

New Technologies/ New Use Patterns for Current Products in Cotton IPM



**Crop Management Seminar
Wednesday, November 10, 2010**

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New Technology

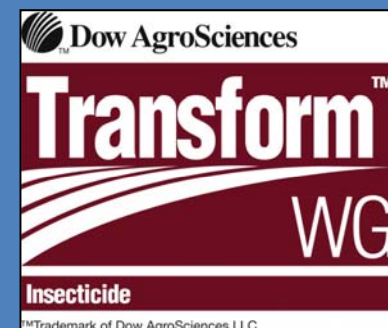
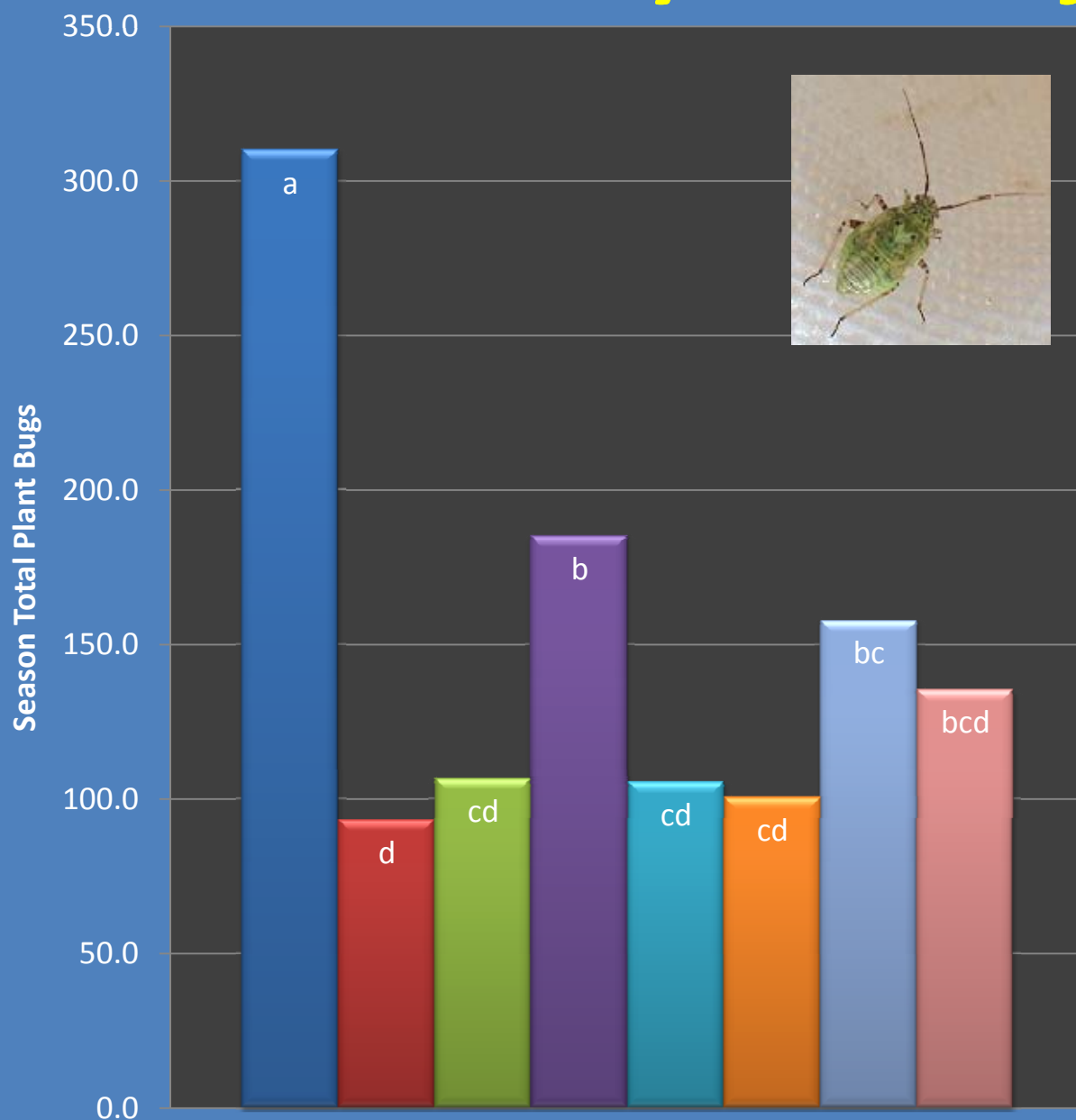
BELT™

Coragen®
insecticida
powered by
RYNAXYPYR®

 **Dow AgroSciences**
Transform™
WG
Insecticide
™Trademark of Dow AgroSciences LLC


TwinLink®
BT COTTON

Efficacy of Transform[®]

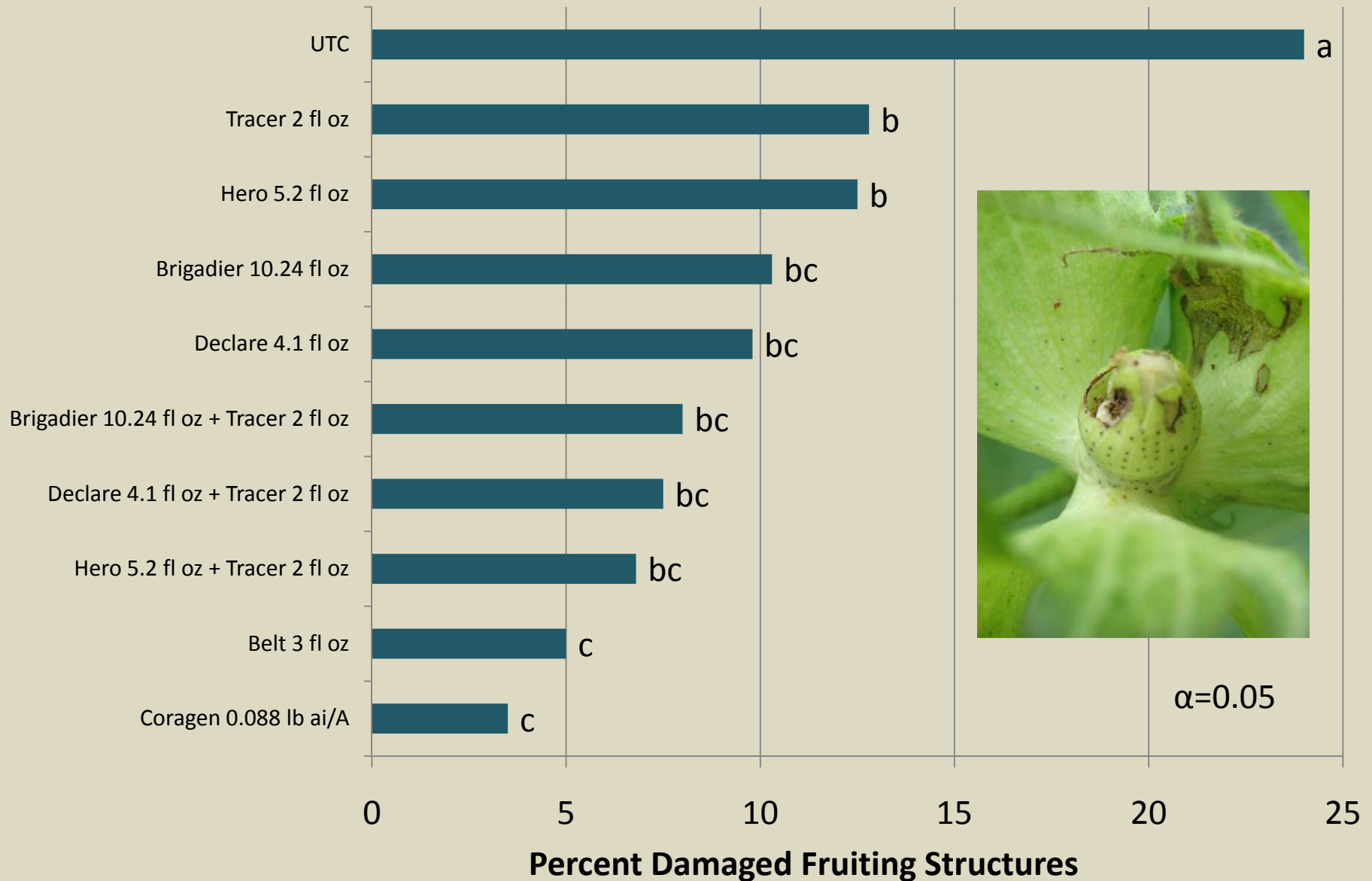


- UTC
- XDE-208 0.045 lb ai/a
- XDE-208 0.067 lb ai/a
- Acephate 0.5 lb.a
- Endigo 5 oz/a
- Bidrin 6 oz/a
- Leverage 360 3.2 oz/a + NIS 0.25 % v/v
- Leverage 360 3.2 oz/a +COC 1% v/v

Lorenz 2010

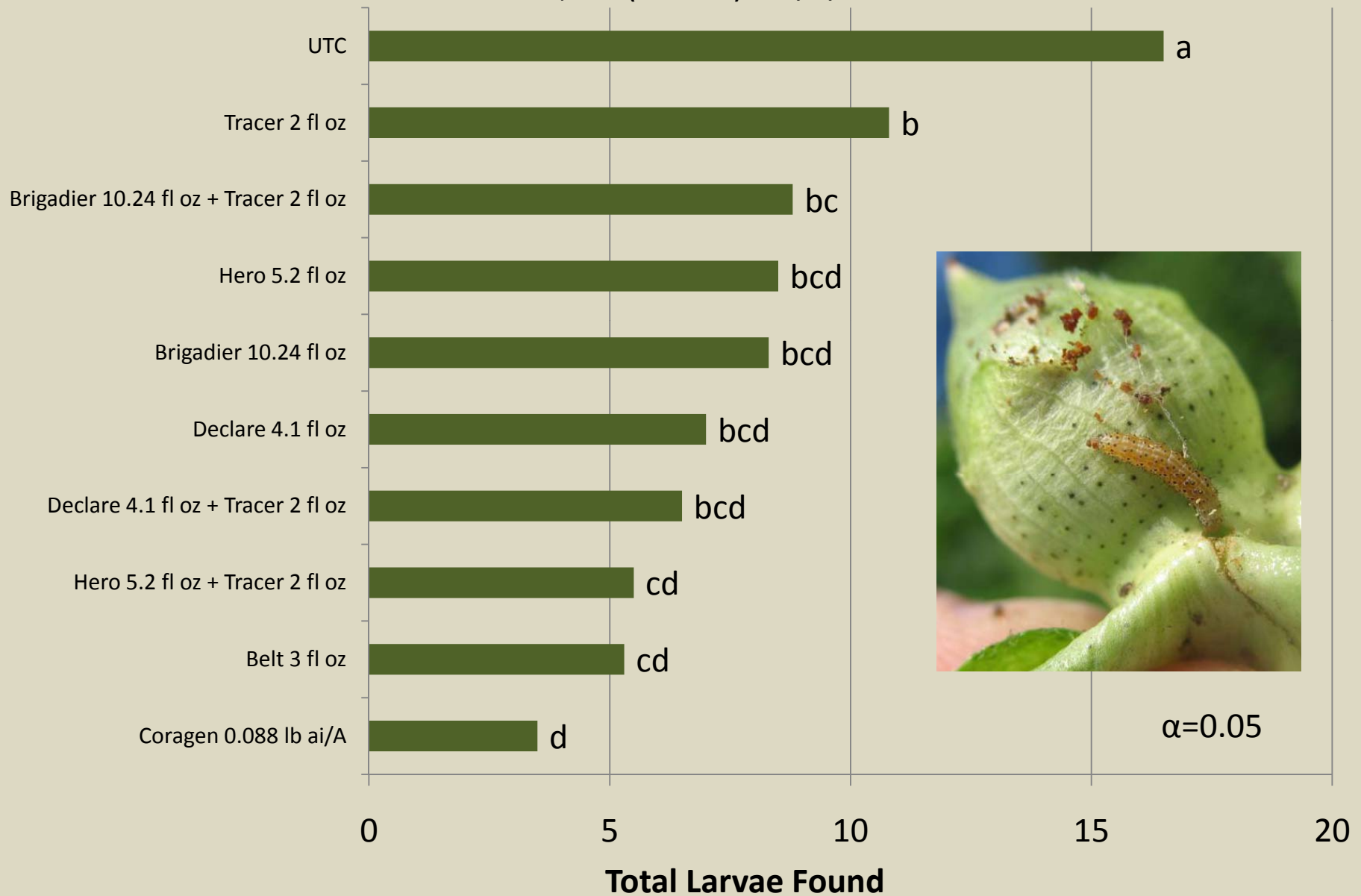
Efficacy of *Belt*[®] and *Coragen*[®] (15 DAT)

Grady, AR (Lorenz) – 8/4/2009



Efficacy of *Coragen*[®] and *Belt*[®] (15 DAT)

Tillar, AR (Lorenz) – 8/4/2009



Evolution of Commercialized Bt Cotton

1996
Bollgard®
Single-gene
cry1Ac
(endotoxin)

2003
Bollgard II®
cry1Ac+cry2Ab
(endotoxins)

2005
WideStrike®
cry1Ac+cry1F
(endotoxins)

?2013?
TwinLink®
Cry1Ab + Cry2Ae
(endotoxins)

???
VipCot®
Novel protein
cry1Ab+Vip3A
(endo+exotoxin)

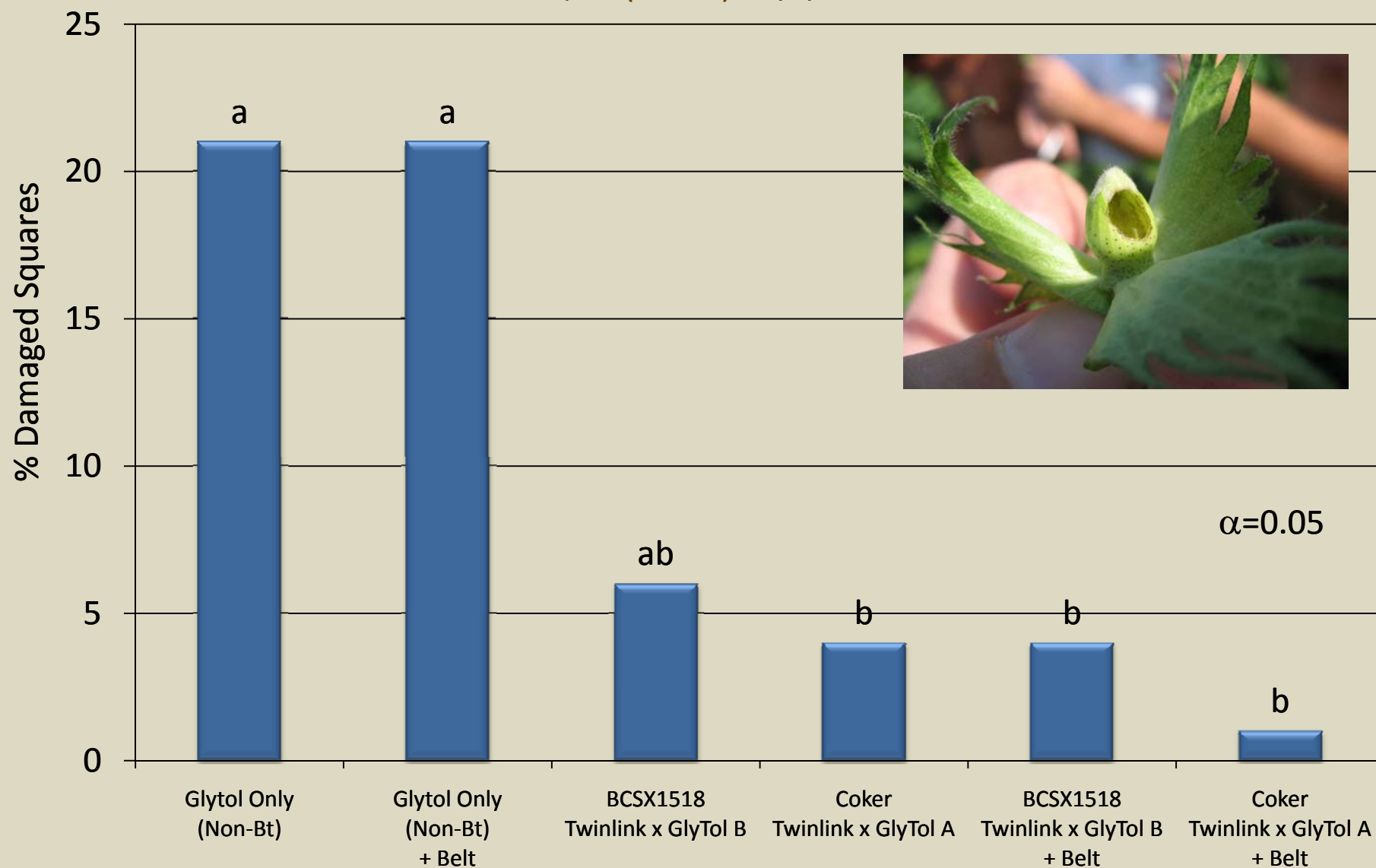


+



TwinLink[®] Cotton

Tillar, AR (Lorenz) – 8/3/2010



Bollworm Efficacy from *Twinlink*[®]?

Bollgard[®]
(*cry1Ac*)



Bollgard II[®]
(*cry1Ac+cry2Ab*)

Fair control

Good control

WideStrike[®]
(*cry1Ac+cry1F*)

'TwinLink'

(*Cry1Ab + Cry2Ae*)

Still have to be scouted carefully!

New Uses for Current Products?



Creativity is key!





Corn



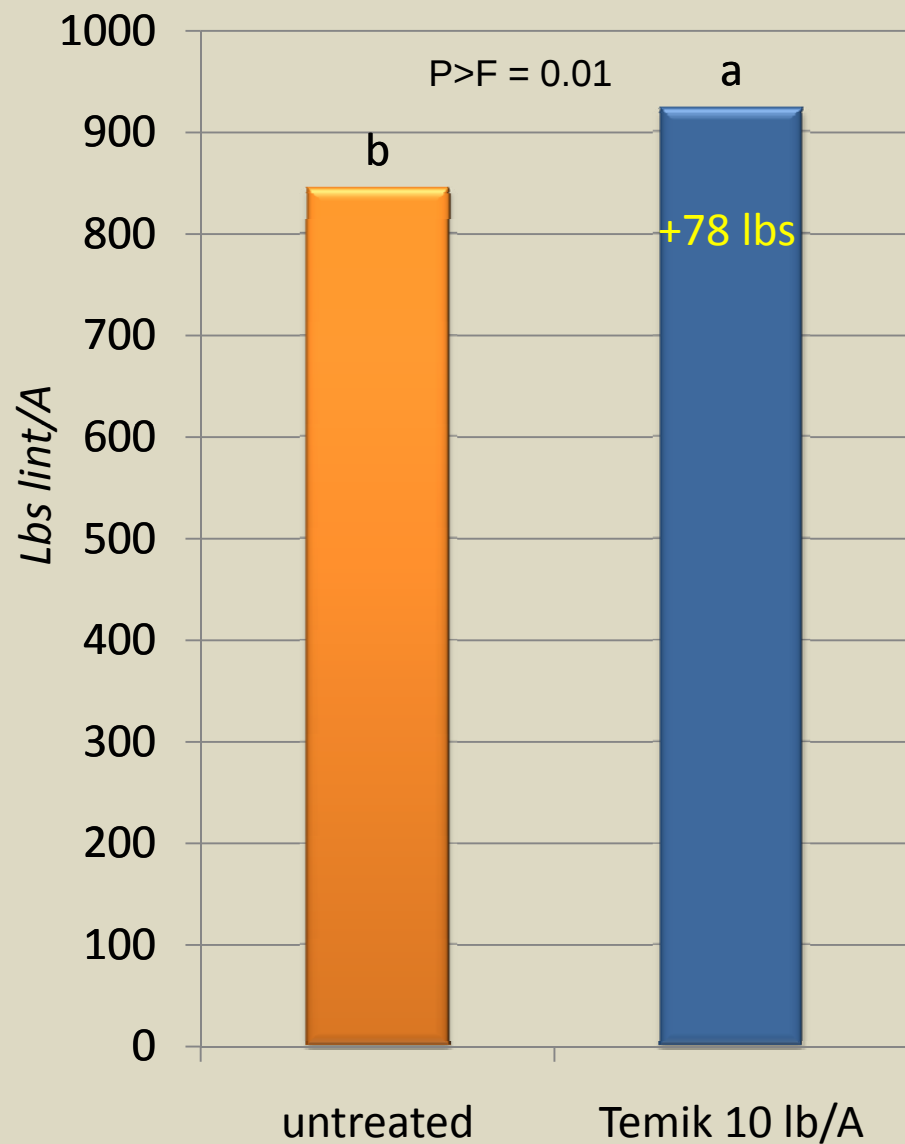
Turn row/ditch
↑
↓

Cotton

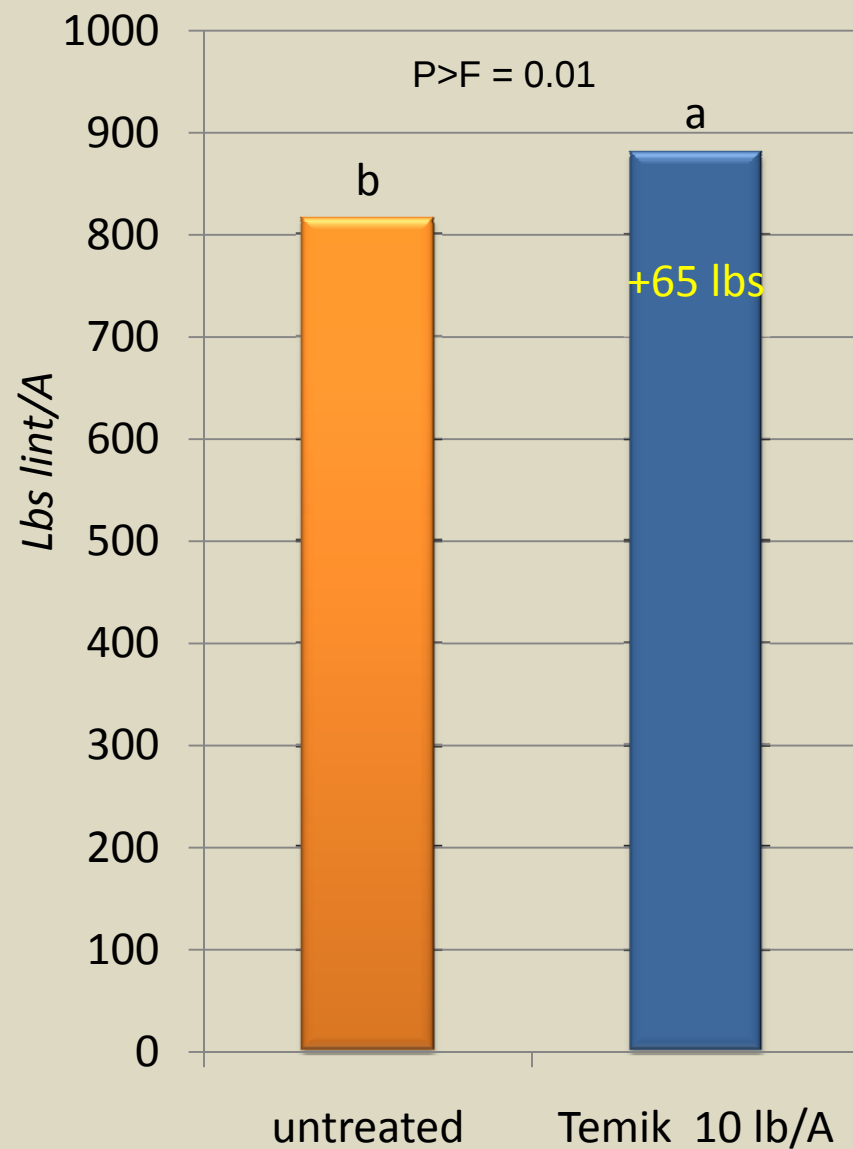


Rows 1-8 Rows 9-16 Rows 17-24 Rows 25-32

Impact of Side-dressed *Temik*[®] on Yield



2008



2009

Program 1

1. **Diamond 6 fl oz**
2. **Diamond 6 fl oz**
3. Bidrin 6 fl oz + Bifenthrin 6 fl oz
4. Carbine 2.5 oz
5. Orthene 1 lb ai



Program 2

1. **Diamond 9 fl oz**
2. Endigo 5 fl oz
3. Bidrin 6 fl oz + Bifenthrin 6 fl oz
4. Carbine 2.5 oz
5. Orthene 1 lb ai

Program 3

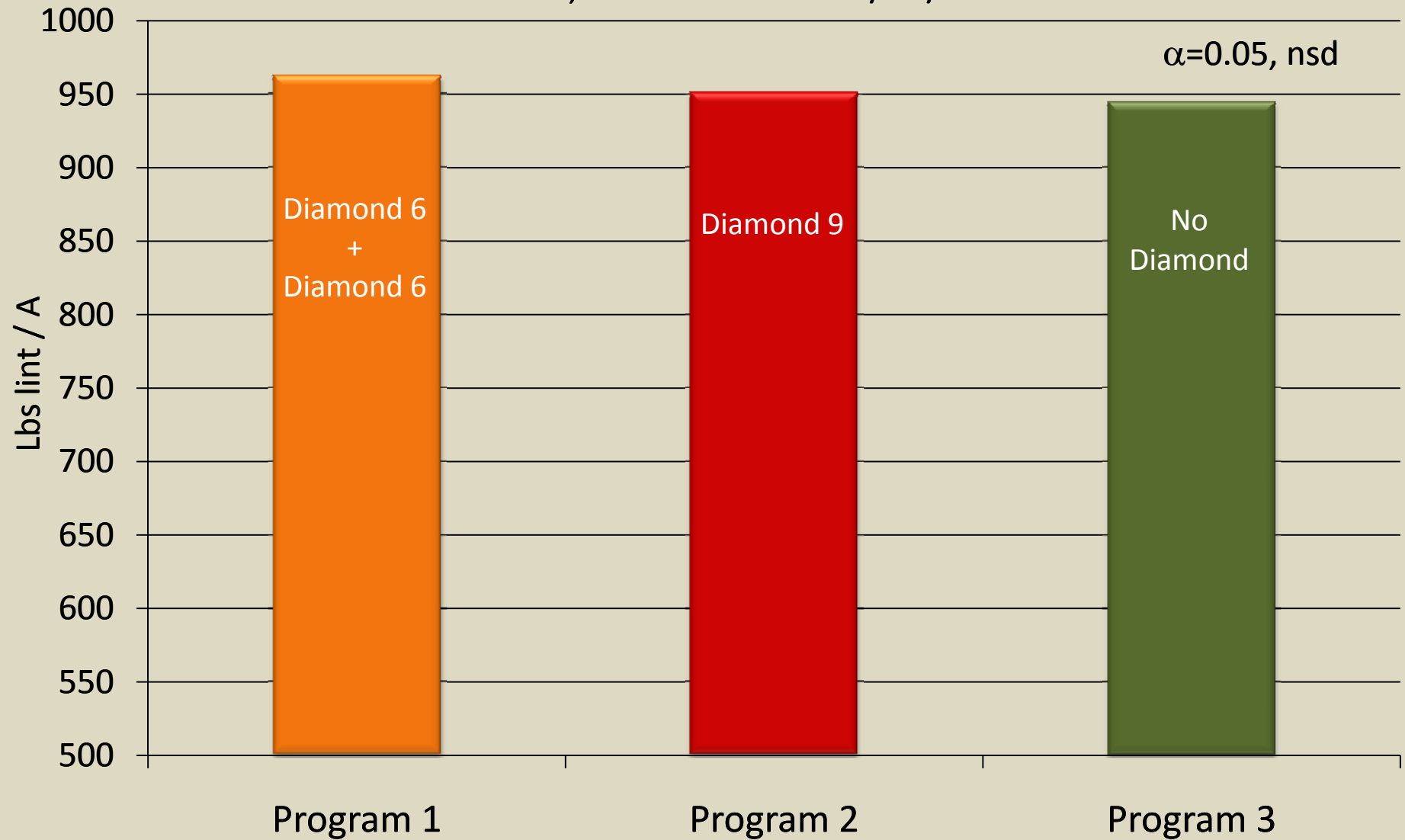
1. Orthene 1 lb ai
2. Endigo 5 fl oz
3. Bidrin 6 fl oz + Bifenthrin 6 fl oz
4. Carbine 2.5 oz
5. Orthene 1 lb ai

Application #1 made 2nd week of bloom
Applications made weekly (as needed)
RCB, 6 reps / 32 rows x 100 ft plots
Kelso, AR -- Steve Stevens Farm

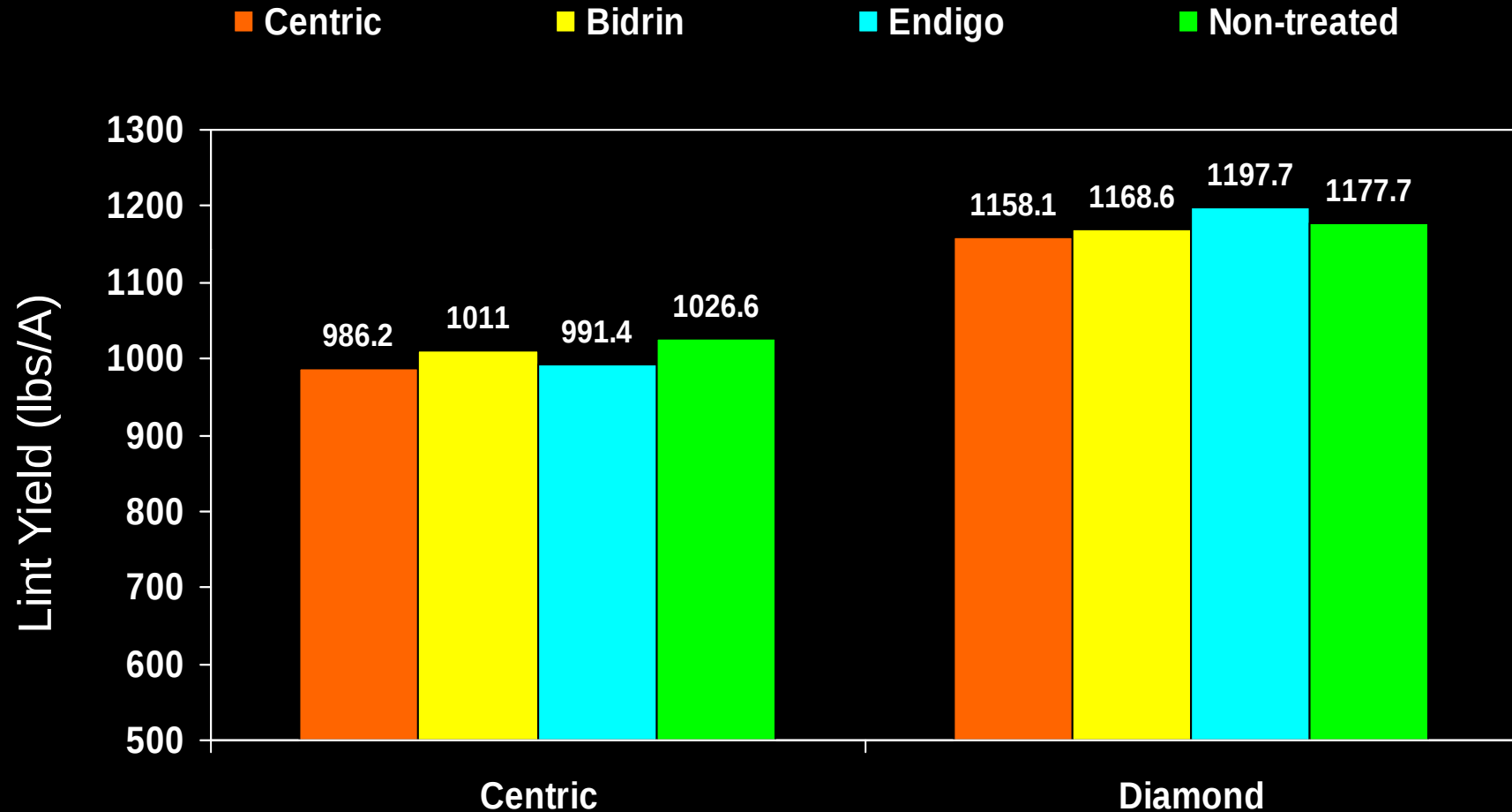


Diamond Program Trial Yield

Kelso, AR – Harvested 9/21/10



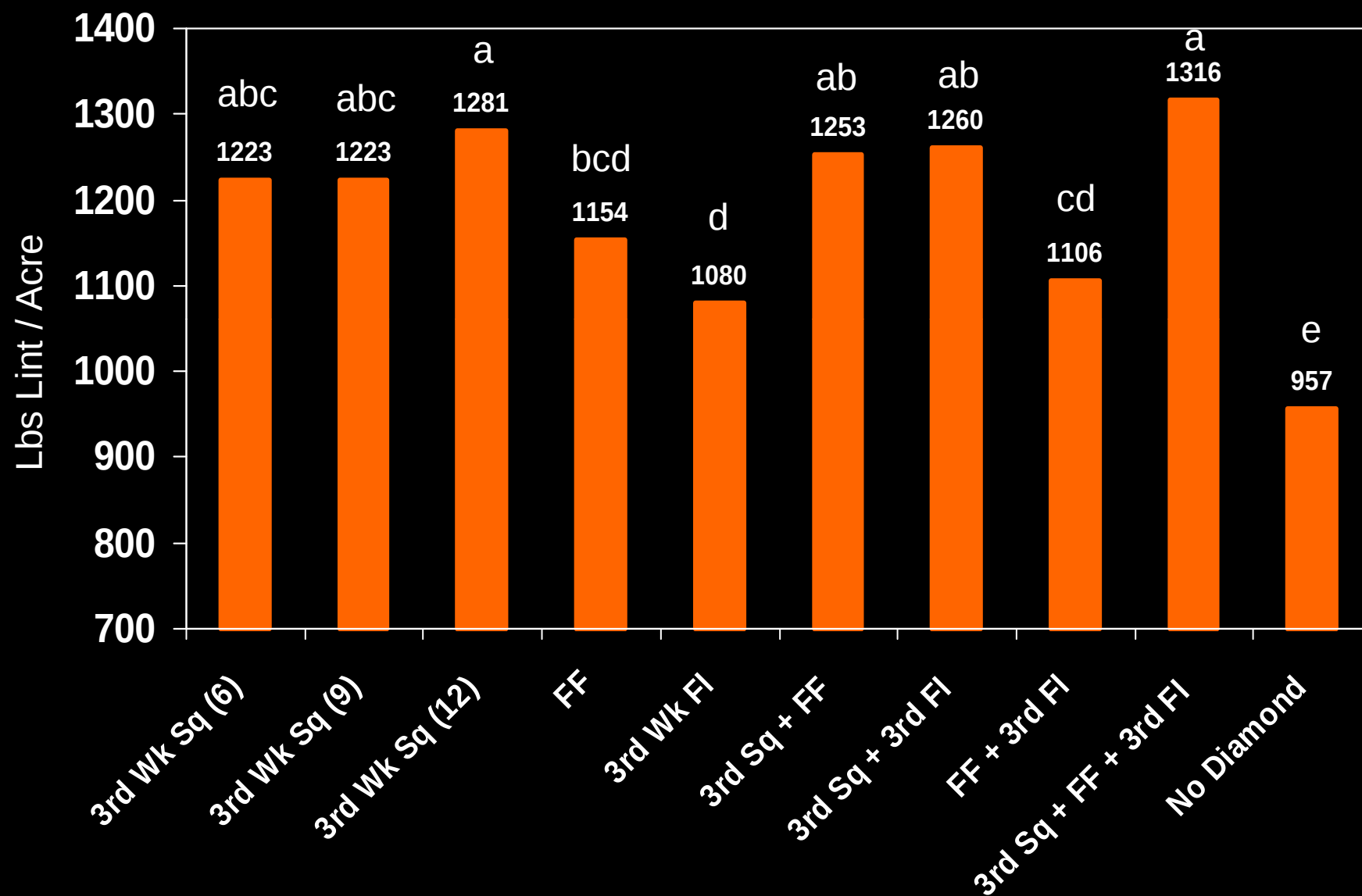
Early Diamond Applications



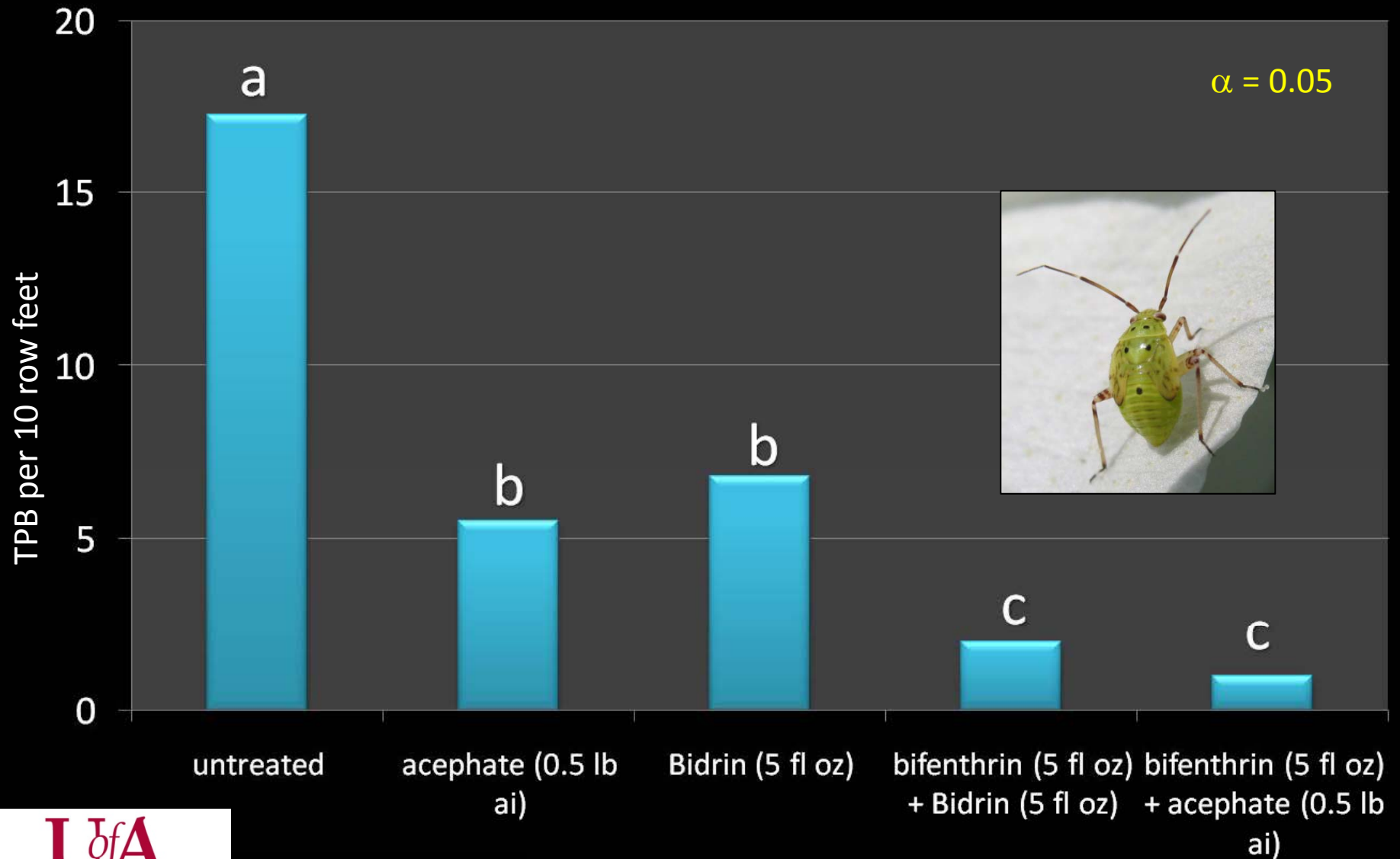
Diamond was applied alone at 9 oz./A during the third week of squaring to half of the field and Centric was applied to the other half of the field on the same date

Gore 2010

Diamond Timing and Number of Applications- 2010



No. TPB nymphs per 10 row feet (7 DAT) Marianna, AR-- 2008



Acknowledgements



***MID-SOUTH ENTOMOLOGISTS
WORKING GROUP***