



COTTON FUNGICIDE SEED TREATMENTS

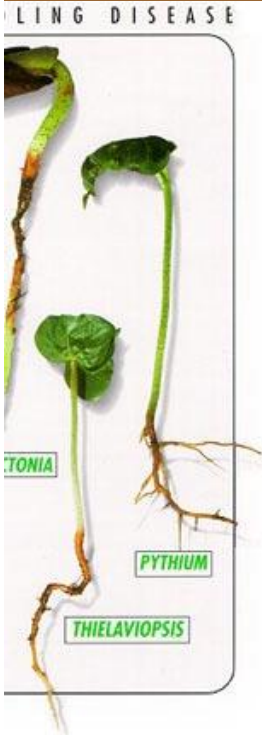


**LOUISIANA
TECHNOLOGY &
MANAGEMENT
CONFERENCE
February 17, 2012**





Seedling Disease



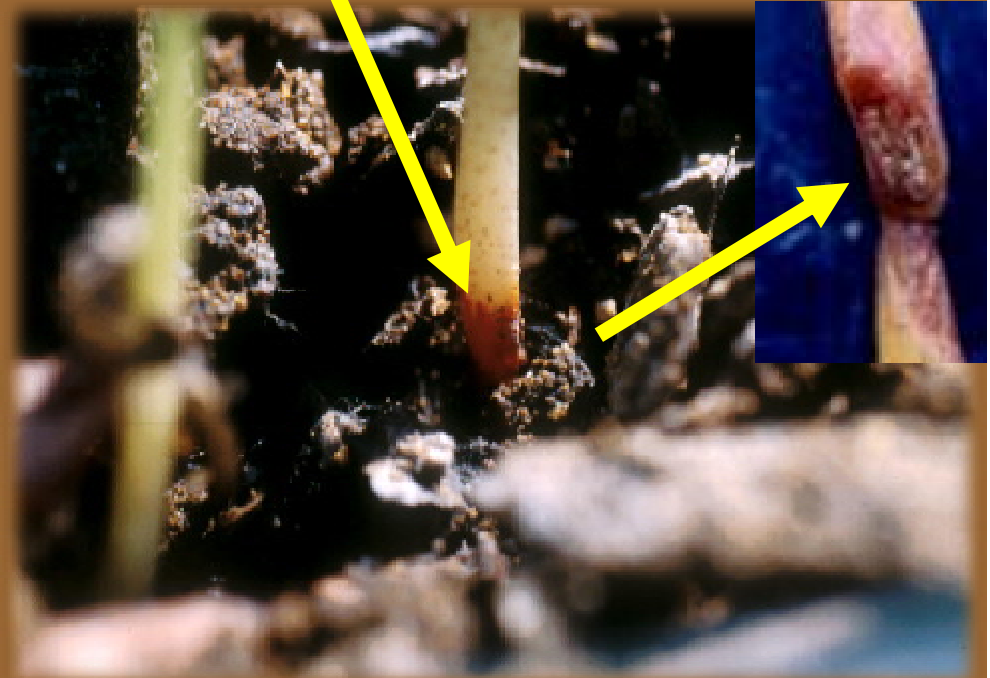
Seedling Disease Fungi

- ü *Rhizoctonia solani*
- ü *Fusarium spp.*
- ü *Pythium spp.*



Rhizoctonia solani

- ü Soreshin, Damping off, Rhizoc
- ü Reddish-brown lesion
- ü Wire-stem



Rhizoctonia solani



ü

Survives as vegetative body (mycelium)

ü

Colonizes organic matter

ü

Wide host range

ü

Active over a wide temperature range
61-94°F



Rhizoctonia solani



- ü Development is favored most by excessive moisture and cool soil temperatures
- ü Infection occurs over a wide soil moisture range



Pythium spp.



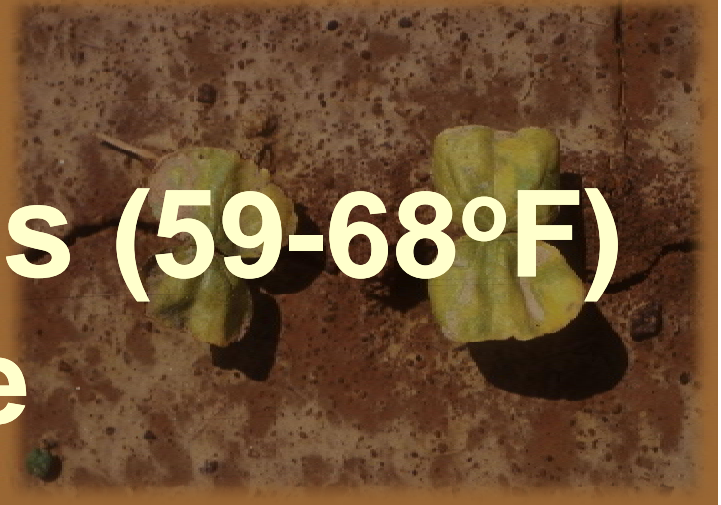
ü Preemergence damping-off
Seed rot (toothpaste-like)

ü Postemergence damping-off
Water-soaked lesions
Dry lesions (unfavorable)



Pythium spp.

- ü Overwinters as spores in plant tissue or soil
- ü Colonizes organic matter
- ü Infects other crops and weeds
- ü Low temperatures (59-68°F) and high moisture



Pythium spp.

- ü Favored by cool, wet soils
- ü Heavy poorly-drained soils



Fusarium spp.

- ü Stunted chlorotic plants
- ü Lesion on hypocotyl and roots
- ü Poorly developed root system

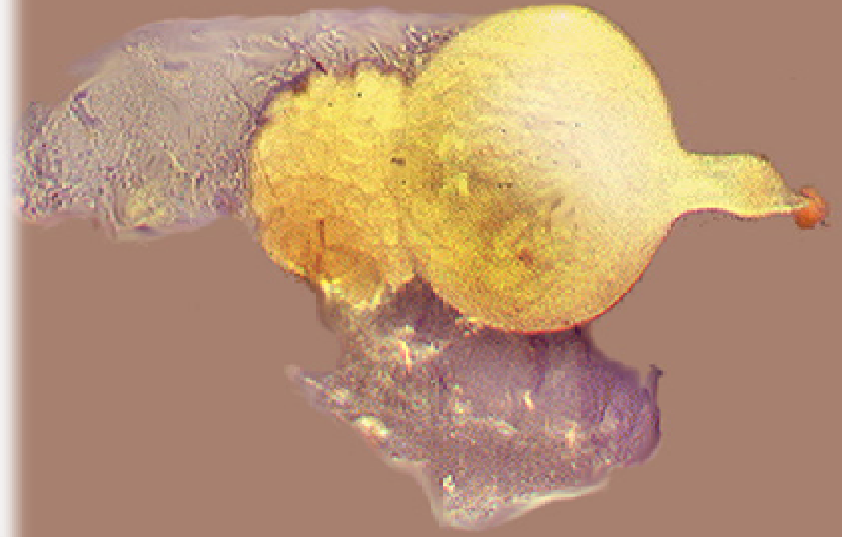


Fusarium spp.

- ü Survive as spores and mycelium
- ü Active over a wide range of moisture and temperatures



Thrips



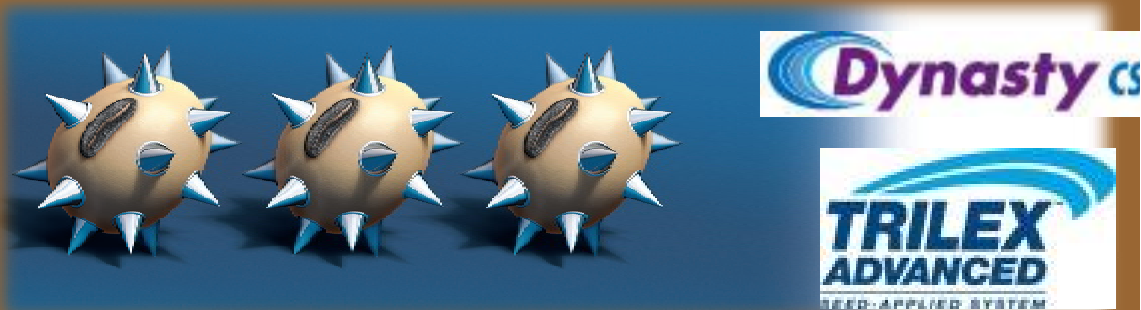
Root-knot

Reniform



Seedling Disease

Hopper Box & ST



ü Delta Coat AD

ü Dynasty CST



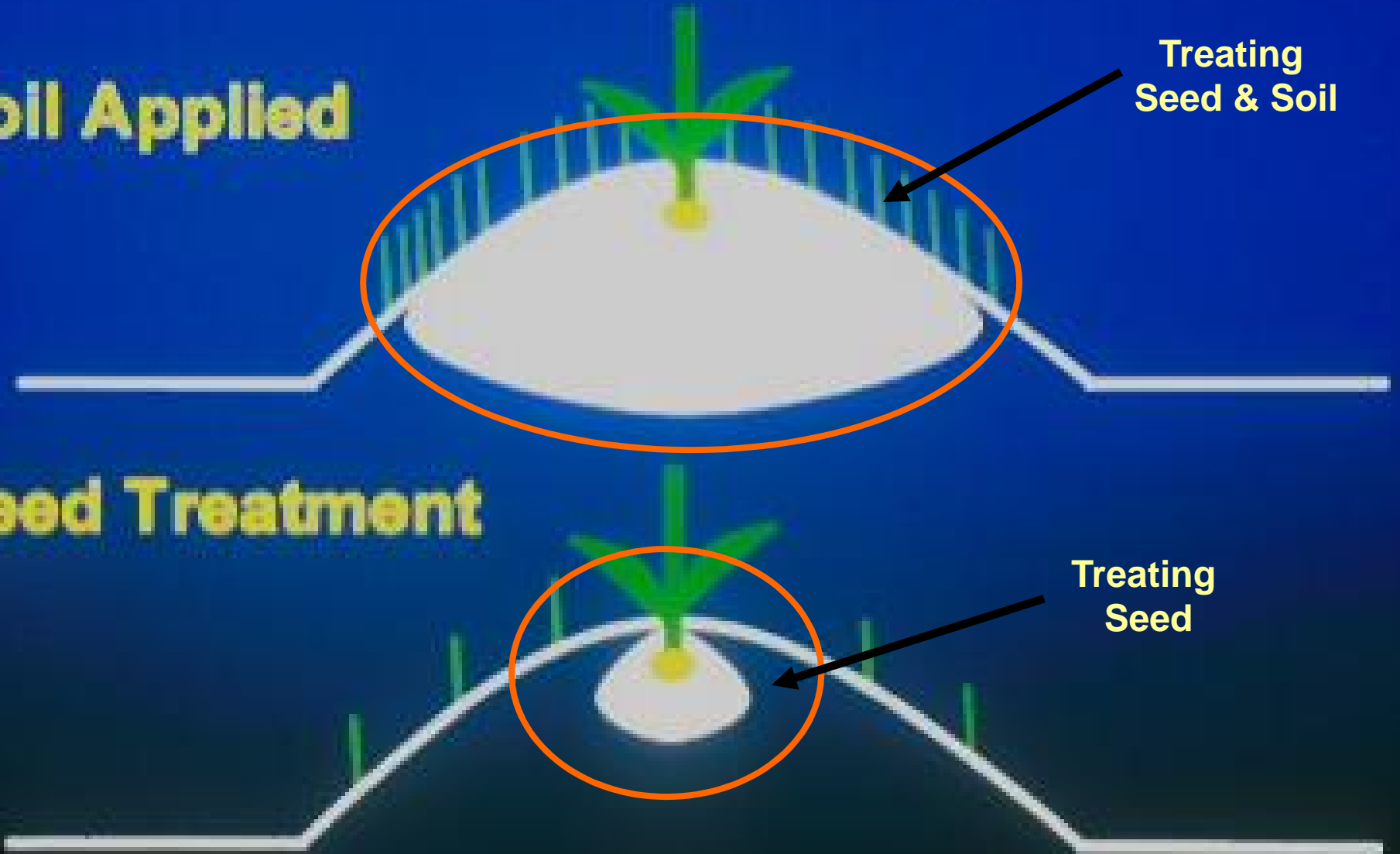
ü Trilex Advanced

Soil Applied

**Treating
Seed & Soil**

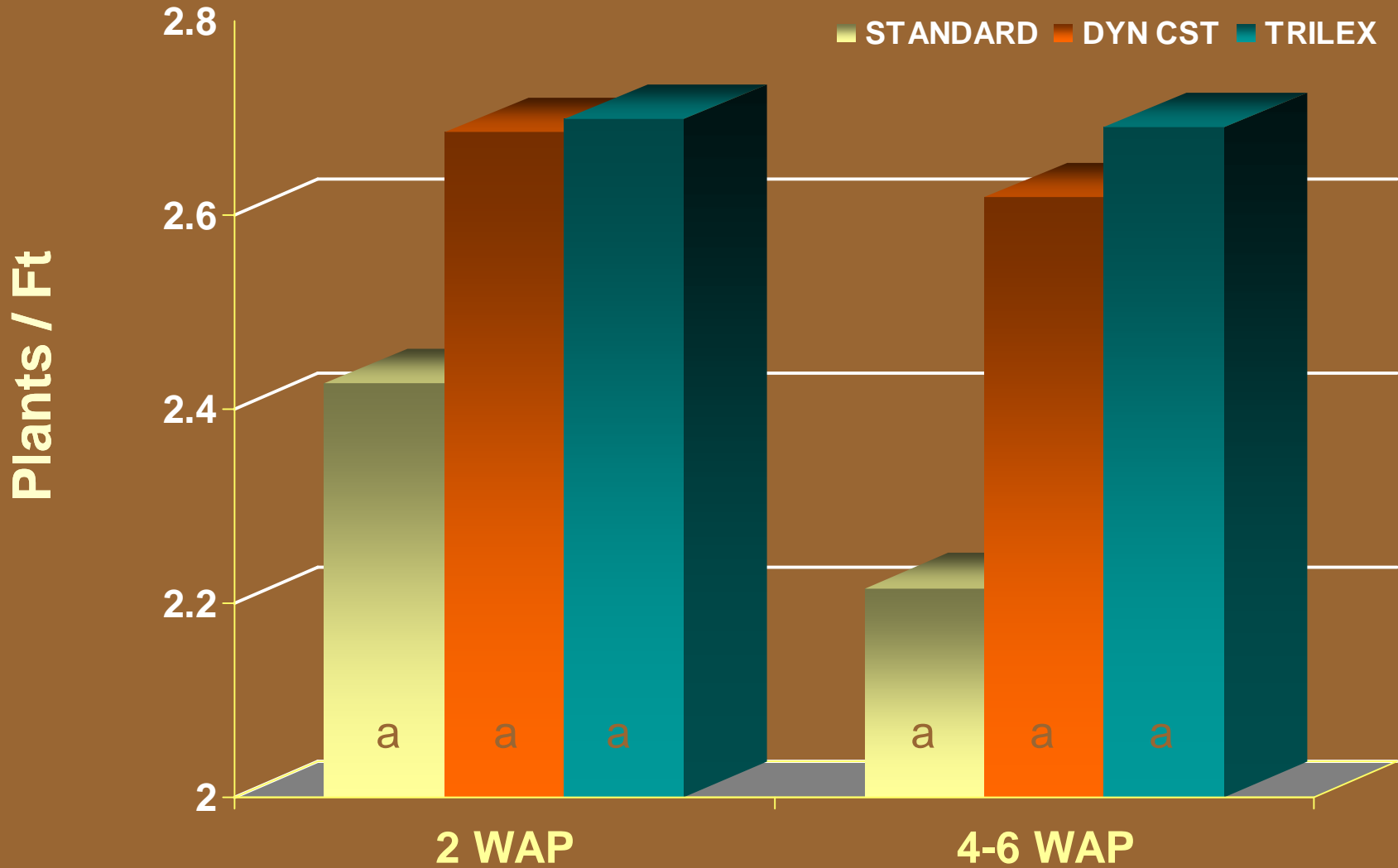
Seed Treatment

**Treating
Seed**



DYNASTY CST / TRILEX SUMMARIES

2006-2007



Ib Seed Cotton/A

■ NONTREATED ■ DYNASTY ■ TRILEX

2700

2600

2500

2400

2300

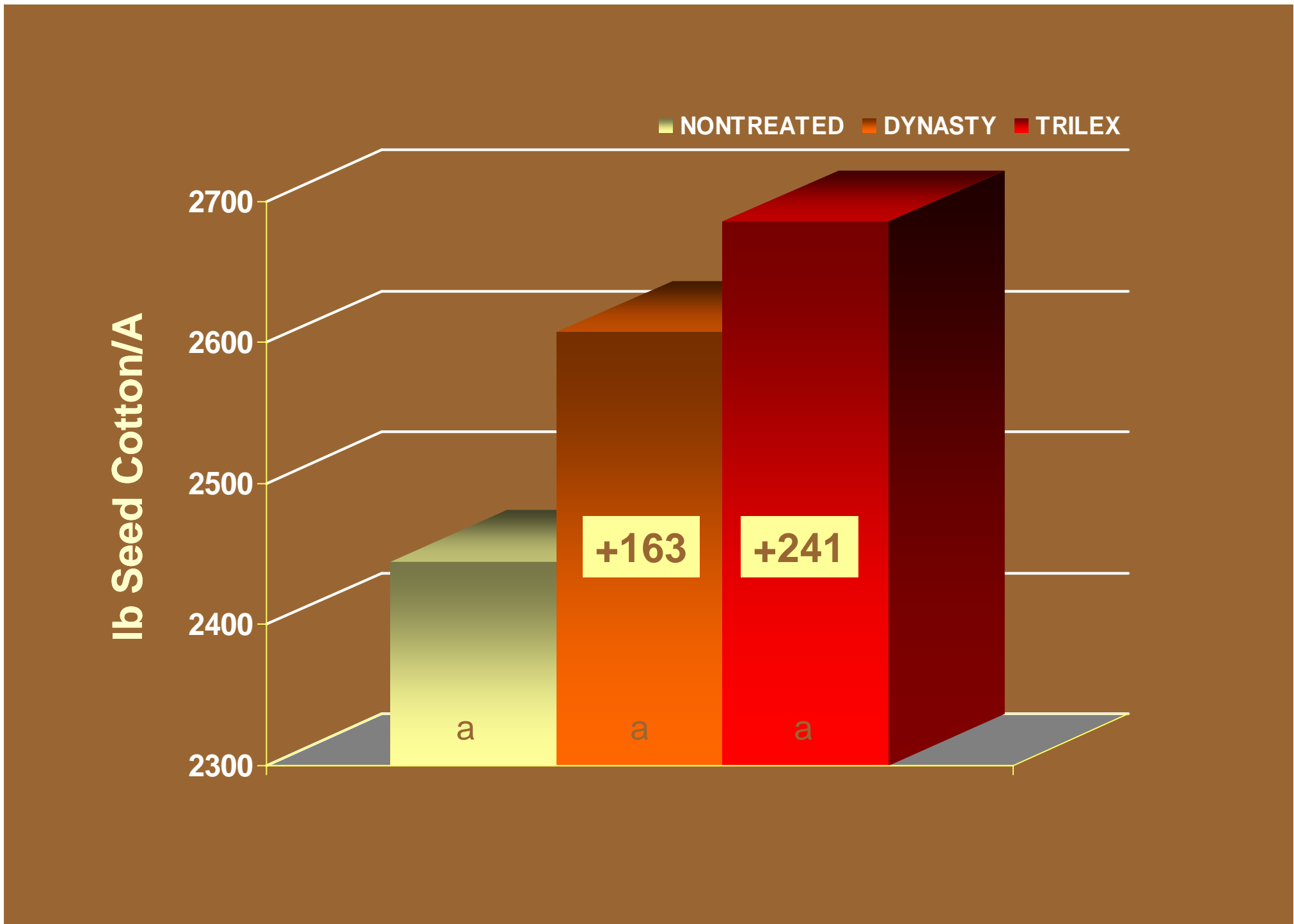
a

+163

a

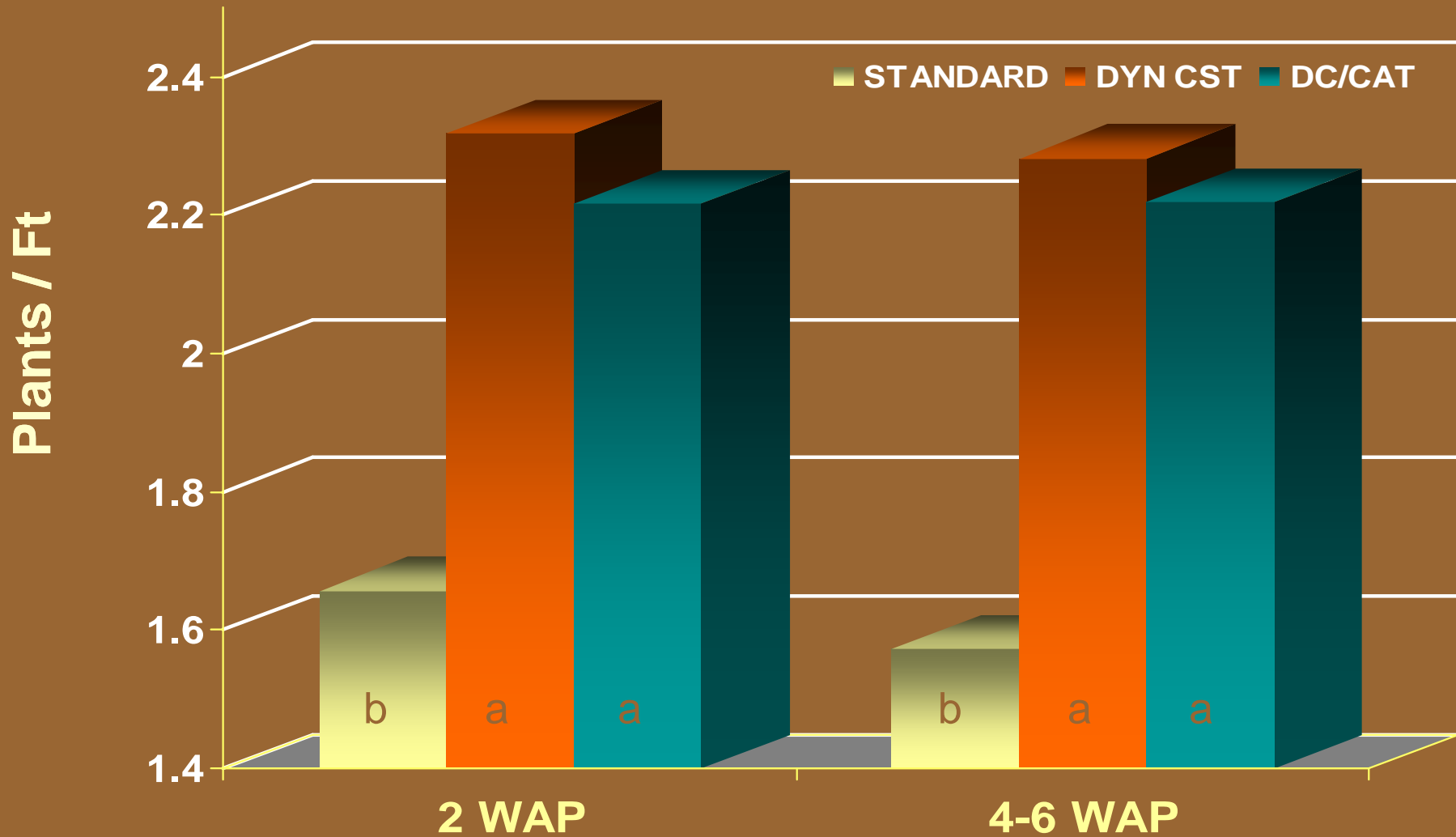
+241

a



DYNASTY CST SUMMARIES

2003-2007



Ib Seed Cotton / A

1700
1650
1600
1550
1500
1450

■ NONTREATED ■ DYNASTY ■ DC/CAT

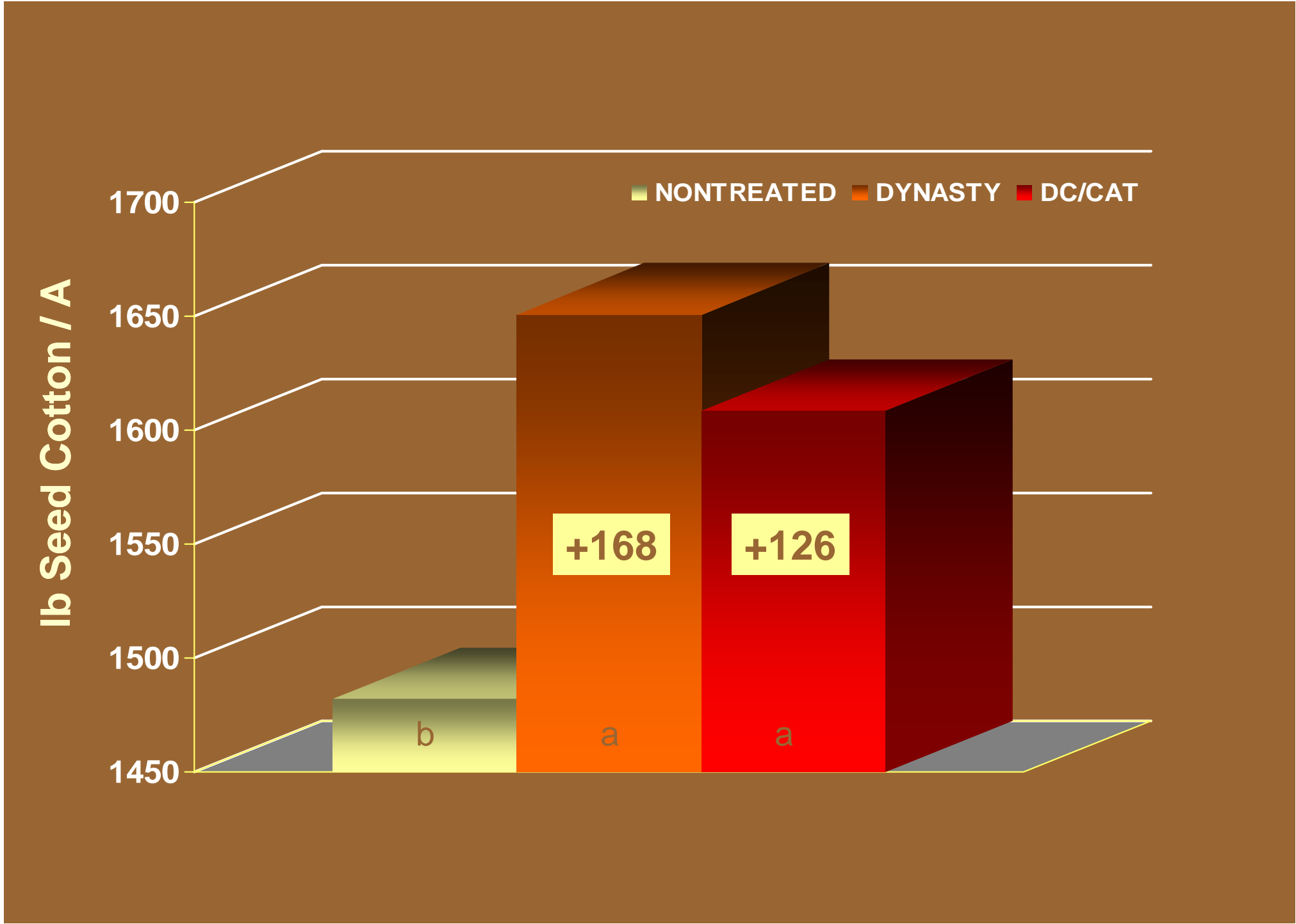
b

+168

a

+126

a



CI Seed Treatment Trial, 2006-10

Treatment	Stand plts/ft
Non-treated	1.57
Baytan + Allegiance FL + Vortex &or Exp	2.27
Apron XL + Maxim 4FS + Systhane Dynasty CST + Bion	2.10
Vitavax-PCNB + Allegiance FL	1.82
RTU-PCNB	1.69
Allegiance FL	1.96

Macon Ridge

2009 Trilex Advanced Cotton Seedling Disease

treatment	Plt/ft			Yield lb/a
	13-May	25-May	29-May	
Gaucho Grande	3.0	2.9	3.5	2953.9
Baytan 30 + Allegiance FL + Vortex	3.3	3.5	3.6	3289.0
Baytan 30 + Allegiance FL + Vortex + Trilex Advanced	3.5	3.7	3.7	3263.3
Baytan 30 + Allegiance FL + Vortex + Trilex Flowable	3.4	3.7	3.7	2423.7
Apron XL + Maxim XL + Systhane + Dynasty	3.5	3.8	3.6	3186.3
Baytan 30 + Allegiance FL + Vortex FL + EXP	3.5	3.8	3.8	3594.8
LSD (P=0.05)	0.4	0.5	0.4	461.4

2011 Macon Ridge

Treatment	Stand 25-Apr		Yield (lb/a) 21-Sep	
	Inoc	Non	Inoc	Non
Cruiser (0.34)	0.3	2.8	1517	3641
Apron XL (7.5) + Maxim (2.5) + Systhane (21) + Cruiser (0.34)	1.6	3.5	3359	3524
Apron XL (7.5) + Maxim (2.5)+ Systhane (21) + Apron XL (7.5) + Maxim (2.5) + EXP A (1x) + Cruiser (0.34)	1.6	3.3	3431	3408
Apron XL (7.5) + Maxim (2.5) + Systhane (21) + Dynasty (18) + Cruiser (0.34)	1.9	3.5	3307	3396
LS (P=0.05)	0.4	0.5	359	291

Weather

Excessive Rainfall

Approaching Cold Front





Thank You

Industry

Associates/Students

Scientists & Agents





Celebrating Excellence in Research



In 2012, we celebrate 125 years of research excellence at the LSU AgCenter through the Louisiana Agricultural Experiment Station, which was established in 1887. That was the year Congress passed the Hatch Act, which provided federal funding to support agricultural experiment stations at the nation's land-grant colleges. The year 2012 also is the 40th anniversary of the LSU AgCenter, which was established in 1972.



LSUAgCenter.com

Thanks
for
Your Time



Thank You!!!!

- *Producers*
- *Co-workers*



*Louisiana Soybean
and Grains Research
and Promotion Board*



Headline Study, 2007

Treatment (fl oz/A)	GS @ Appl ¹	% Discolored Leaves	Yield (lb/A)
Check	--	8.8	2758
Headline (6.14)	A	5.0	2919
Headline (6.14)	B	6.8	2850
Headline (6.14)	AB	4.0	3077
LSD (P=0.05)	--	11.0	414

¹Applications: 14 Days after 1st Flower (A) and 28 Days after 1st Flower.

MRCT0708

SUMMARY

- 1. Disease was Low in 06 and 07**
- 2. No Consistent Effect on Disease in 05 and 08**
- 3. No Consistent Effect on Yields ?????**

CI Seed Treatment Trial, 2006

Treatment	Stand plts/ft
Non-treated	1.56 c
Baytan + Allegiance FL + Vortex or Trilex	2.73 a
Dynasty CST	1.83 bc
Vitavax-PCNB + Allegiance FL	2.28 ab
RTU-PCNB	1.98 bc
Allegiance FL	2.30 ab
LSD (P=0.05)	0.68

CI Seed Treatment Trial, 2007

Treatment	Stand plts/ft
Non-treated	1.08 b
Baytan + Allegiance FL + Vortex + Trilex	2.27 a
Dynasty CST	2.28 a
Vitavax-PCNB + Allegiance FL	1.74 ab
RTU-PCNB	1.22 b
Allegiance FL	1.16 b
LSD (P=0.05)	0.82

CI Seed Treatment Trial, 2008

Treatment	Stand plts/ft
Baytan + Allegiance FL + Vortex + Trilex	2.11 a
RTU Baytan Thiram + Allegiance FL + Dynasty CST + Bion	1.99 ab
Vitavax-PCNB + Allegiance FL	1.08 c
RTU-PCNB	1.41 bc
Allegiance FL	2.00 ab
Nontreated	0.98 c
LSD (P=0.05)	0.68

MRCT0809

CI Seed Treatment Trial, 2009

Treatment	Stand plts/ft
Baytan + Allegiance FL + Vortex + SP1020	1.72 a
RTU Baytan Thiram + Allegiance FL + Dynasty Extreme + Bion	2.12 a
Vitavax-PCNB + Allegiance FL	1.56 a
RTU-PCNB	1.54 a
Allegiance FL	1.78 a
Nontreated	1.87 a
LSD (P=0.05)	0.56

MRCT0902

CI Seed Treatment Trial, 2010

Treatment	Stand plts/ft
Baytan + Allegiance FL + Vortex + SP1020	2.53 a
Apron XL + Maxim 4FS + Systhane Dynasty CST + Bion	2.30 a
Vitavax-PCNB + Allegiance FL	2.46 a
RTU-PCNB	2.30 a
Allegiance FL	2.54 a
Nontreated	2.34 a
LSD (P=0.05)	0.63

MRCT1002

Quadris Study, 2005-06

Treatment (fl oz/A) ¹	2006		Yield 05-06 (lb/A)
	% Red	% Foliar	
Pix (8.0)	63.8	2.0	2214
Pix (8.0) + Quadris (6.0)	60.0	1.0	2356
Quadris (6.0)	65.0	1.0	2447
Pix (8.0) + Quadris (9.0)	65.0	1.0	2507
Quadris (9.0)	56.3	1.0	2247
LSD (P=0.05)	37.2	1.3	

¹Applications were made at First Flower and 14 Days later.

MRCT0605

Headline Twinline Study, 2009

Treatment (fl oz/A)	GS @ Appl ¹	Yield (lb/A)
Check	--	1756.3
Headline (6)	A	1782.7
Headline (6)	AB	2011.5
Twinline (9)	A	2006.4
Twinline (18)	A	1958.7
LSD (P=0.05)	--	362.7

¹Applications: Three Weeks after First Flower (A), Two Weeks after First Application (B).

MRCT0903