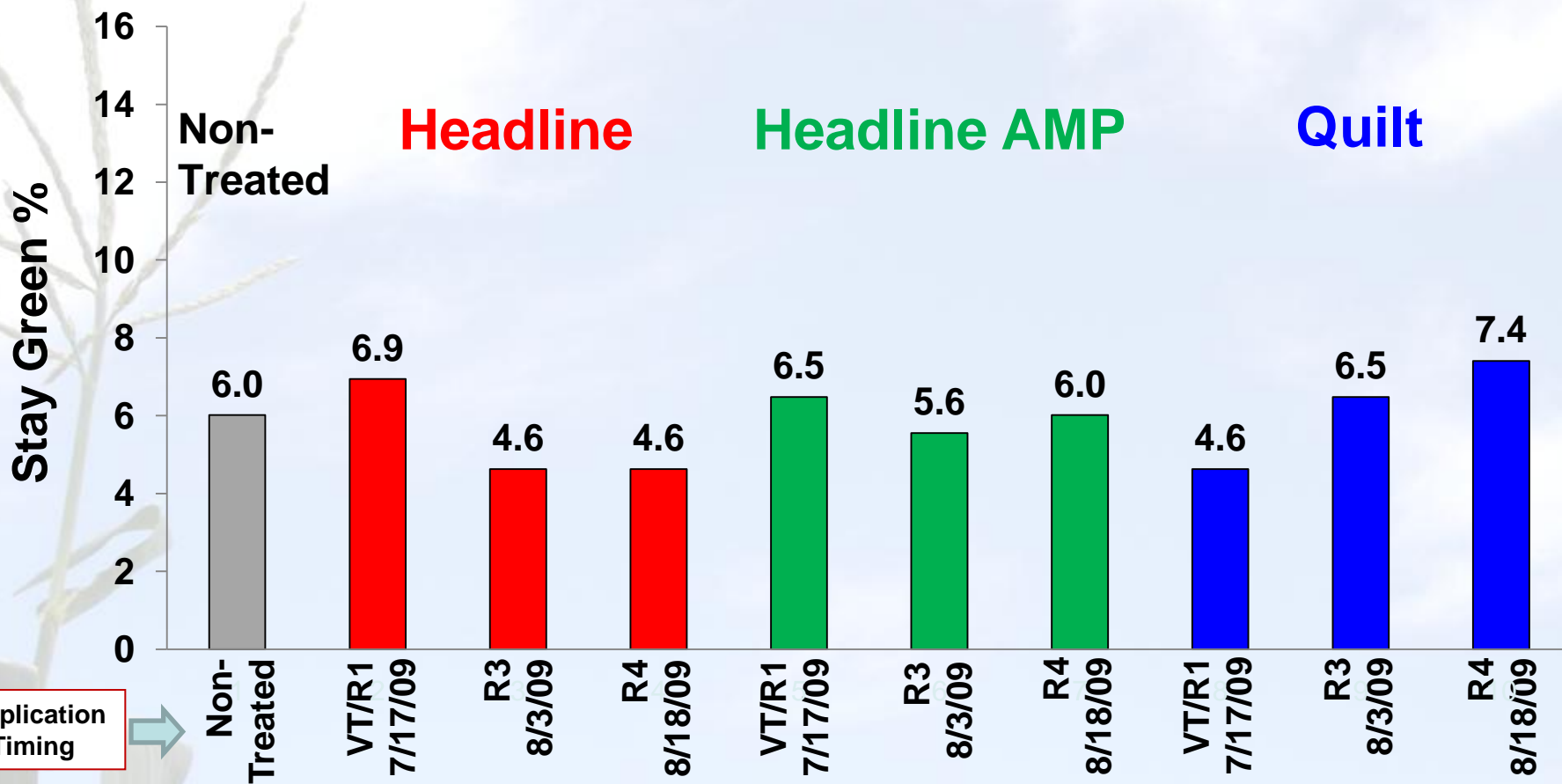




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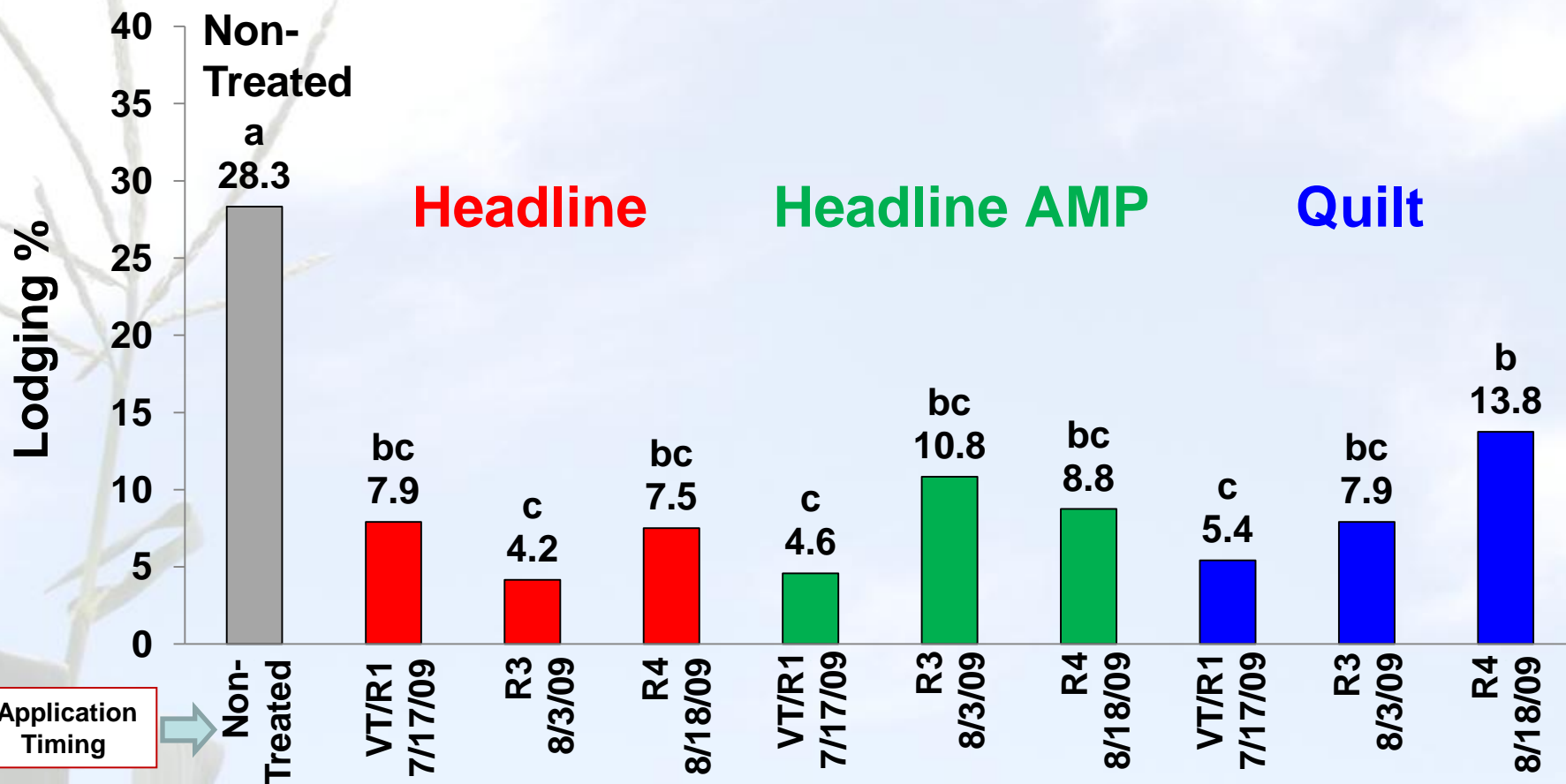
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# 2009 Fungicide Timing Trial in NE

Lodging (%) assessed on October 14, 2009  
DKC 60-18 (GLS rating = 7/fair)

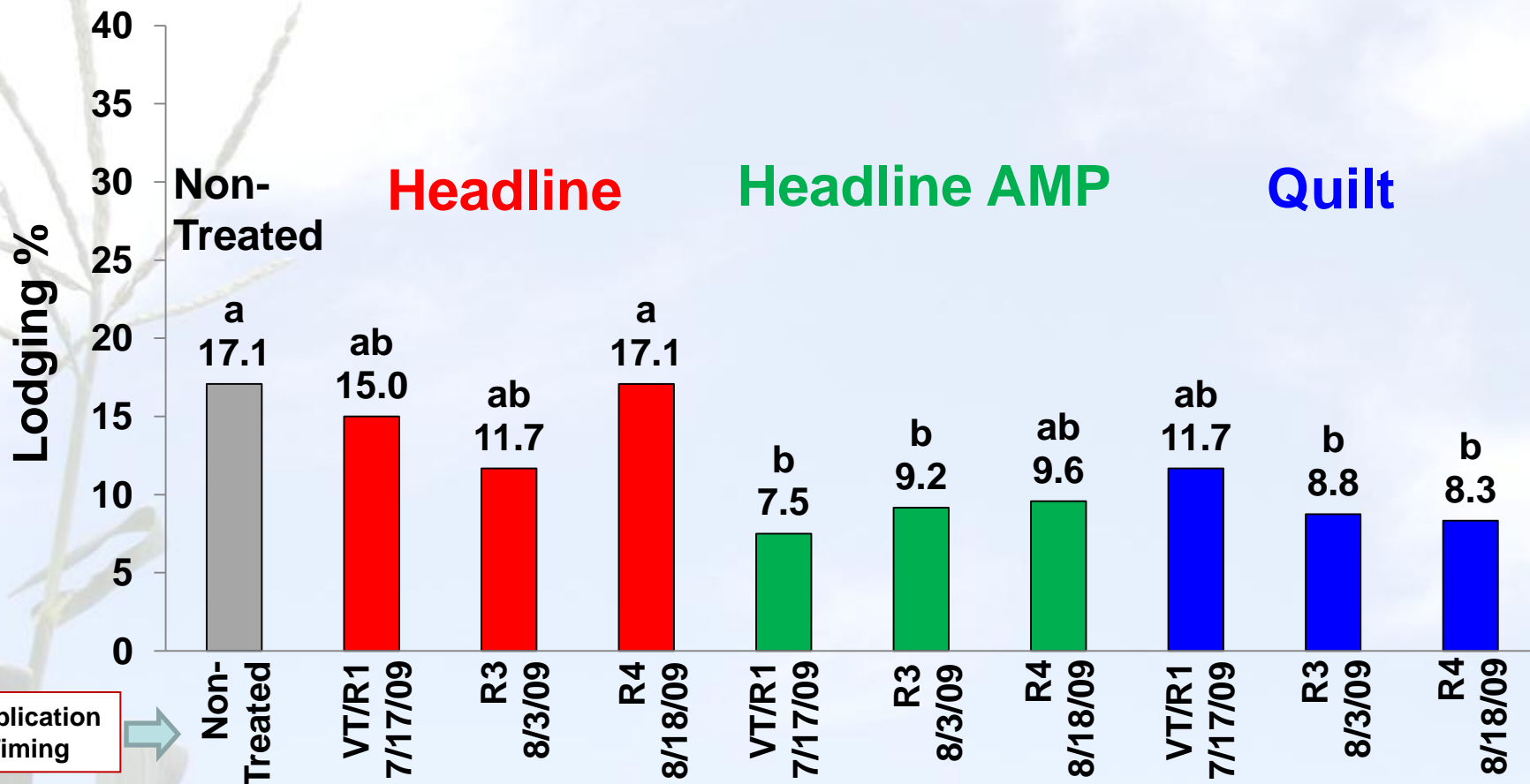


\*Lodging (%) defined as corn plants lodged below the ear leaf

Application Timing

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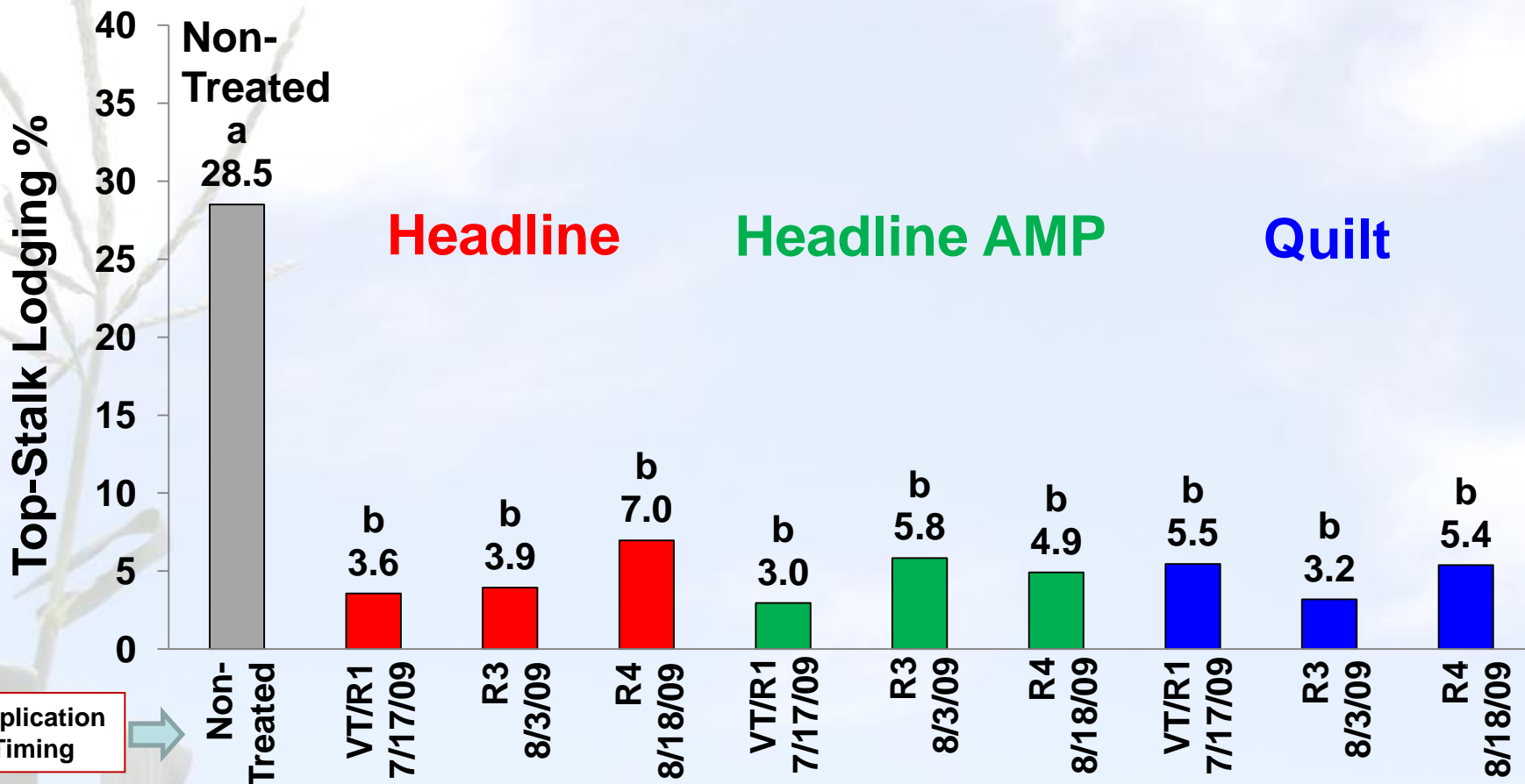


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# 2009 Fungicide Timing Trial in NE

Top-Stalk Lodging (%)  
DKC 60-18 (GLS rating = 7/fair)

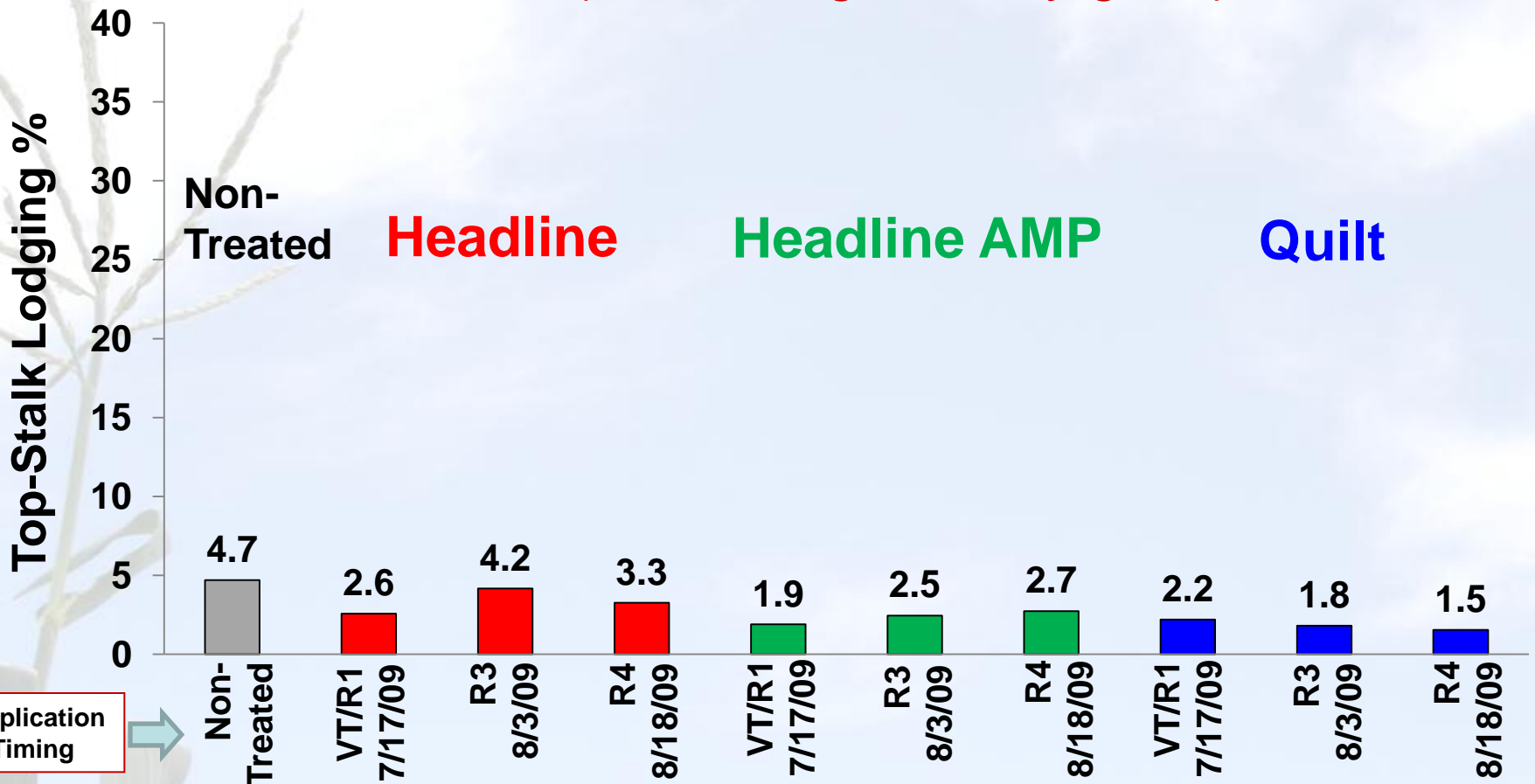


\*Top-Stalk Lodging (%) was defined as lodging at or above the ear node and appeared to be due primarily to anthracnose top dieback

# 2009 Fungicide Timing Trial in NE

## Top-Stalk Lodging (%)

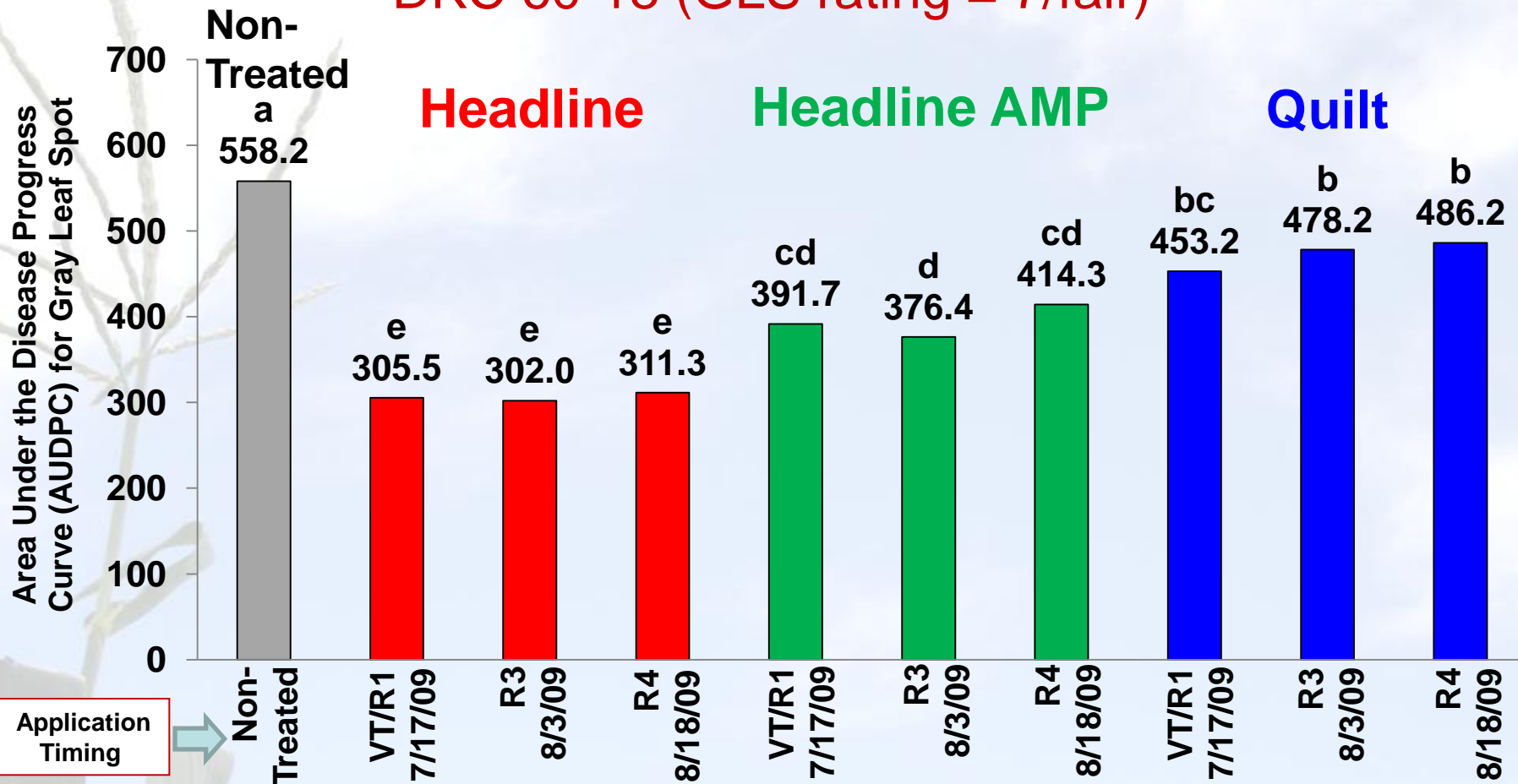
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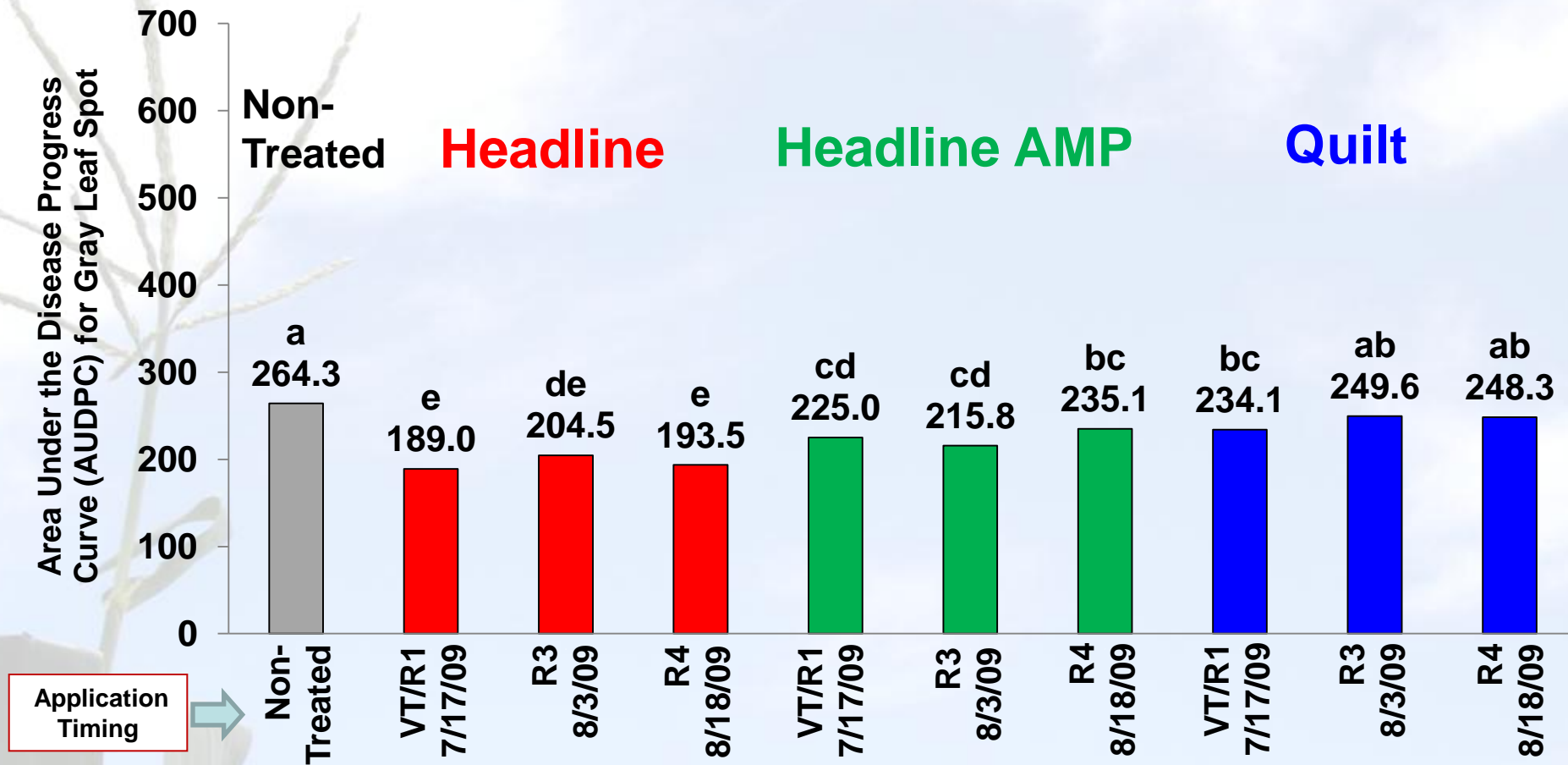
# 2009 Fungicide Timing Trial in NE

Area Under the Disease Progress Curve (AUDPC) for Gray Leaf Spot  
DKC 60-18 (GLS rating = 7/fair)



# 2009 Fungicide Timing Trial in NE

Area Under the Disease Progress Curve (AUDPC) for Gray Leaf Spot  
DKC 62-54 (GLS rating = 4/very good)



# Acknowledgments

- Casey Schleicher, Technologist
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