

# TARNISHED PLANT BUGS IN LA COTTON: WHERE ARE WE AND WHAT IS ON THE HORIZON

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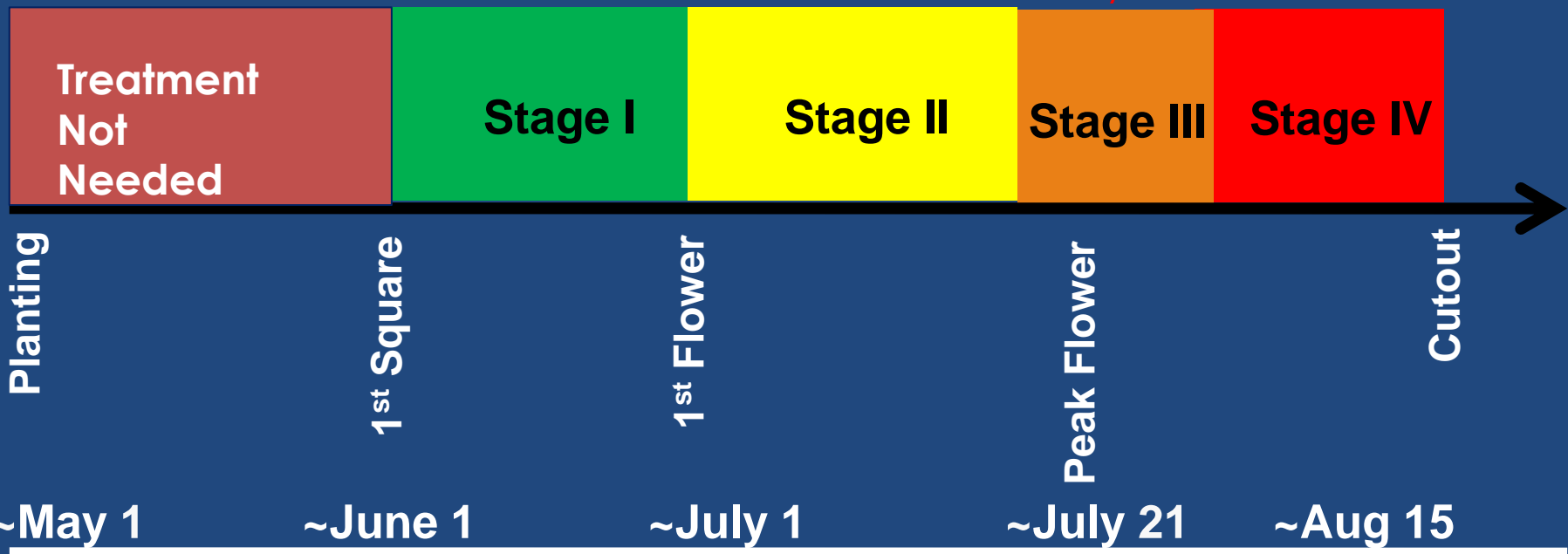
LSU AgCenter  
Macon Ridge Research Station  
Winnsboro, LA



# INSECTICIDE APPLICATION TIMINGS FOR TARNISHED PLANT BUG

- Diamond every other application
- Delay as long as possible:  
Acephate, Bidrin, pyrethroids
- Avoid consecutive shots of same AI
- Shorten spray interval to ~5 days

- Imidacloprid
- Vydate
- Centric
- Transform
- Belay
- Carbine
- Strafer
- ± Diamond
- Centric
- Transform
- Belay
- Strafer
- Bidrin
- Acephate
- ± Diamond
- ± Pyrethroid
- Transform
- Bidrin
- Acephate ± Pyrethroid
- Malathion + Pyrethroid ULV



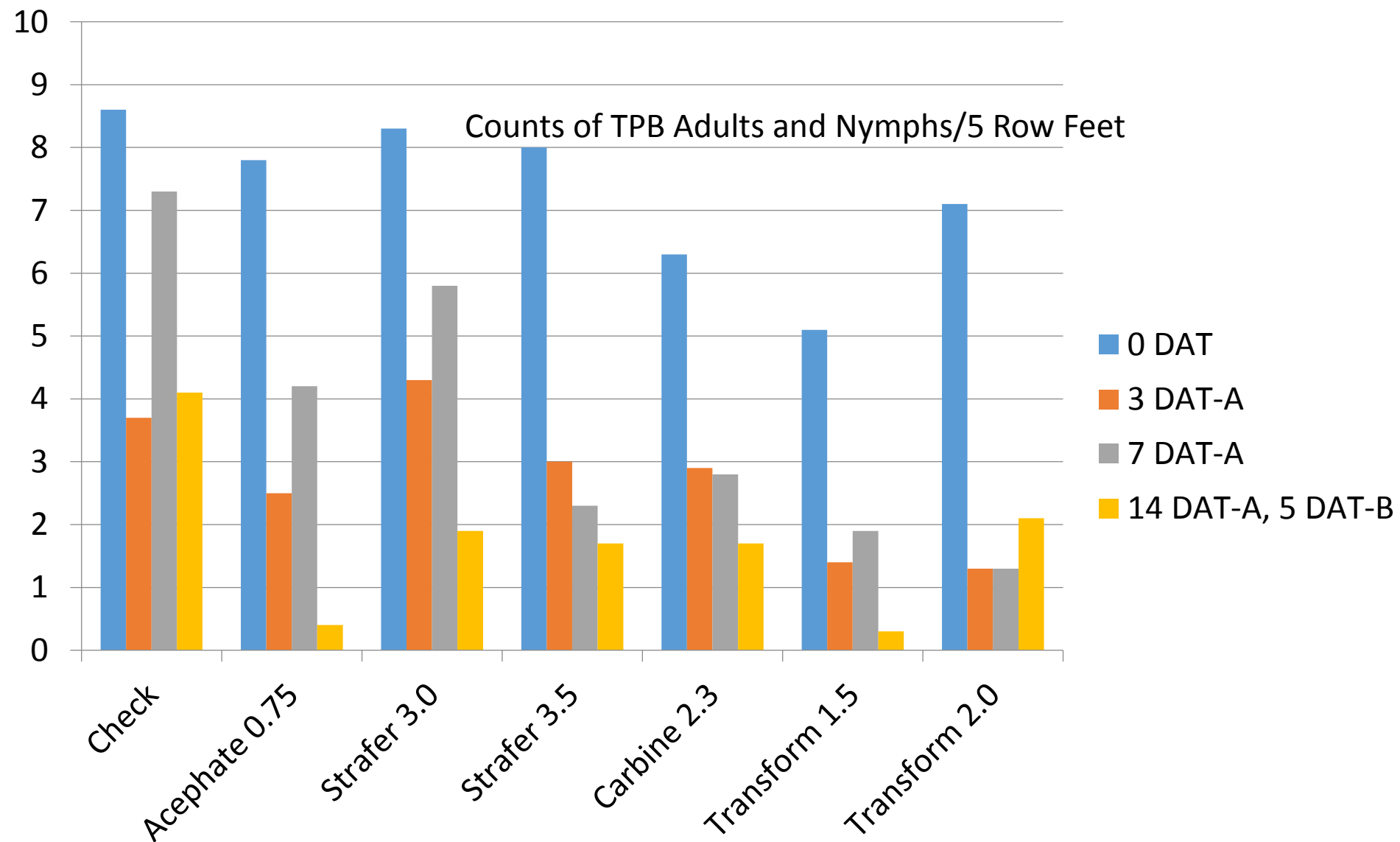
# New Product :Strafer

- Received 1B registration
- AI: Acetamiprid
- Effective on TPB at 3.0 and 3.5 oz rate
- 2 applications allowed



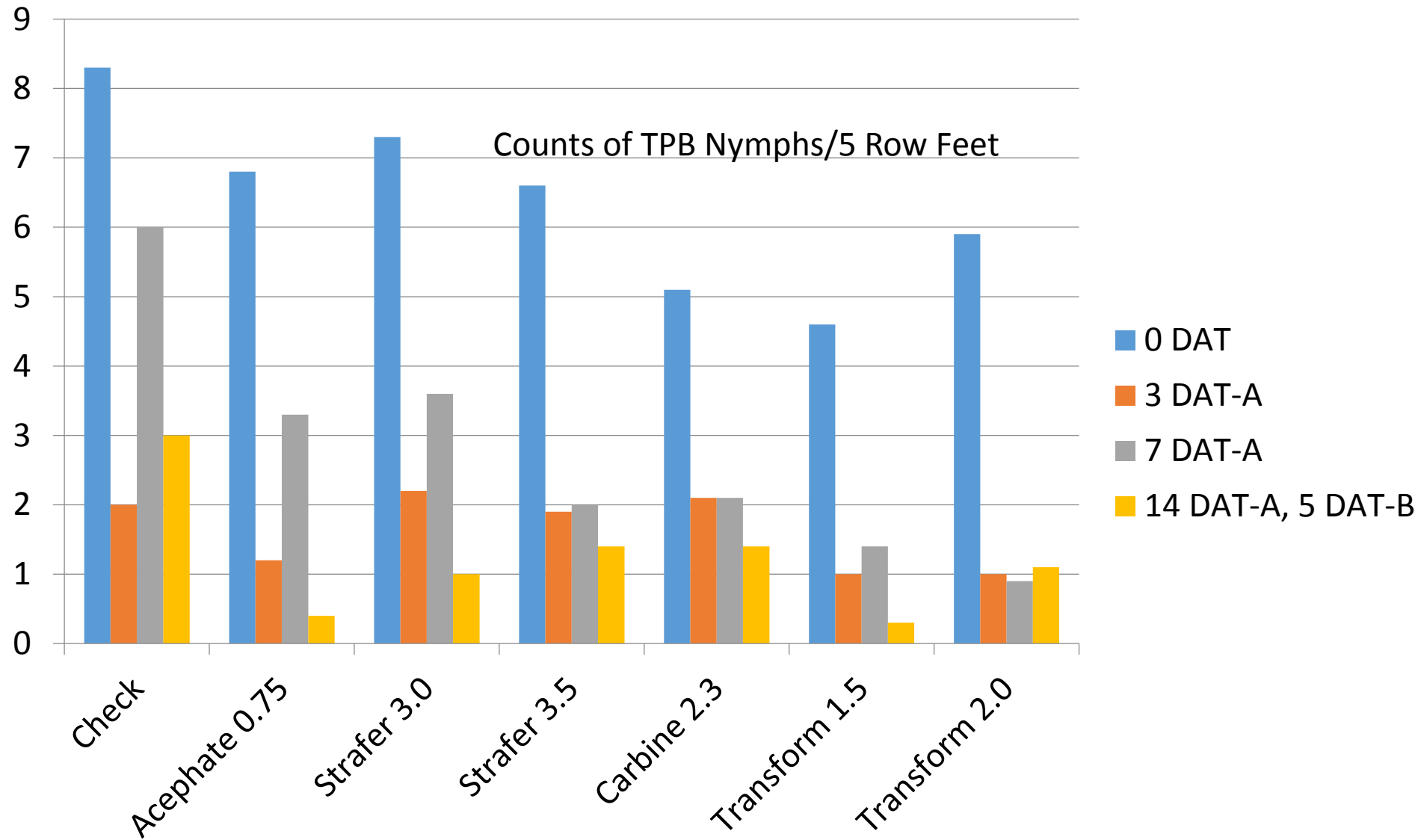
# Tarnished Plant Bug Control in Cotton

## LSU – Winnsboro, LA



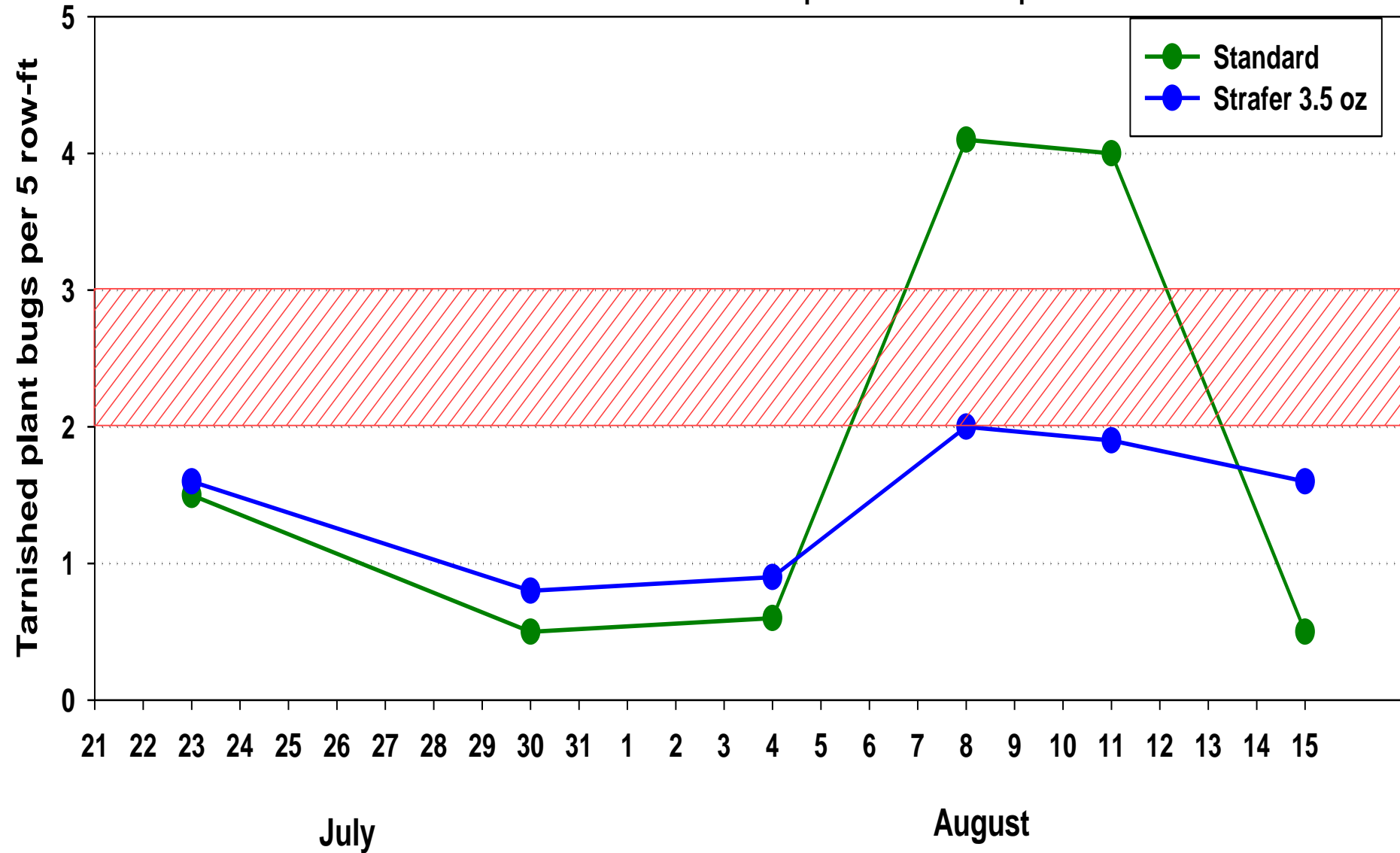
# Tarnished Plant Bug Control in Cotton

## LSU – Winnsboro, LA



Bidrin XP II 12 fl oz

Acephate 0.75 lb + Sniper 6.4 fl oz

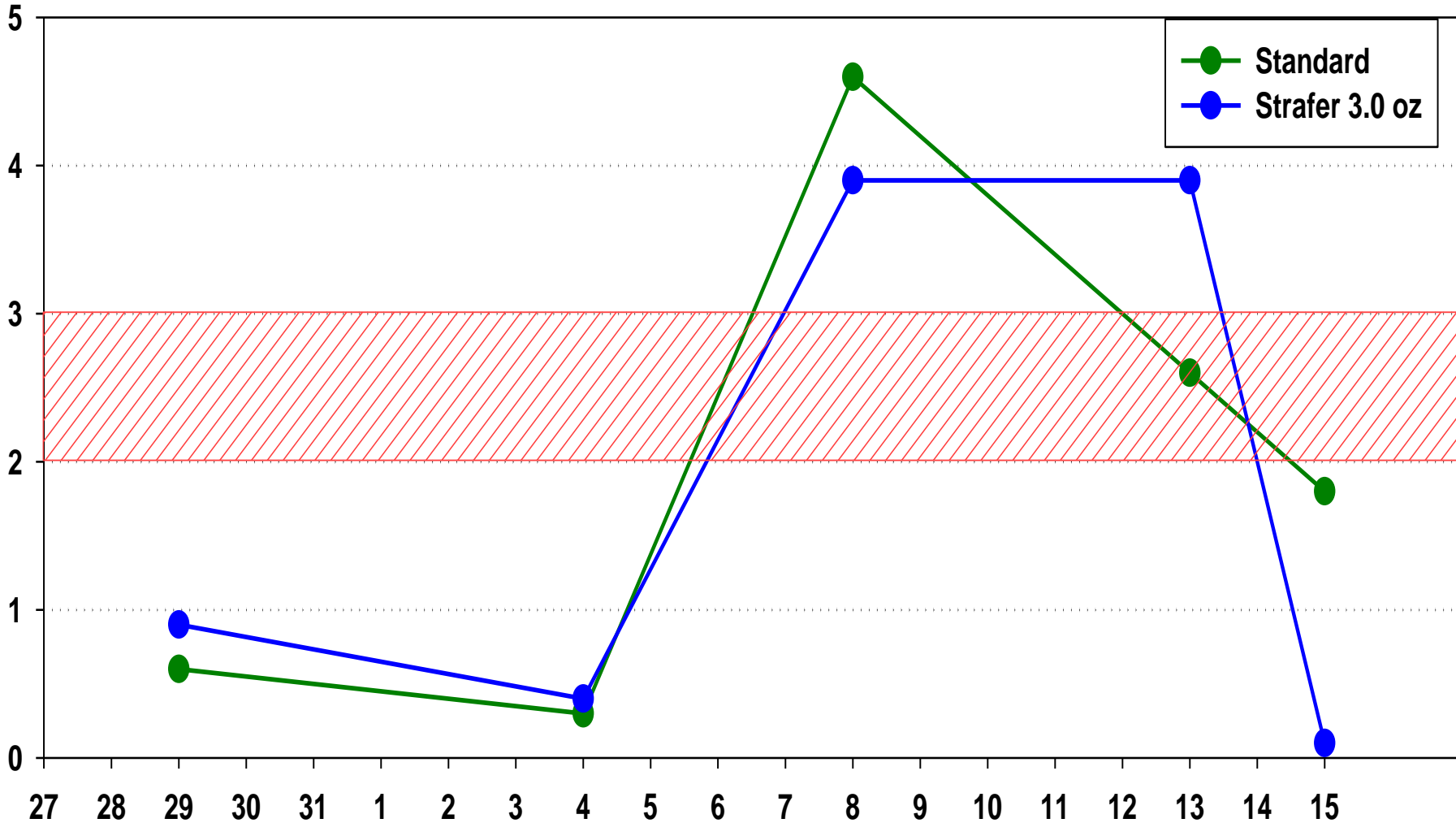


Hank Jones - Demonstration

Leverage 360 3.2 fl oz +  
Diamond 6 fl oz

Transform 1.5 oz

Tarnished plant bugs per 5 row-ft



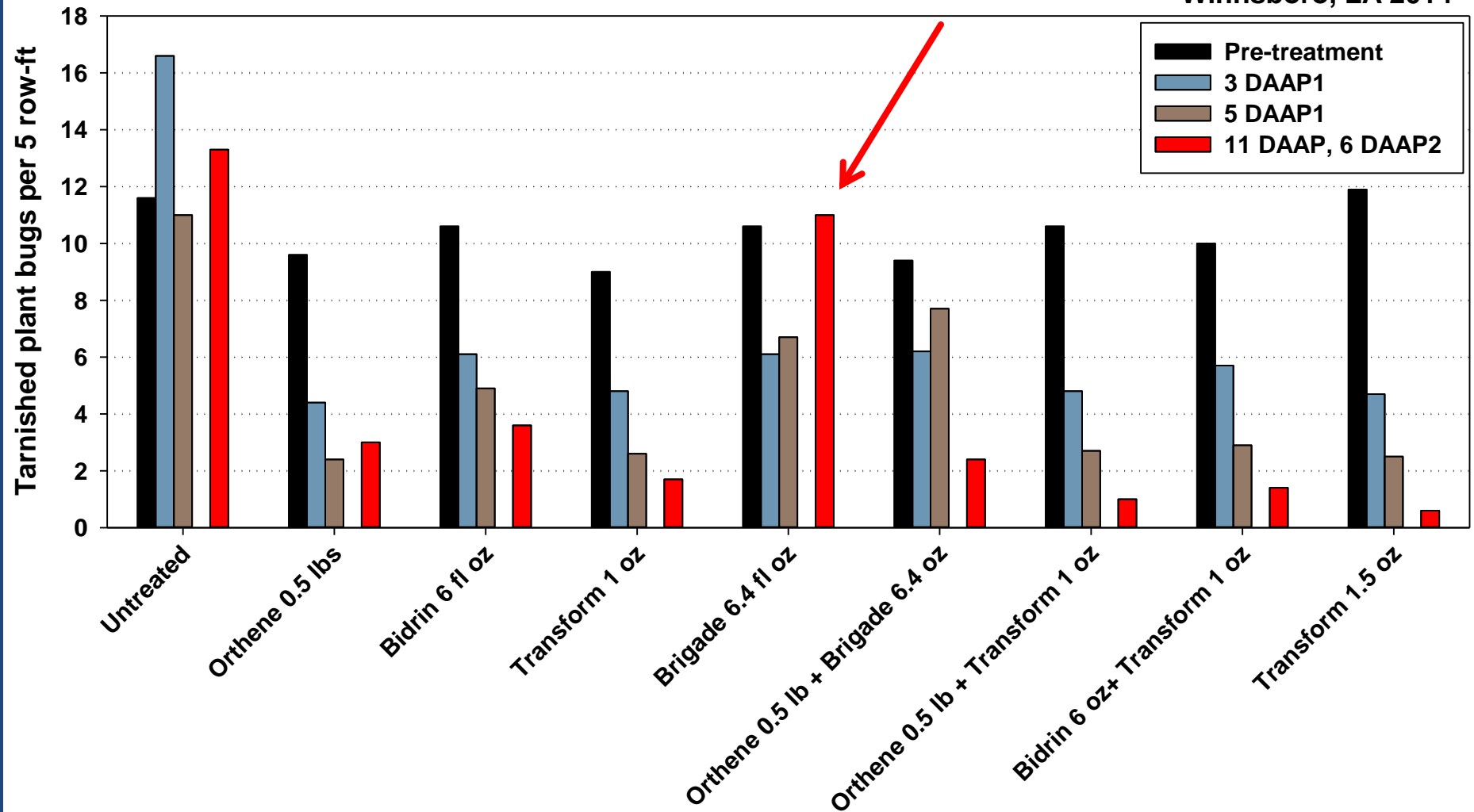
July

August

Howard Anderson - Demonstration

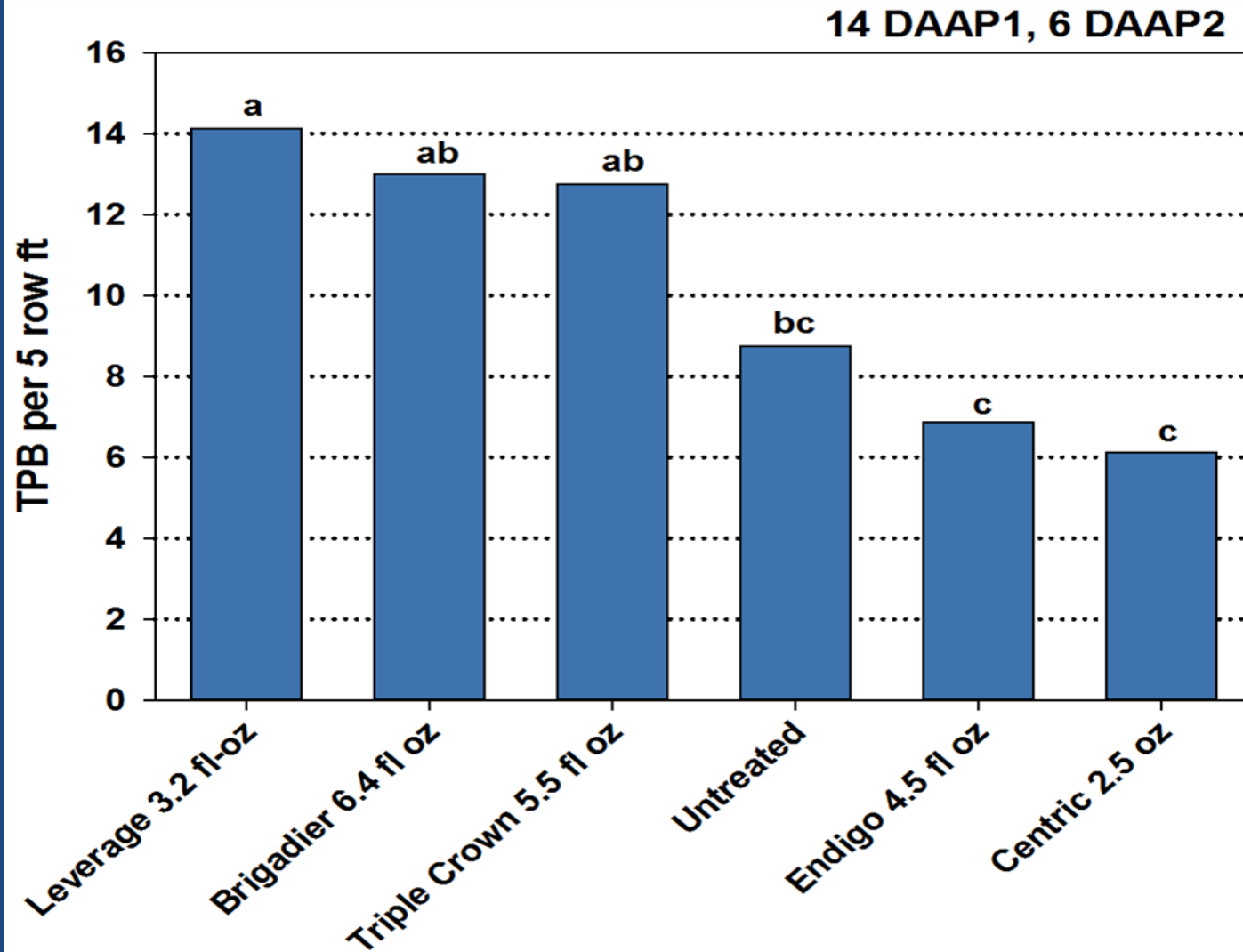
# Winnsboro Small Plot Efficacy Trials

Winnsboro, LA 2014





# Neonicotinoids and Pyrethroids for Plant Bugs



# Dow Vs Commercial Program

- Compared two programs using a “medium plot”
- Plot sizes were 0.5 acres per treatment
- Commercial vs Non-disruptive (Dow)
- Utilized sequential 1.5 oz Transform apps for TPB and Radiant for Thrips

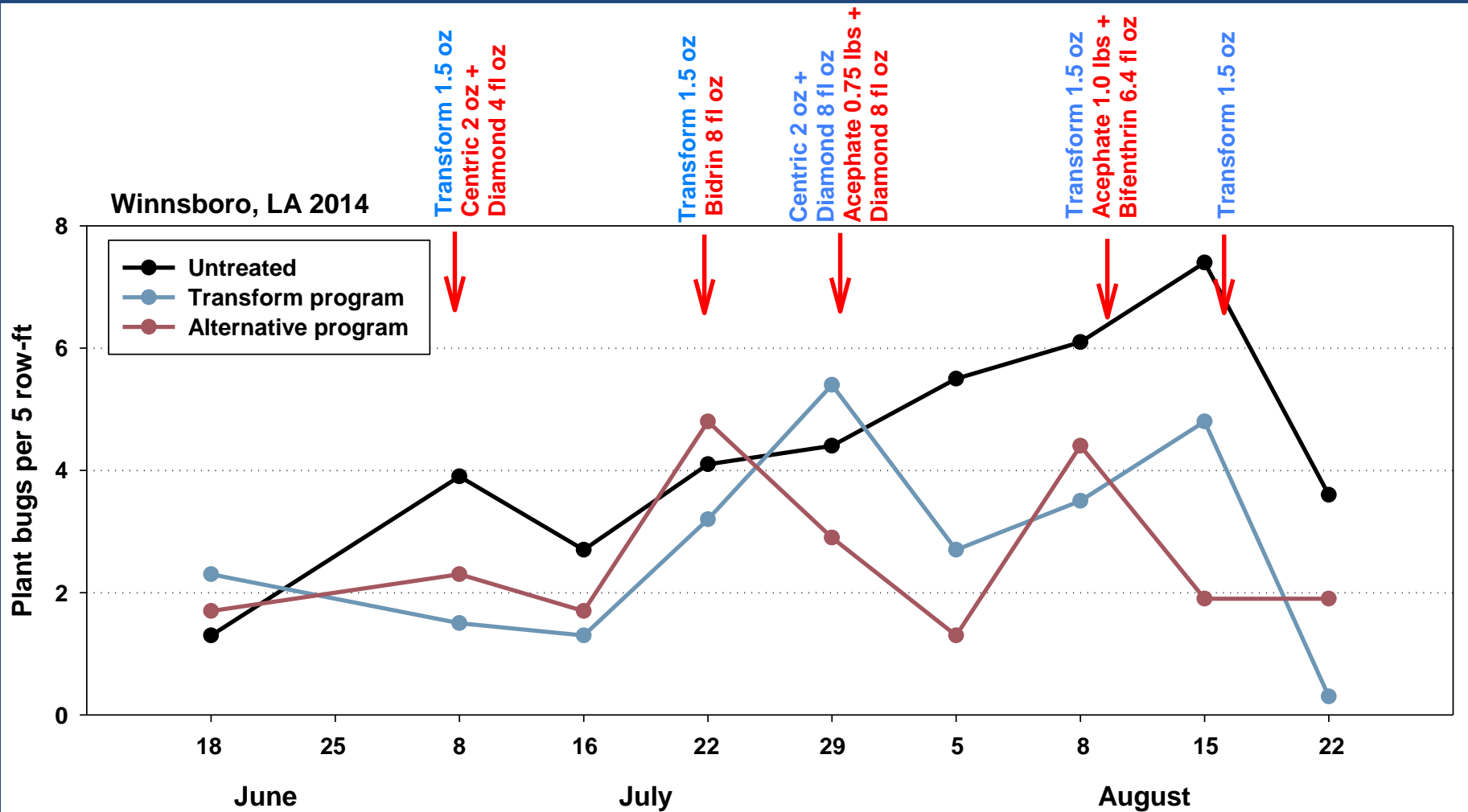
# Application Description

## Thrips

- Seed treatment
- All seed utilized was treated with Aeris
- Foliar treatments
  - Radiant SC + COC
  - Commercial Standard + COC
  - NTC
- Application Protocol
  - Common occurrence of immatures thrips
  - Repeat applications if needed
  - All apps made ground

## Tarnished Plant Bug

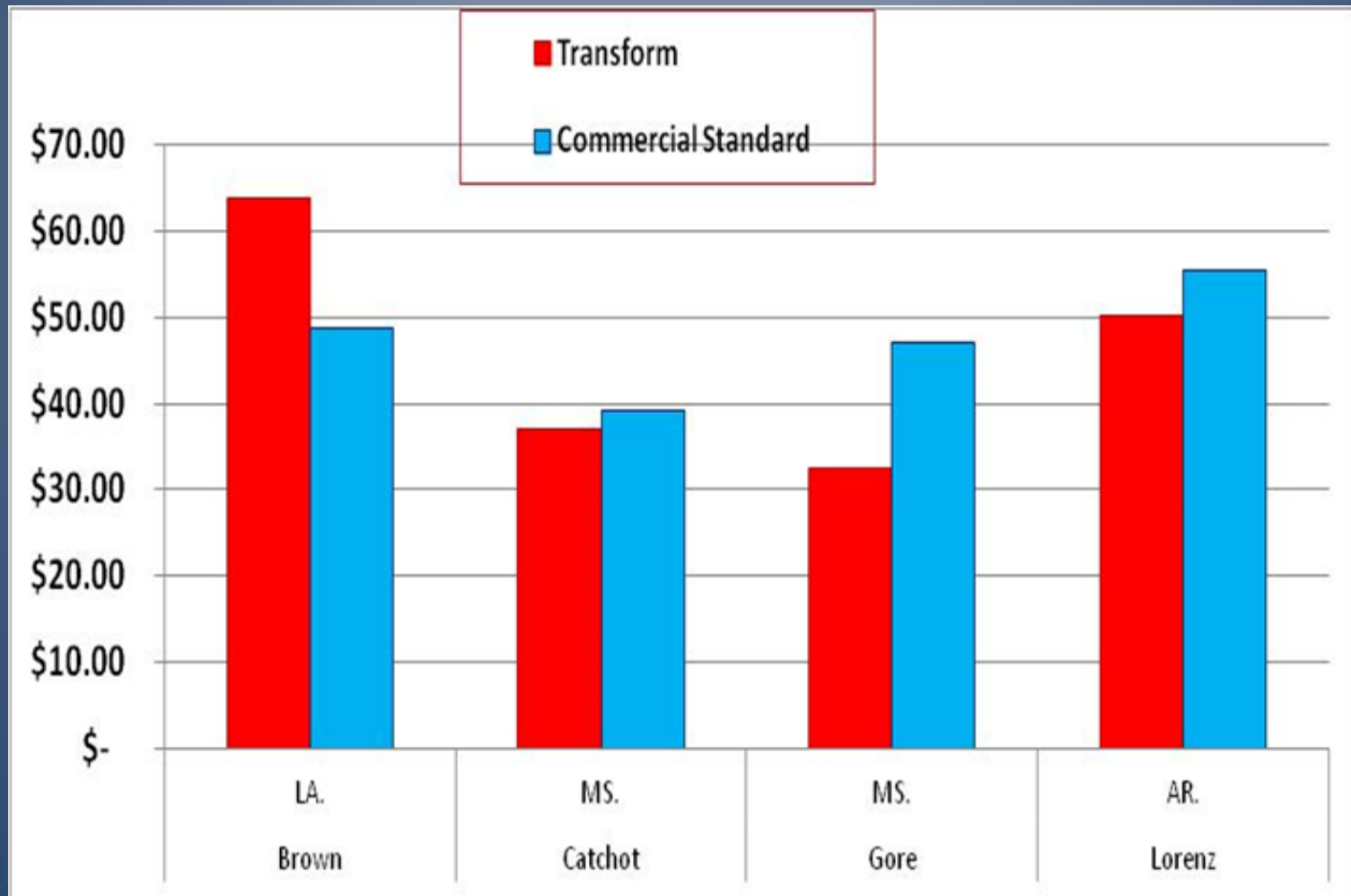
- Treatments
  - Transform WG
  - Commercial Standard
  - NTC
- Application Protocol
  - TPB threshold 3 bugs/5 ft.row
  - 2 sequential apps of Transform
  - All apps made by ground
  - Yields



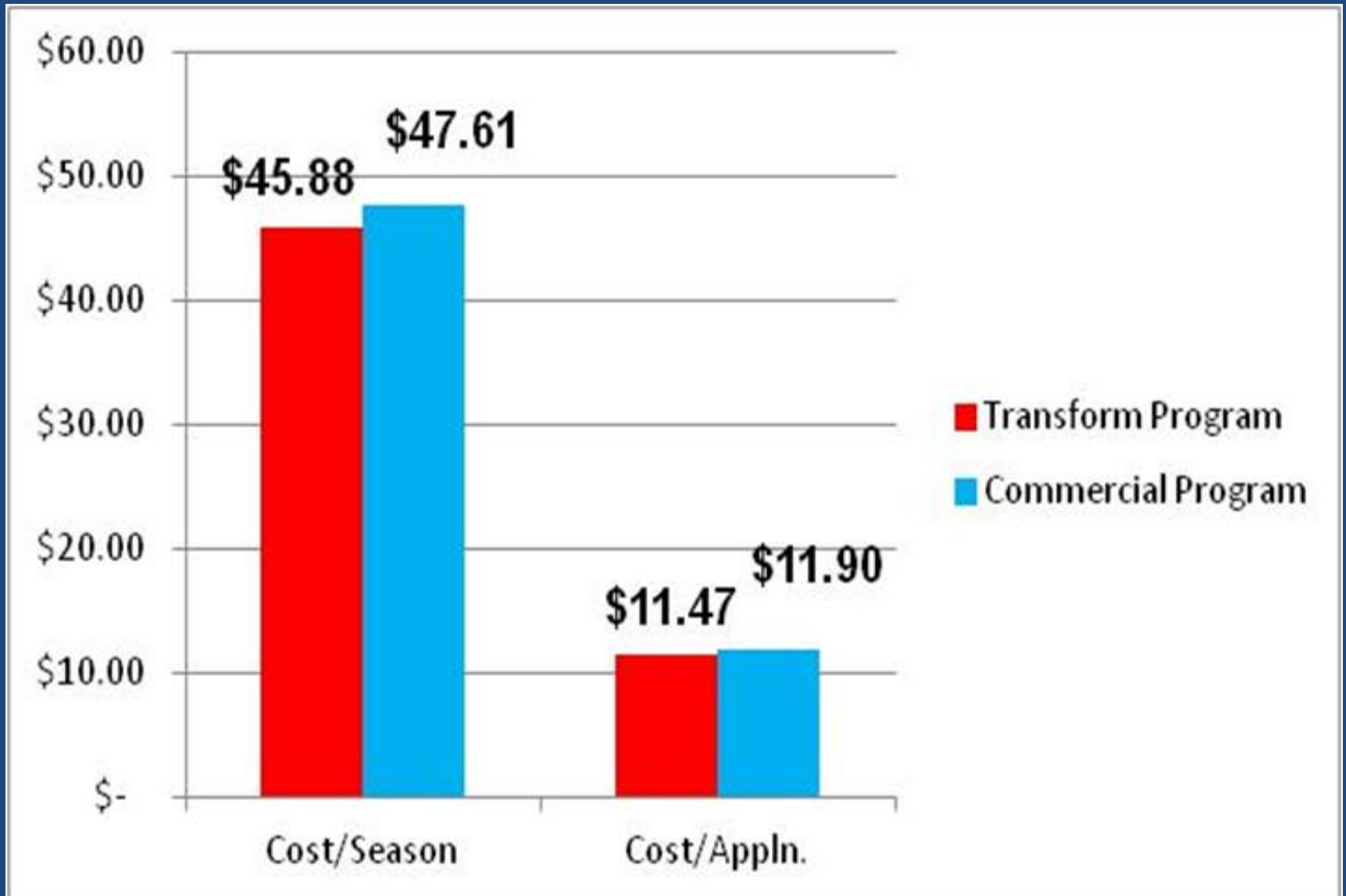
Untreated = 1076 lbs lint/ac  
 Transform program = 1128 lbs lint/ac  
 Alternative program = 1165 lbs lint/ac

Transform program = \$98.67  
 Alternative program = \$78.99

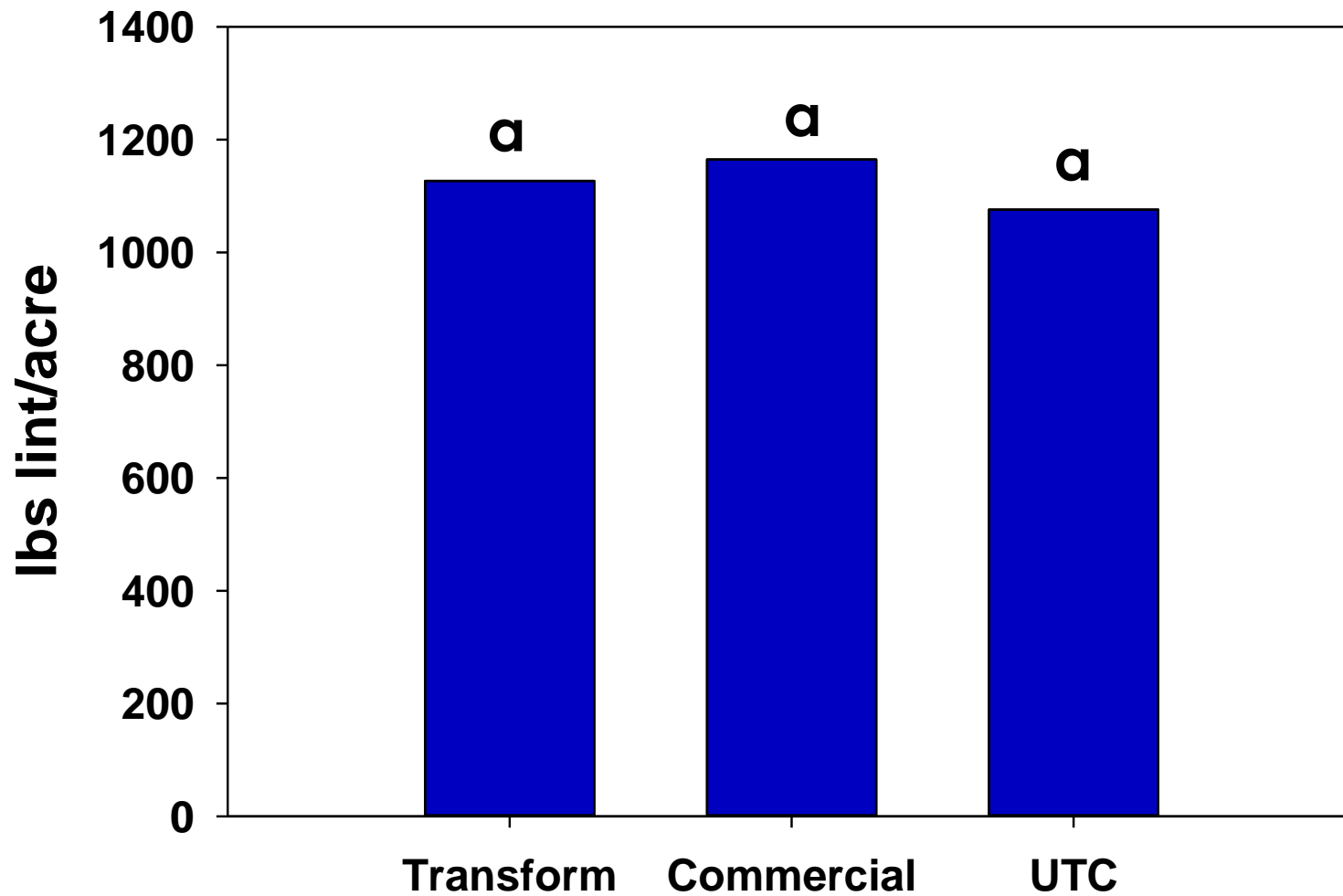
# COST X LOCATION FOR THRIPS & TPB



# COST PER SEASON/APP ACROSS LOCATIONS



# LOUISIANA YIELD



# STANDARD VS TRANSFORM TREATMENTS

- Dow Program

- Radiant (1.5 oz) + COC (1%)
- Transform (1.5 oz)
- Transform (1.5 oz)
- Centric (2.0 oz) + Diamond (6.0 oz)
- Transform (1.5 oz)
- Transform (1.5 oz)

- Commercial Standard

- Bidrin (3.2 oz) + COC (1%)
- Centric (2.0 oz) + Diamond (6.0 oz)
- Bidrin (8.0 oz)
- Acephate (0.75 lb) + Diamond (6.0 oz)
- Acephate (0.75 lb) + Discipline (6.4 oz)



# TRANSFORM SUMMARY

- Transform optional rotation partner
- Little to no efficacy on stink bugs
- Effective aphicide
- Typically “soft” on beneficials
- >1 application often needed if used at 1.5 oz/a

# What's on the Horizon

- Transgenic cotton for thrips and plant bugs
- Not a silver bullet
- Will help take pressure off of insecticides
- Stacked with Lepidoptera genes

# RESEARCH SUPPORTED BY:



Questions