

# Evaluation of Experimental Foliar Products for Burley and Dark Tobacco

2007 – MSU, Murray, KY

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# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

- Objective: Evaluate phytotoxicity potential from experimental foliar products applied to burley and dark tobacco.
- Randomized complete block with 4 replications
- Tobacco set June 5
  - 40" row spacing, 32" plant spacing (4900 plants/A)
  - Burley variety: TN 90LC; Dark variety: Narrowleaf Madole LC
  - Plots 4 rows, 40 ft. long
  - 2 rows burley, 2 rows dark
  - All rows in plot treated (broadcast, 15 gal/A), evaluated, and harvested
  - 2 products tested, 3 mid-season applications made 7-10 days apart
- Data collected: phytotoxicity ratings, air-cured yield, quality

# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

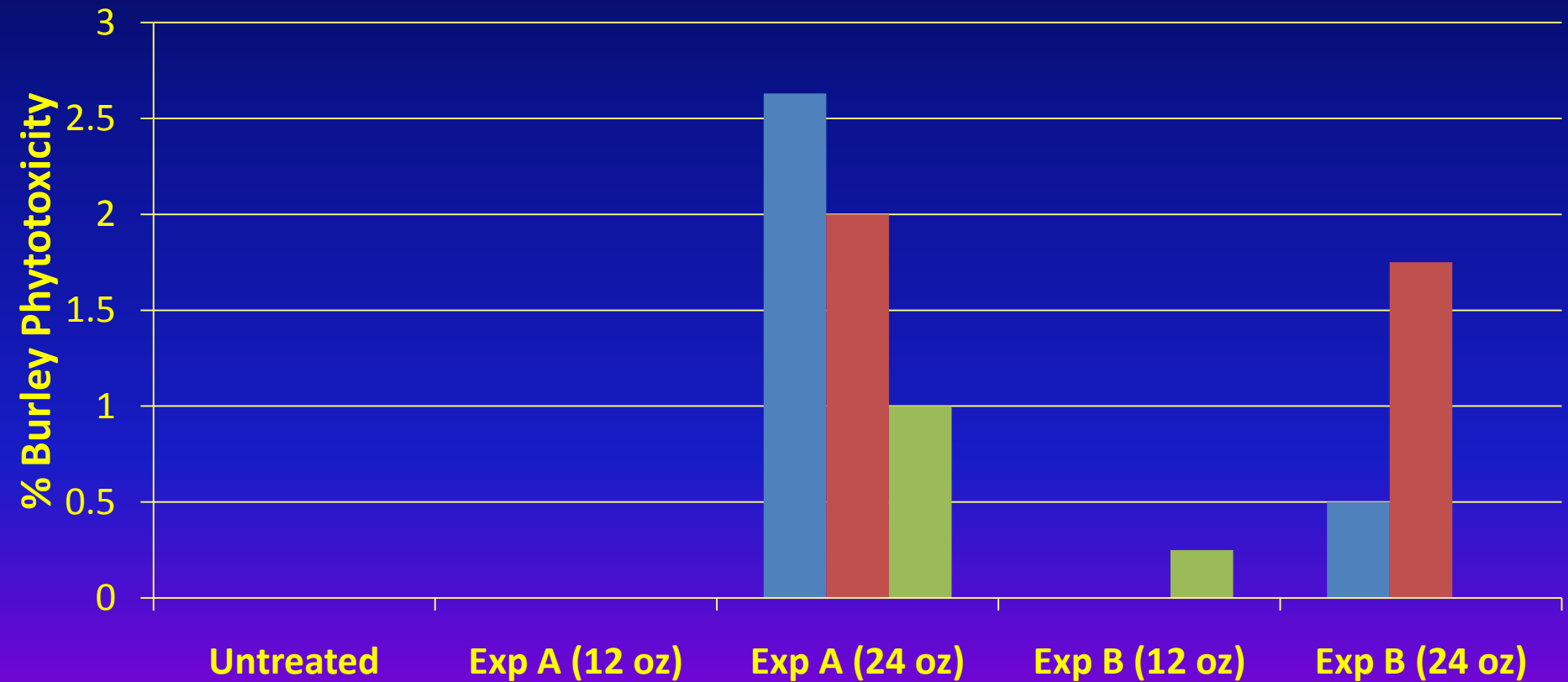
Treatment	Product	Rate/A (oz/A)	No. of Applications
1	Untreated Control	0	0
2	Experimental A	12 oz/A	3
3	Experimental A	24 oz/A	3
4	Experimental B	12 oz/A	3
5	Experimental B	24 oz/A	3

\*Dates of Application: App. 1: July 10; App. 2: July 18; App. 3: July 27  
Plots evaluated July 18, July 27, August 6, September 19 (preharvest)

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## Burley Phytotoxicity Ratings\*

LSD<sub>0.05</sub> =      0.80                      0.95                      0.91  
■ Burley Injury 1    ■ Burley Injury 2    ■ Burley Injury 3



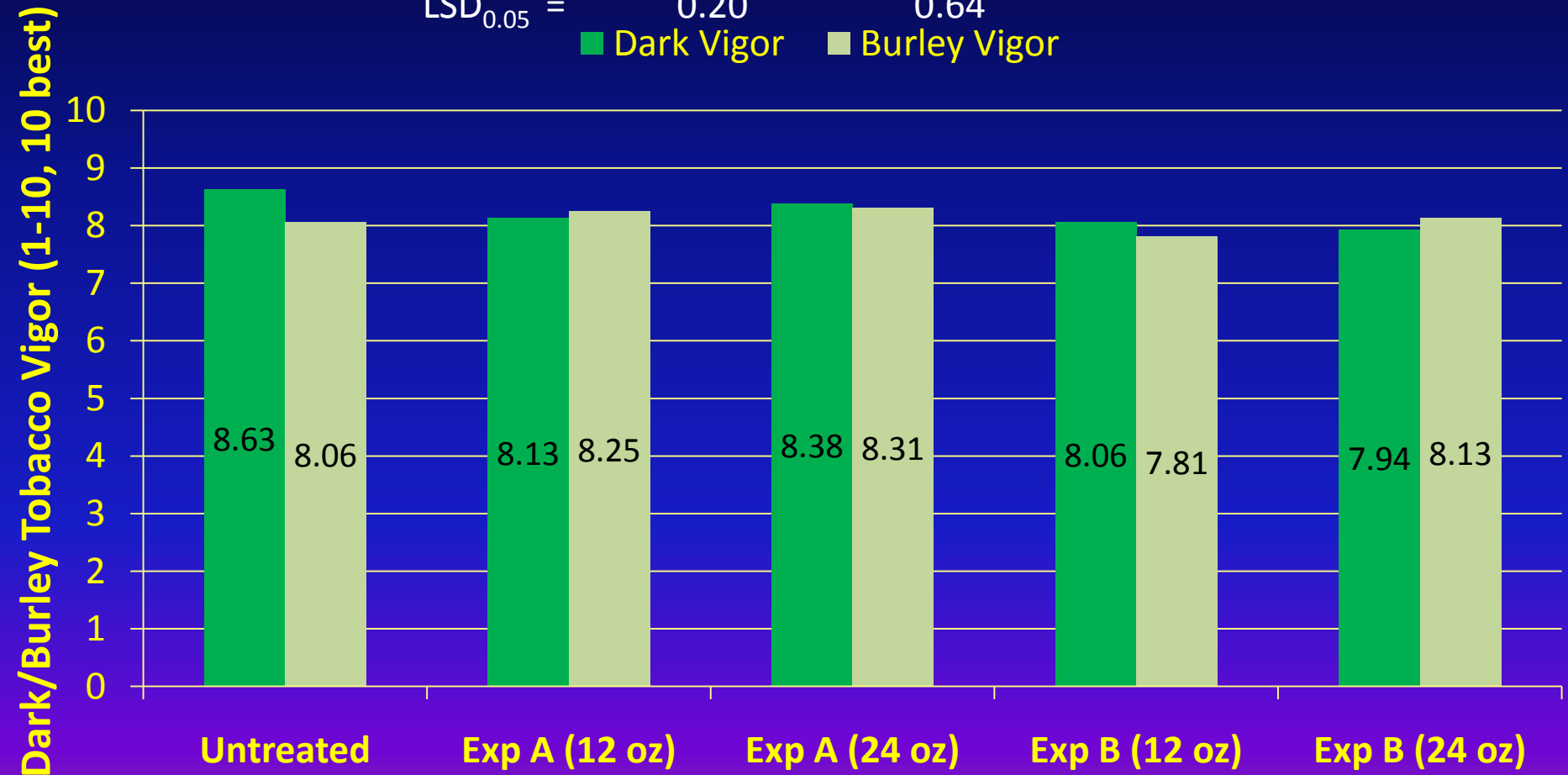
\*Burley phyto data only, no injury apparent in dark tobacco.

# Experimental Foliar Products for

## Burley and Dark Tobacco – 2007, Murray, KY

Late-season preharvest burley and dark crop vigor ratings

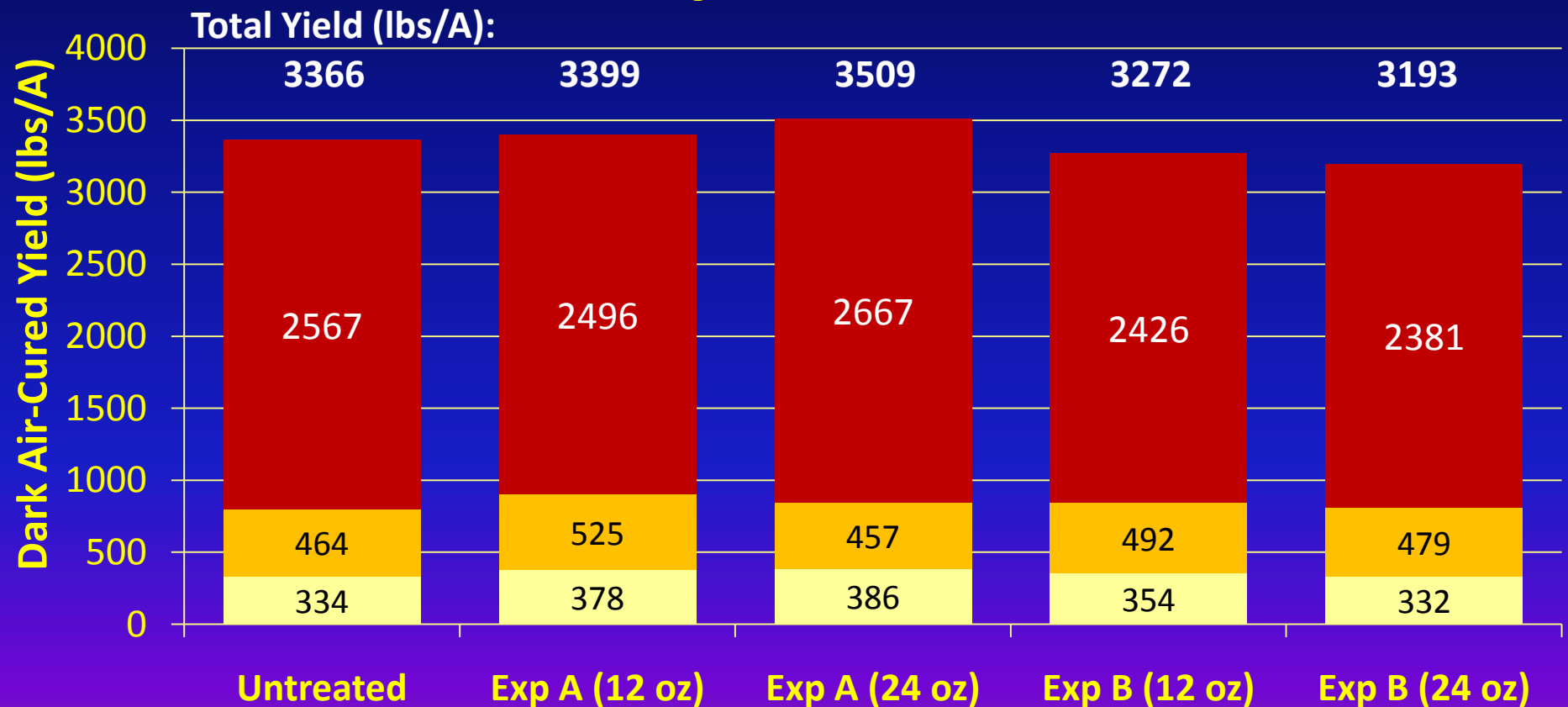
LSD<sub>0.05</sub> = 0.20      0.64  
■ Dark Vigor      ■ Burley Vigor



# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

## Dark Air-Cured Tobacco Yield

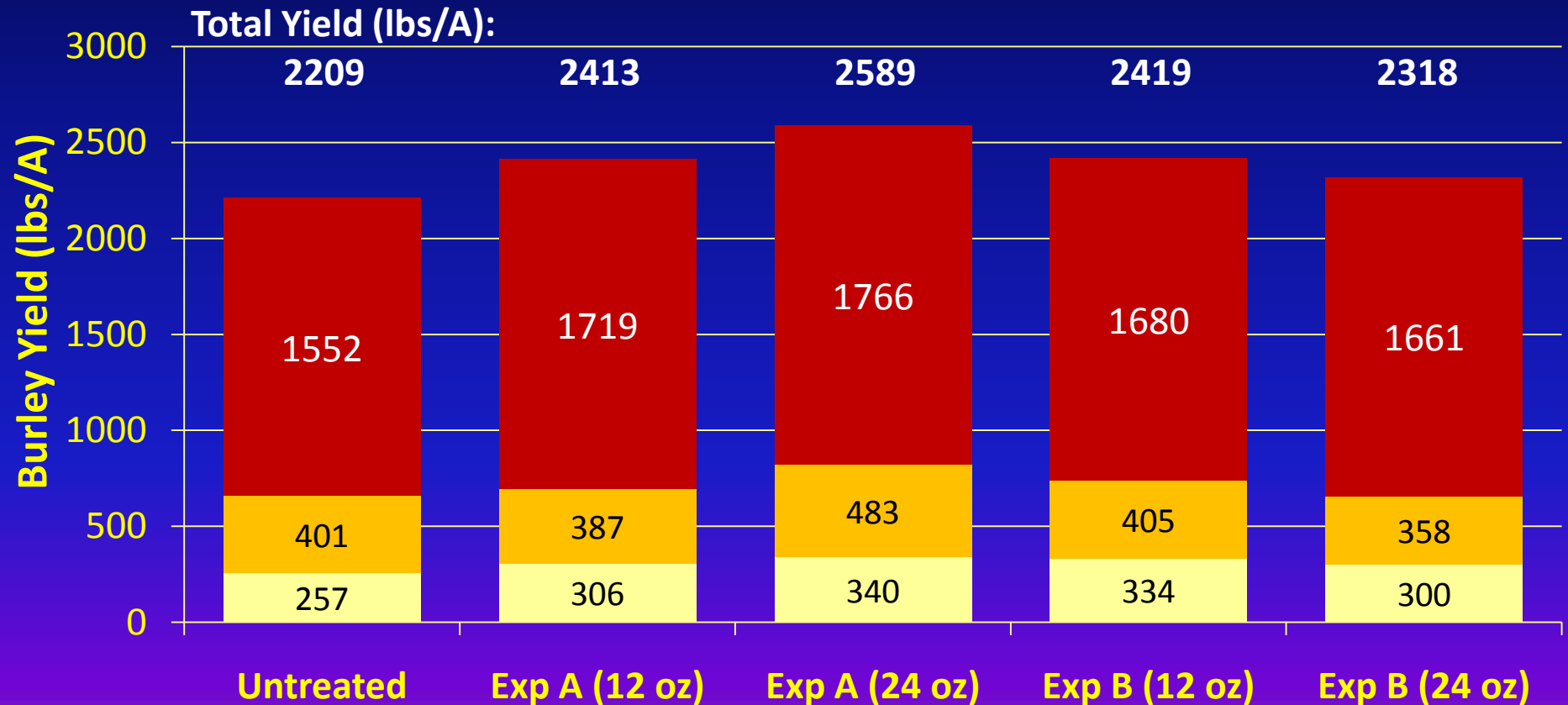
LSD<sub>0.05</sub> =    107            128            229            339 (total)  
 Lug     Second     Leaf



# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

## Burley Tobacco Yield

LSD<sub>0.05</sub> =    125            116            522            704 (total)  
 Lug     Second     Leaf

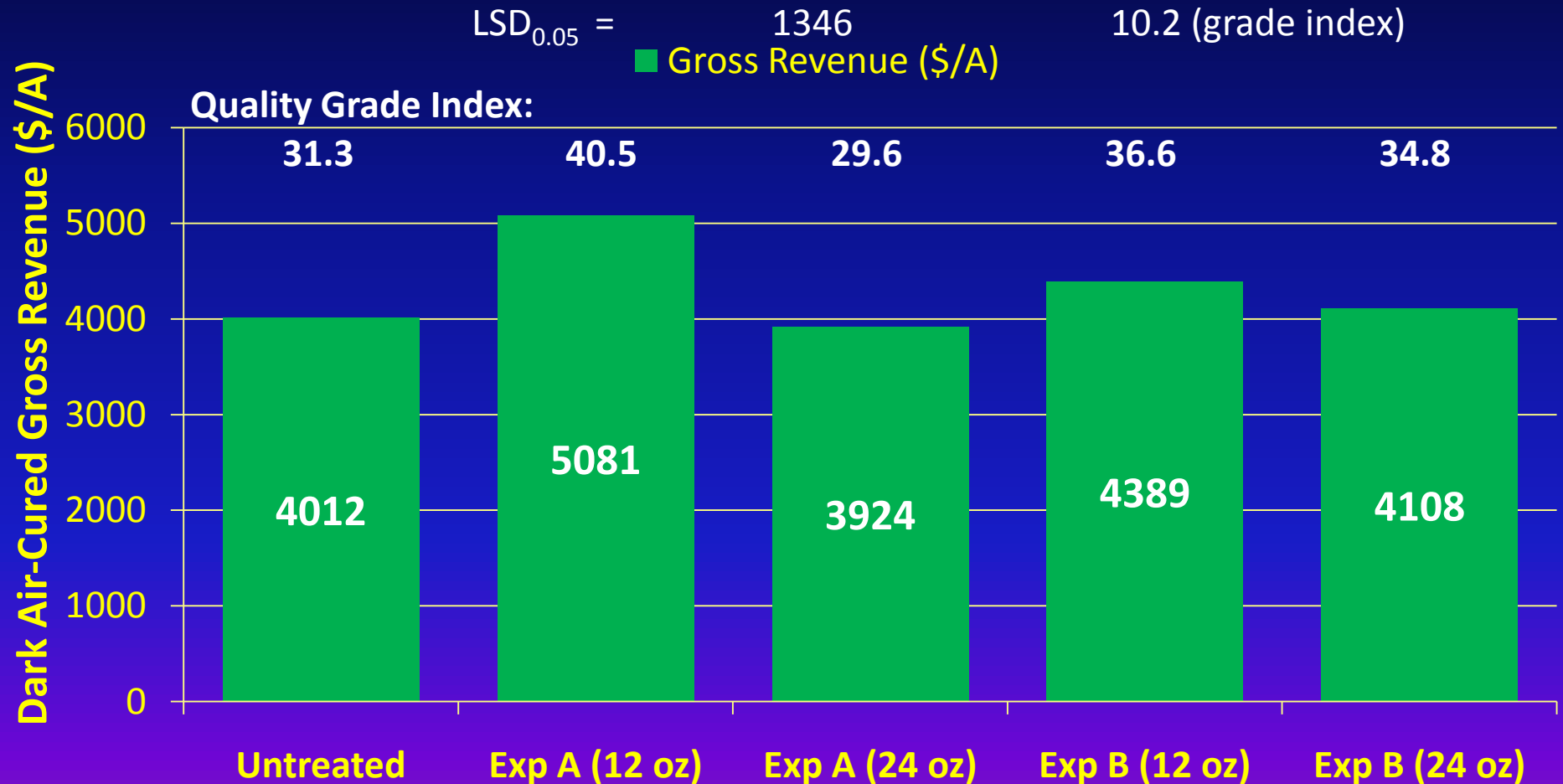


\*Some variability in burley yield due to heavy tomato spotted wilt infection in burley portion of trial.

# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

Dark Air-Cured Quality Grade Index and Gross Revenue/A\*

\*Grade Index and revenue based on 2004 USDA grade and price support for Type 35 Dark Air-Cured Tobacco.



\*\*Quality grade index not evaluated on burley due to tomato spotted wilt damage.



# Experimental Foliar Products for Burley and Dark Tobacco – 2007, Murray, KY

- Trial Summary:
  - Phytotoxicity not apparent on dark tobacco, appeared as mild flecking on burley, most from 24 oz/A rate of Experimental A (Trt 3).
  - Dark late-season plant vigor reduced from all treatments compared to nontreated, largest reduction from either rate of Experimental B.
  - Small reduction in dark leaf yield from Experimental B at either rate compared to Exp. A at 24 oz/A, but not different from untreated. Total yield not affected.
  - Small differences in yield of burley seconds, total burley yield not affected.
  - Quality grade index lowest in dark treated with 24 oz/A rate of Exp. A, but not different from untreated. No differences in dark gross revenue/A.