2008 Foliar Fungicides on Corn Product Comparisons

South Central Agricultural Laboratory
Clay Center, NE

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Disease Notes
Gray Leaf Spot

- Gray leaf spot (GLS) was the predominant foliar disease in this trial
- Gray leaf spot reached the tassel leaf prior to senescence in most plots

Disease Notes

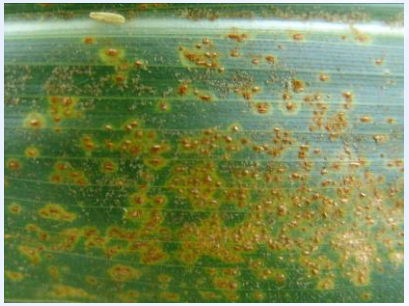
Common Rust

- Common rust developed at low severity (<5%) in this trial
- In general, common rust was more severe than normal in Nebraska in 2008, likely due to the ample moisture and cooler than normal temperatures.

Disease Notes

Southern Rust

- Southern rust developed in Nebraska in 2008 for the third consecutive year.
- The disease developed at very low incidence and severity (<3%) in this trial and surrounding areas, likely because of the cooler than normal temperatures.



2008 Foliar Fungicide Trials

- **Applied with high clearance sprayer**
- **Continuous corn**
- **Later planting (May 14, 2008)**
- **6 reps**
- **20 gpa**
- **Overhead sprinkler irrigated**

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Acknowledgement – Big John Manufacturing, Althouse, Ridgway, Rathje

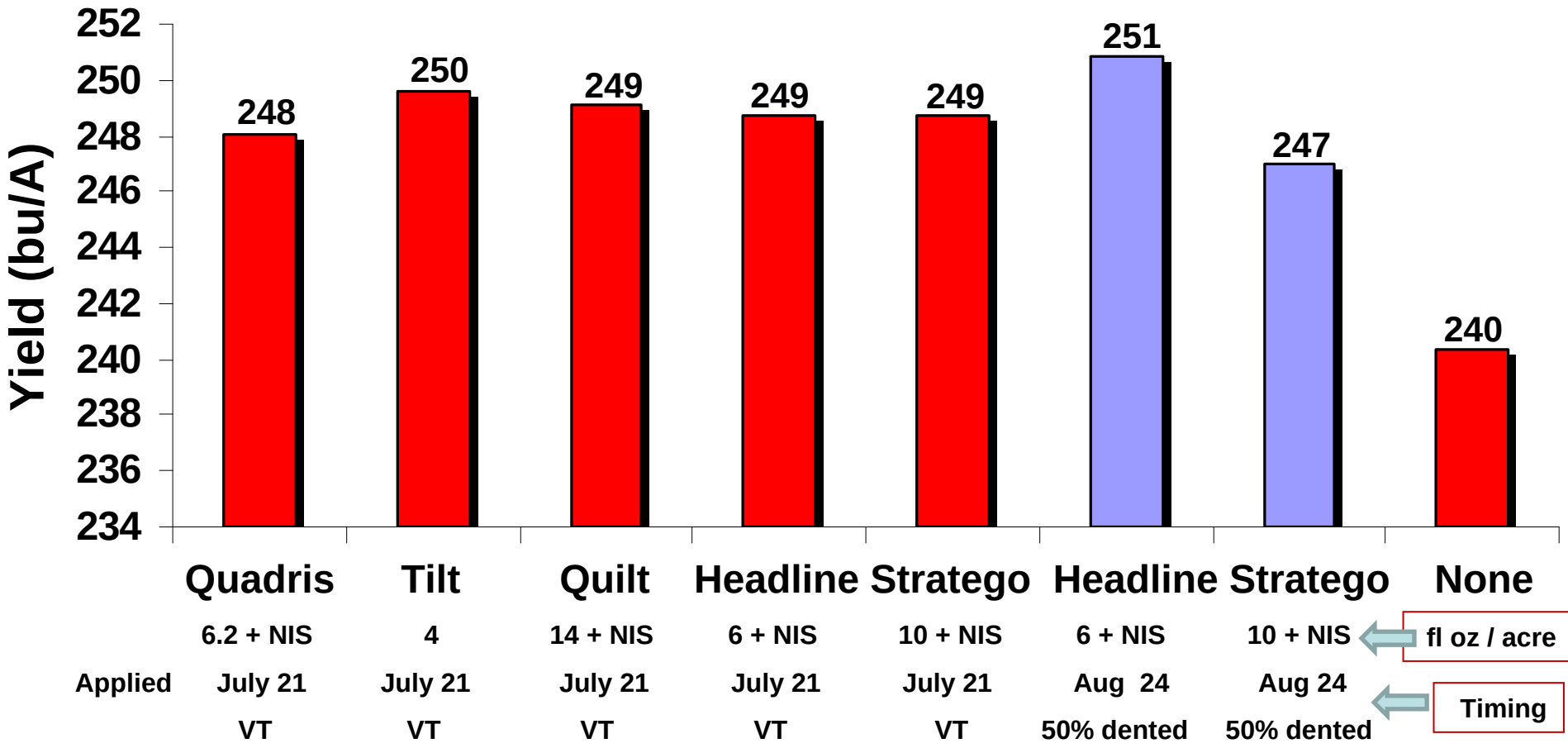
2008 Foliar Fungicide Trials

Data Collection

- Disease severity = % total leaf area covered by lesions or rust pustules
- GLS progression recorded as leaf number moving up the plant (1-18)
- Grain mechanically harvested and adjusted to 15.5% moisture
- Lodged plants per plot (%) estimated at harvest

2008 Corn Yield in NE

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

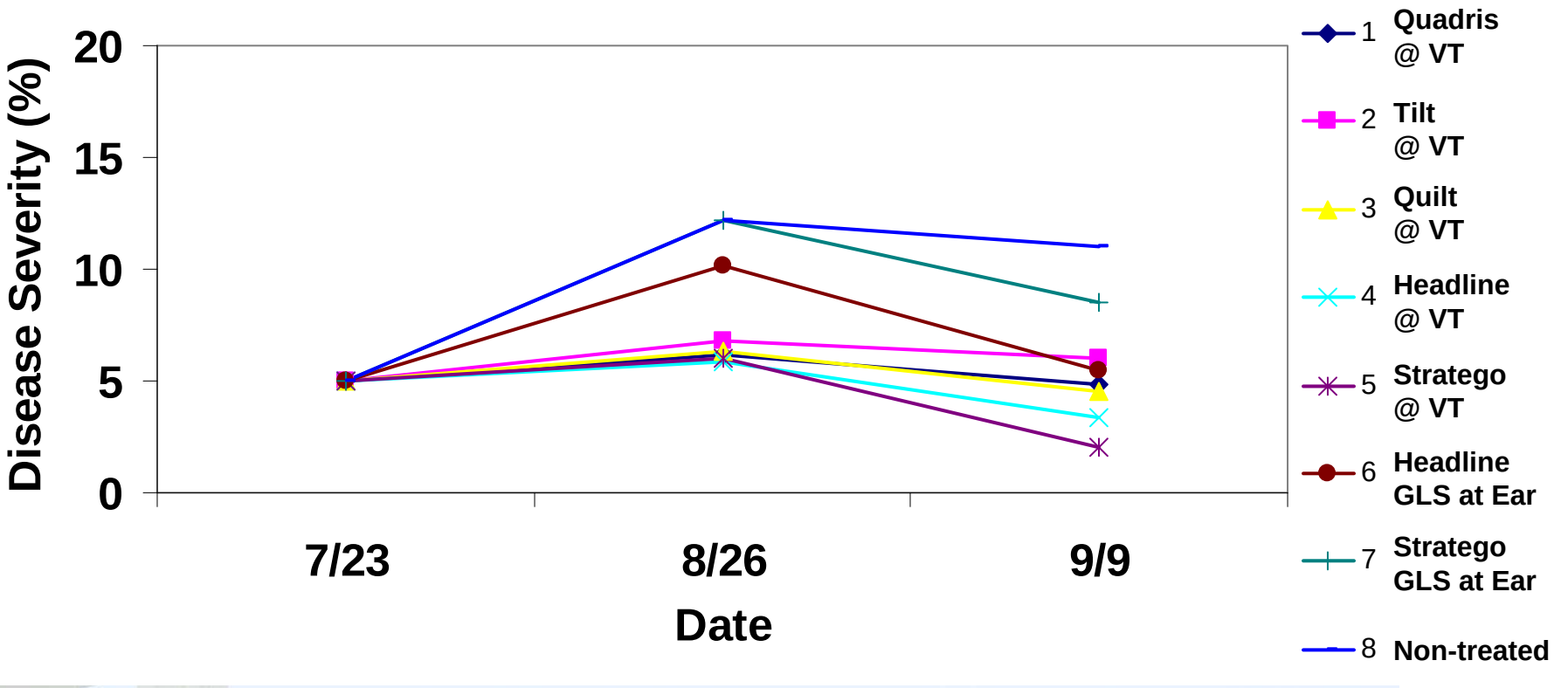


South Central Agricultural Lab near Clay Center, NE – no statistical differences

Fungicides applied at **VT** & when **GLS reached ear leaf** 20 gpa, NIS = 0.25% v/v

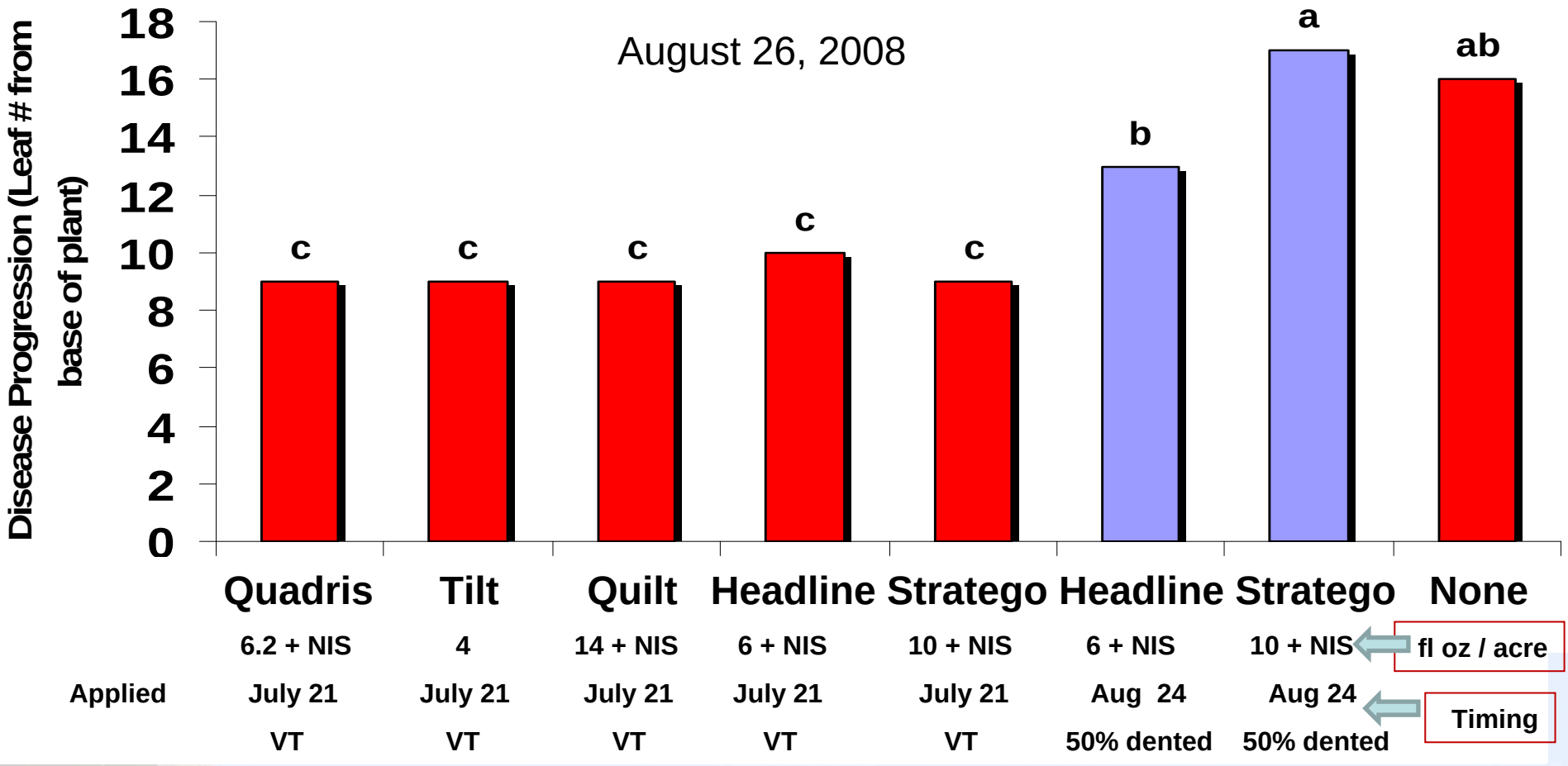
2008 Corn Gray Leaf Spot Severity in NE

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



2008 Corn Gray Leaf Spot Progression in NE

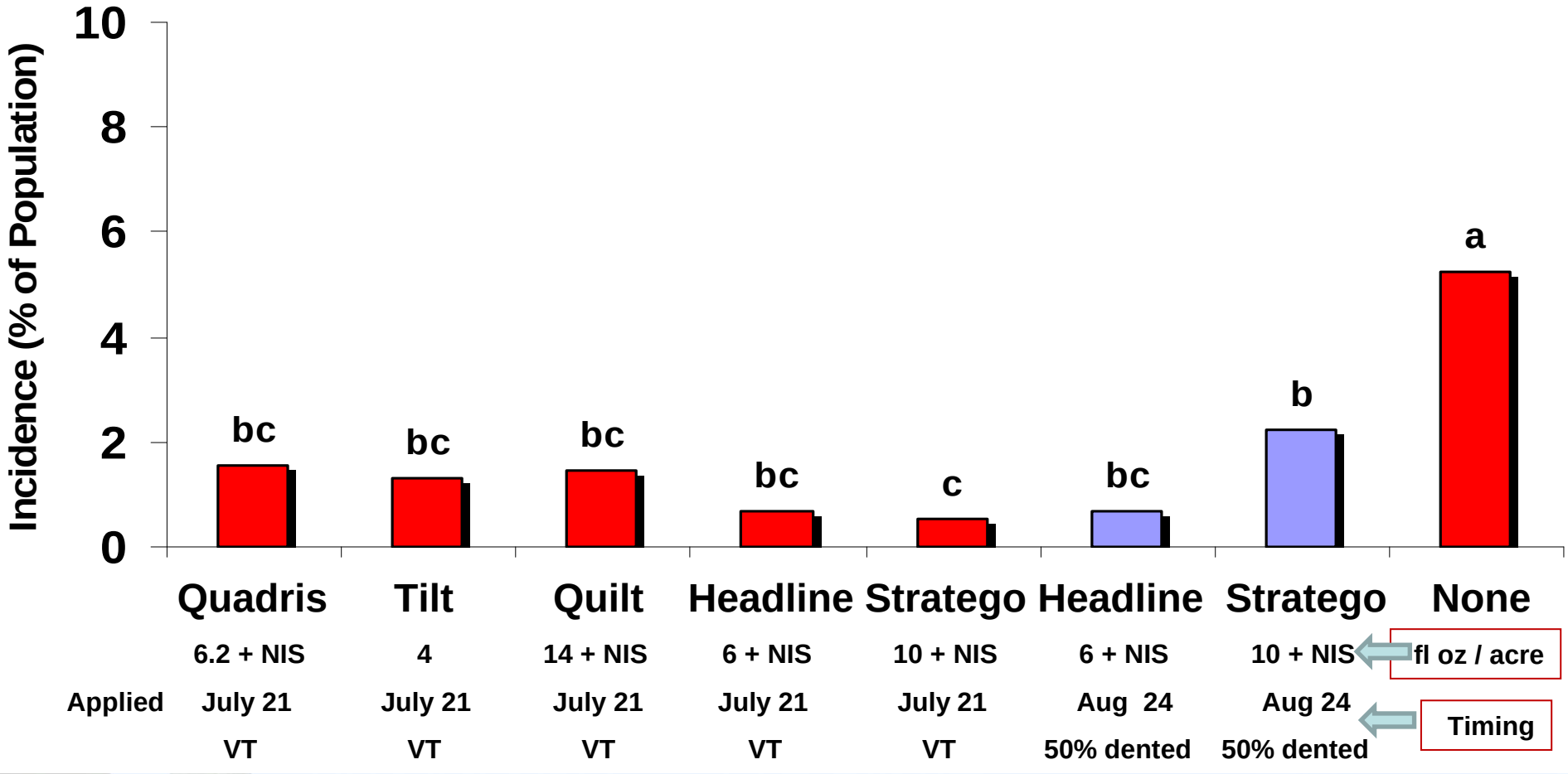
DKC 60-18 (GLS rating = 7/fair)



- 8/26/08, GLS was on tassel leaf of all treatments by 9/9/2008
  South Central Agricultural Lab near Clay Center, NE
  Fungicides applied at **VT** & when **GLS reached ear leaf** 20 gpa, NIS = 0.25% v/v

2008 Corn Top Rot Incidence in NE

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



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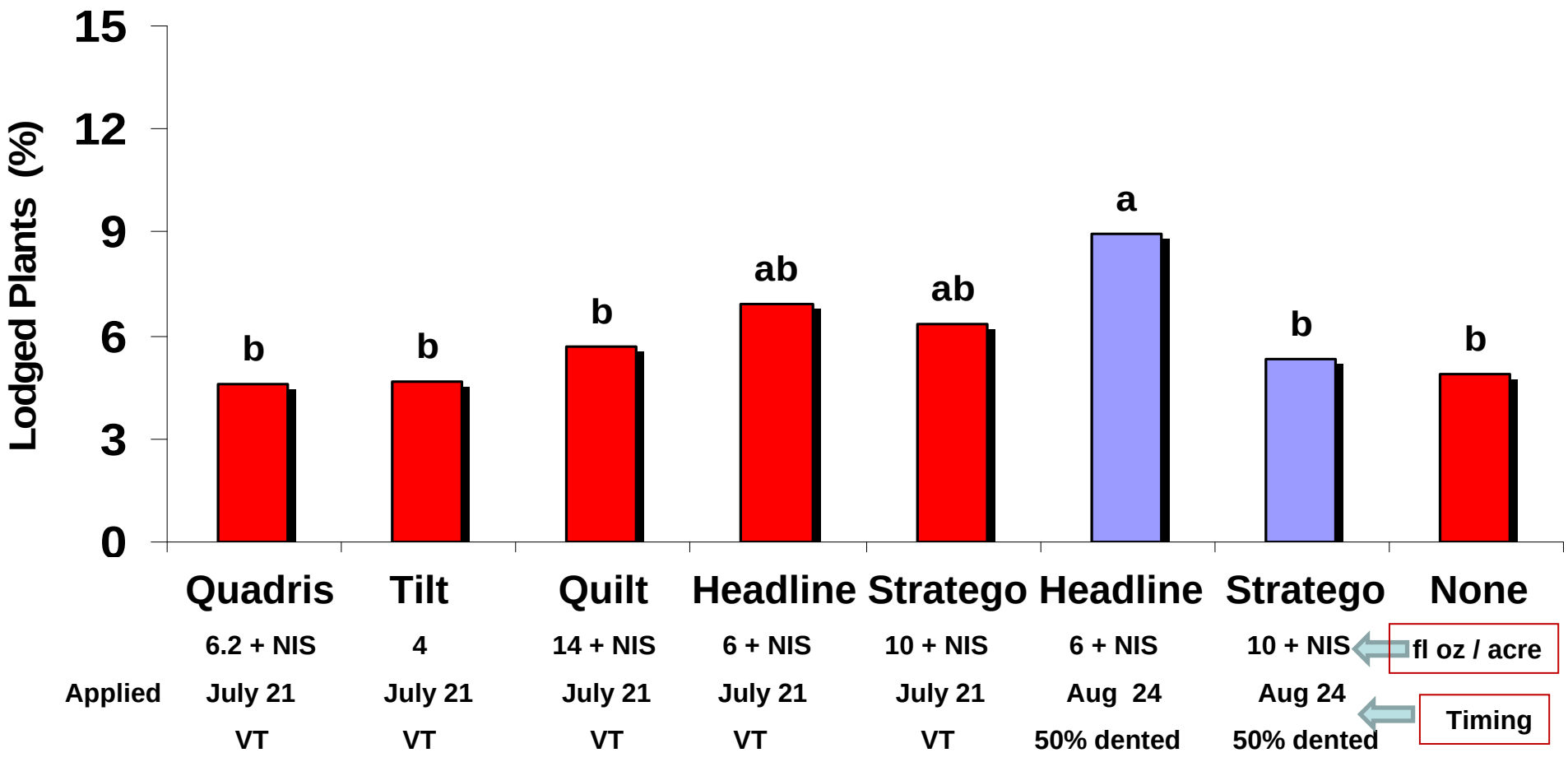
Fungicides applied at **VT** & when **GLS reached ear leaf** 20 gpa, NIS = 0.25% v/v

2008 Corn Lodging in NE

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

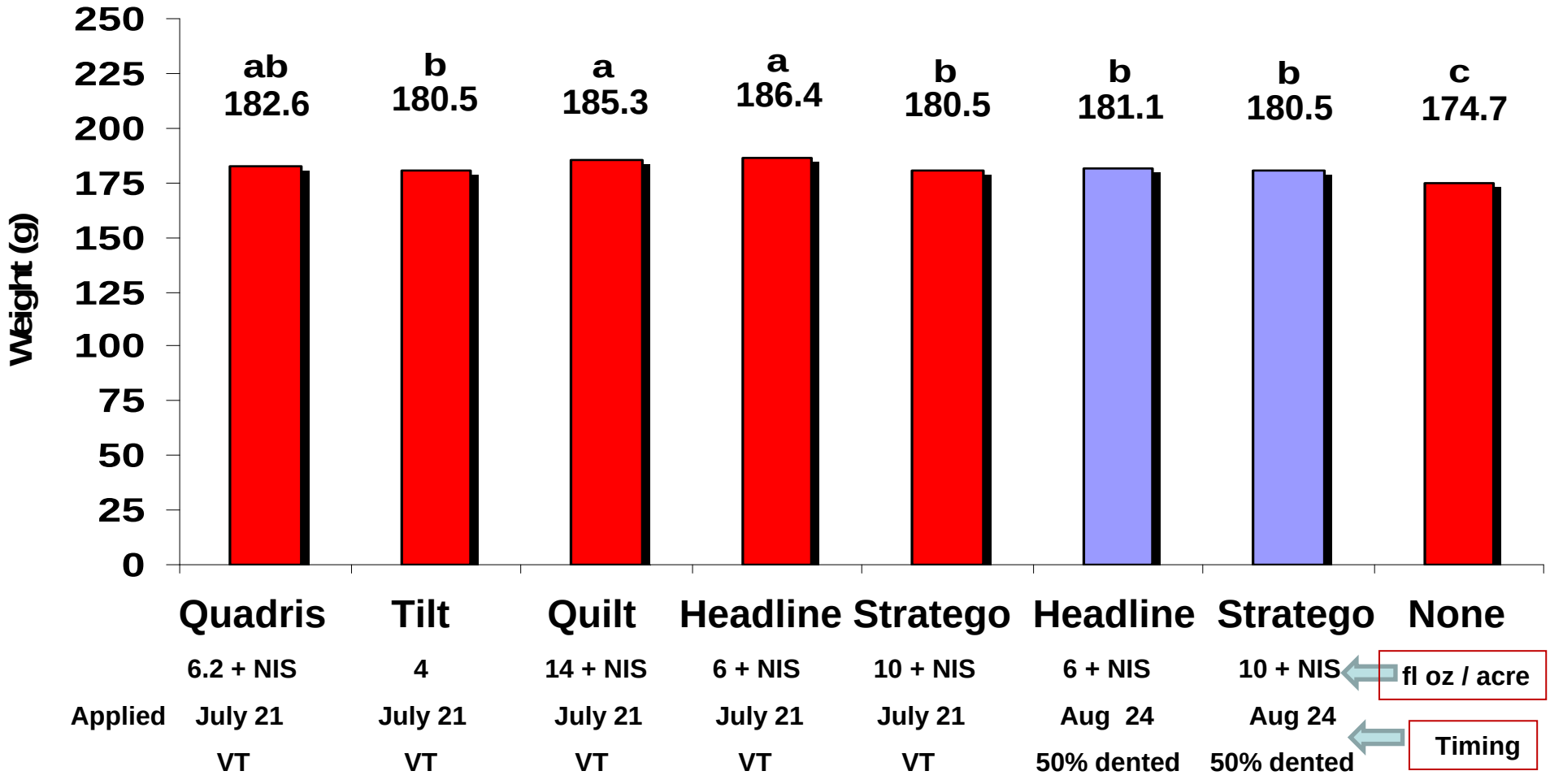


South Central Agricultural Lab near Clay Center, NE

Fungicides applied at **VT** & when **GLS reached ear leaf** 20 gpa, NIS = 0.25% v/v

2008 Corn 500 Kernel Weight in NE

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



South Central Agricultural Lab near Clay Center, NE

Fungicides applied at **VT** & when **GLS reached ear leaf** 20 gpa, NIS = 0.25% v/v

2008 Rainfall

Clay Center, NE

	Total Rain (in.)	Avg. High Temp (F)	Avg. Low Temp (F)	High Temp. (F)	Low Temp. (F)
May	10.15	67	46	86	34
June	10.65	81	59	90	55
July	4.6	87	65	97	55
August	1.67	85	64	100	55
September	1.79	75	53	91	40
October	8.53	63	42	79	25
November	0	73	47	73	34

- Does not include irrigation.

*Source used: Nebraska Department of Natural Resources: http://dnrdata.dnr.ne.gov/NeRAIN/

Acknowledgments

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- Corn Pathology Lab Staff

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