



CORN FUNGICIDE USE IN LOUISIANA



**Boyd Padgett
LATMC
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COLLABORATORS

ü **Cliff Coker (Univ of AR)**

ü **Tom Allen (Miss State Univ)**



CAN FUNGICIDES POSITIVELY IMPACT CORN PRODUCTION???



CORN DISEASES

- ü **Common Rust**
- ü **Southern Rust**
- ü **Northern Corn Leaf Blight**
- ü **Gray Leaf Spot**
- ü **Ear Rots**



RUSTS



SMUT





BLIGHTS





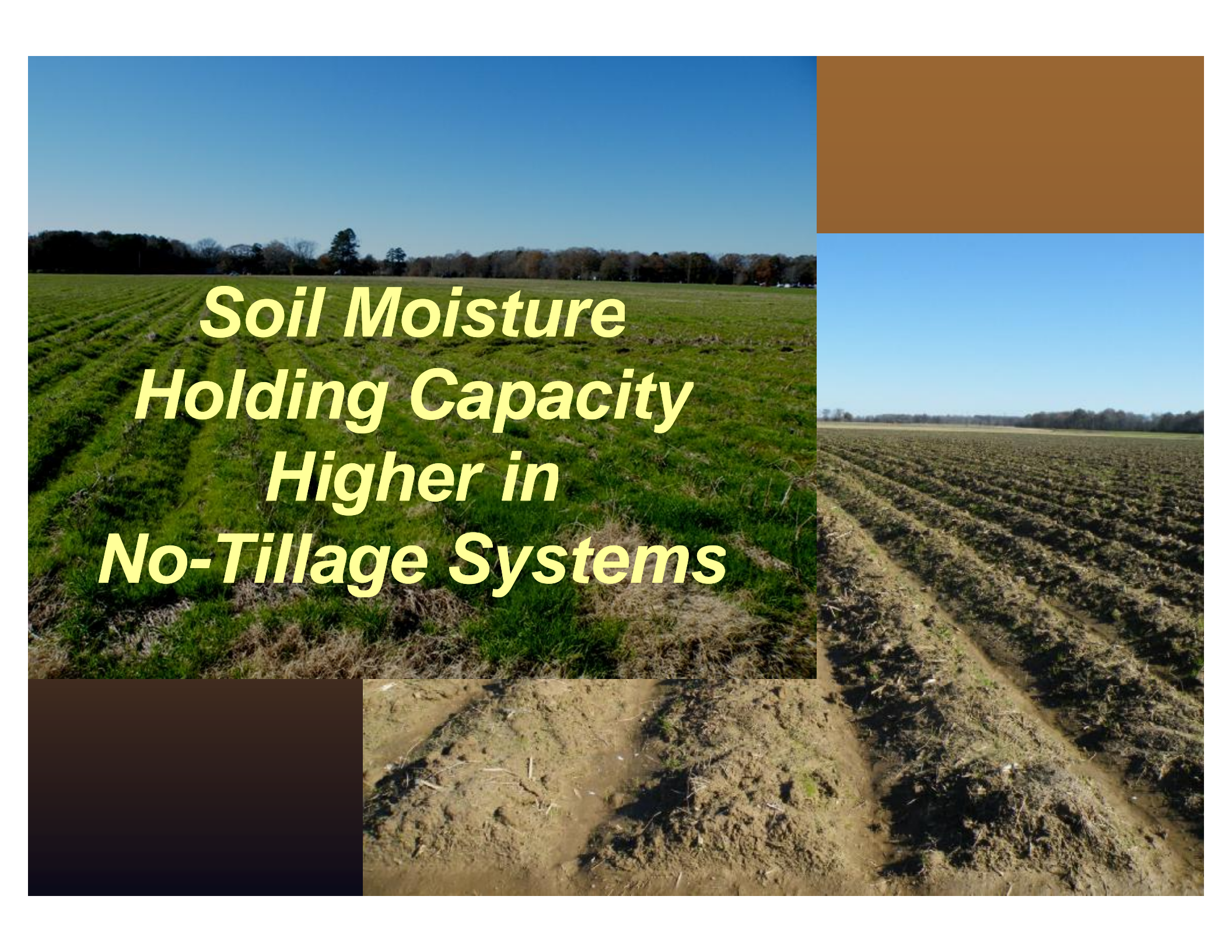
***DISEASES 'USUALLY'
OCCUR LATE-SEASON***

?? WHY ??



***REDUCED-TILLAGE
PRACTICES USED
ON ABOUT 90%
OF CORN ACRES***





***Soil Moisture
Holding Capacity
Higher in
No-Tillage Systems***



***Plant Residue
Higher in
No-Tillage Systems***





***CORN RESEARCH
SUMMARIES***



CORN RESEARCH SUMMARIES

ü Recommended Varieties

ü Quilt, Headline, Stratego

**ü Applied at or near VT
(Tasseling)**

ü Ground and Aerial Applied



CORN RESEARCH SUMMARIES

- ü Monitored for Diseases**
- ü Quantified Stalk Density**
- ü Yield and Test Weights**





Disease Assessments

- ü Disease Severity Low in Most Tests
- ü Common & Southern Rust
- ü Northern Corn Leaf Blight



2007-08 Arkansas Corn Fungicide Summaries

Fungicide	Yield	Diff ¹
Headline (6.0)	191.13	-2.2
Quilt (14.0)	185.84	-7.5
Non-treated	193.43	--

¹ Average difference in bu/A from non-treated

² n=5

Cliff Coker, UA

2007-08 Mississippi Corn Fungicide Summaries

Fungicide	Yield	Diff¹
Headline (6.0)	170.5	-2.5
Quilt (14.0)	172.2	-0.8
Non-treated	173.0	--

¹ *Average difference in bu/A from non-treated*

² *n=18, 6 small plot + 12 large plot*

Tom Allen, MSU

2007-08 Louisiana Corn Fungicide Summaries

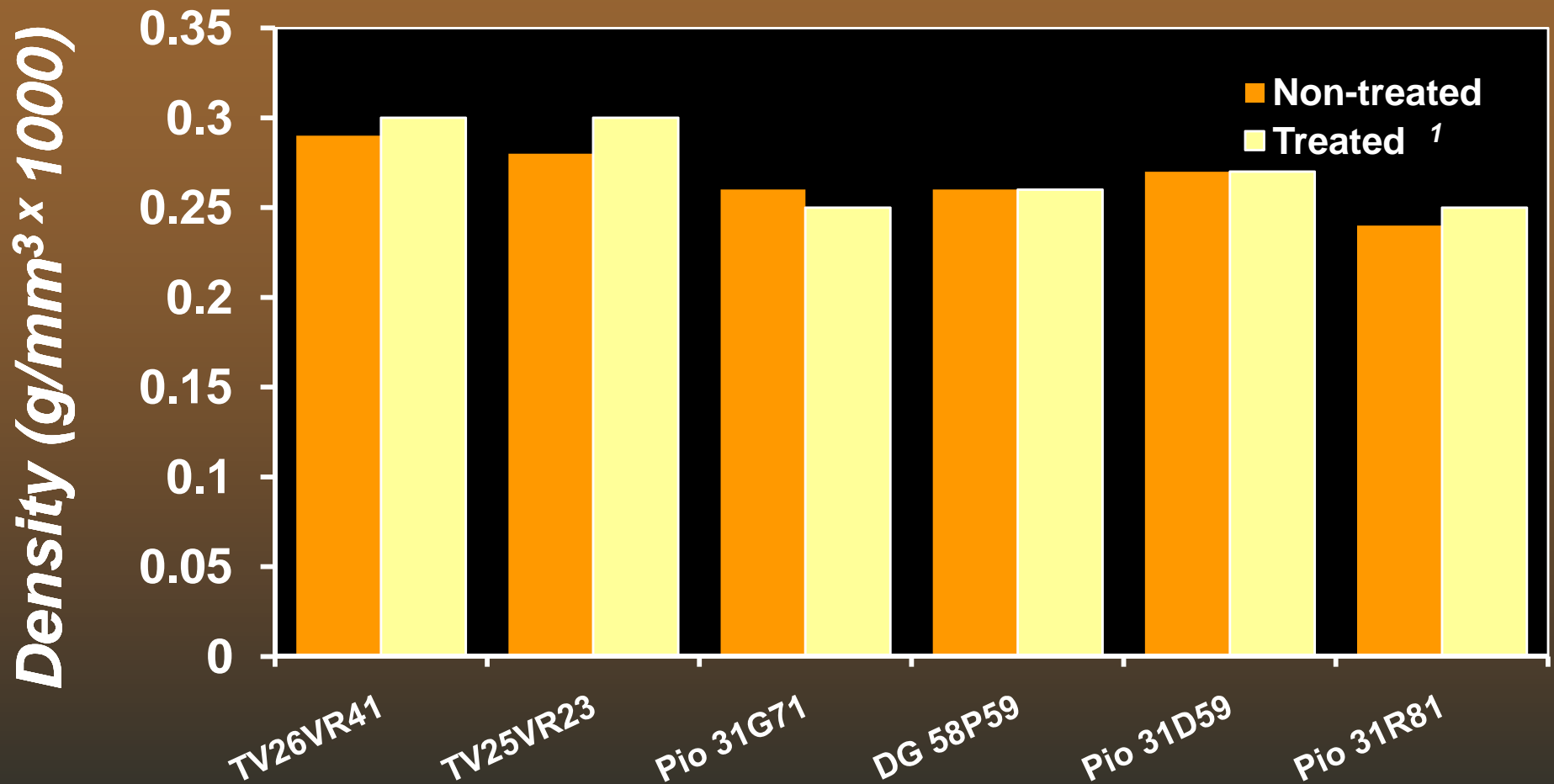
Fungicide	Yield	Diff ¹	Range (bu/A)
Headline (6.0)	126.6	4.3	(+33.9 to -19.7)
Quilt (14.0)	135.6	- 4.6	(+15.7 to -14.3)

¹ Average difference in bu/A from non-treated

² n=3

Padgett, LSU AgCenter

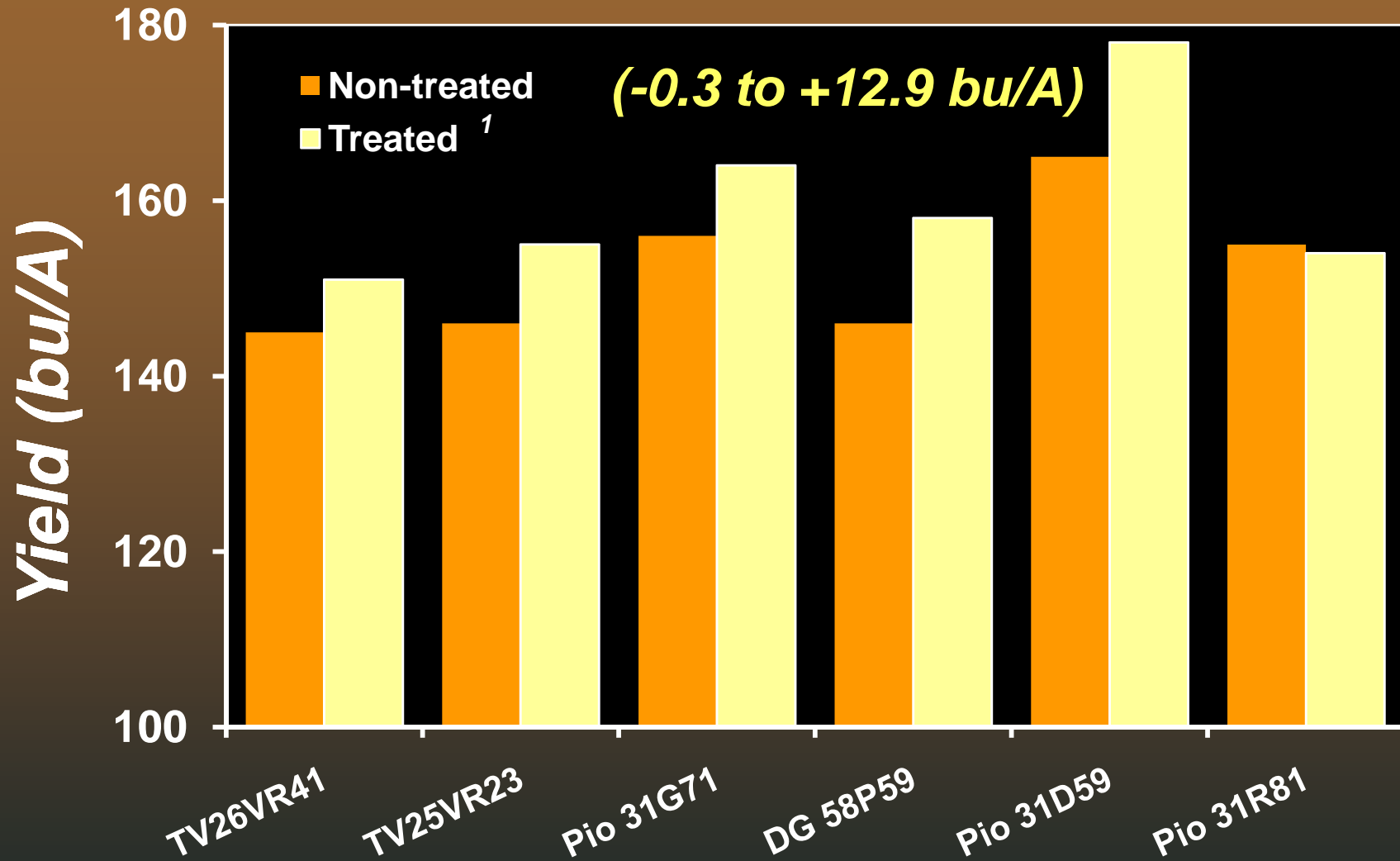
2009 Northeast



¹Treated with Quilt @ 14 fl oz/A

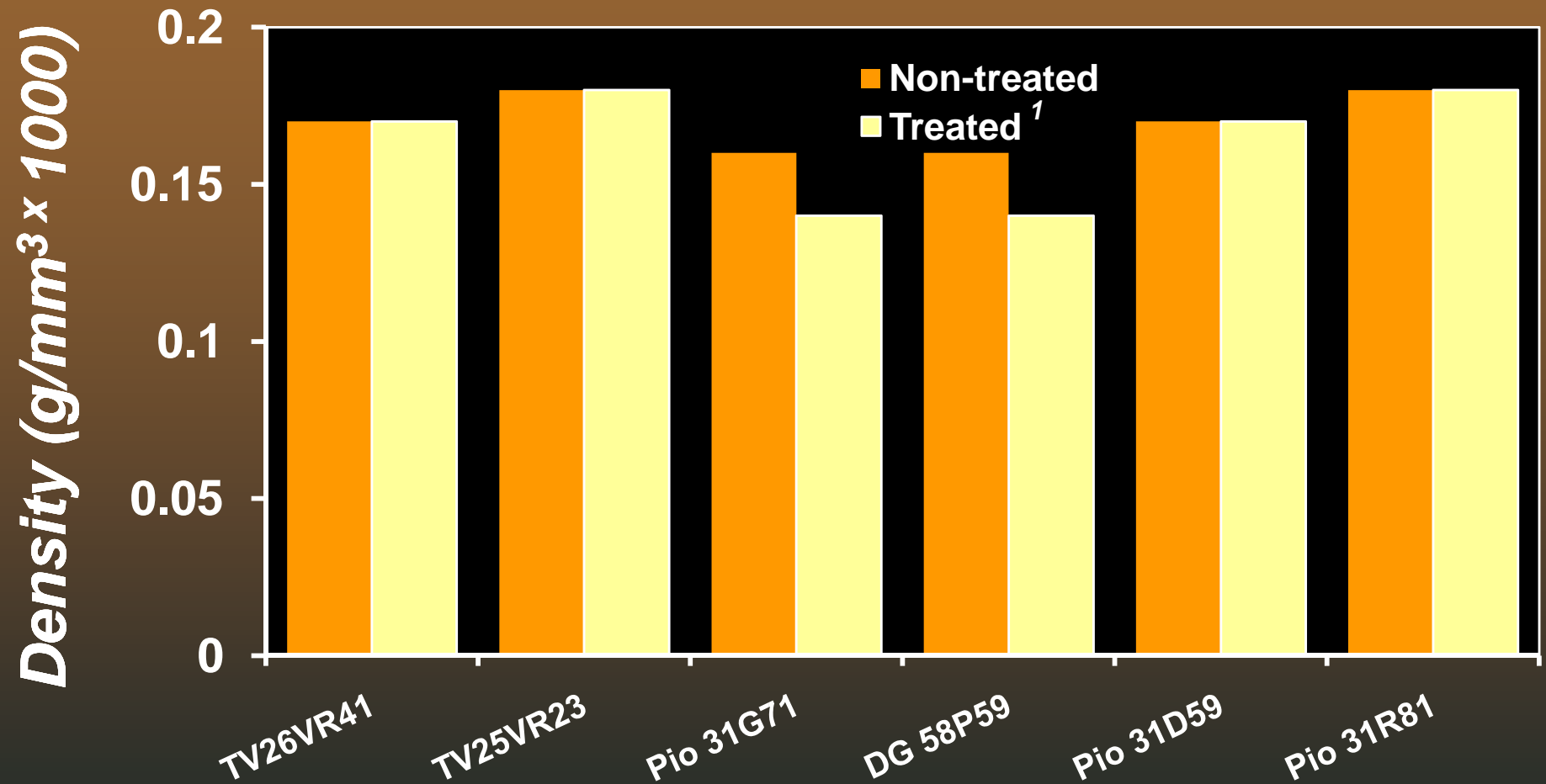
NECN0901

2009 Northeast



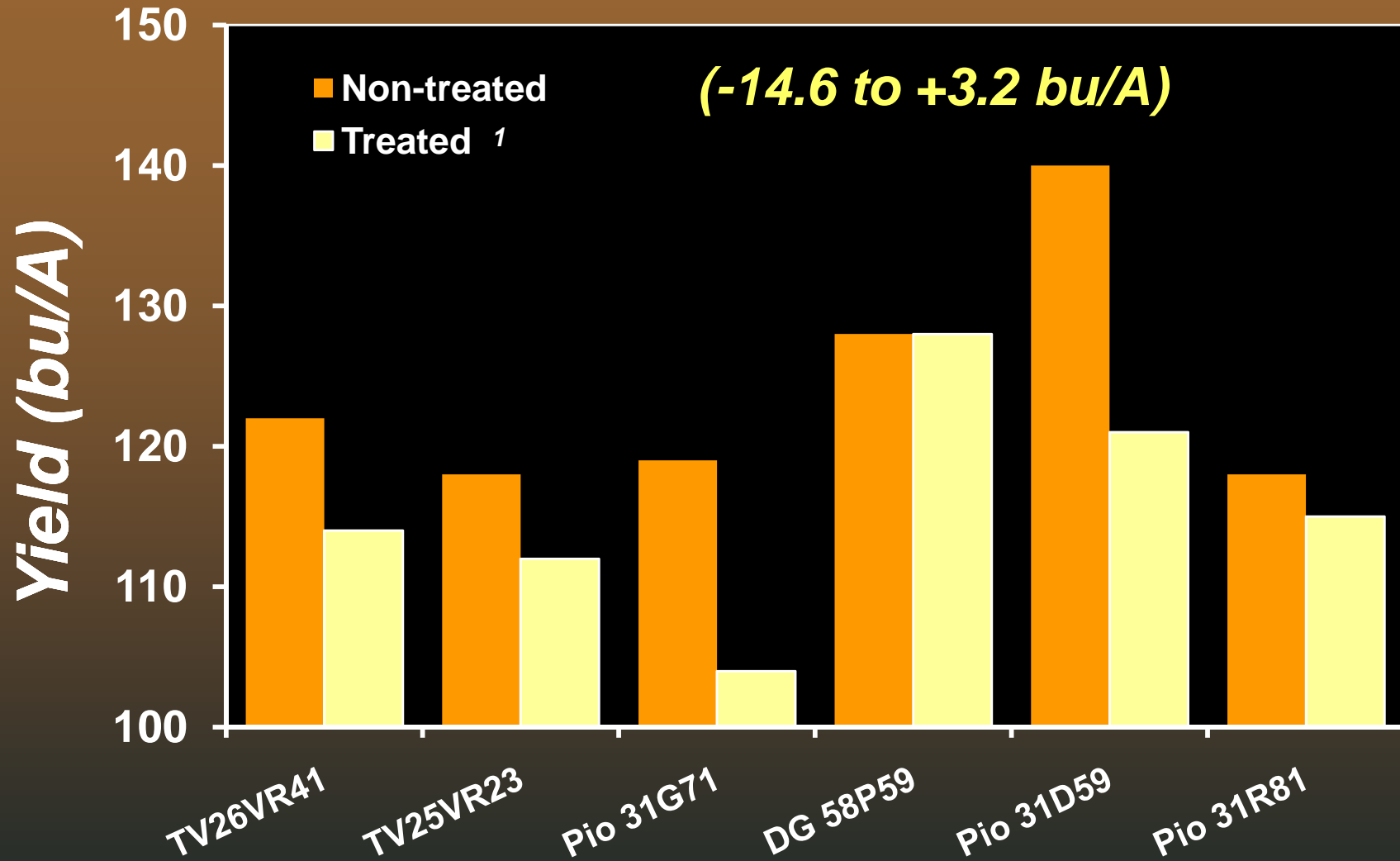
¹Treated with Quilt @ 14 fl oz/A

2009 Macon Ridge



¹Treated with Headline @ 6 fl oz/A

2009 Macon Ridge



¹Treated with Headline @ 6 fl oz/A

General Fungicide Screening and LSU AgCenter Variety Disease Ratings



2007 Louisiana Corn Fungicide Summaries

Fungicide	# Tests	Diff¹
Headline (6.0)	27	2.1
Quilt (14.0)	34	-1.7
Quadris (6.0)	3	2.4
Stratego (10.0)	9	-1.3

¹ Difference in bu/A from non-treated

Hollier and Padgett

Corn Fungicide Trials Macon Ridge 2008¹

<i>Treatment (fl oz/a)</i>	<i>5-Aug TW</i>	<i>5-Aug Yld</i>
<i>Check</i>	<i>59.4</i>	<i>105.9</i>
<i>Stratego (10.0)</i>	<i>59.1</i>	<i>103.7</i>
<i>Stratego (12.0)</i>	<i>59.5</i>	<i>109.7</i>
<i>Headline (6.0)</i>	<i>58.7</i>	<i>104.8</i>
<i>LSD P=(0.05)</i>	<i>0.5</i>	<i>NS</i>

***¹Planting Date: April 22
Corn variety: DKC63-42***

MRCN0805

Red River 2009

<i>Treatment (fl oz/a)</i>	<i>5-Aug Yld (bu/A)</i>
<i>Check</i>	<i>126.7</i>
<i>Quilt (14.0)</i>	<i>120.4</i>
<i>Stratego (10.0)</i>	<i>122.2</i>
<i>Headline (6.0)</i>	<i>130.6</i>
<i>Quilt (14.0) + 1% COC</i>	<i>139.1</i>
<i>Stratego (10.0) + ¼% NIS</i>	<i>131.0</i>
<i>Headline (6.0) + ¼% NIS</i>	<i>131.1</i>
<i>LSD P=(0.10)</i>	<i>7.0</i>

Red River 2009

<i>Treatment (fl oz/a)</i>	<i>5-Aug Yld (bu/A)</i>
<i>Check</i>	<i>126.7</i>
<i>Quilt (14.0)</i>	<i>120.4</i>
<i>Stratego (10.0)</i>	<i>122.2</i>
<i>Headline (6.0)</i>	<i>130.6</i>
<i>Quilt (14.0) + 1% COC</i>	<i>139.1</i>
<i>Stratego (10.0) + ¼% NIS</i>	<i>131.0</i>
<i>Headline (6.0) + ¼% NIS</i>	<i>131.1</i>
<i>LSD P=(0.10)</i>	<i>7.0</i>



***GREENING
EFFECT***

Dean Lee 2009

Treatment (Fl oz/a)	% Brn LF	5-Aug TW	5-Aug Yld
Check	52.5	55.9	108
Stratego (10.0)	46.3	56.1	113
Quadris (6.0)	52.5	56.6	117
Quilt (14.0)	46.3	55.1	106
Headline (6.0)	46.3	55.5	98
LSD P=(0.10)	11.0	1.0	19

Pioneer 31D59: 3-6-09

Dean Lee 2009

<i>Treatment (rate/A)¹</i>	<i>% Brn LF</i>	<i>5-Aug TW</i>	<i>5-Aug Yld (bu/A)</i>
<i>Check</i>	<i>52.5</i>	<i>55.9</i>	<i>108</i>
<i>Ballad Plus (0.5 qt)</i>	<i>36.3</i>	<i>56.6</i>	<i>99</i>
<i>Ballad Plus (1.0 qt)</i>	<i>51.3</i>	<i>56.3</i>	<i>82</i>
<i>Ballad Plus (0.5 qt) + Headline (6.0 fl oz)</i>	<i>37.1</i>	<i>56.0</i>	<i>99</i>
<i>Ballad Plus (1.0 qt) + Headline (6.0 fl oz)</i>	<i>41.3</i>	<i>56.6</i>	<i>109</i>
<i>Headline (6.0 fl oz)</i>	<i>37.5</i>	<i>56.5</i>	<i>101</i>
<i>LSD P=(0.10)</i>	<i>10.0</i>	<i>1.2</i>	<i>30</i>

1/4 V/V Induce added to all treatments.

Planting Date: March 6th

NO Plant Health Improvements

In the absence of significant foliar disease

- ü Stalk strength***
- ü Plant color / biomass***
- ü Grain test weight***
- ü Yields***

Mississippi State
UNIVERSITY
Extension
SERVICE

LSU
AgCenter
Research & Extension

U of A
UNIVERSITY OF ARKANSAS
DIVISION OF AGRICULTURE
Cooperative Extension Service

POTENTIAL FIT

- ü Continuous Corn
- ü Susceptible Varieties
- ü No-till Increased Residue
- ü Late Planted Corn ???
- ü Disease Pressure High

Early



2009 Fungicide Prices

(Prices Subject to Change)

Syngenta

ü Quadris-\$17.25/A

ü Quilt-\$19.57/A

BASF

ü Headline-\$18.46/A

Bayer

ü Stratego-\$12.50/A





Thanks
for
Your Time



Thank You

- ü LA Soybean and Grains
Research and Promotion Board*
- ü AR and MS Commodity Boards*
- ü Industry*
- ü Associates/Students*
- ü Scientists & Agents*





!!! WHO !!!
!!! DAT !!!





