

Sugarcane Fertility Update for 2026

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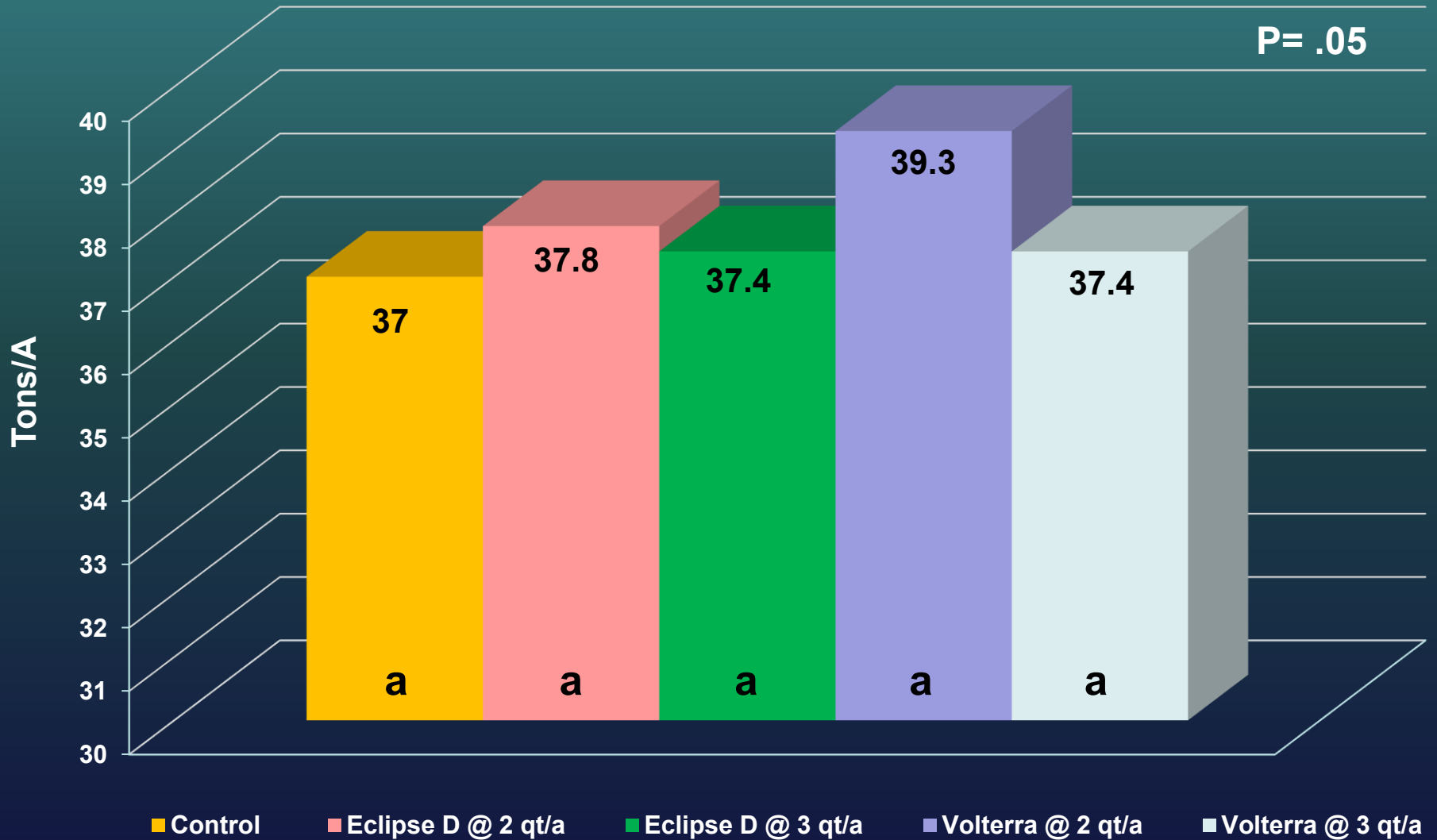
Nitrogen Stabilizers

- UAN 32% - 11.08 lbs/gal, - 3.55 lbs N/gal
- UAN 32% - $\frac{1}{4}$ NO_3^- , $\frac{1}{2}$ Urea, $\frac{1}{4}$ NH_4^+
- Urea \longrightarrow urease \longrightarrow NH_4^+
 - Urease inhibitor - N-(n-butyl) thiophosphoric triamide (NBPT)
- NH_4^+ \longrightarrow nitrosomonas, nitrobacter \longrightarrow NO_3^-
 - Nitrification inhibitor – Dicyandiamide (DCD)

Not all products labeled as N-stabilizers have been evaluated as extensively as these materials. Research is on-going with several alternative products.

Response to Nitrogen Stabilizers

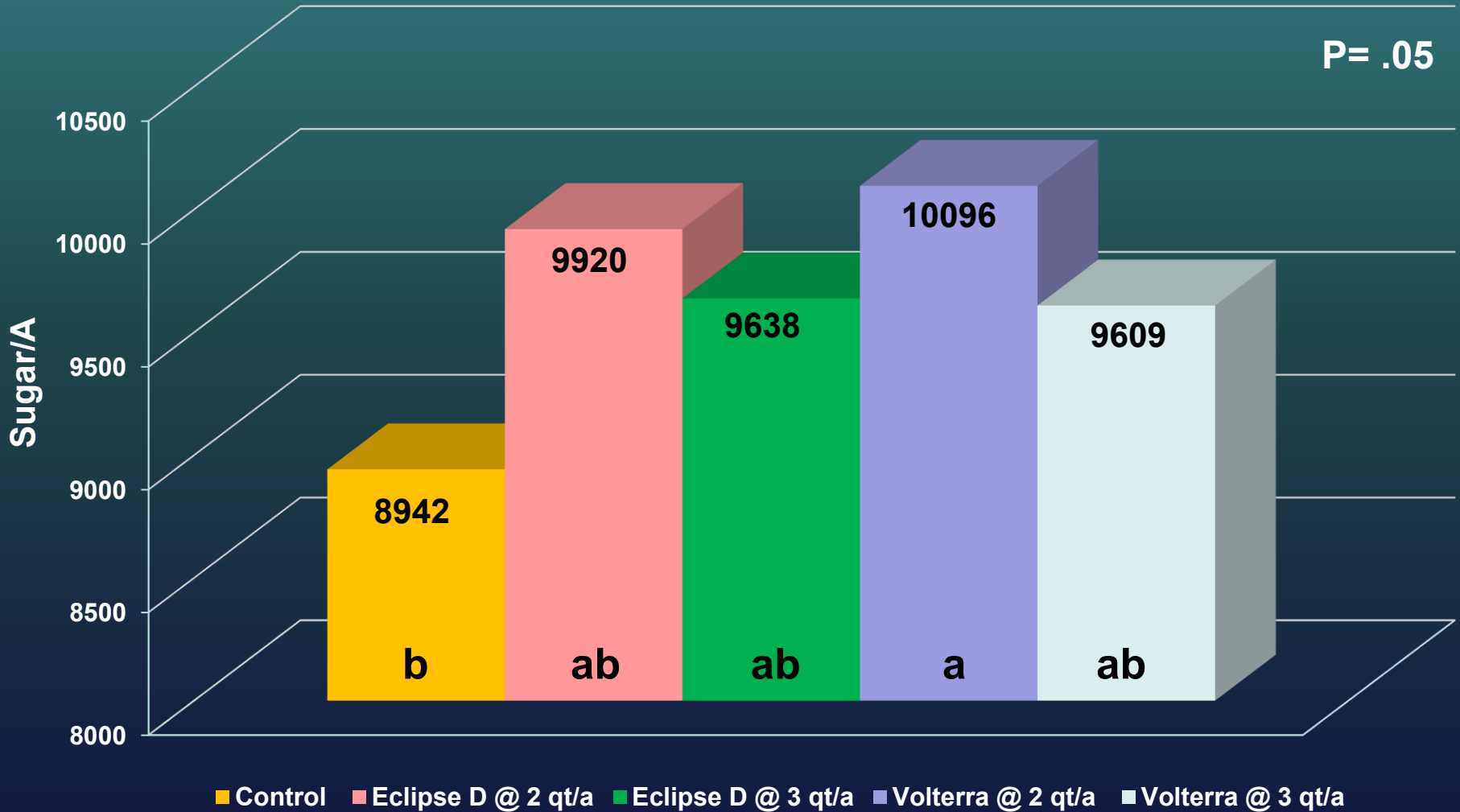
L 01-299, Plant Cane, Tons/A, Gravois, 2023



Response to Nitrogen Stabilizers

L 01-299, Plant Cane, Sugar/A, Gravois, 2023

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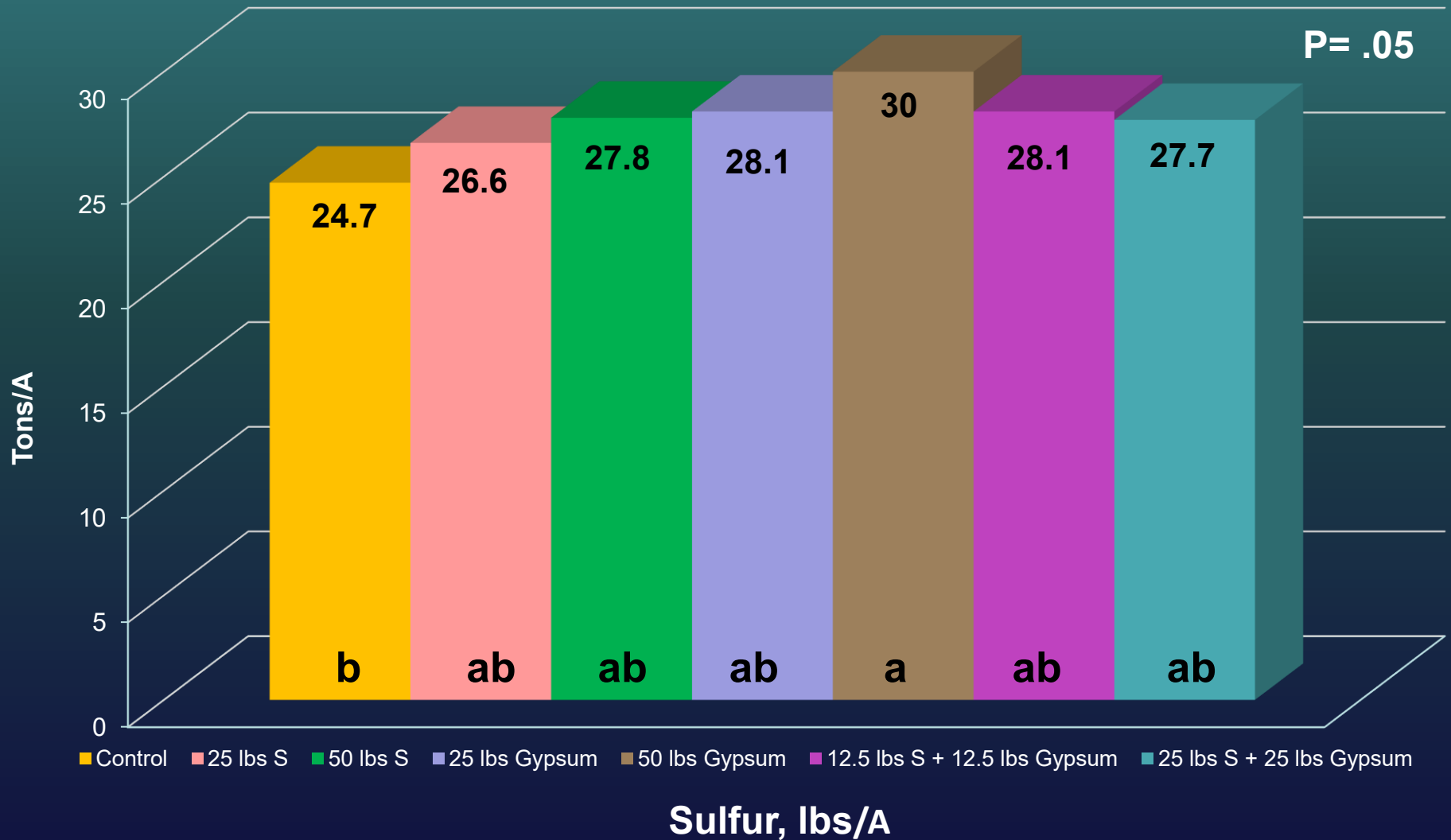


Sulfur (S)

- **Varieties: L01-299, Ho 14-885**
- **Crop Age: PC, 1R, 2R**
- **All soils tested low or medium for, sulfur prior to treatment application.**
- **S rates: 0, 25, 50 lb S/A**
- **Sources: Elemental S, Gypsum**
- **Reps: 6**
- **Sulfur is important in chlorophyll production and photosynthesis.**
- **Sulfur may help plants use nitrogen more efficiently.**

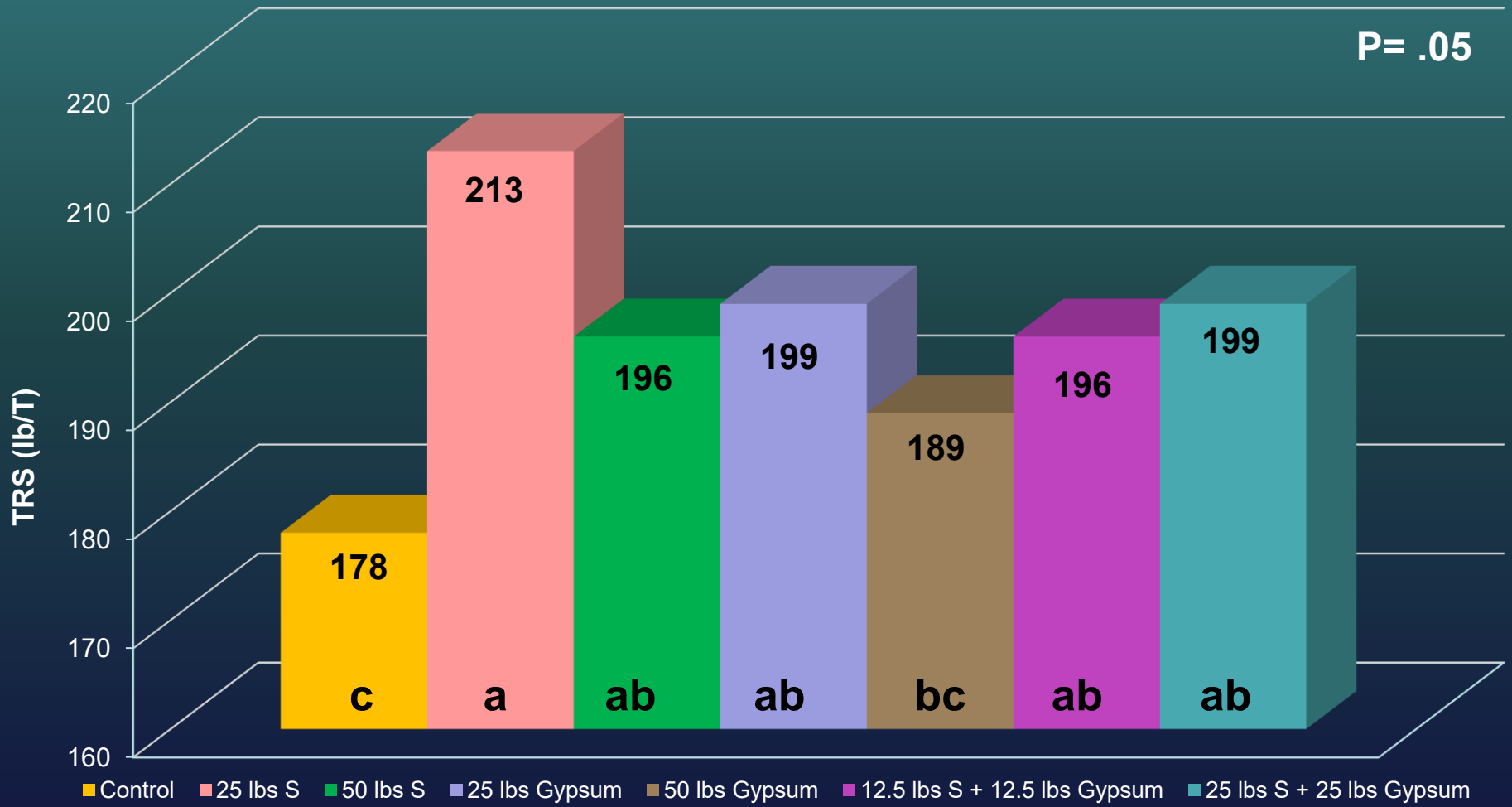
Response to Sulfur Fertilizer

L 01-299, 2nd stubble Tons/A, Robichaux, 2025



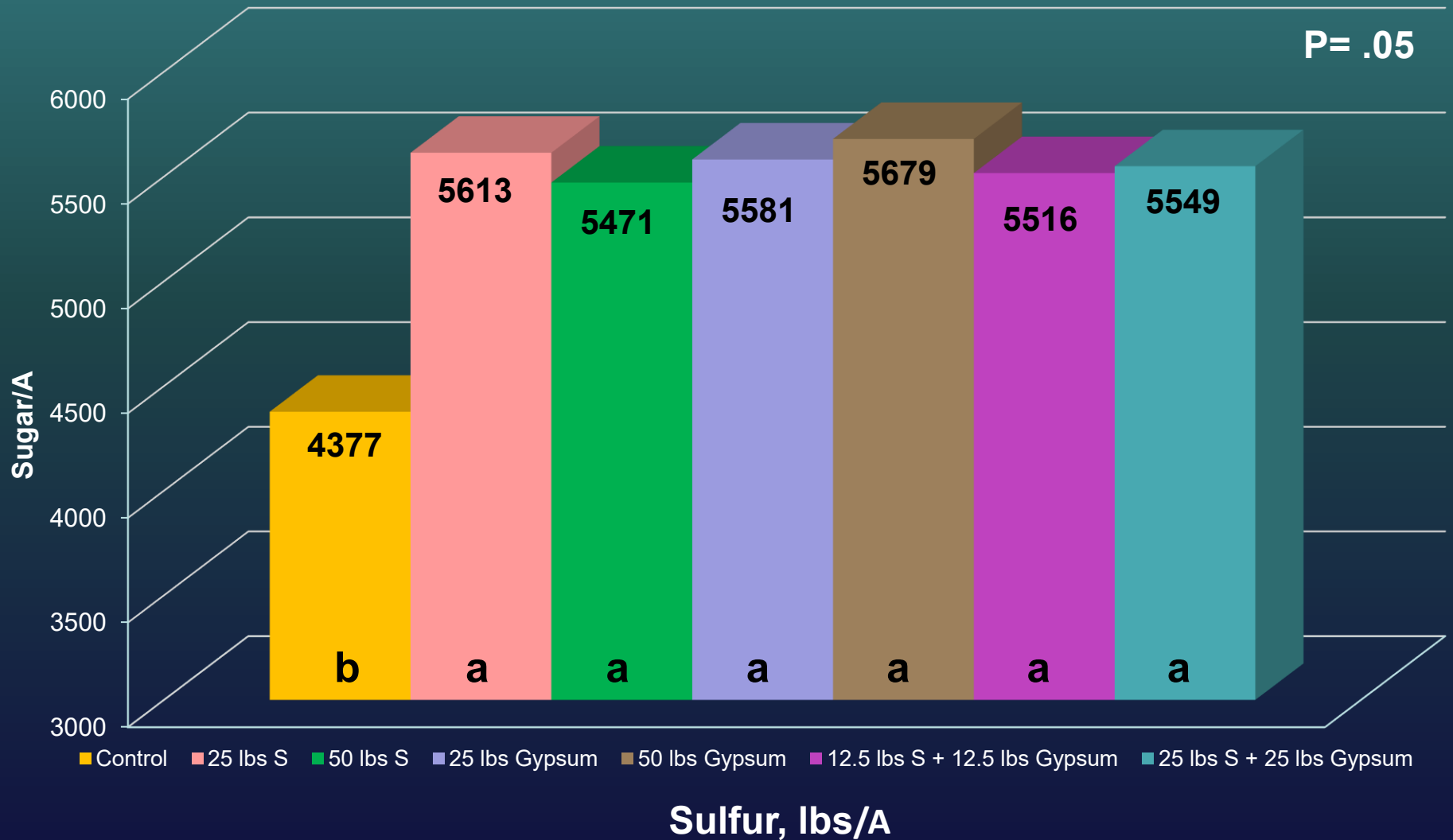
Response to Sulfur Fertilizer

L 01-299, 2nd stubble TRS, Robichaux, 2025



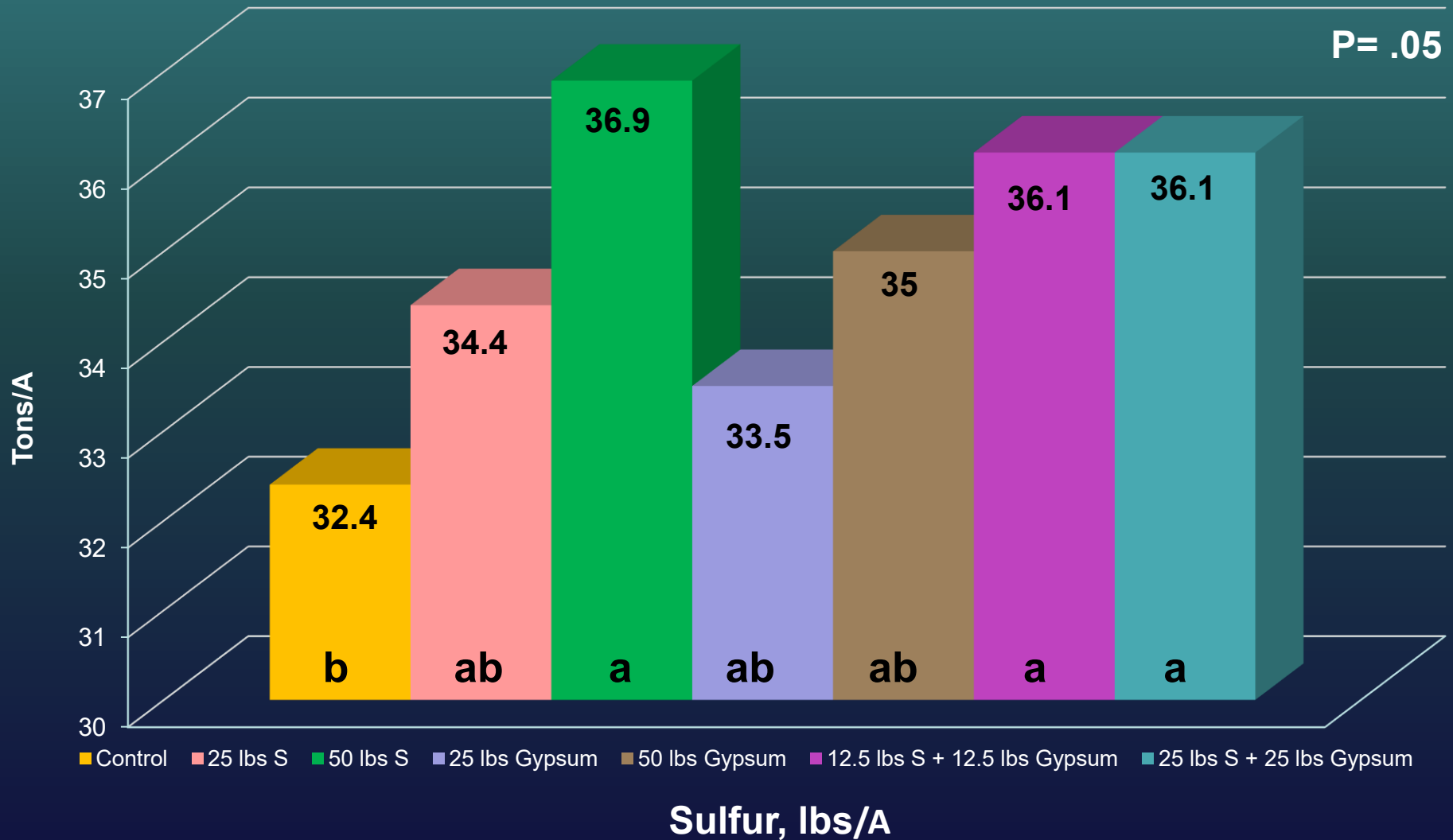
Response to Sulfur Fertilizer

L 01-299, 2nd stubble, Sugar/A, Robichaux, 2025



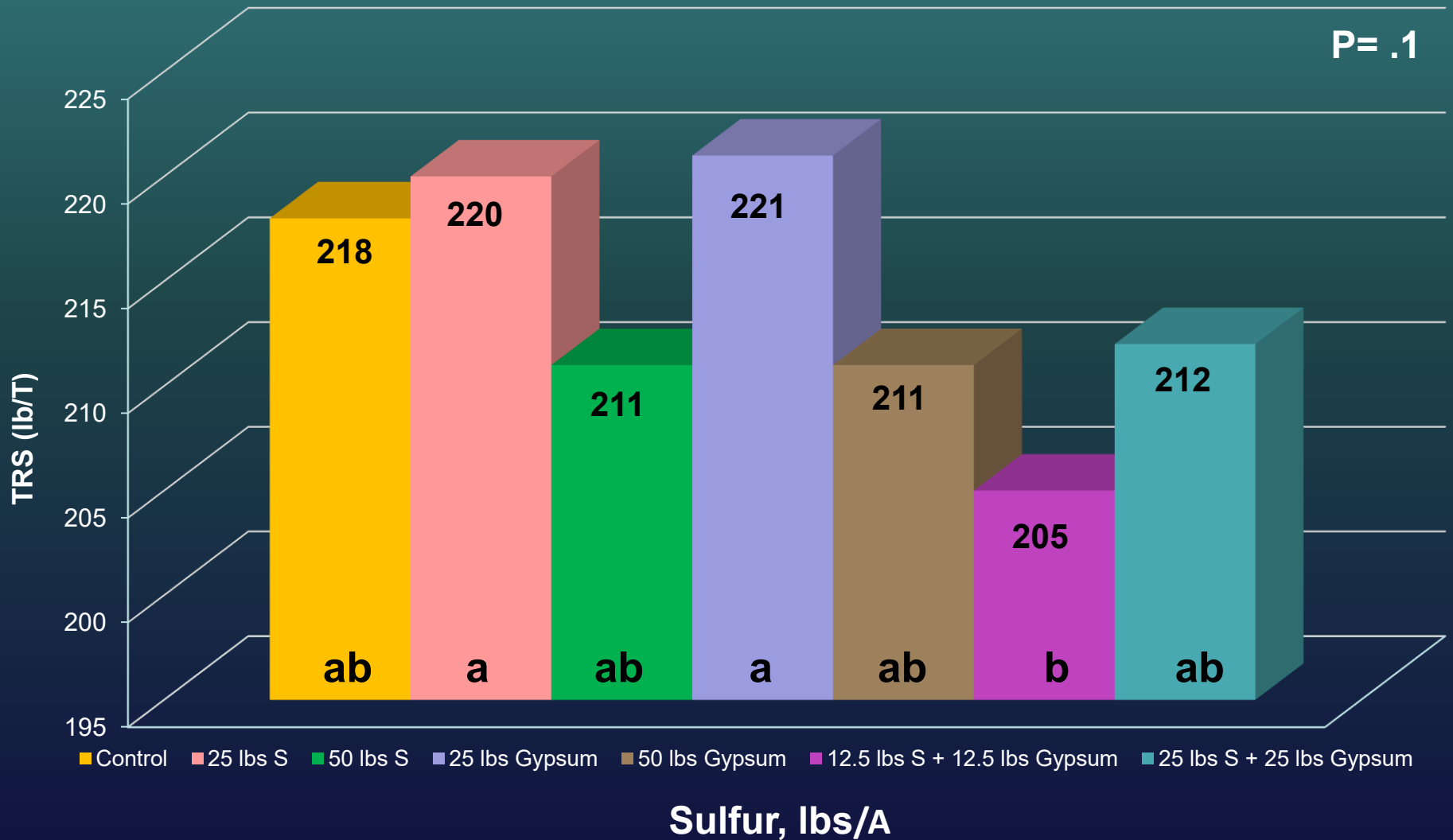
Response to Sulfur Fertilizer

HoCP 14-885, 2nd stubble, Tons/A, Robichaux, 2025



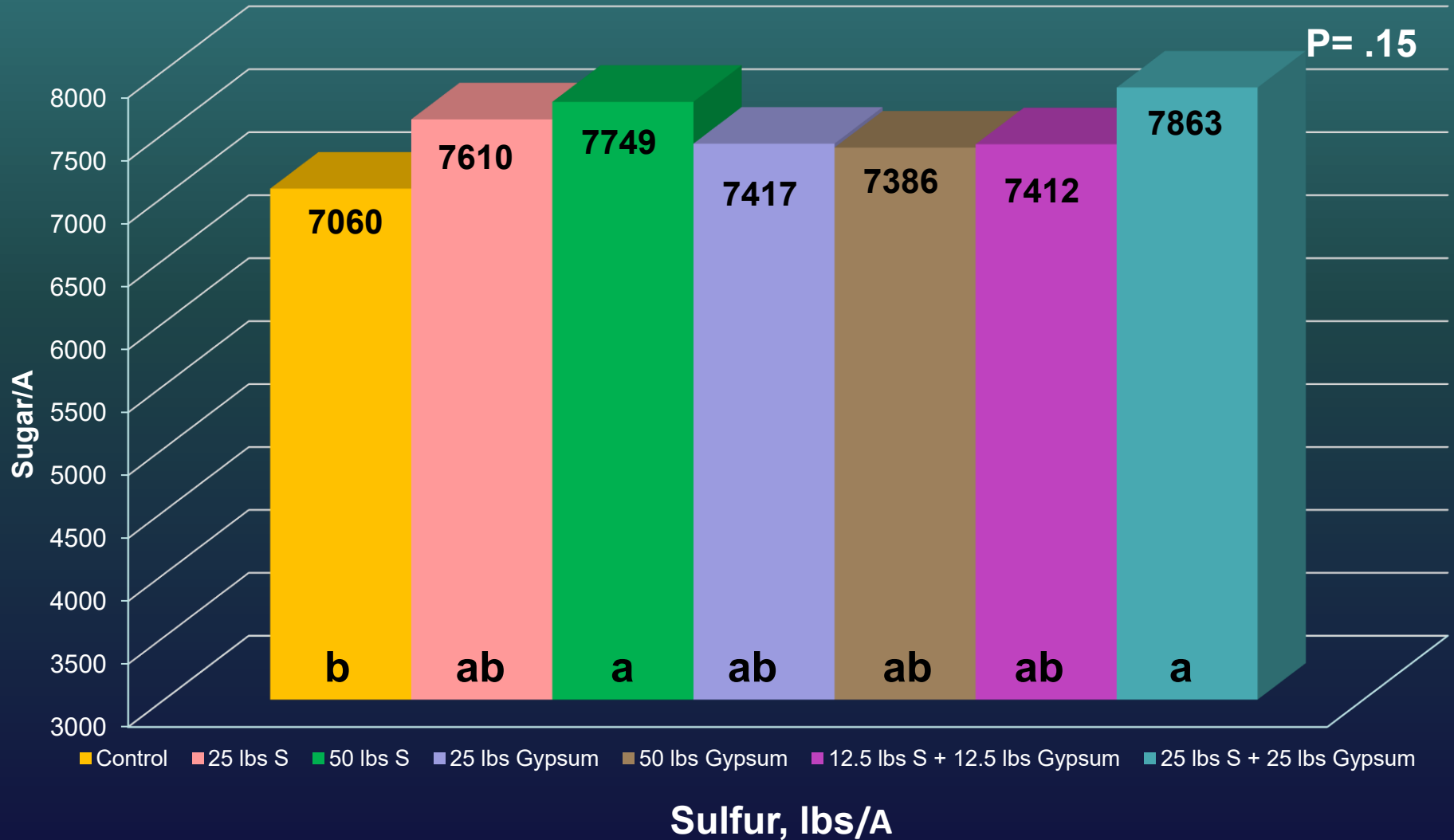
Response to Sulfur Fertilizer

HoCP 14-885, 2nd stubble, TRS, Robichaux, 2025



Response to Sulfur Fertilizer

HoCP 14-885, 2nd stubble, Sugar/A, Robichaux, 2025



Sulfur (S) Summary

- **Consistent results have demonstrated a benefit to sulfur.**
- **Results from studies combining elemental S and gypsum show a potential advantage to combining S sources.**
- **A new 2-tier Sulfur recommendation has been adopted for Louisiana sugarcane.**

< 10 mg S/kg – 40 lbs S/A

10-20 mg S/kg – 20 lbs S/A

Potassium(K)

- **Variety: L01-299, HoCP 14-885,**
 - Light and Heavy soils
- **Crop Age: PC, 1R, 2R**
- **All soils tested low**
- **K rates: 0, 60, 120, 180, 240 lb K₂O/A**
- **Sources: Muriate of Potash (KCl)**
- **Reps: 6**
- **Potassium is important for proper water use and may help in drought tolerance.**
- **Potassium deficient plants are more prone to certain diseases and more likely to lodge.**

Potassium(K)

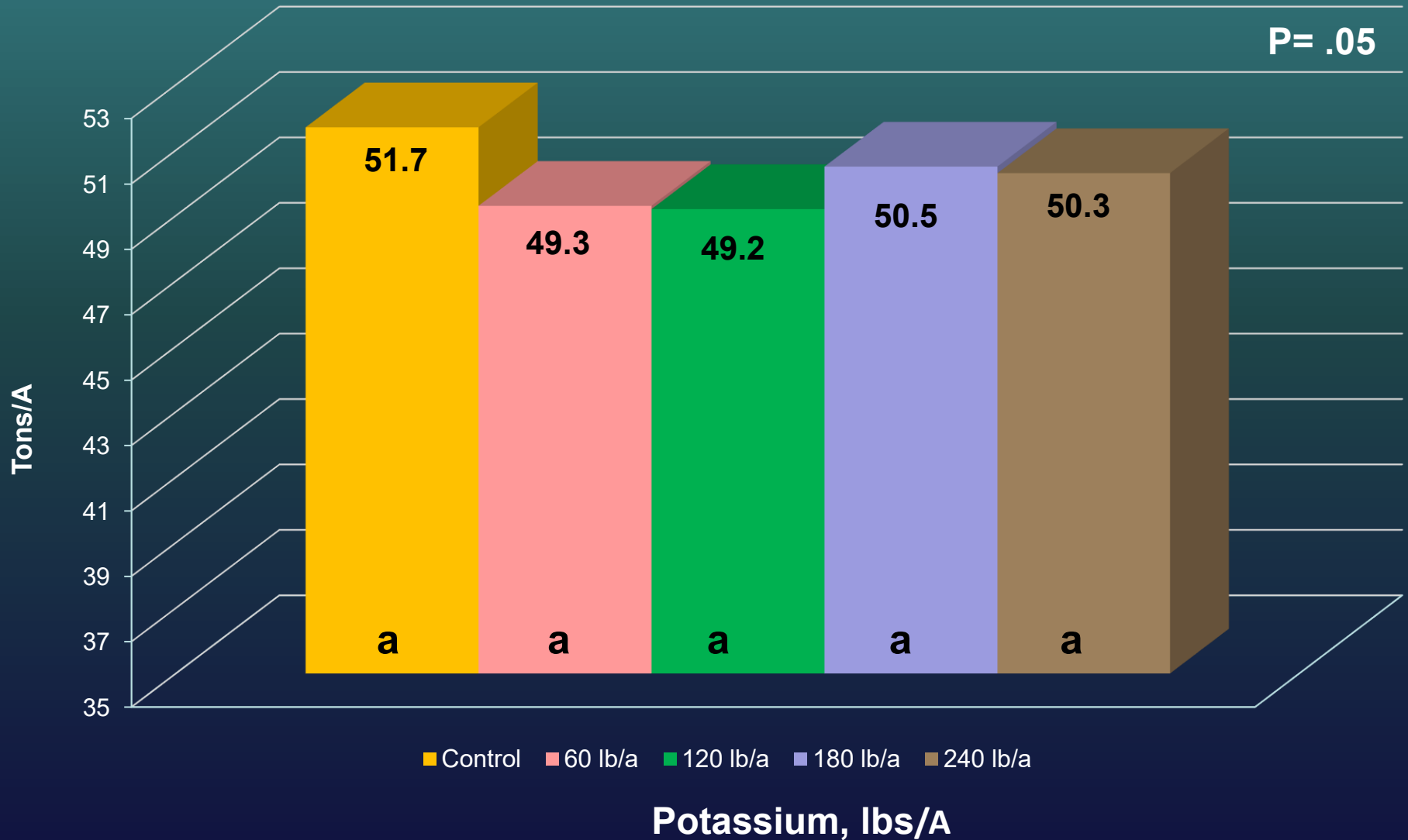
POTASSIUM (K₂O)

Potassium rate recommendations for sugarcane in Louisiana based on Mehlich 3 extraction.

Soil Test Category	Plant cane lbs./acre	Stubble cane lbs./acre
Very low	120	140
Low	110	120
Medium	80	80
High	0	0
Very high	0	0

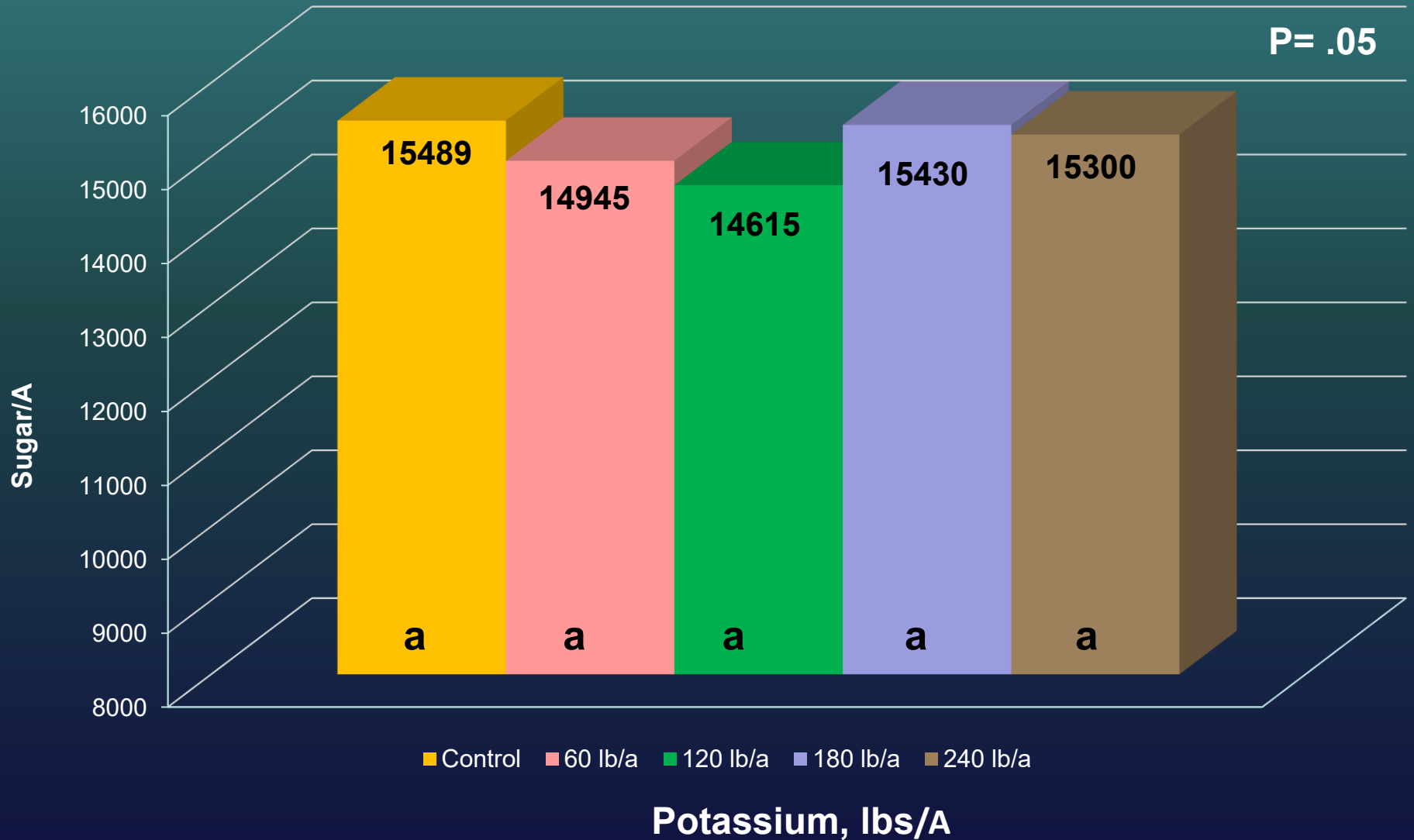
Response to Potassium Fertilizer

L 01-299, Light Soil, 2nd stubble, Tons/A, Segura, 2025



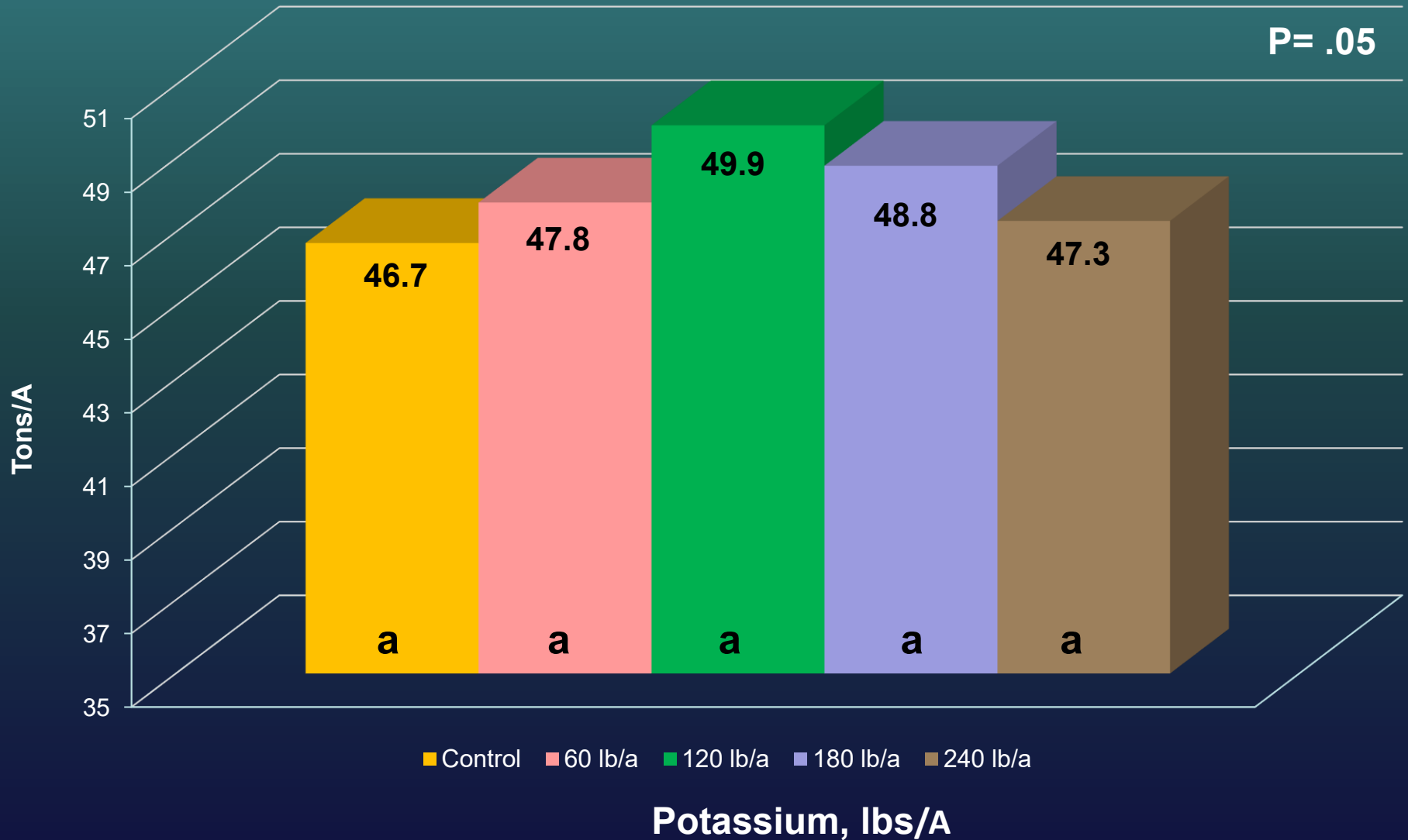
Response to Potassium Fertilizer

L 01-299, Light Soil, 2nd stubble, Sugar/A, Segura, 2025



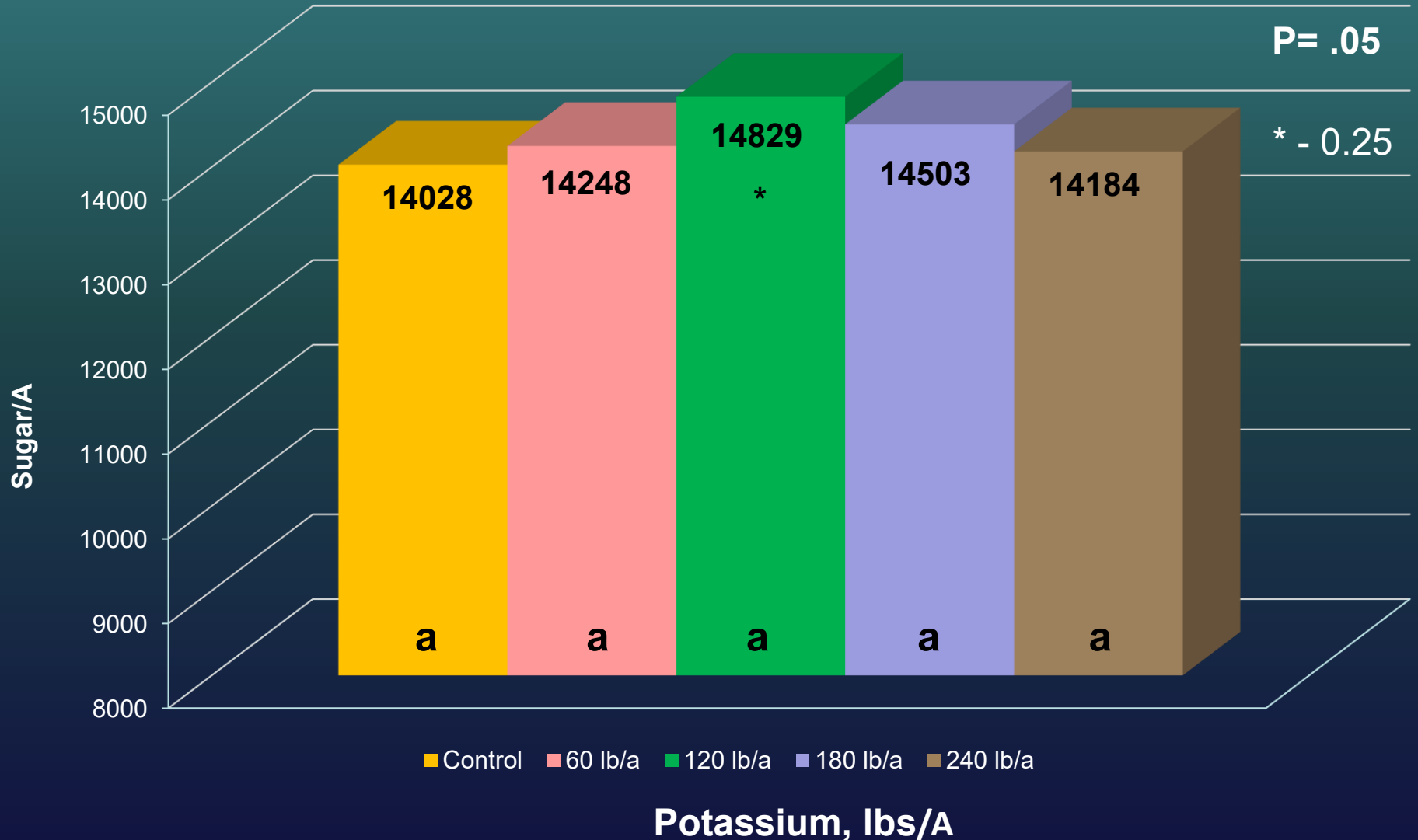
Response to Potassium Fertilizer

L 01-299, Heavy Soil, 2nd stubble, Tons/A, Segura, 2025



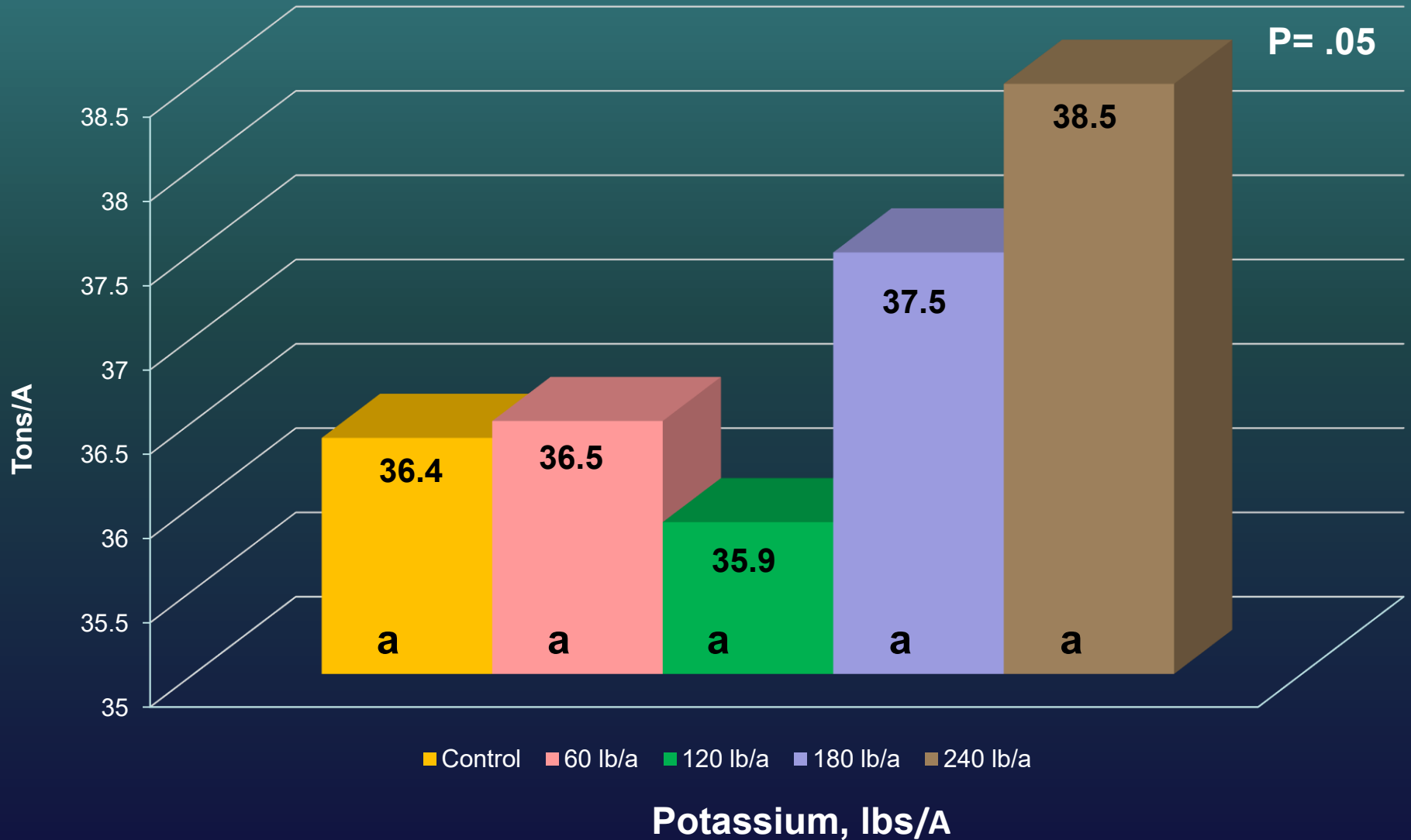
Response to Potassium Fertilizer

L 01-299, Heavy Soil, 2nd stubble, Sugar/A, Segura, 2025



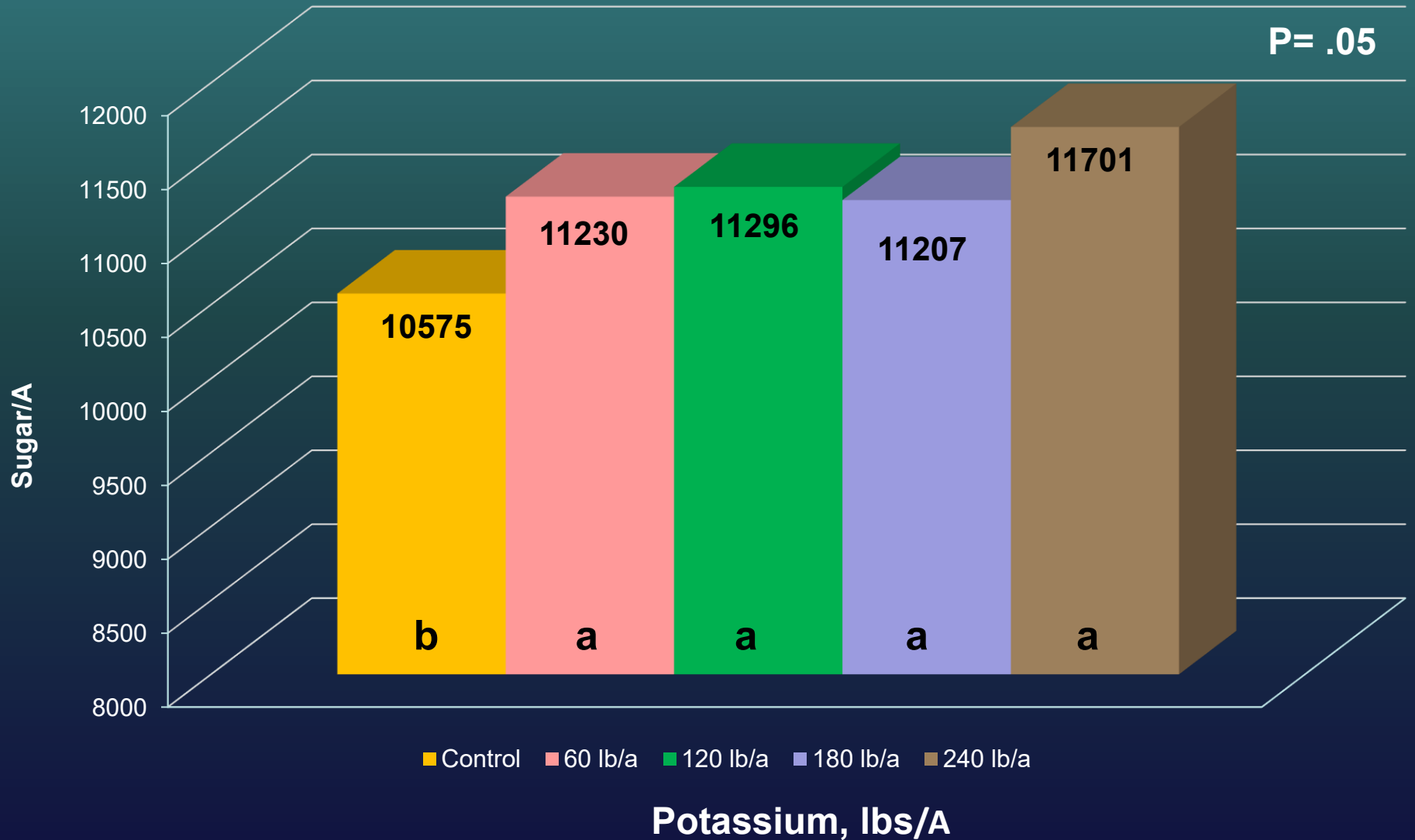
Response to Potassium Fertilizer

HoCP 14-885, Light Soil, 1st stubble, Tons/A, Gaudet, 2025



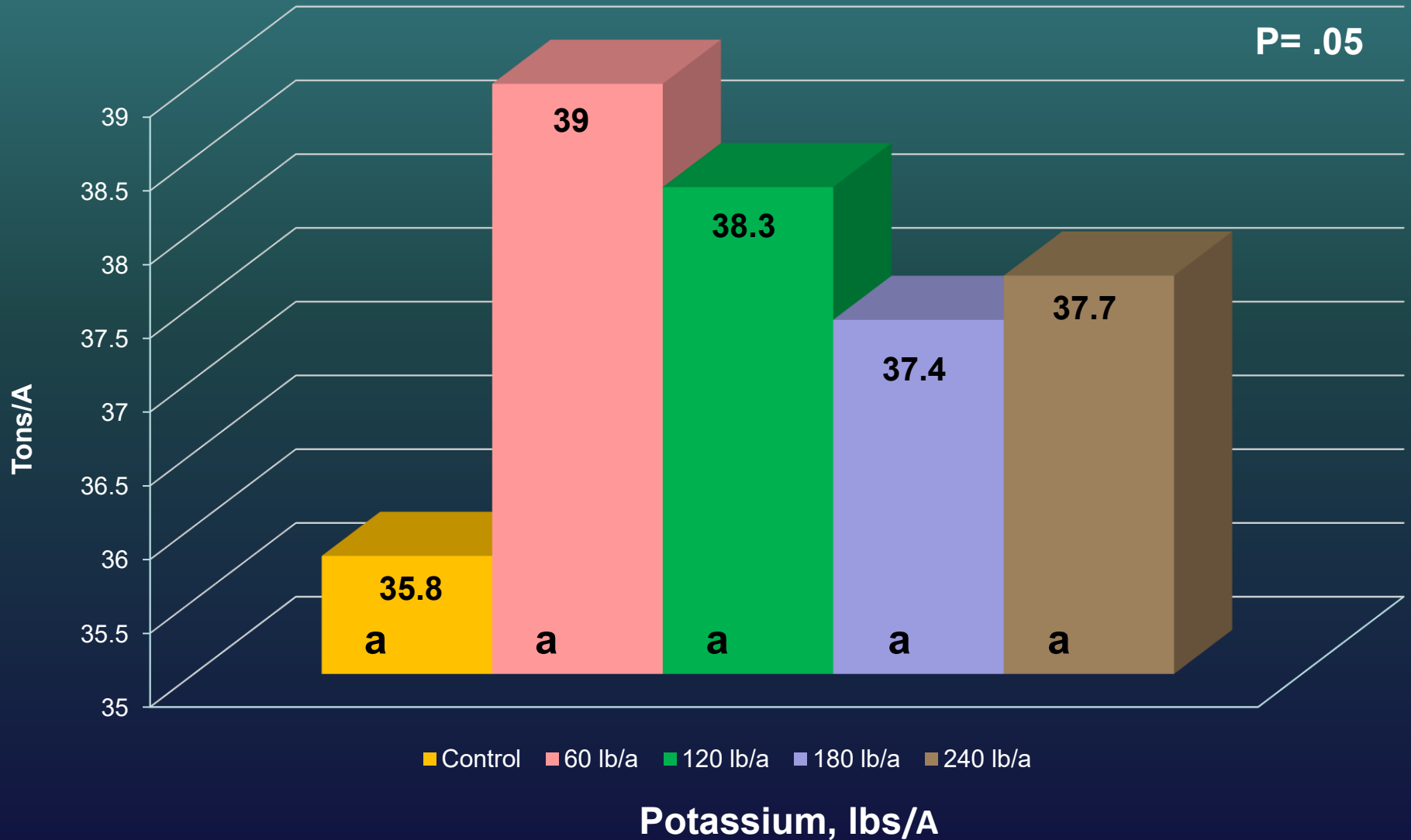
Response to Potassium Fertilizer

HoCP 14-885, Light Soil, 1st stubble, Sugar/A, Gaudet, 2025



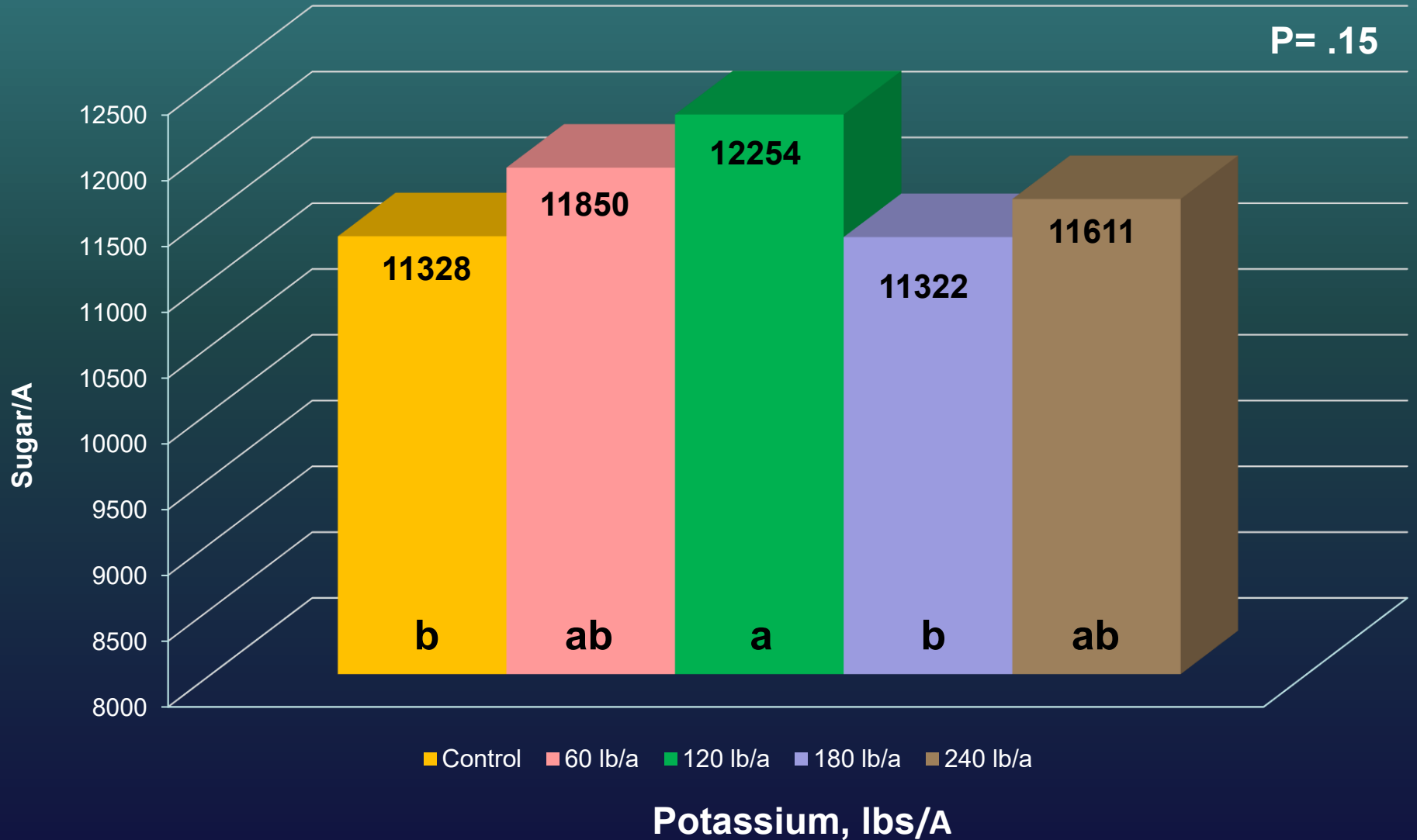
Response to Potassium Fertilizer

HoCP 14-885, Heavy Soil, 1st stubble, Tons/A, Gaudet, 2025



Response to Potassium Fertilizer

HoCP 14-885, Heavy Soil, 1st stubble, Sugar/A, Gaudet, 2025



Potassium (K)

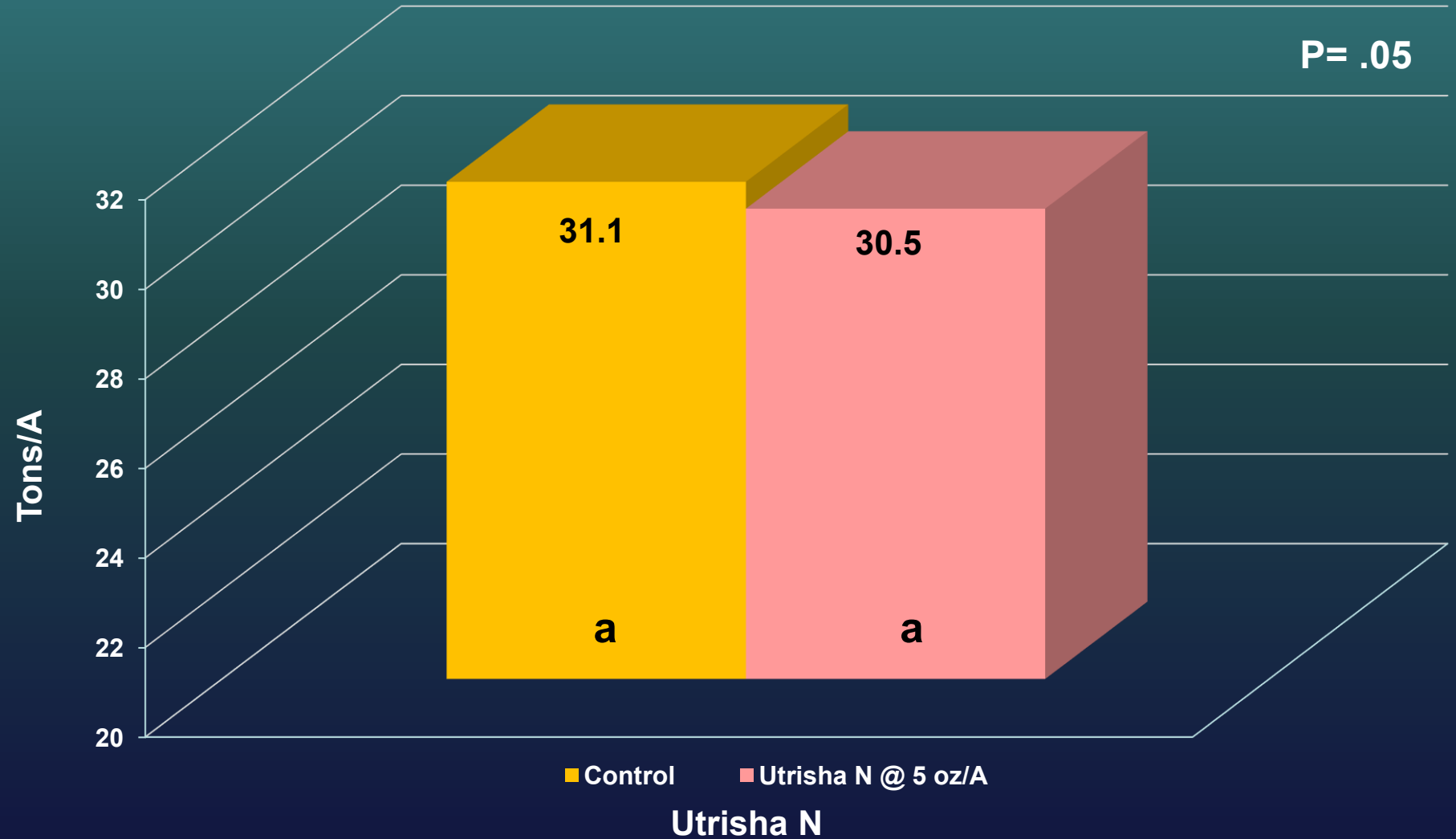
Summary

- **Consistent results have demonstrated a benefit to potassium.**
- **Results from studies investigating potassium rates higher than currently recommended did not show significant yield benefits to increasing rates.**

Utrisha N

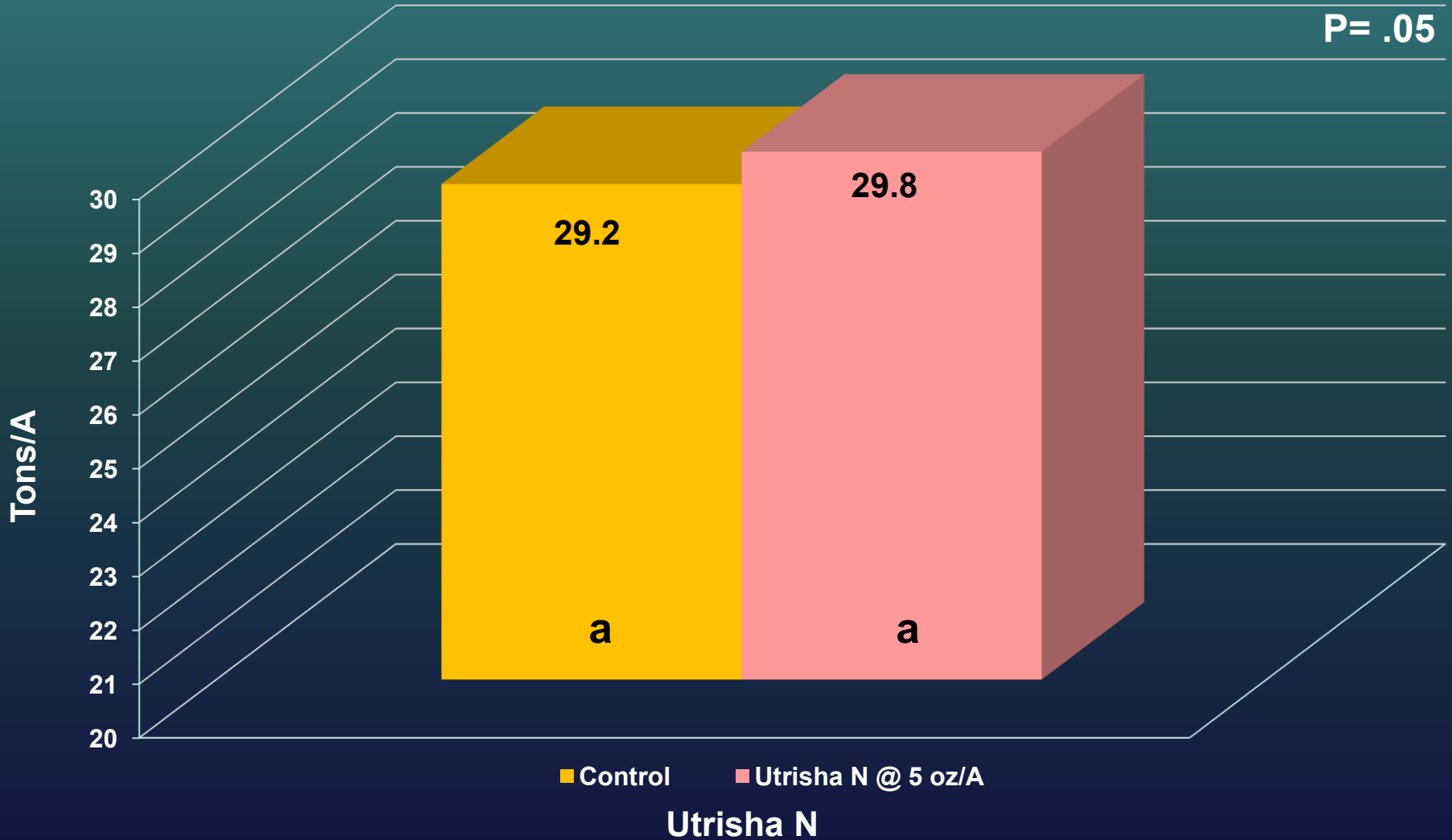
- **Varieties: L01-299**
- **Crop Age: PC, 1R, 2R**
- **Utrisha rate: 5 oz/A (foliar)**
- **N Rate: 0, 40, 80, 120 lb/A**
- **Reps: 4**
- **Can Utrisha N (Methylobacterium symbioticum) application stimulate sugarcane to fix-atmospheric nitrogen?**

Response to Utrisha N L 01-299, PC, Tons/A, Gravois, 2023

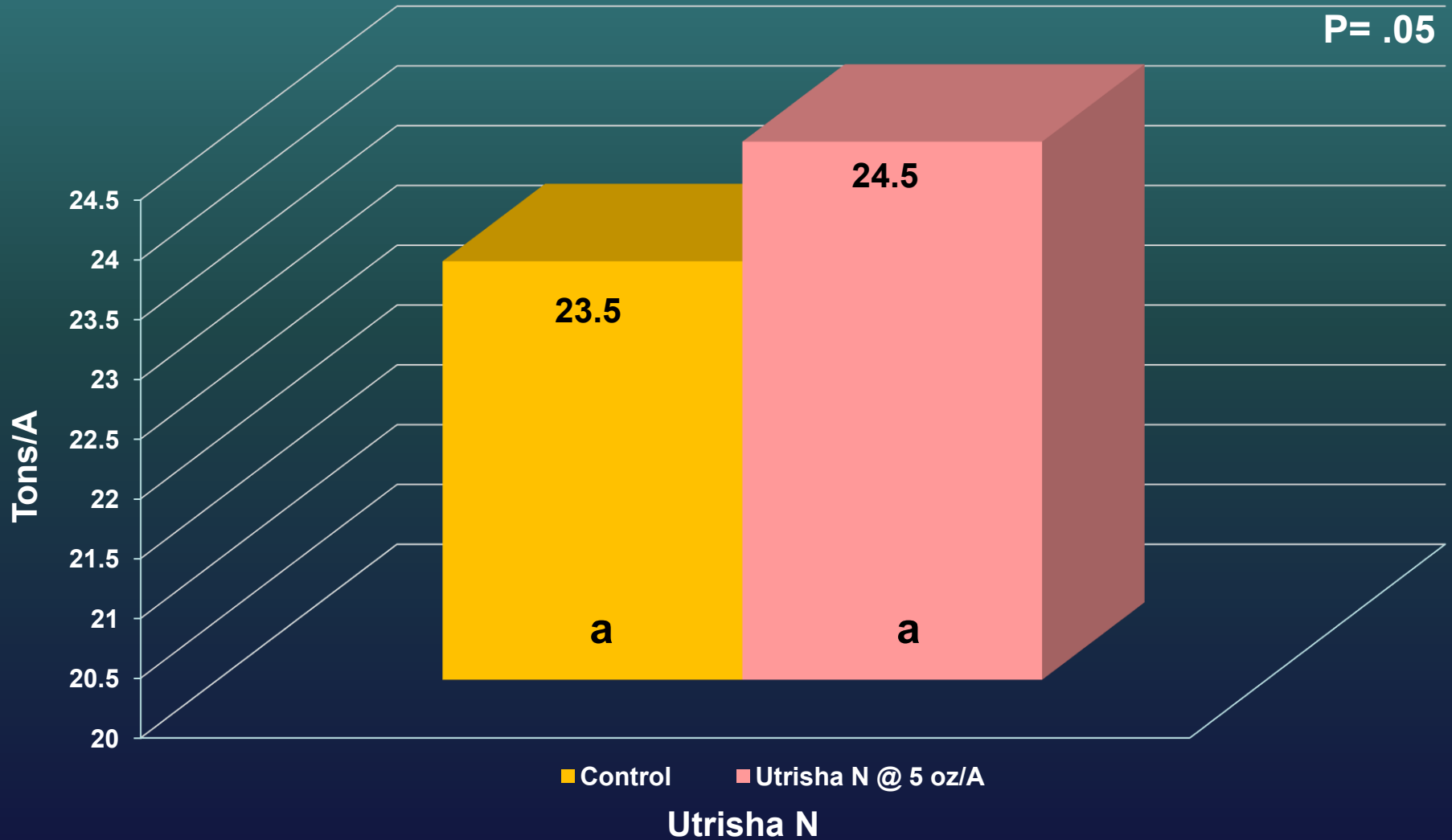


Response to Utrisha N L 01-299, 1R, Tons/A, Gravois, 2024

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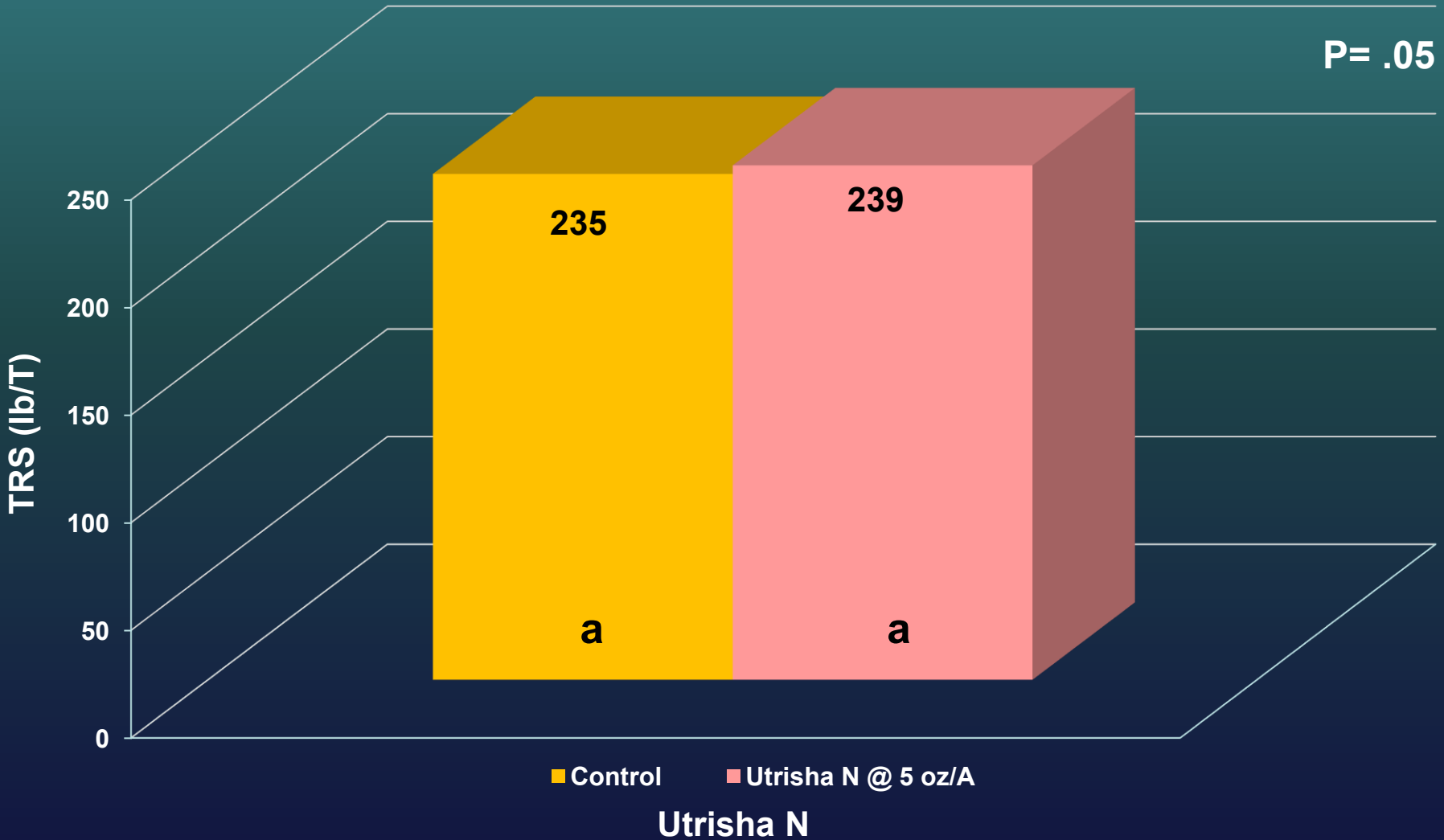


Response to Utrisha N L 01-299, 2R, Tons/A, Gravois, 2025

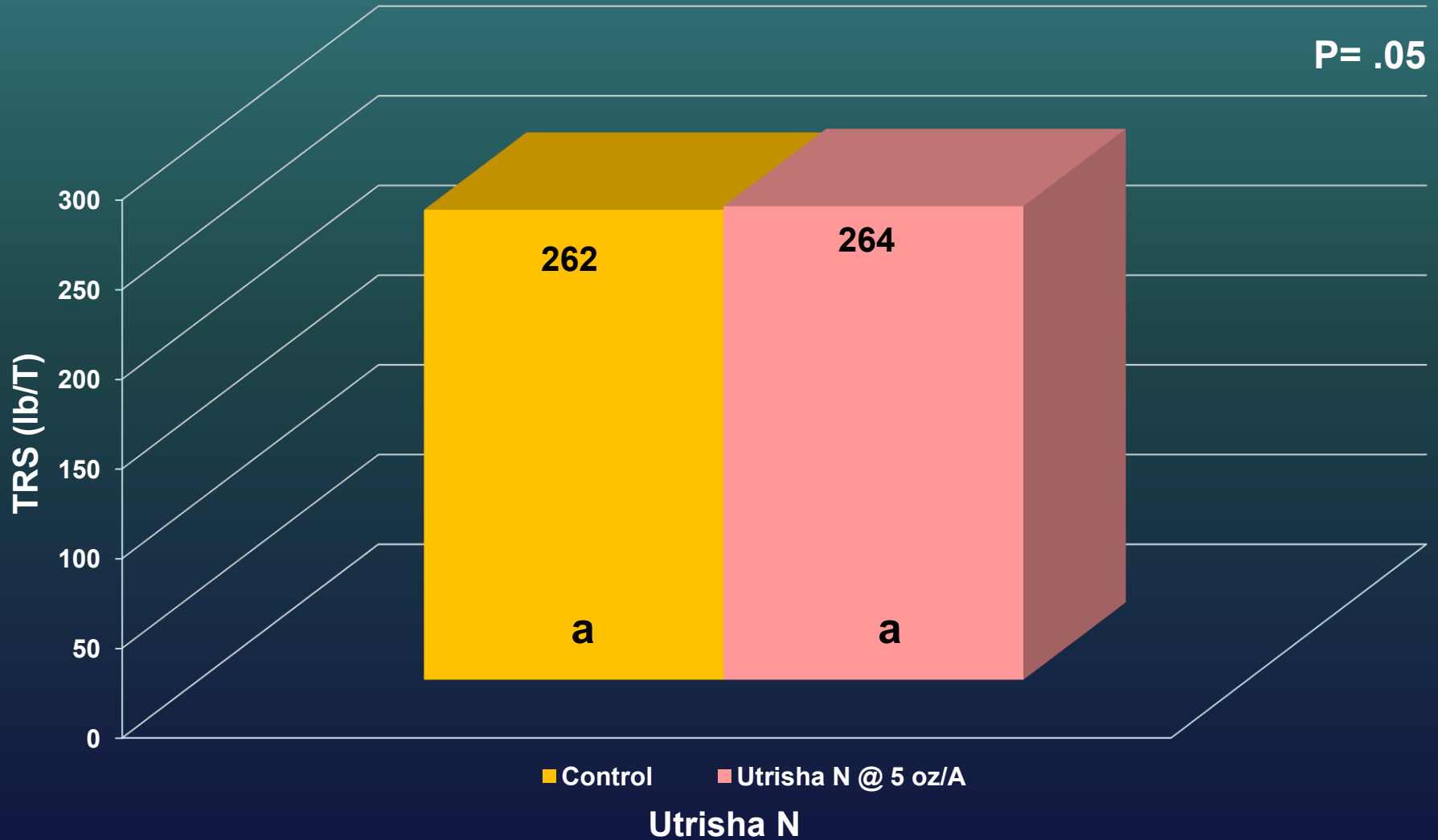


Response to Utrisha N L 01-299, PC, TRS, Gravois, 2023

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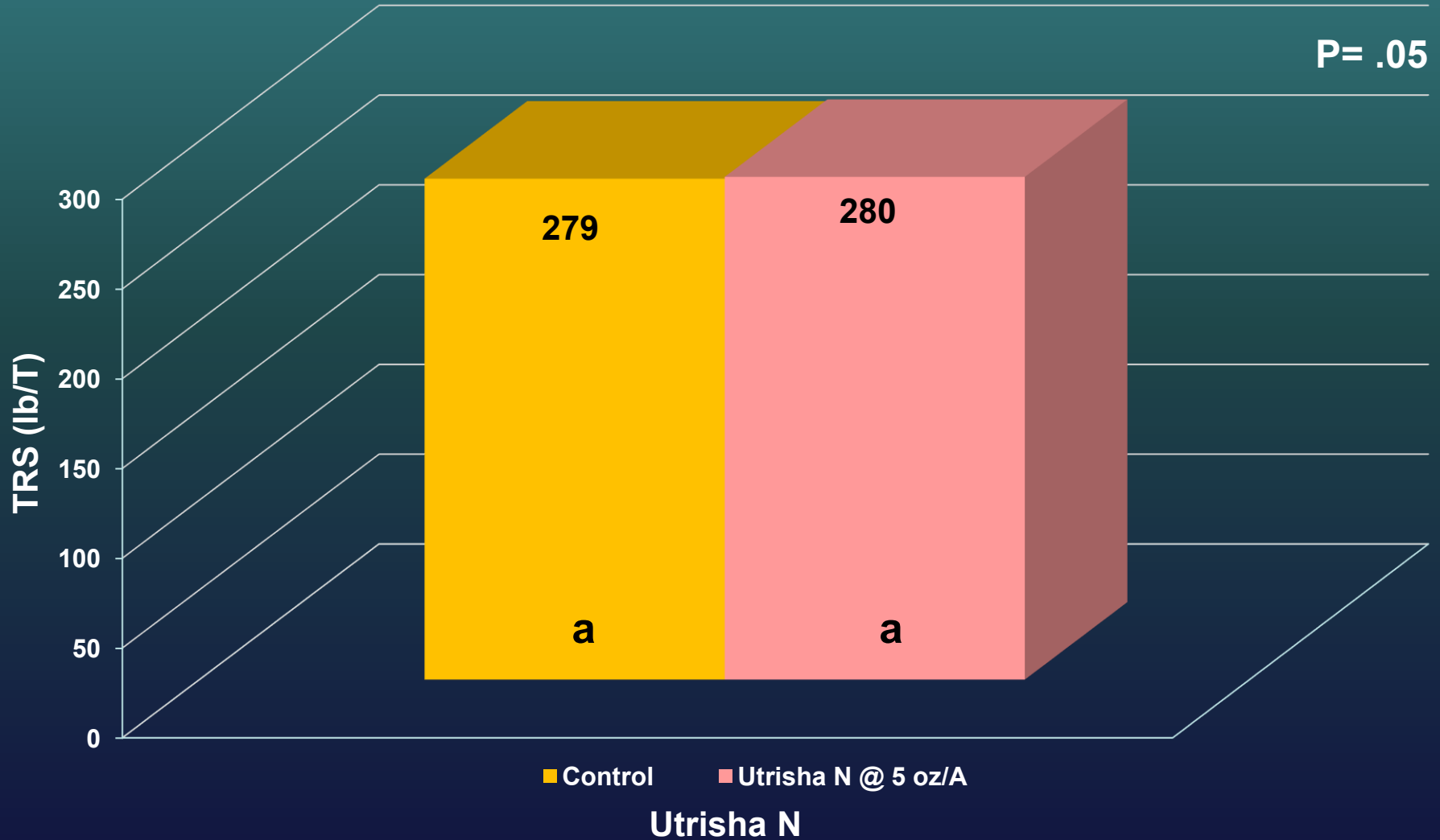


Response to Utrisha N L 01-299, 1R, TRS, Gravois, 2024



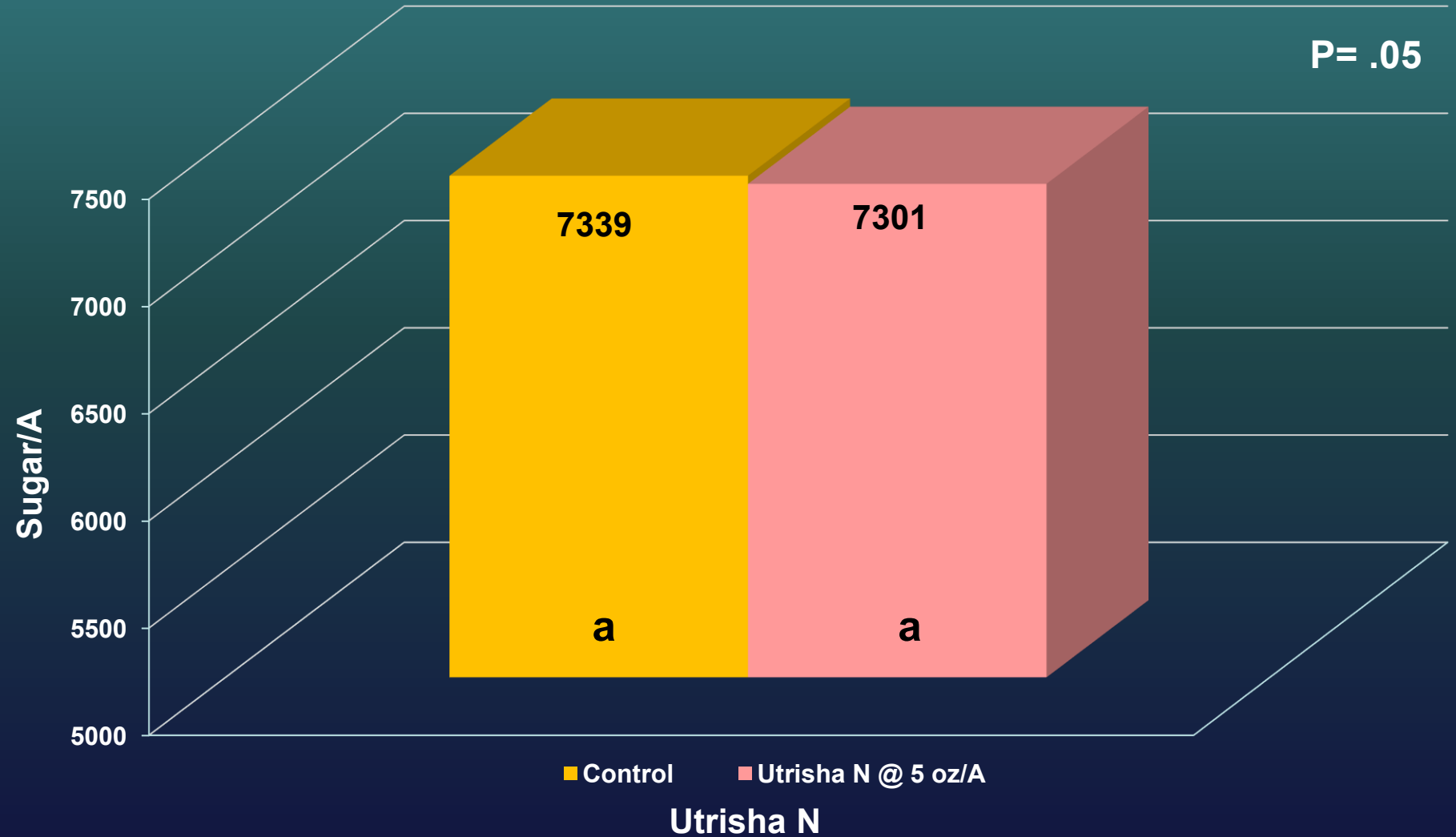
Response to Utrisha N

L 01-299, 2R, TRS, Gravois, 2025



Response to Utrisha N

L 01-299, PC, Sugar/A, Gravois, 2023

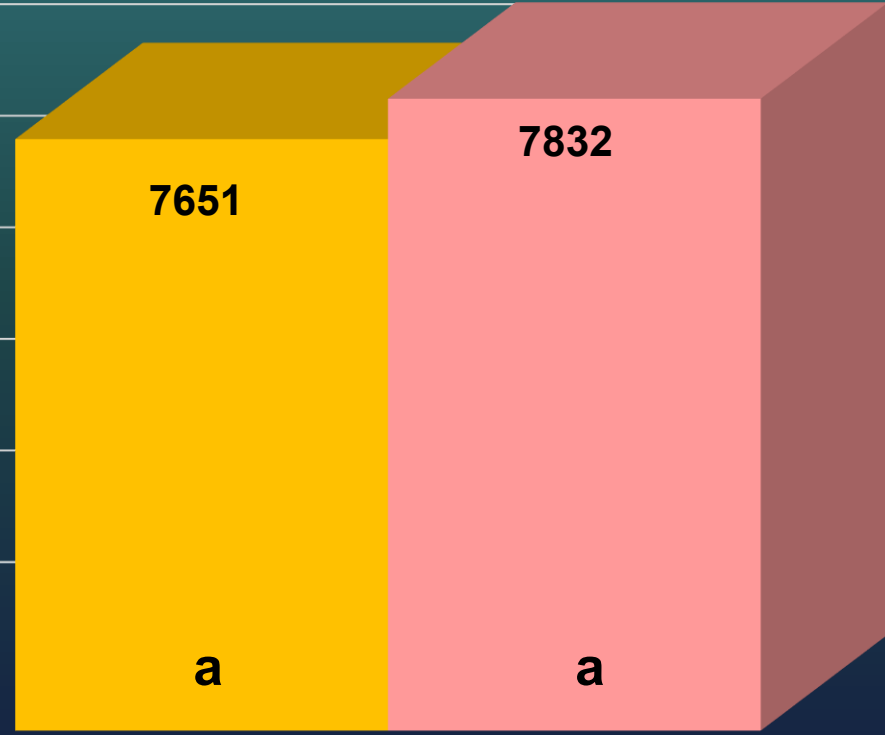


Response to Utrisha N L 01-299, 1R, Sugar/A, Gravois, 2024

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8000
7500
7000
6500
6000
5500
5000

Sugar/A

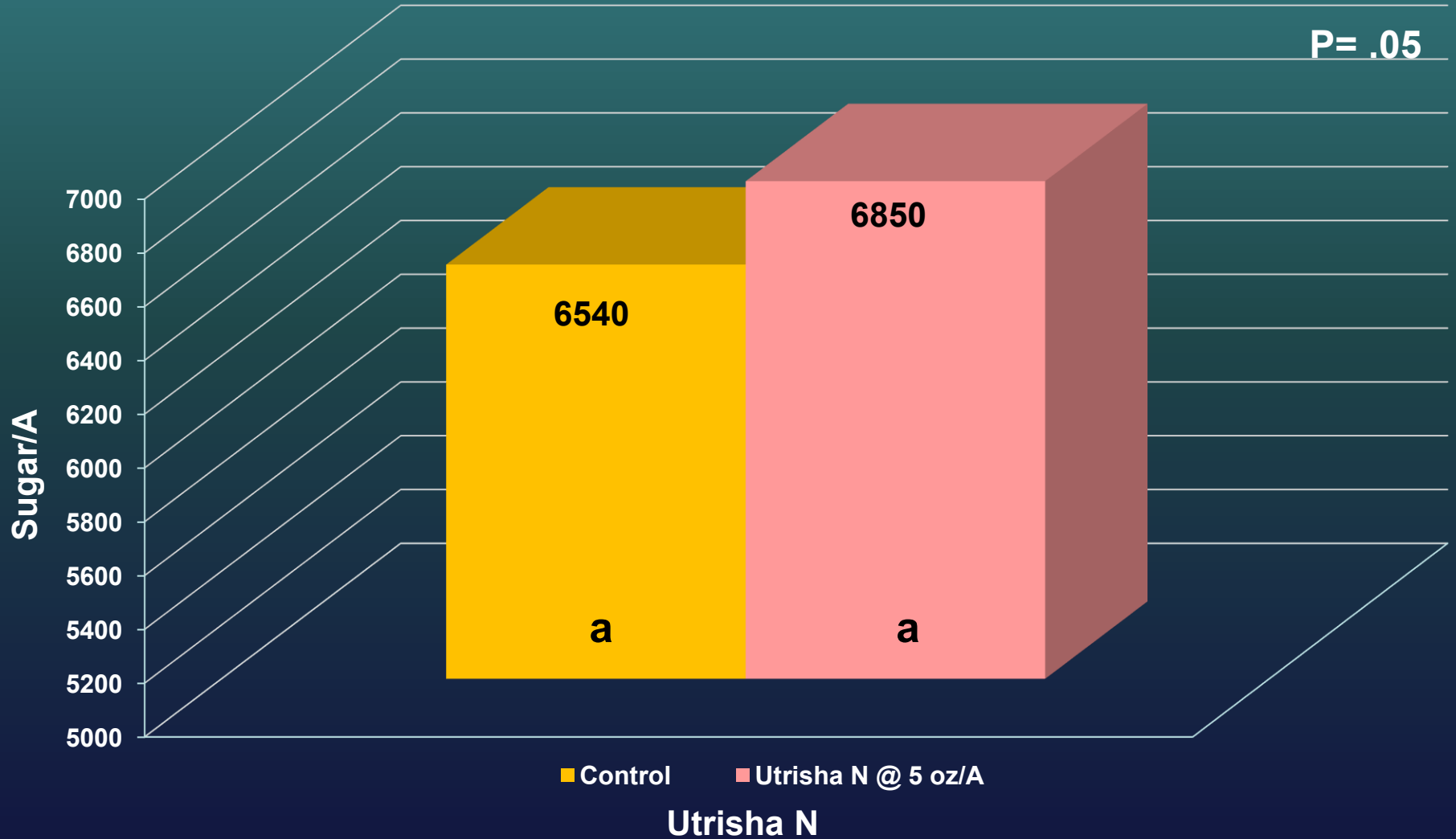


■ Control ■ Utrisha N @ 5 oz/A

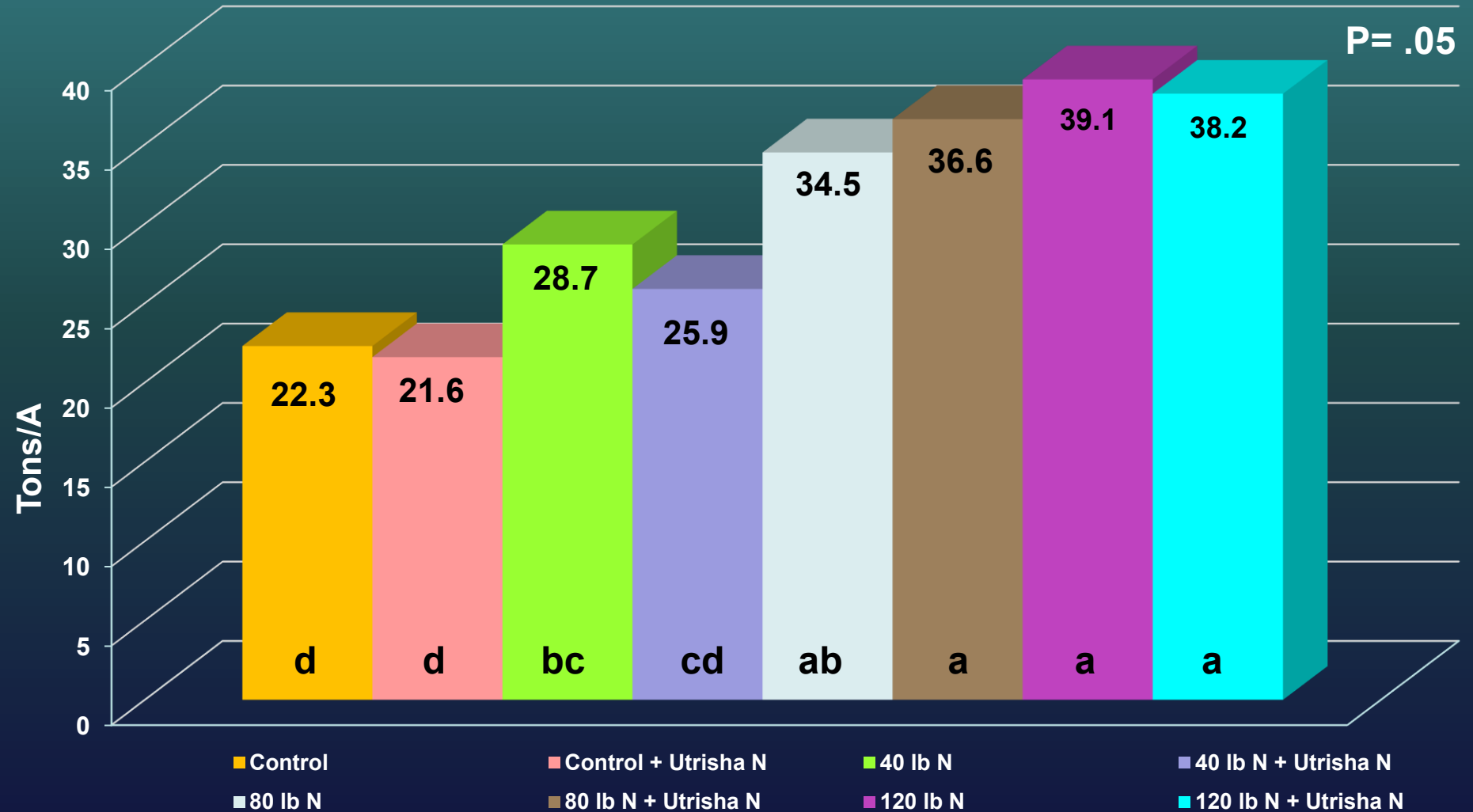
Utrisha N

Response to Utrisha N L 01-299, 2R, Sugar/A, Gravois, 2025

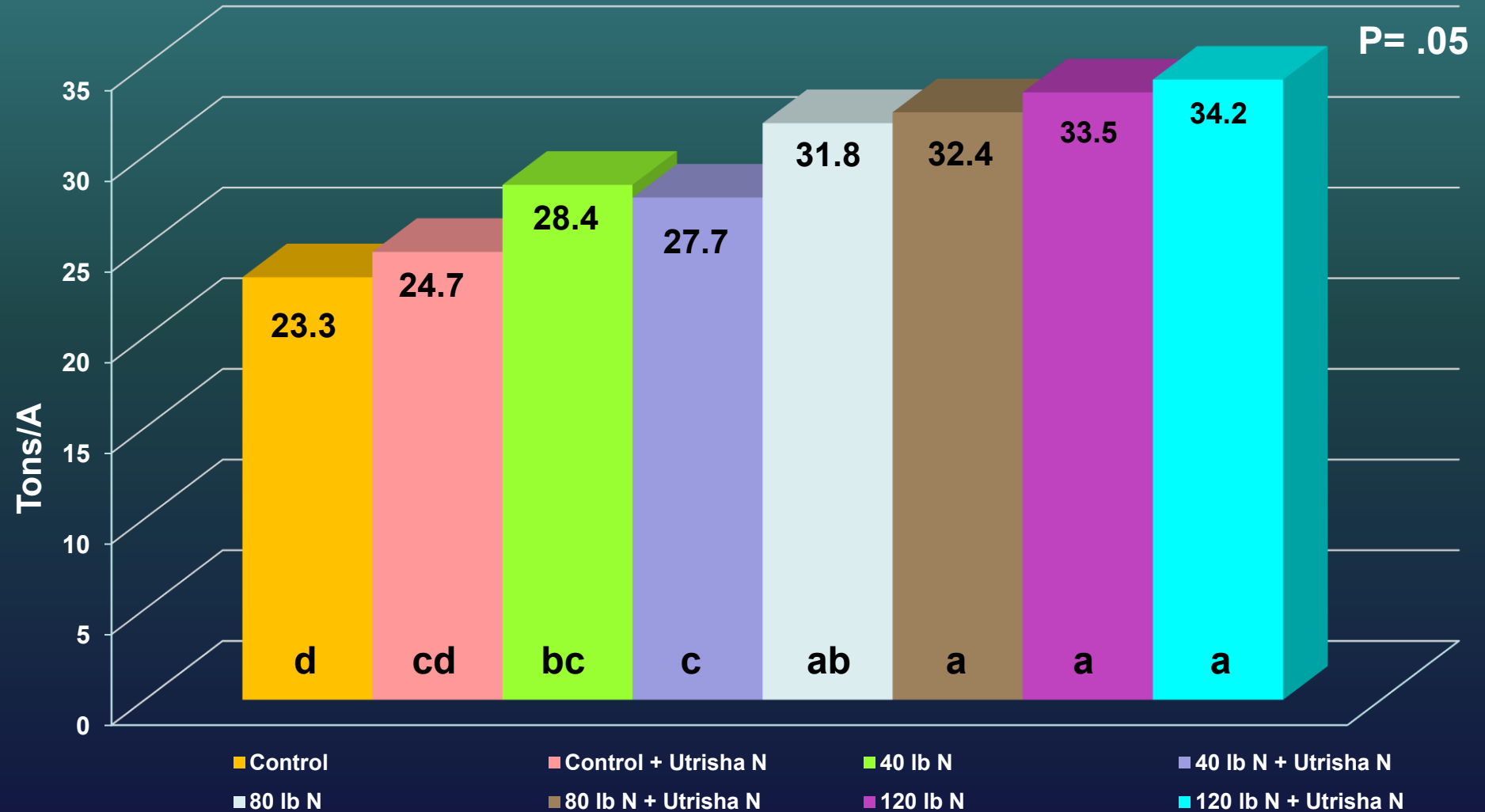
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Response to Utrisha N x Nitrogen L 01-299, PC, Tons/A, Gravois 2023

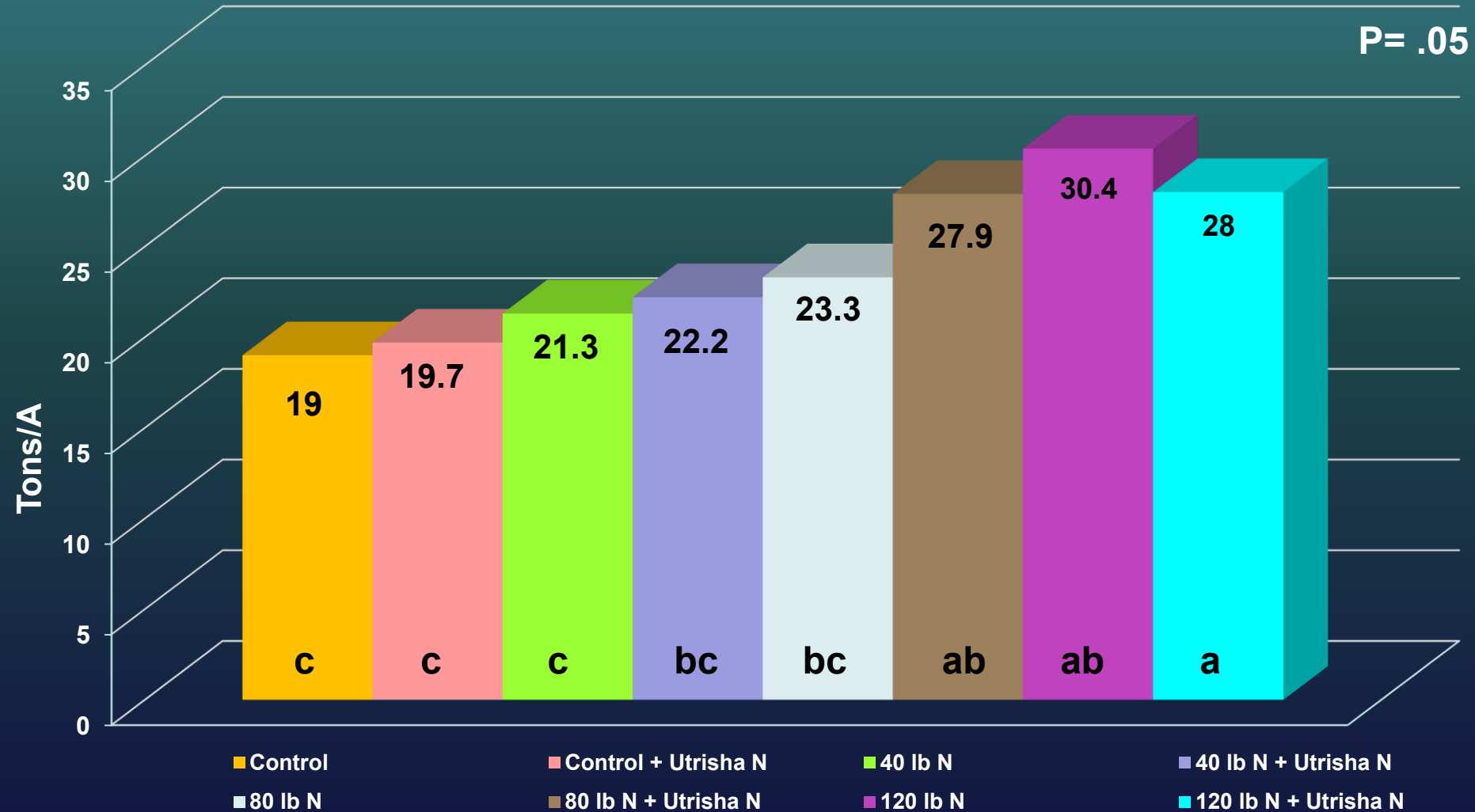


Response to Utrisha N x Nitrogen L 01-299, 1R, Tons/A, Gravois 2024



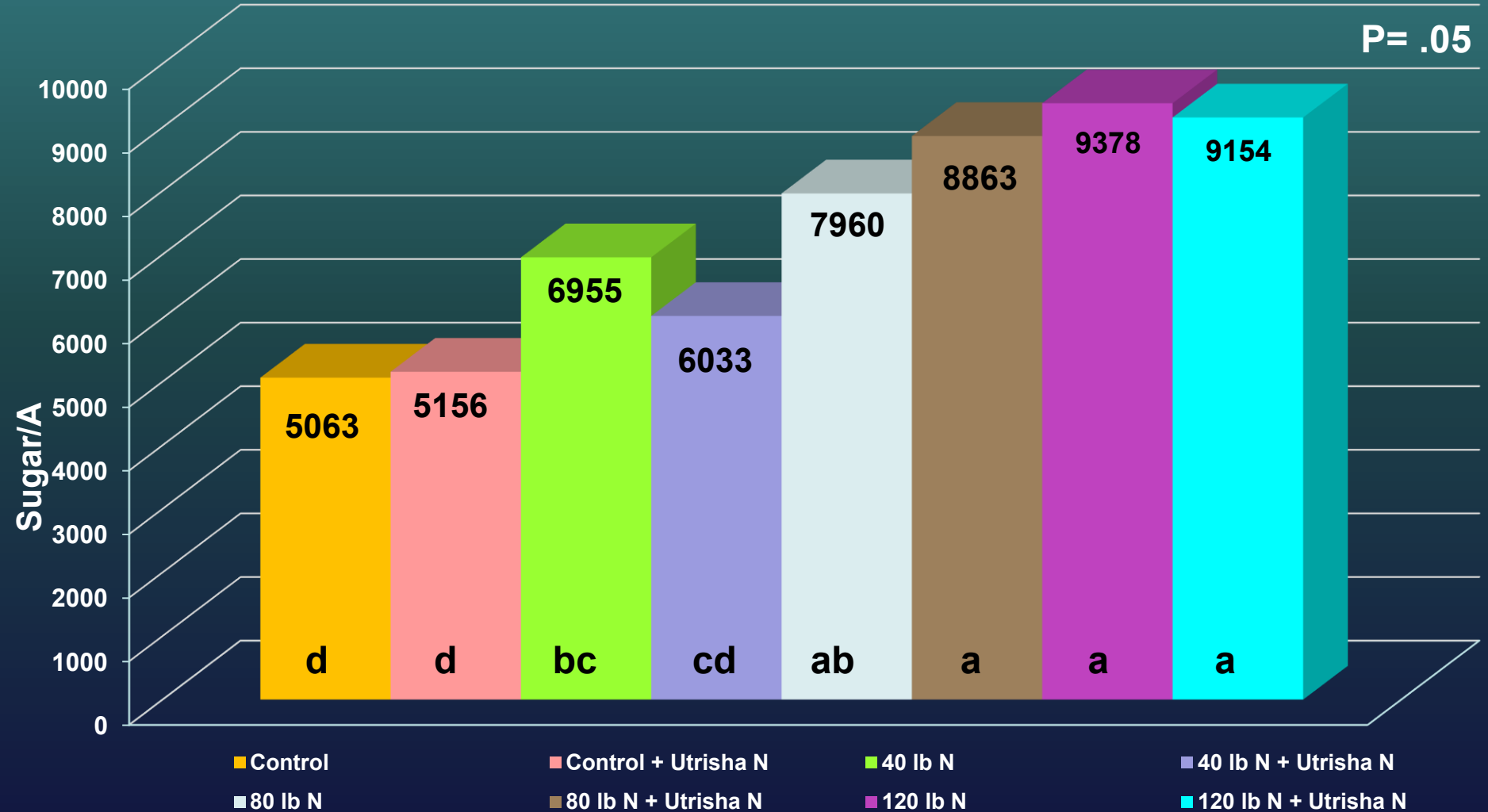
Response to Utrisha N x Nitrogen L 01-299, 2R, Tons/A, Gravois 2025

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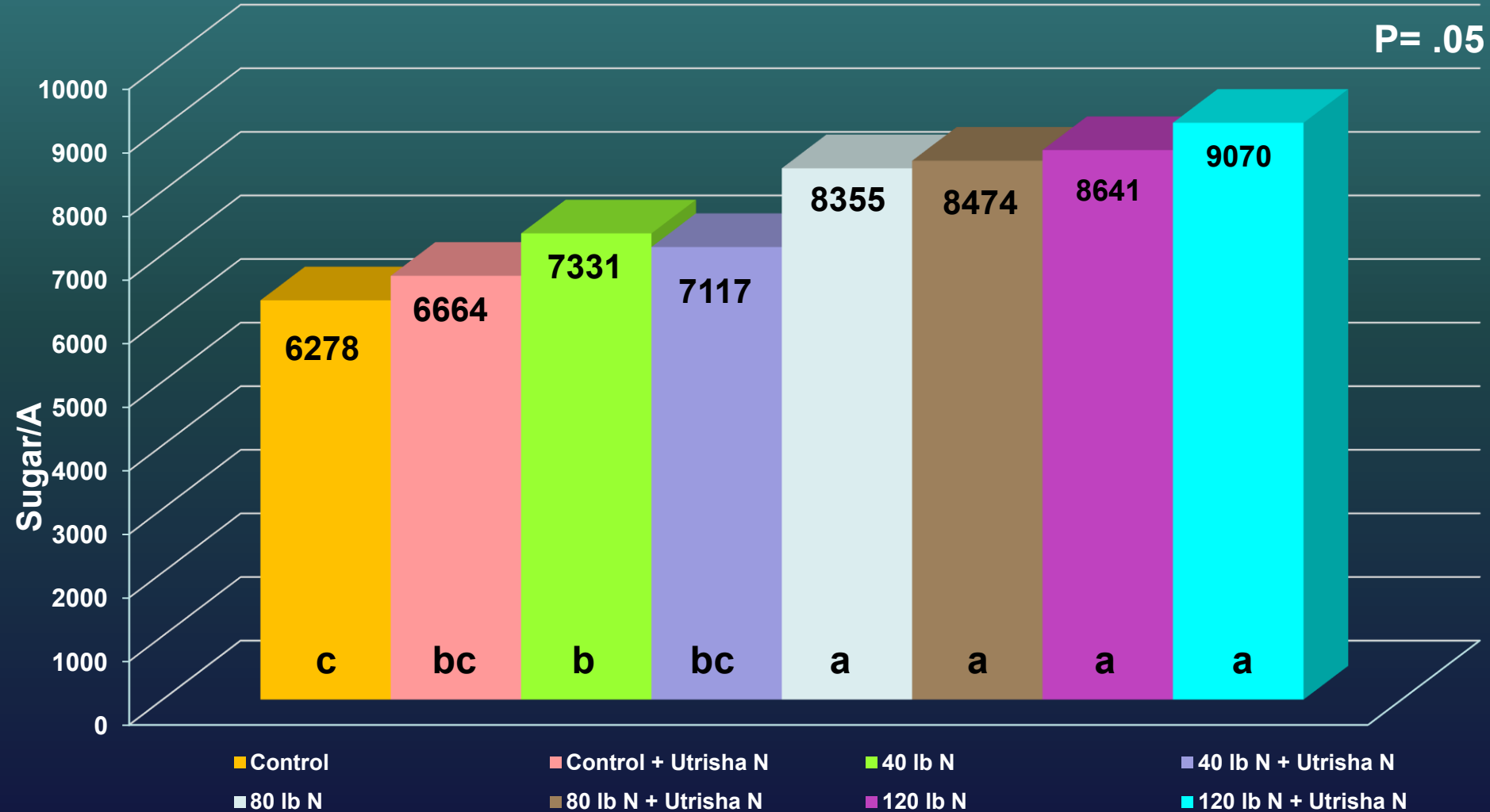
Response to Utrisha N x Nitrogen L 01-299, PC, Sugar/A, Gravois 2023

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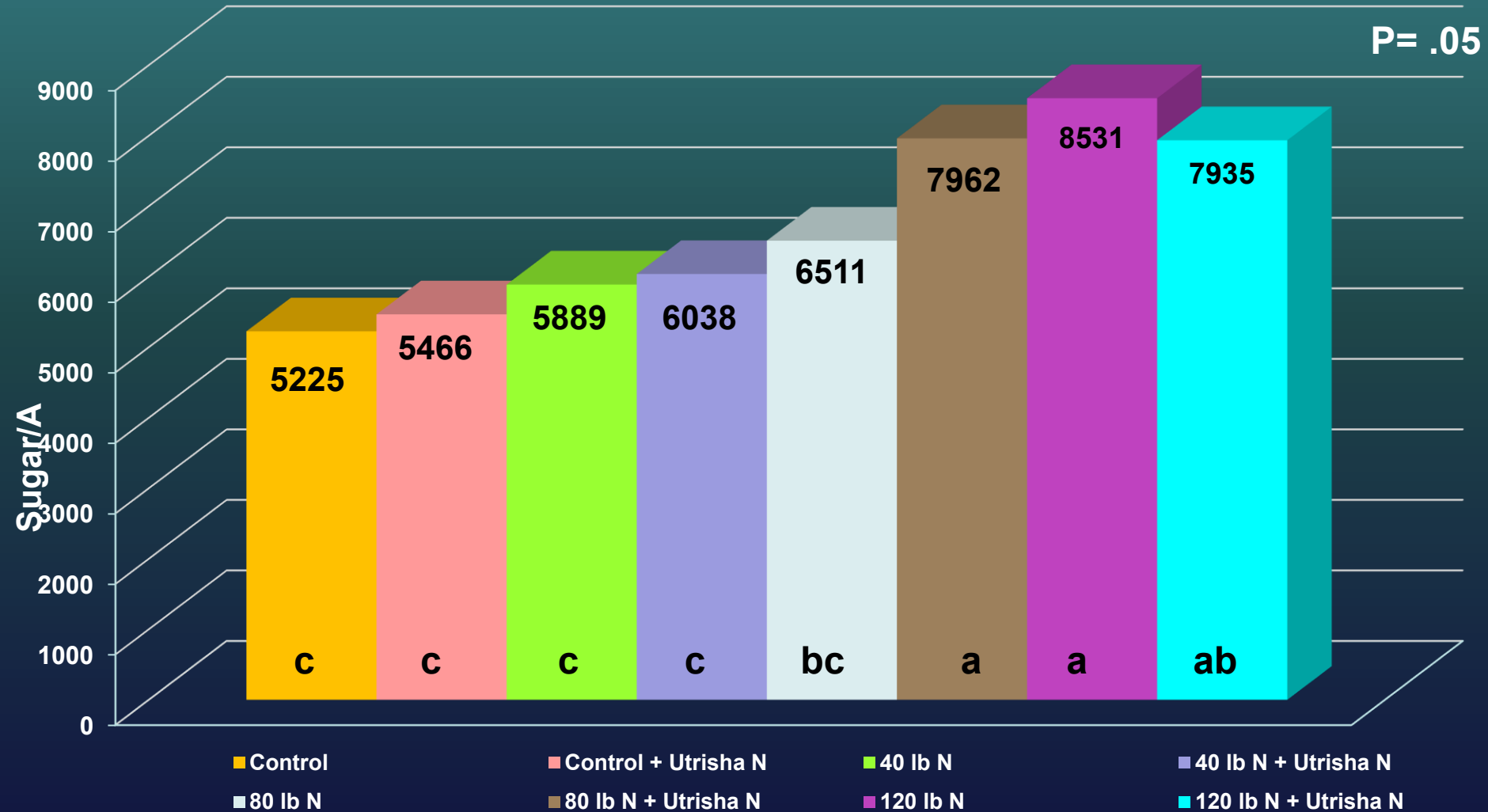
Response to Utrisha N x Nitrogen L 01-299, 1R, Sugar/A, Gravois 2024

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Response to Utrisha N x Nitrogen L 01-299, 2R, Sugar/A, Gravois 2025

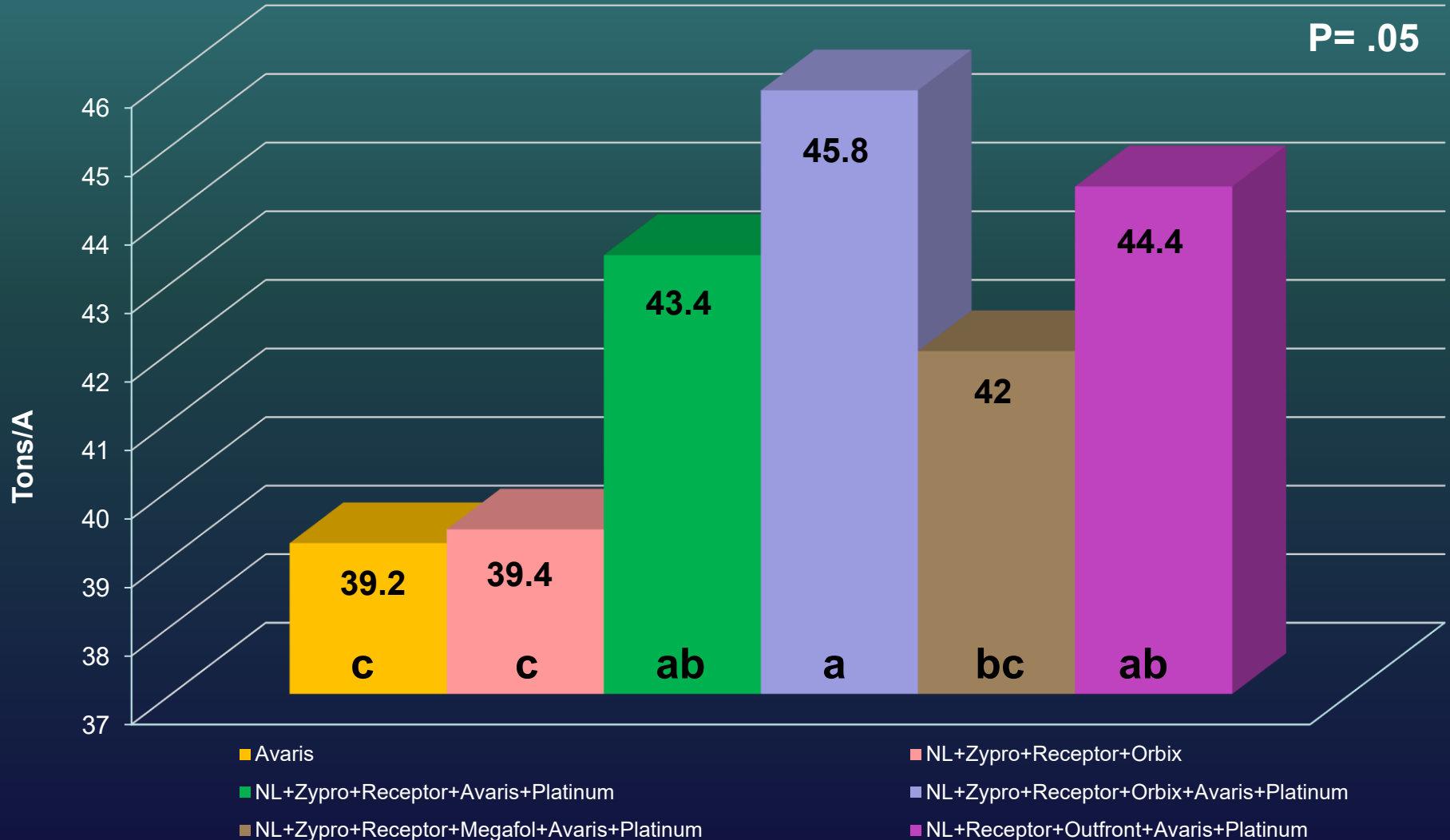
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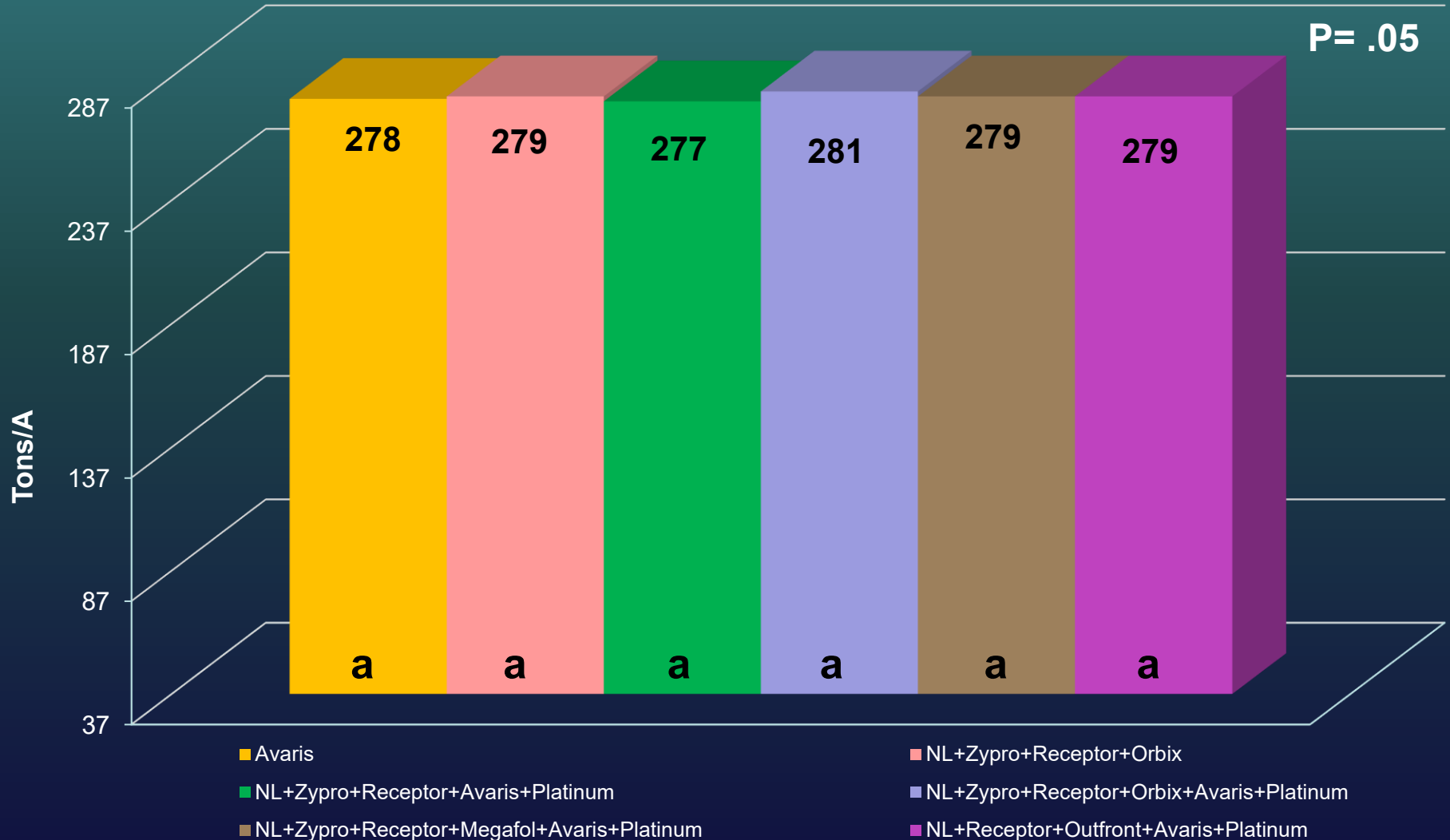
Adjuvants for Billet Planted Cane

- Varieties: L01-299
- Crop Age: PC
- Treatments:
 - Grower Standard (Avaris)
 - Nutri-link @ 5 G/A + Zypro @ 8 oz/A + Receptor @ 1 pt/A + Orbix @ 1 qt/A
 - Nutri-link @ 5 G/A + Zypro @ 8 oz/A + Receptor @ 1 pt/A + Avaris @ 20 oz/A + Platinum @ 5.67 oz/A
 - Nutri-link @ 5 G/A + Zypro @ 8 oz/A + Receptor @ 1 pt/A + Orbix @ 1 qt/A + Avaris @ 20 oz/A + Platinum @ 5.67 oz/A
 - Nutri-link @ 5 G/A + Zypro @ 8 oz/A + Receptor @ 1 pt/A + Megafol @ 1 pt/A + Avaris @ 20 oz/A + Platinum @ 5.67 oz/A
 - Nutri-link @ 5 G/A + Zypro @ 8 oz/A + Receptor @ 1 pt/A + Outfront @ 1 qt/A + Avaris @ 20 oz/A + Platinum @ 5.67
- All treatments applied after billets planted with spray tractor @ 25 gal/A
- Reps: 4

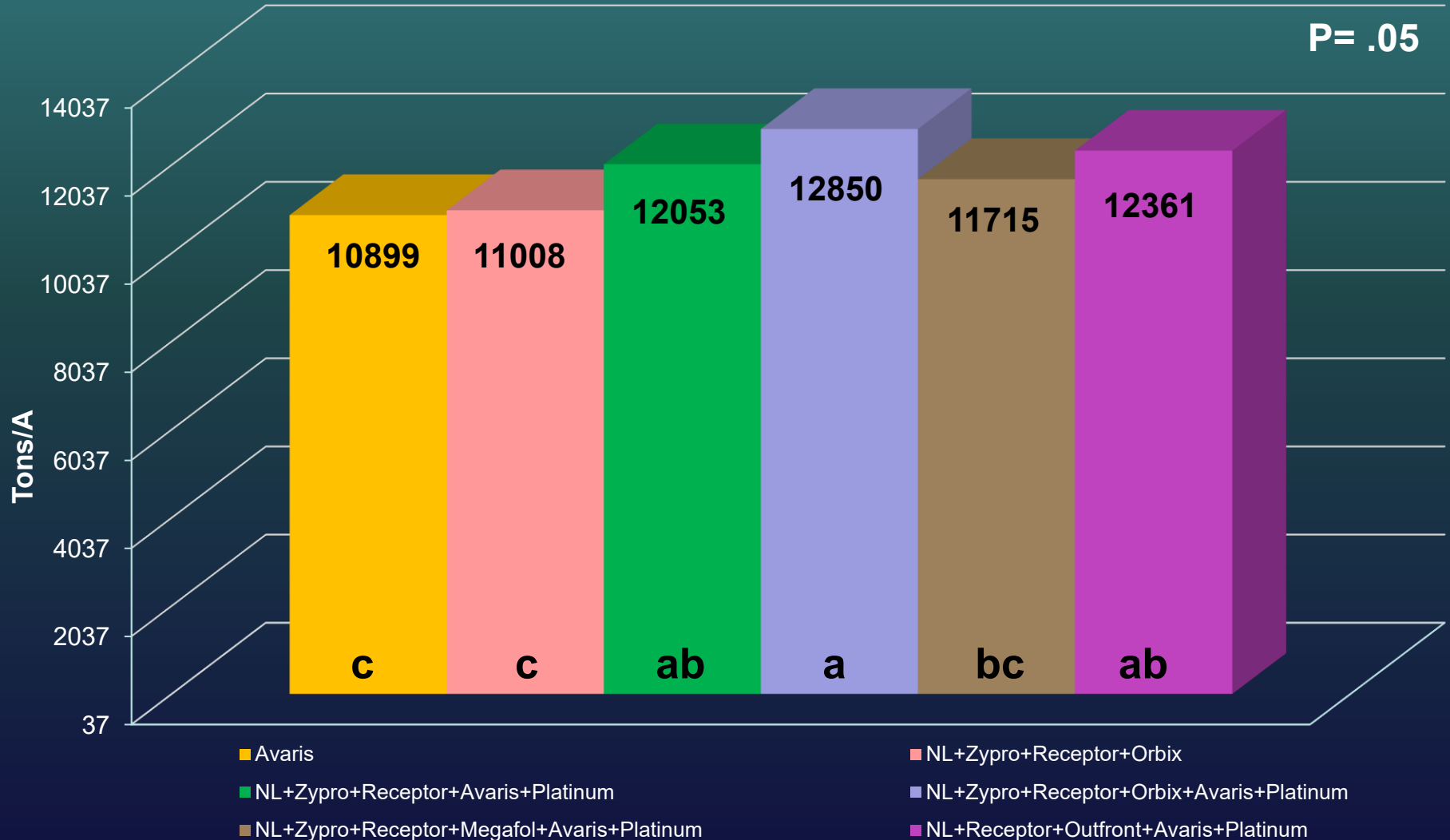
Response to Billet Treatments at Planting L 01-299, Plant Cane, Tons/A, Ardoyne, 2025



Response to Billet Treatments at Planting L 01-299, Plant Cane, TRS, Ardoyne, 2025



Response to Billet Treatments at Planting L 01-299, Plant Cane, Sugar/A, Ardoyne, 2025



Acknowledgements

- American Sugar Cane League
- Cultural Practices and Entomology Staff: Brenda King, Lucy Murphy, Hannah Penn, Tyler Solar (Katie Richard, Eric Petrie)
- All cooperating growers

Questions?



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