

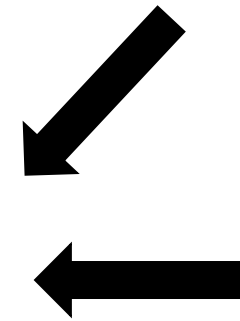
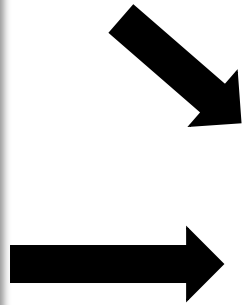


MISSISSIPPI STATE
UNIVERSITY™

Tarnished Plant Bug Control Strategies to Maximize Profit

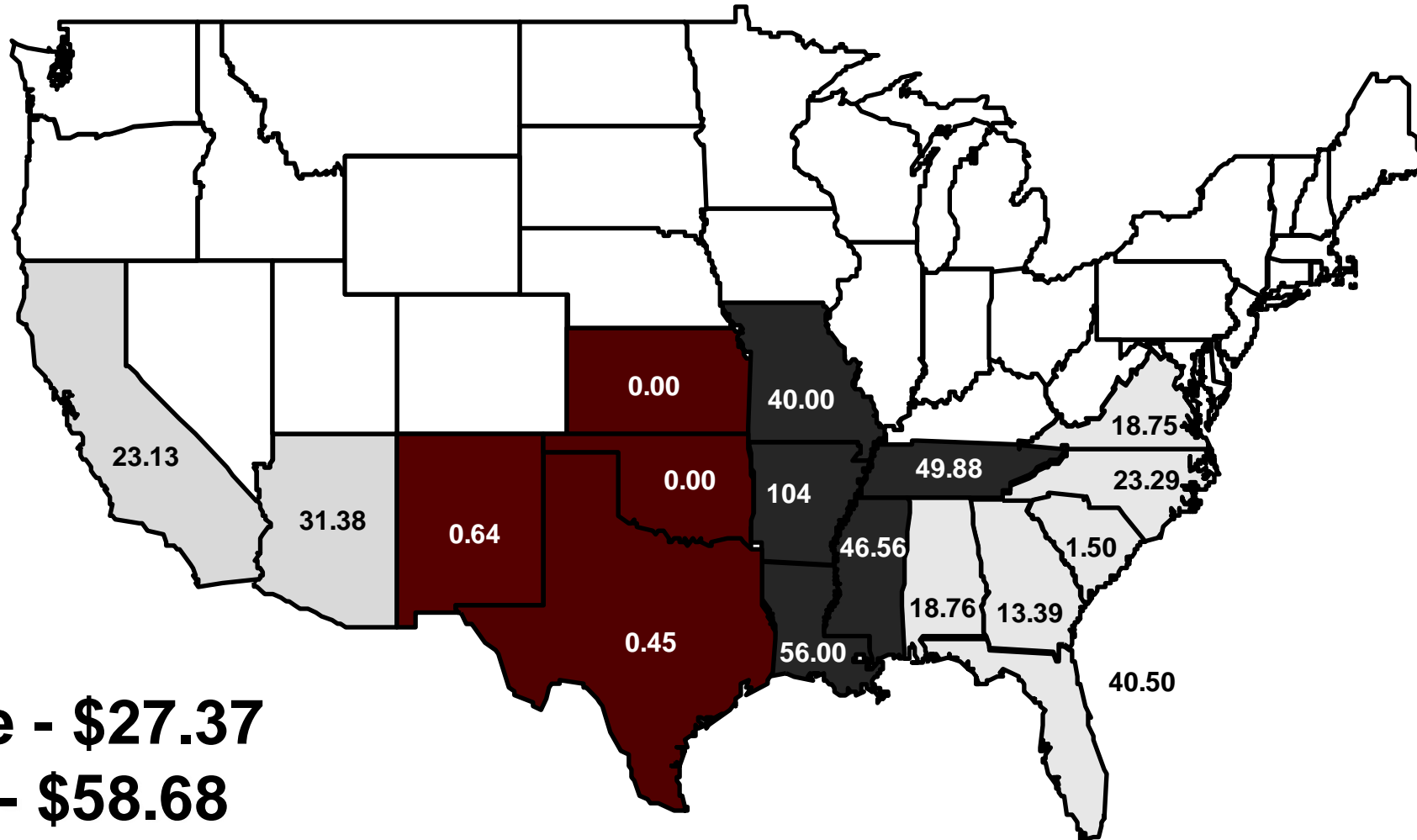
WHITNEY D CROW

Cotton is a sink, not a source



U.S. Cotton Belt

Lygus spp. Control Costs - 2021

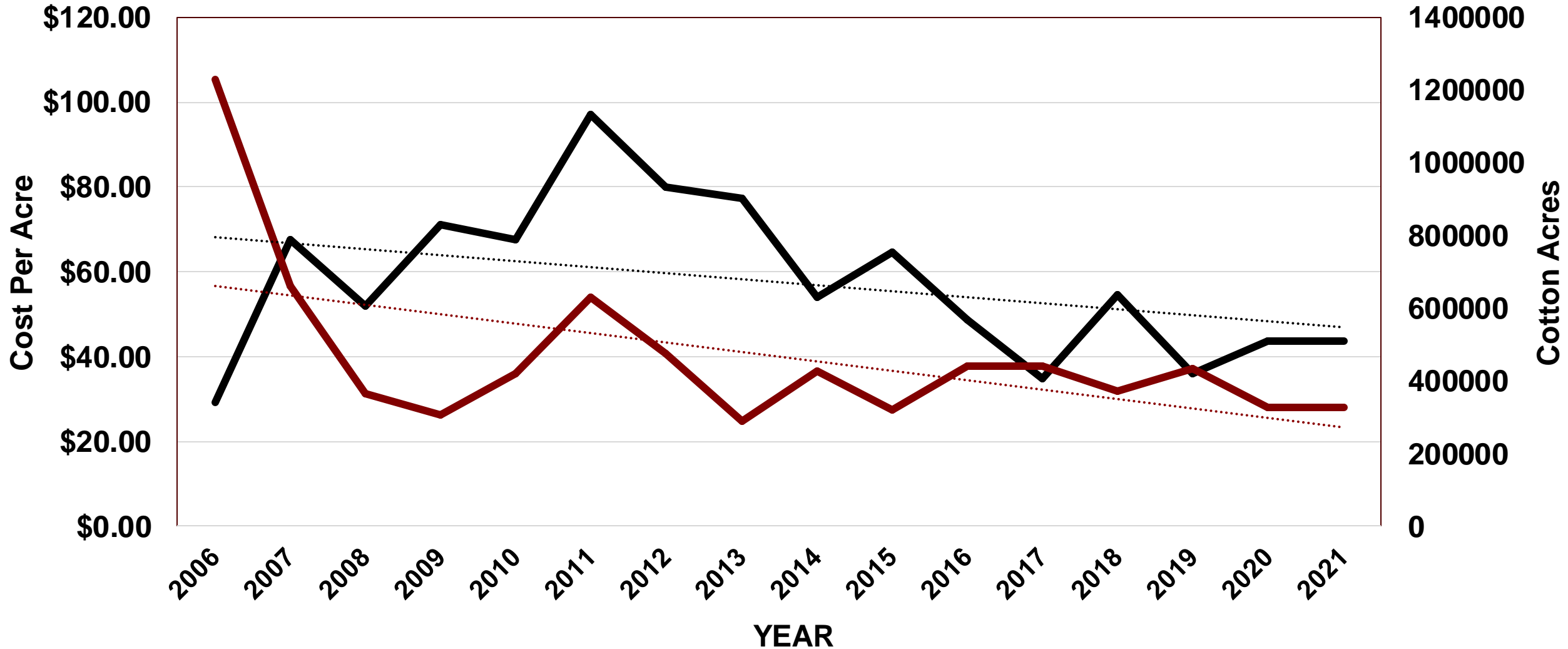


US average - \$27.37

Mid-South - \$58.68

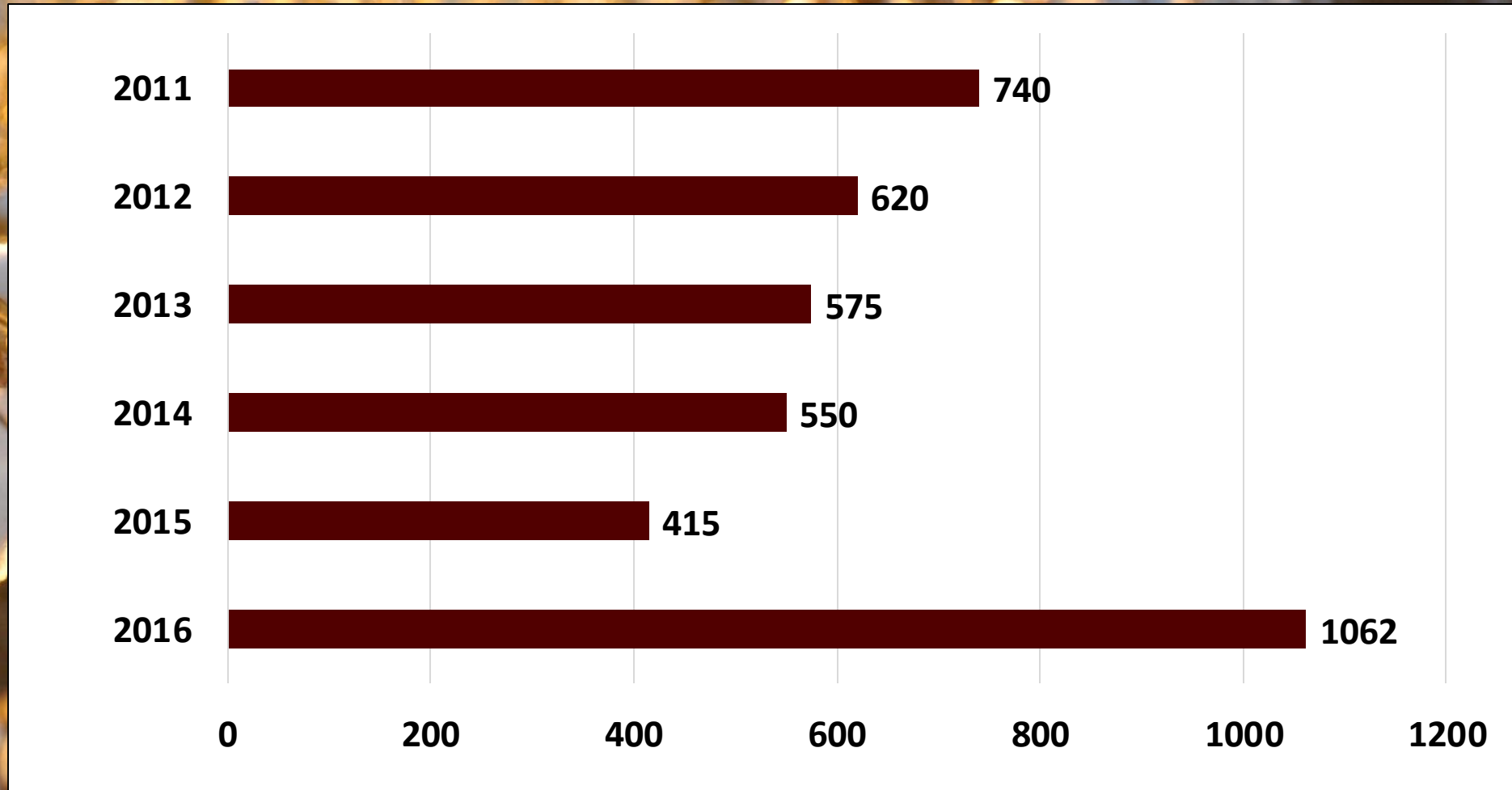
Control Cost for TPB in the MS Delta

— Foliar Control Cost — Cotton Acres Linear (Foliar Control Cost) Linear (Cotton Acres)



Post Bloom Yield Loss From Tarnished Plant Bugs in the Mississippi Delta

Pounds of Lint per Acre



Integrated Program Approach for Tarnished Plant Bug

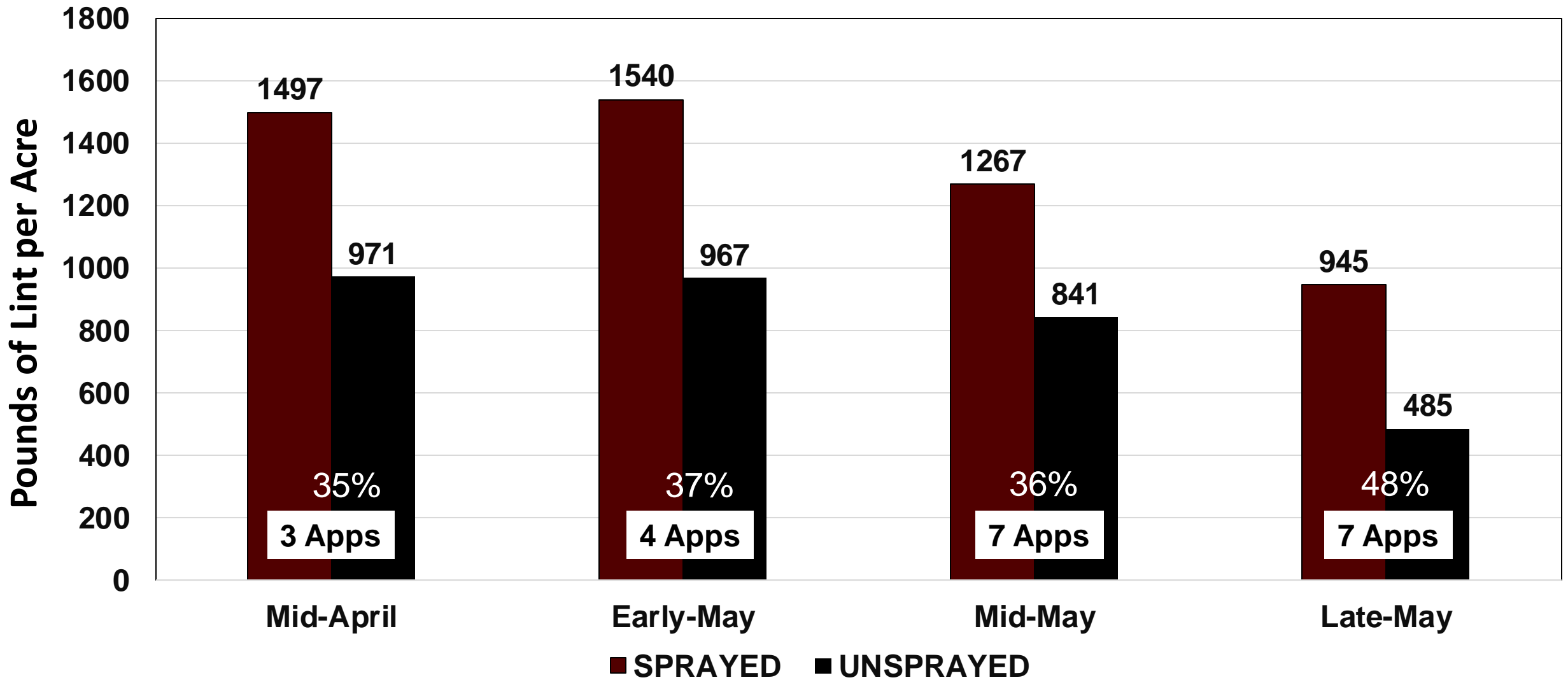
- **Cultural Control (planting date, early maturing)**
- **Blocking Cotton Away from Corn**
- **Manage for Earliness**
- **Early Novaluron Applications**
- **Mixtures, Mixtures, and Mixtures**
- **Shortened Intervals in Heavy Pressure Areas**
- **Improved Sampling Techniques and Thresholds**



Weedy Host Management



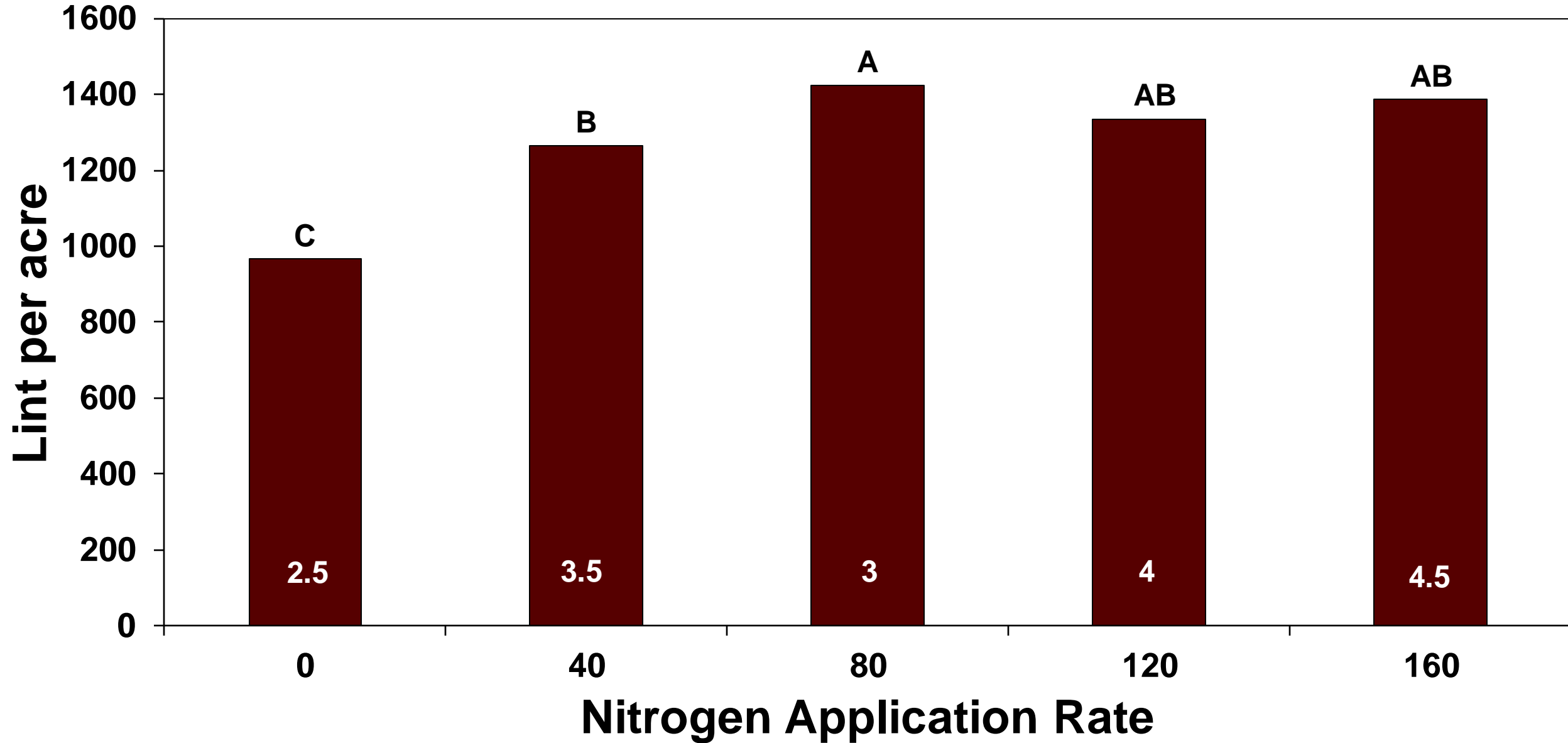
Lint Yields by Planting Date



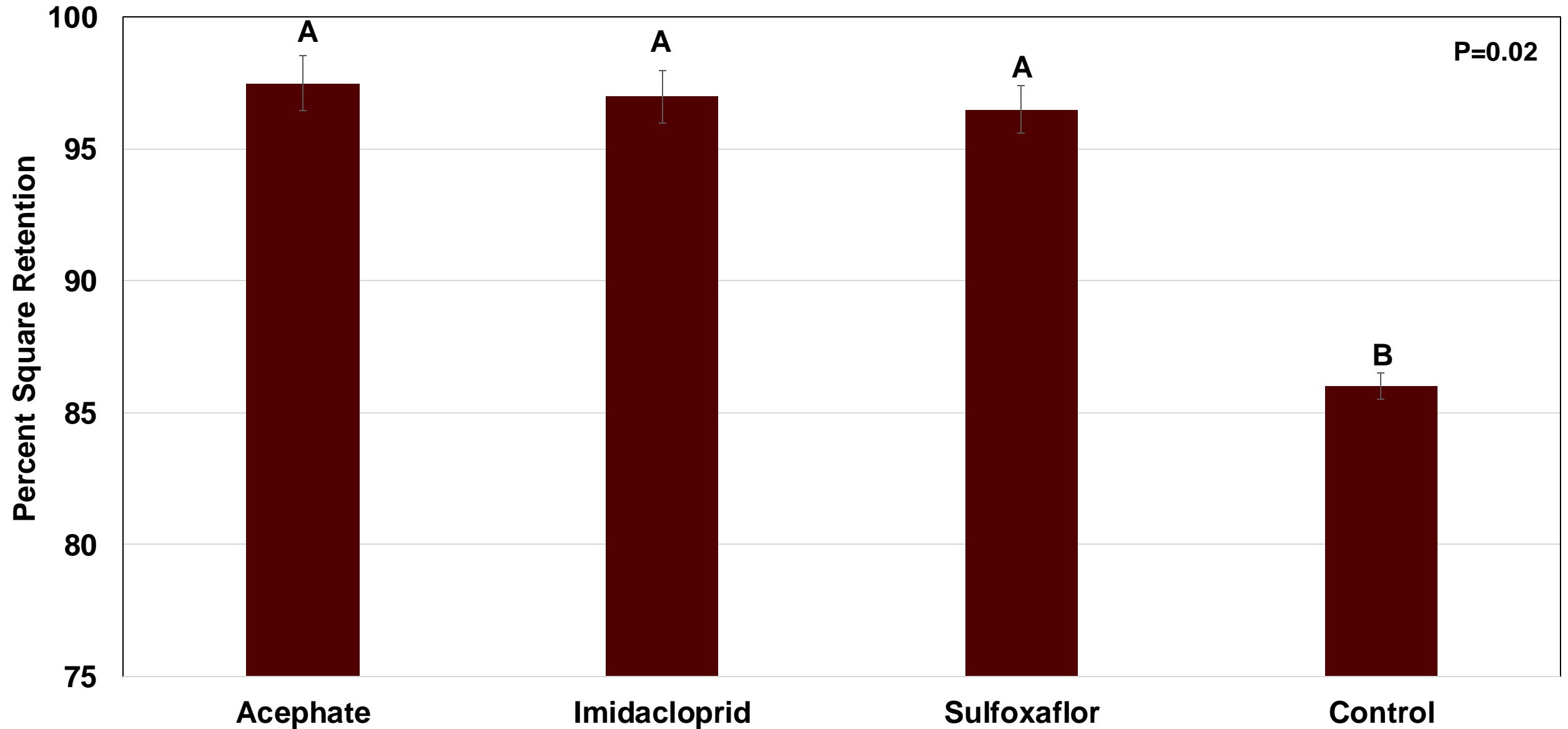


**2021 adult migration next to corn
11 insecticide applications**

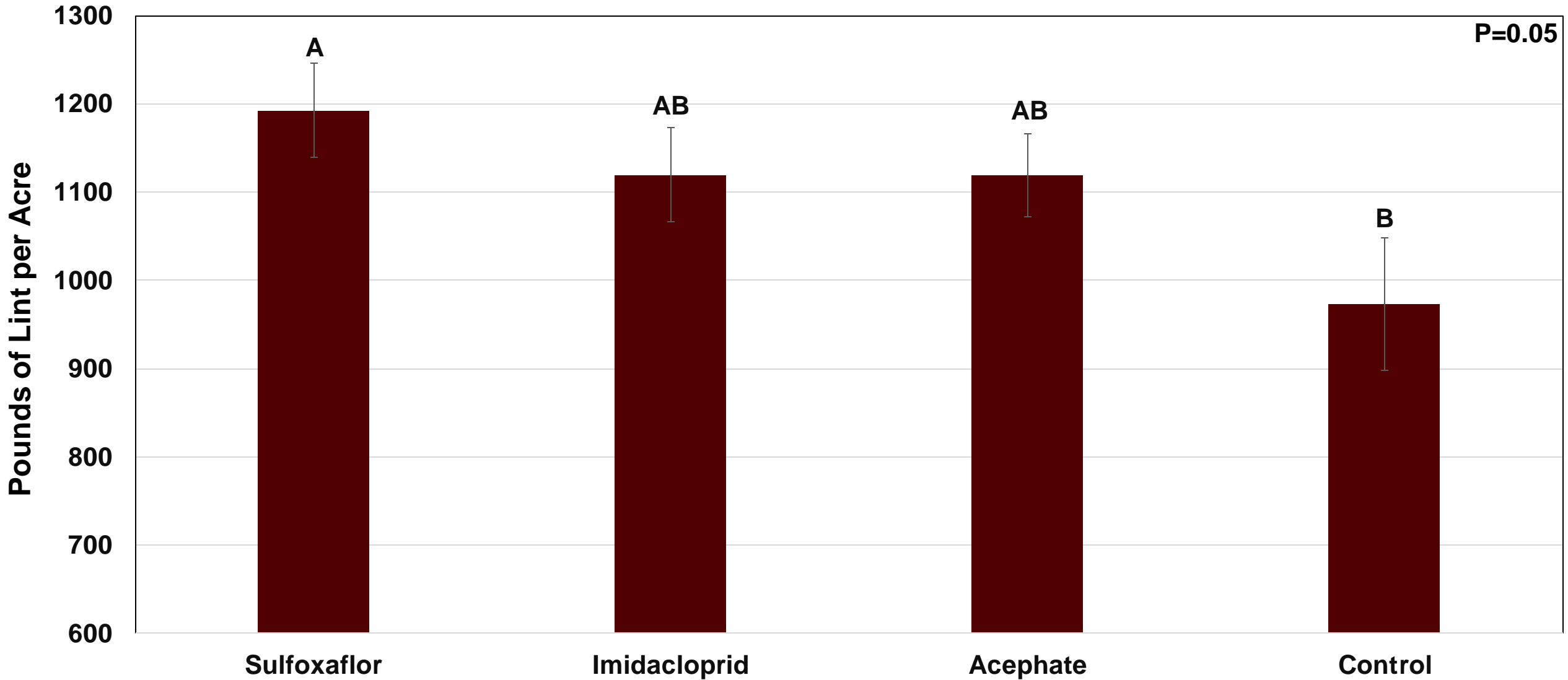
Impact of N Rate on TPB Management



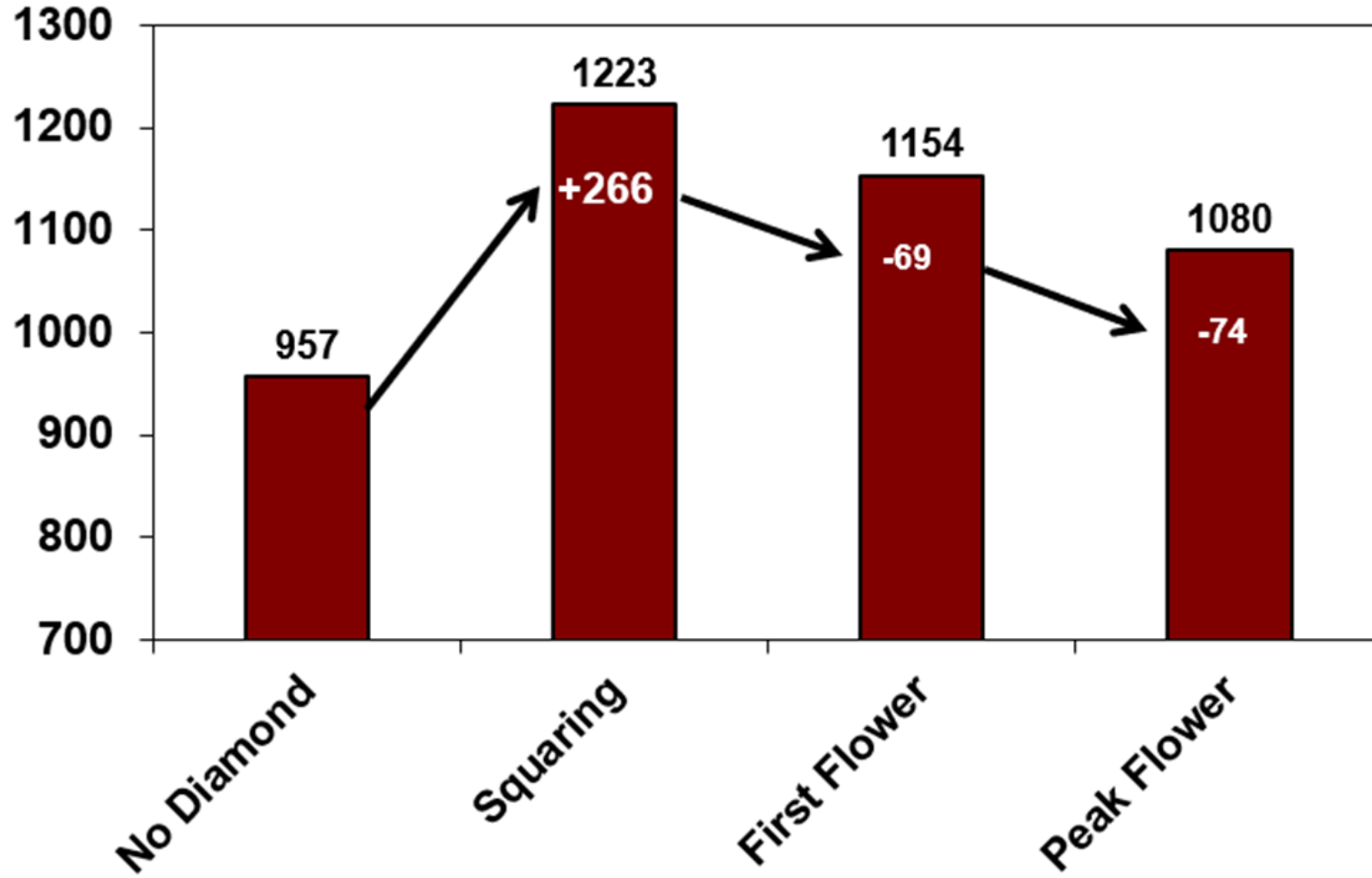
Week 3rd of Square- Retention



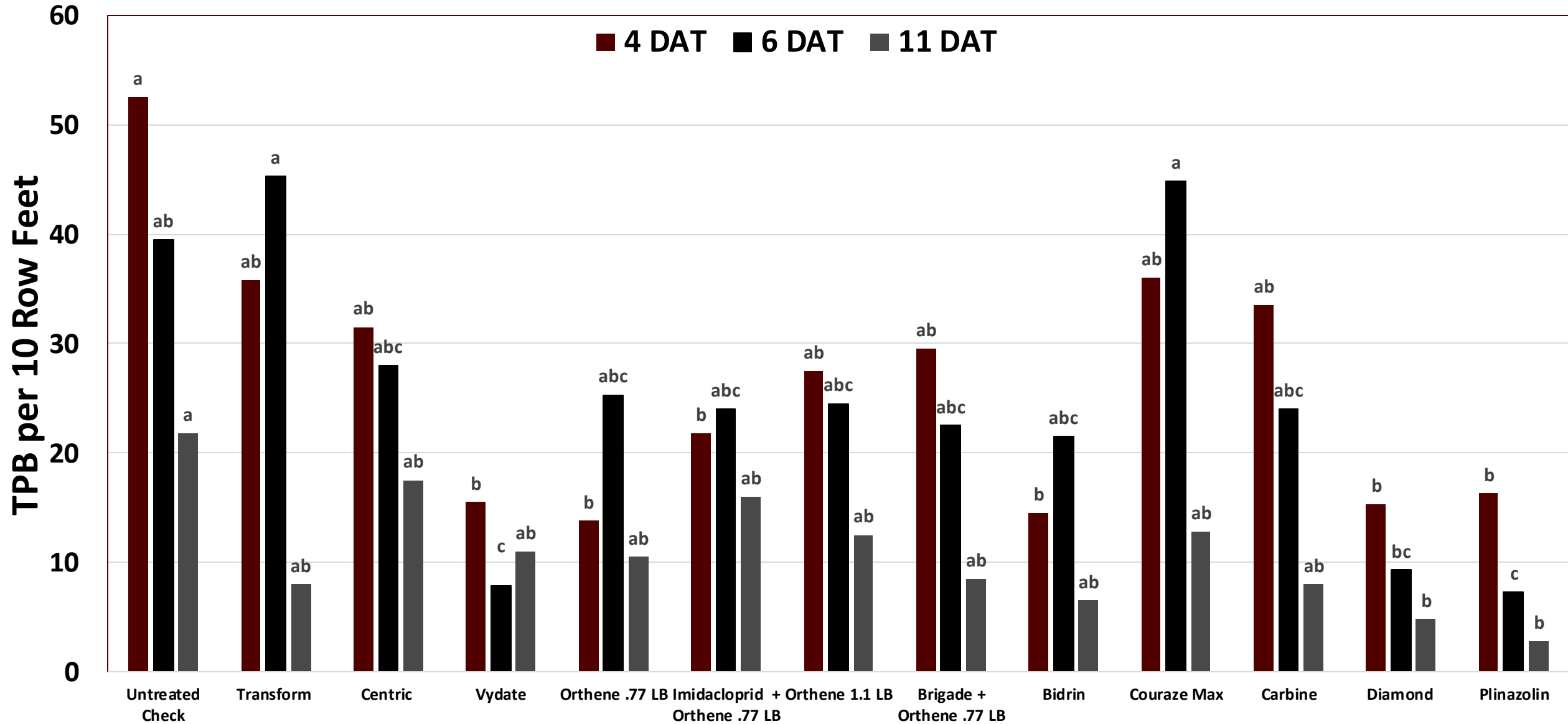
Insecticide Efficacy Yield



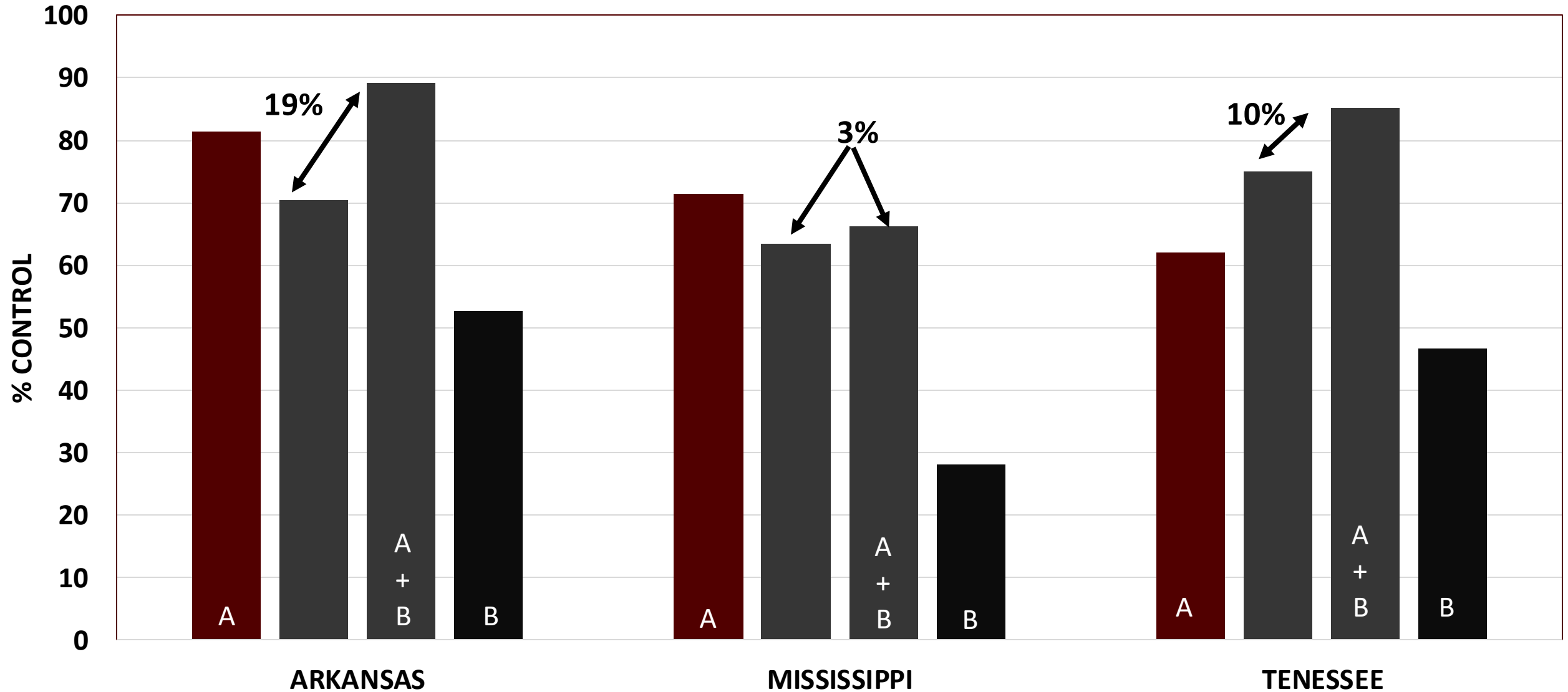
DIAMOND APPLICATION TIMING ON YIELD



Regional TPB Efficacy Trial



Acephate Bifenthrin, Variation Between States



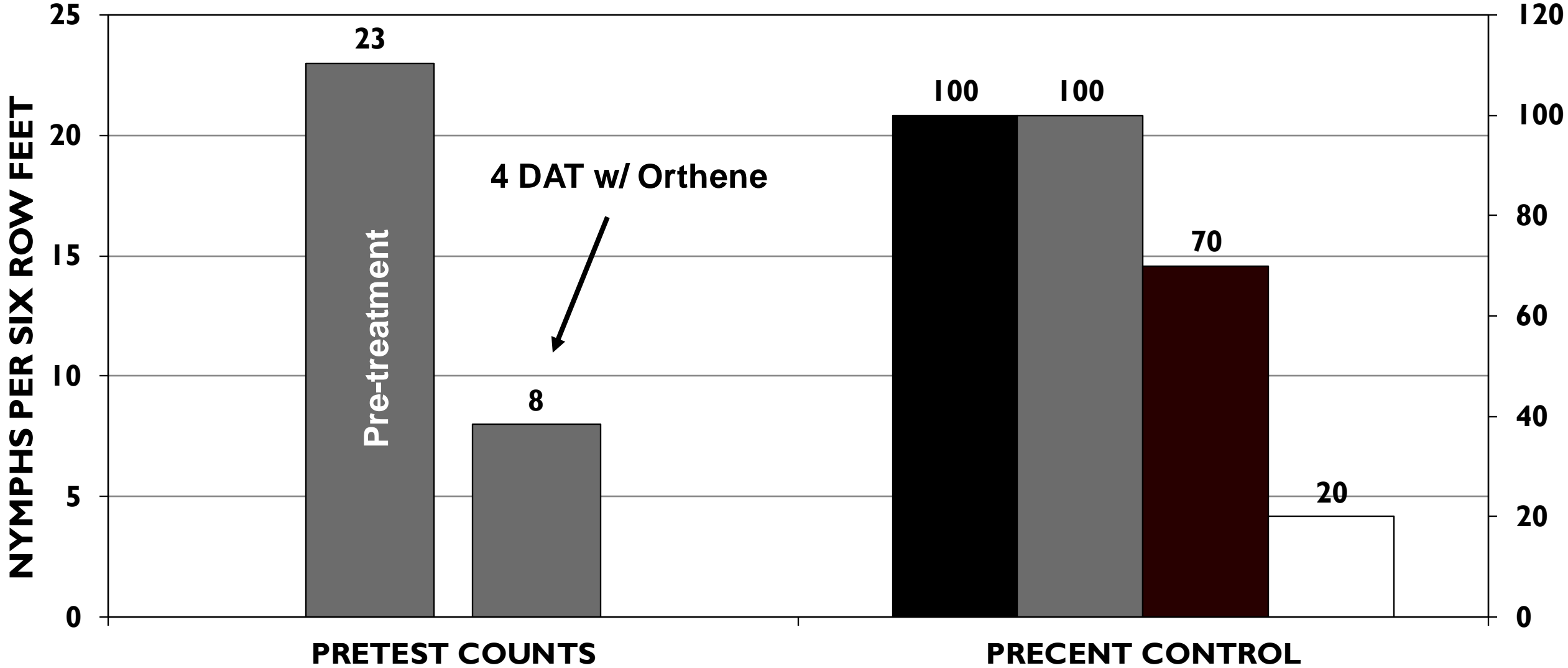
Insecticide Application Intervals

■ 4 D

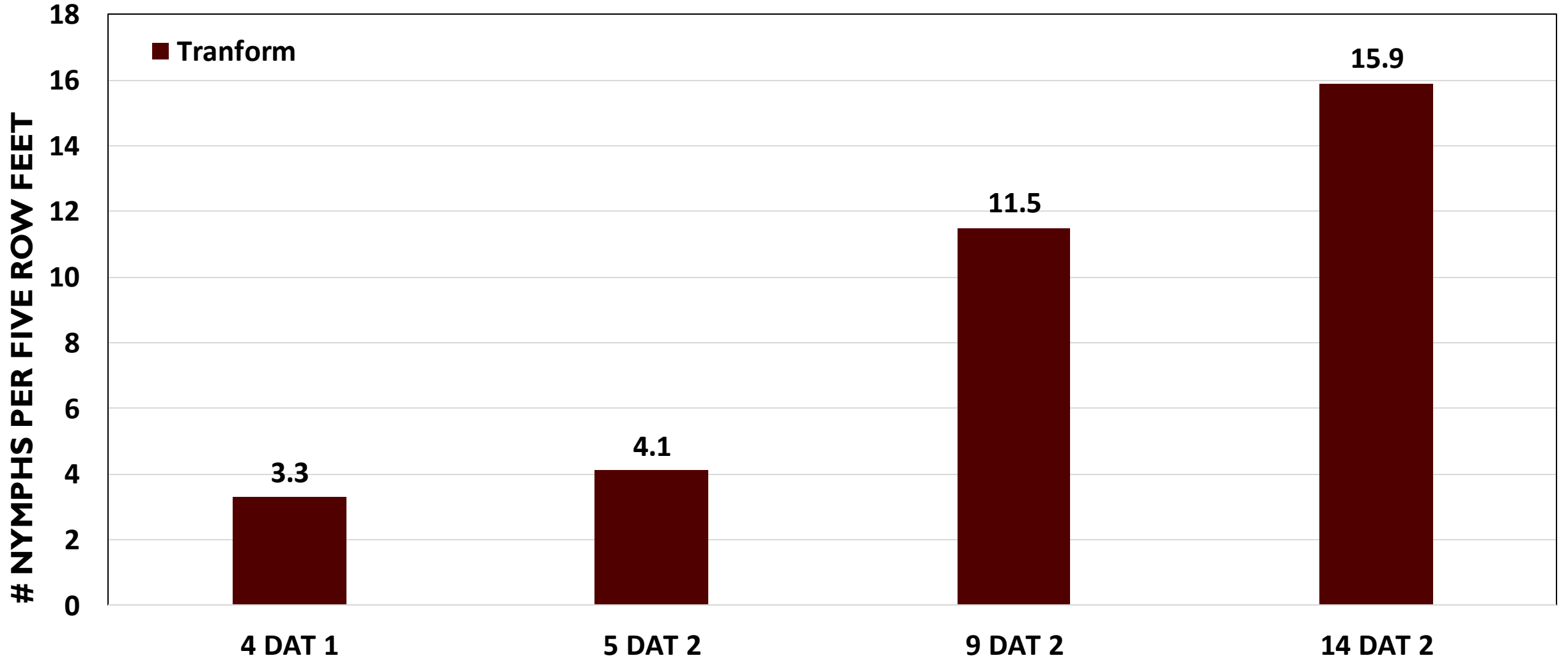
■ 5 D

■ 6 D

□ 7 D



What you see:

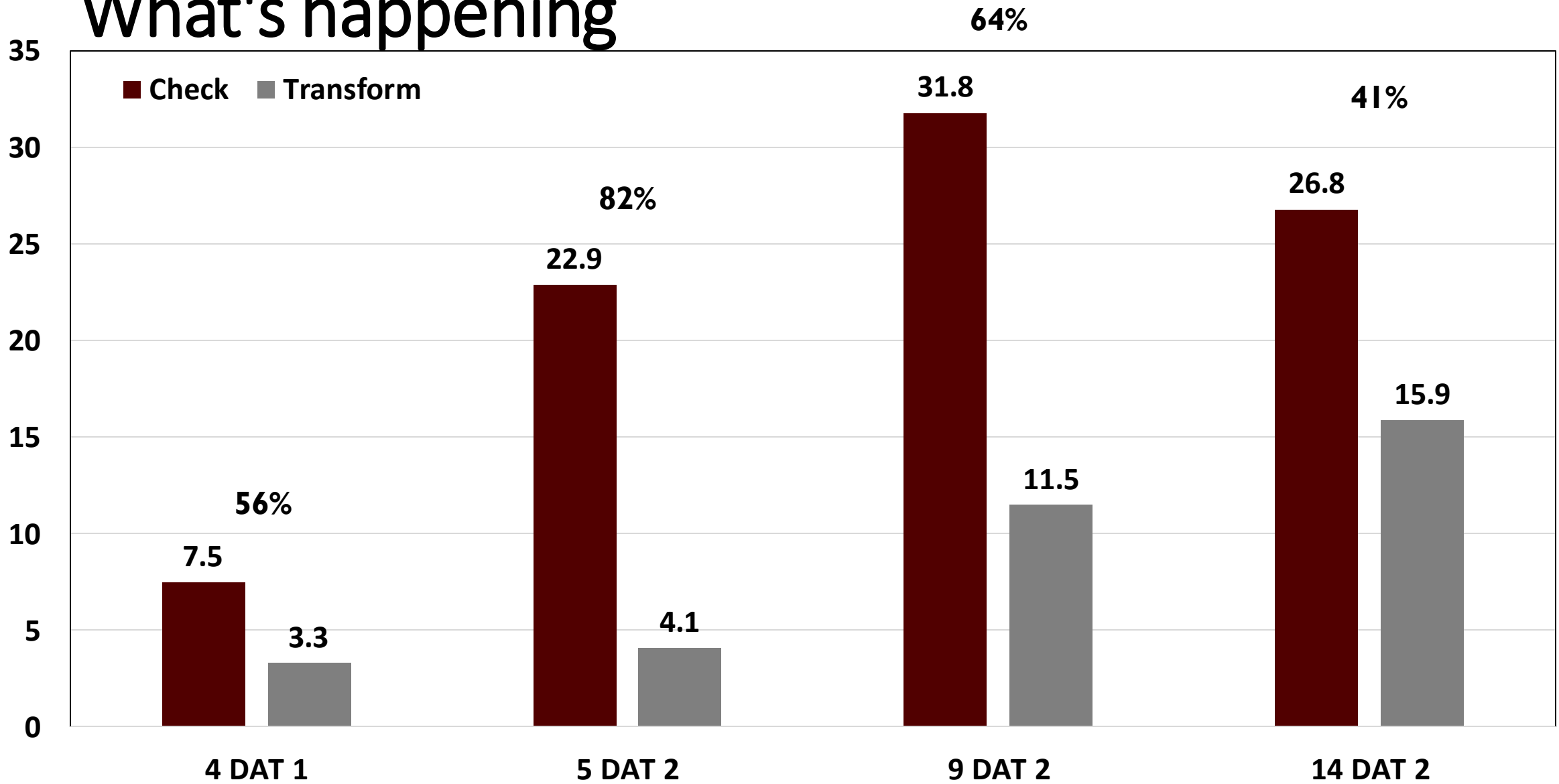


PRECHECK = 3 PLANT BUGS PER FIVE ROW FEET



What's happening

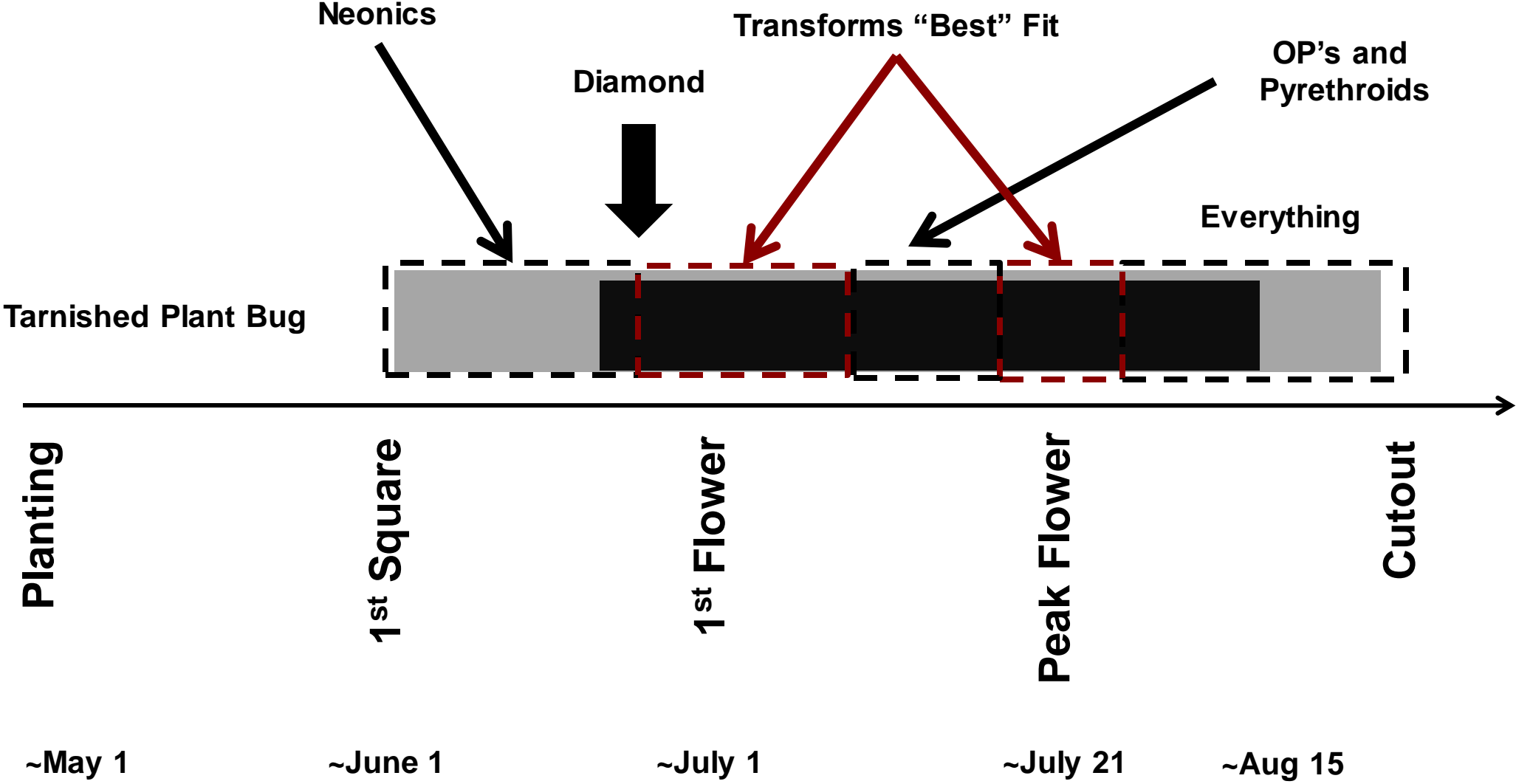
NYMPHS PER FIVE ROW FEET



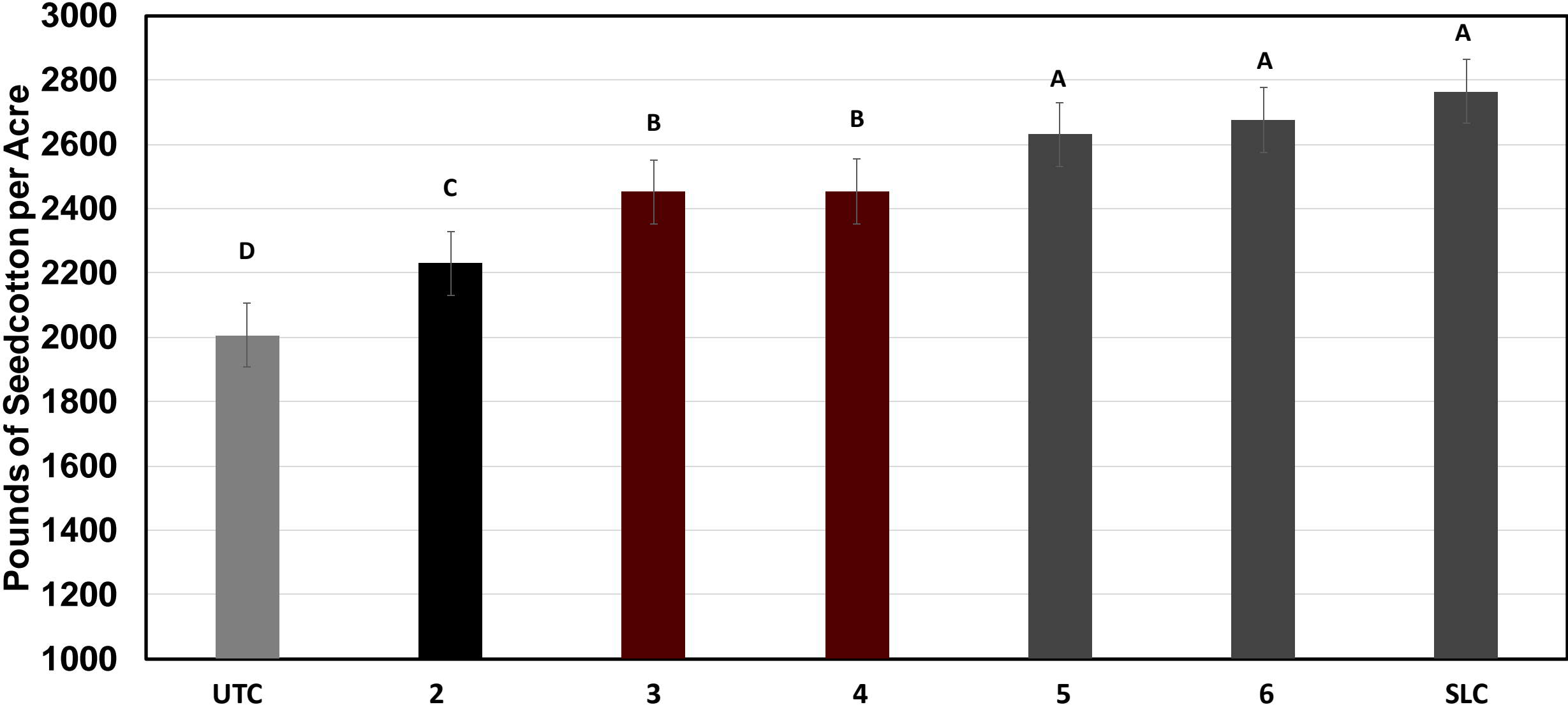
PRECHECK = 3 PLANT BUGS PER FIVE ROW FEET

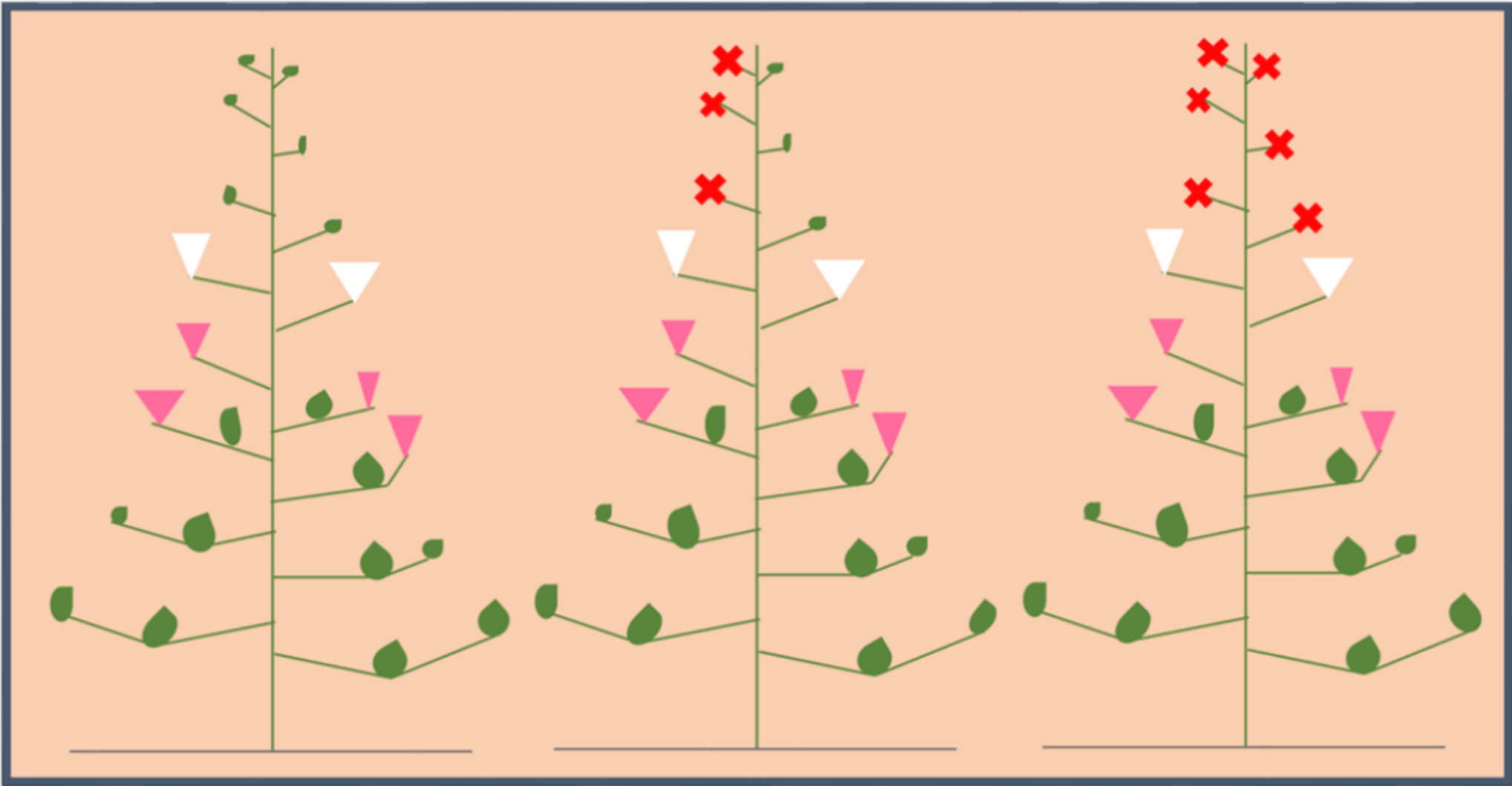


Insecticide Application Timings

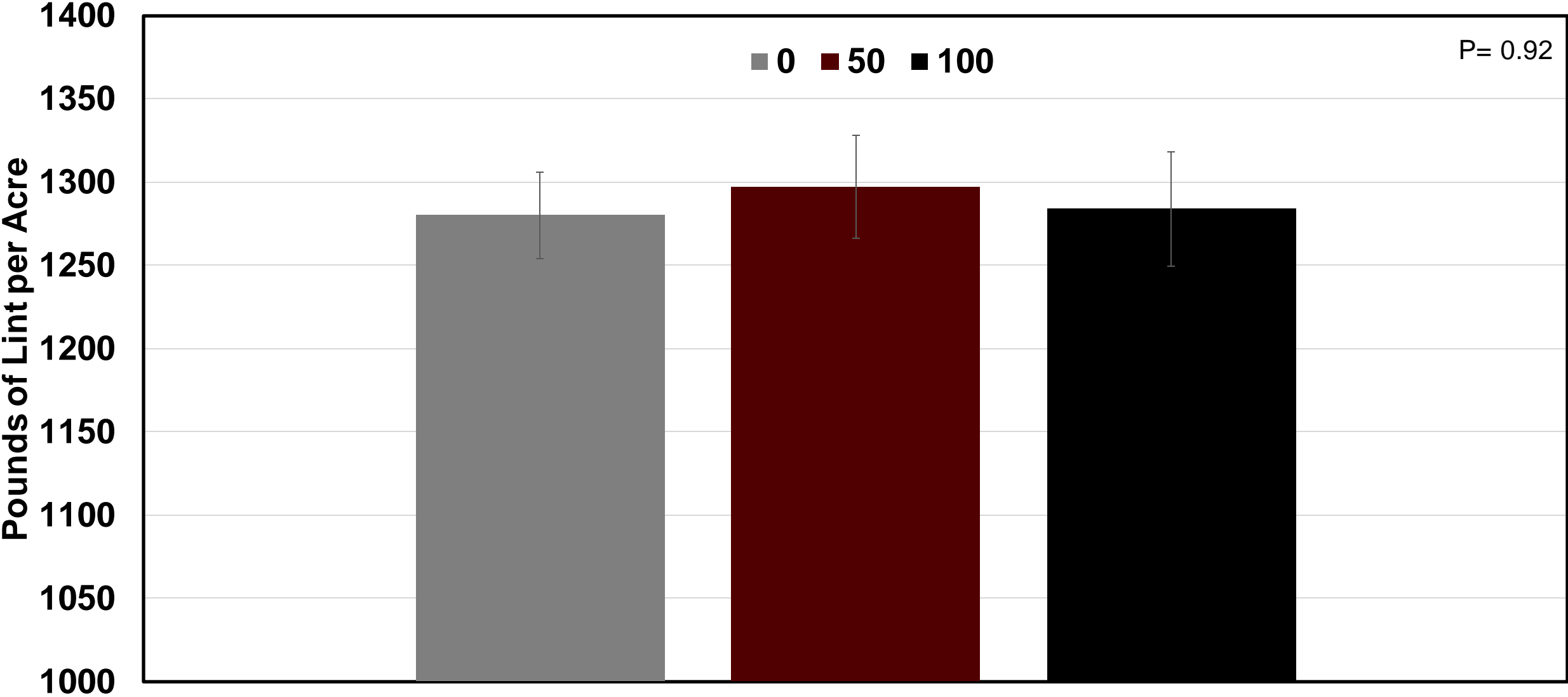


Insecticide Termination

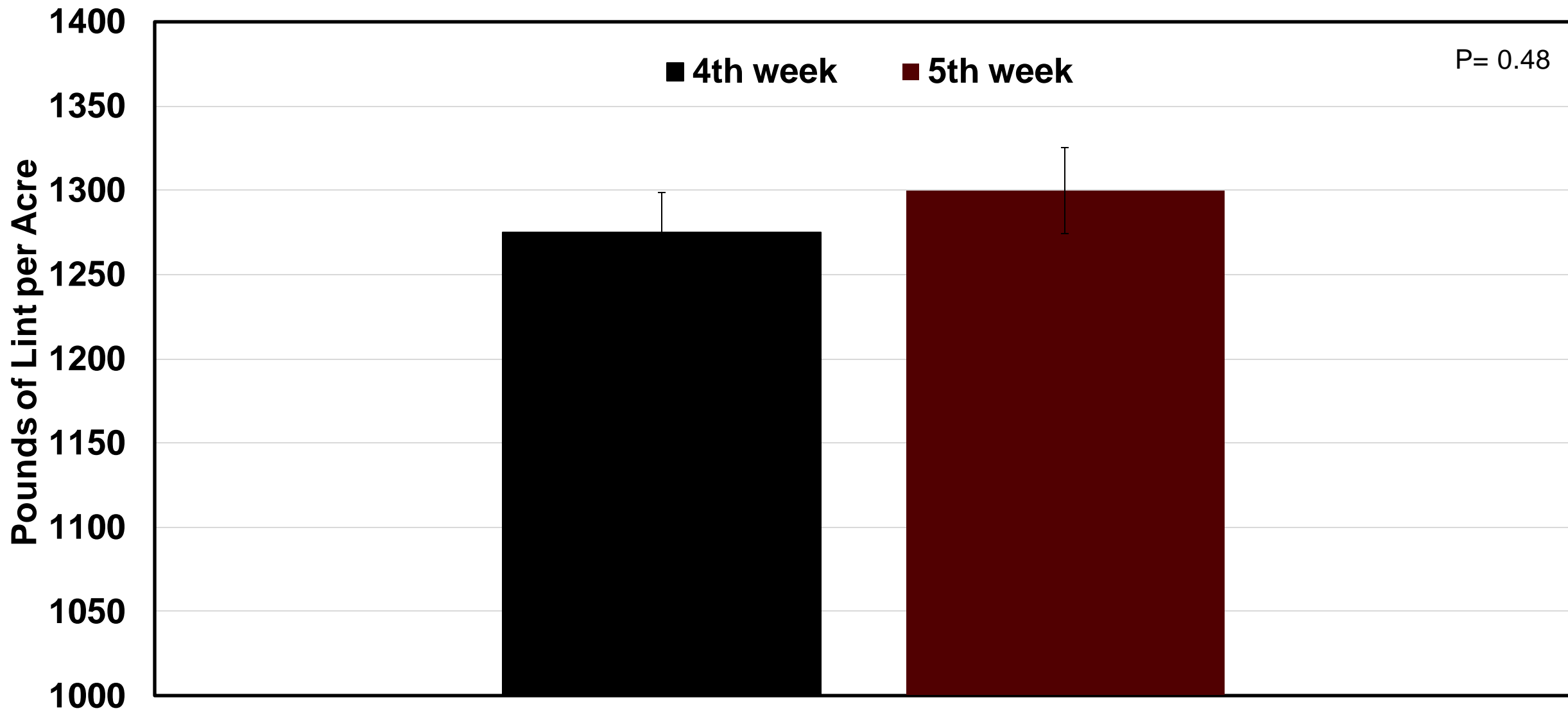




Precent Fruit Removal



Week of Removal





Importance of Black Drop Cloths

Credit: Ben Thrash, the University of Arkansas

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QUESTIONS?

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