

# Sugarcane Management



**Ryan Viator, Rich Johnson,  
and Edward Richard, Jr.**

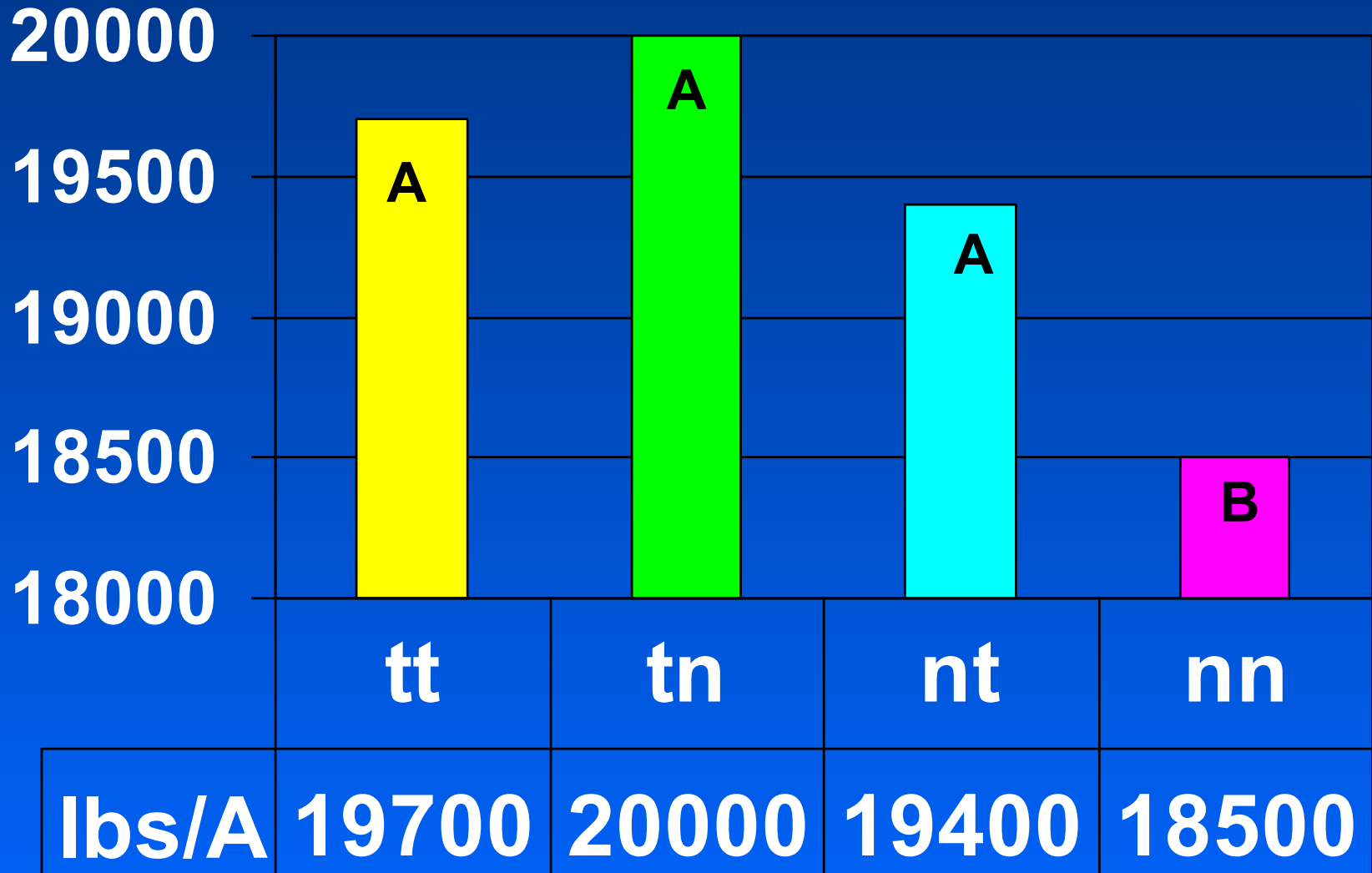


# Conservation Tillage

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- no-till and standard tillage
  - plant cane and 1<sup>st</sup> stubble
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# Cumulative yield



# Residue Tolerance

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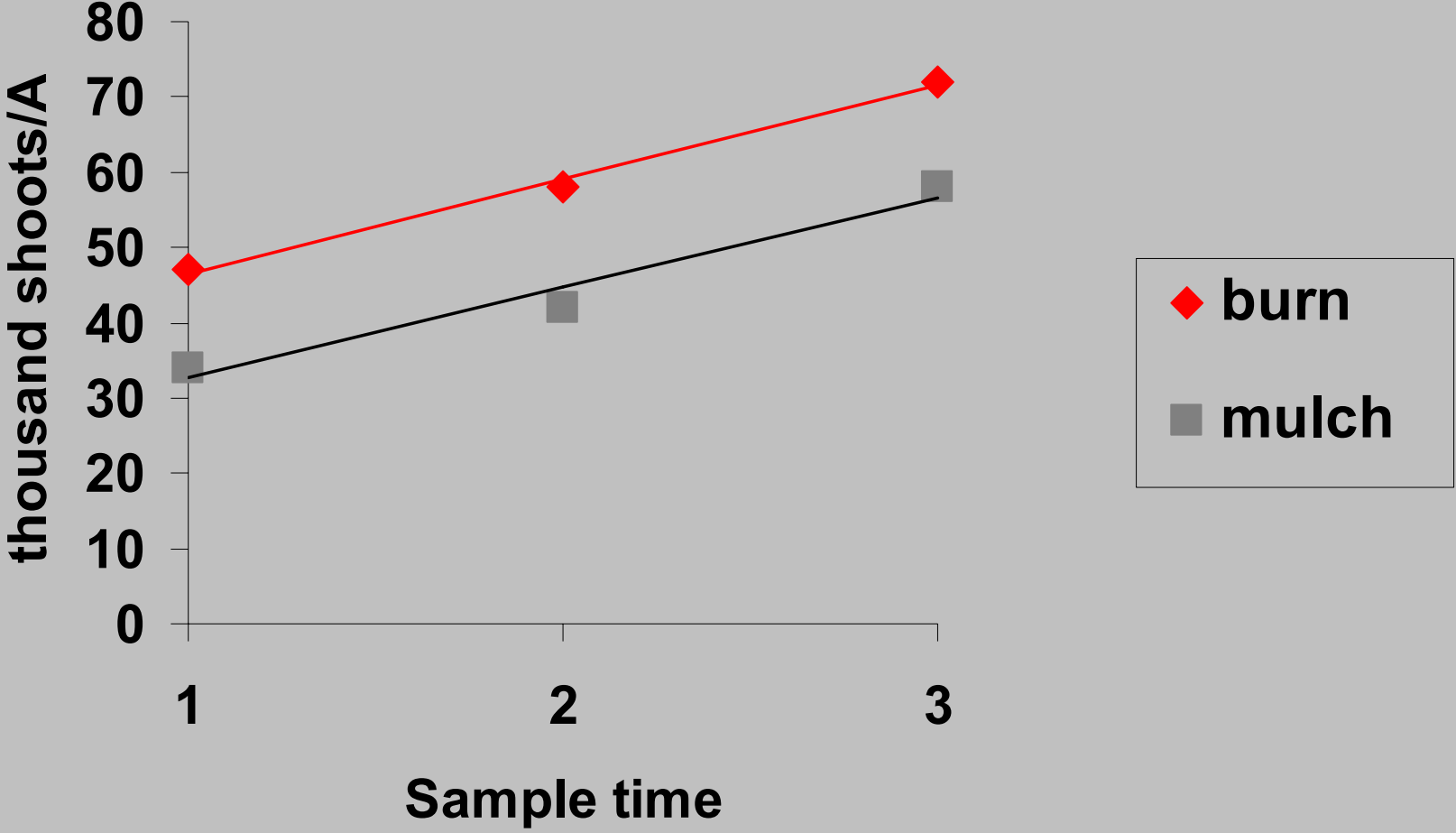
**-All commercial varieties including L99-233 and L99-226.**

**-With and without residue.**

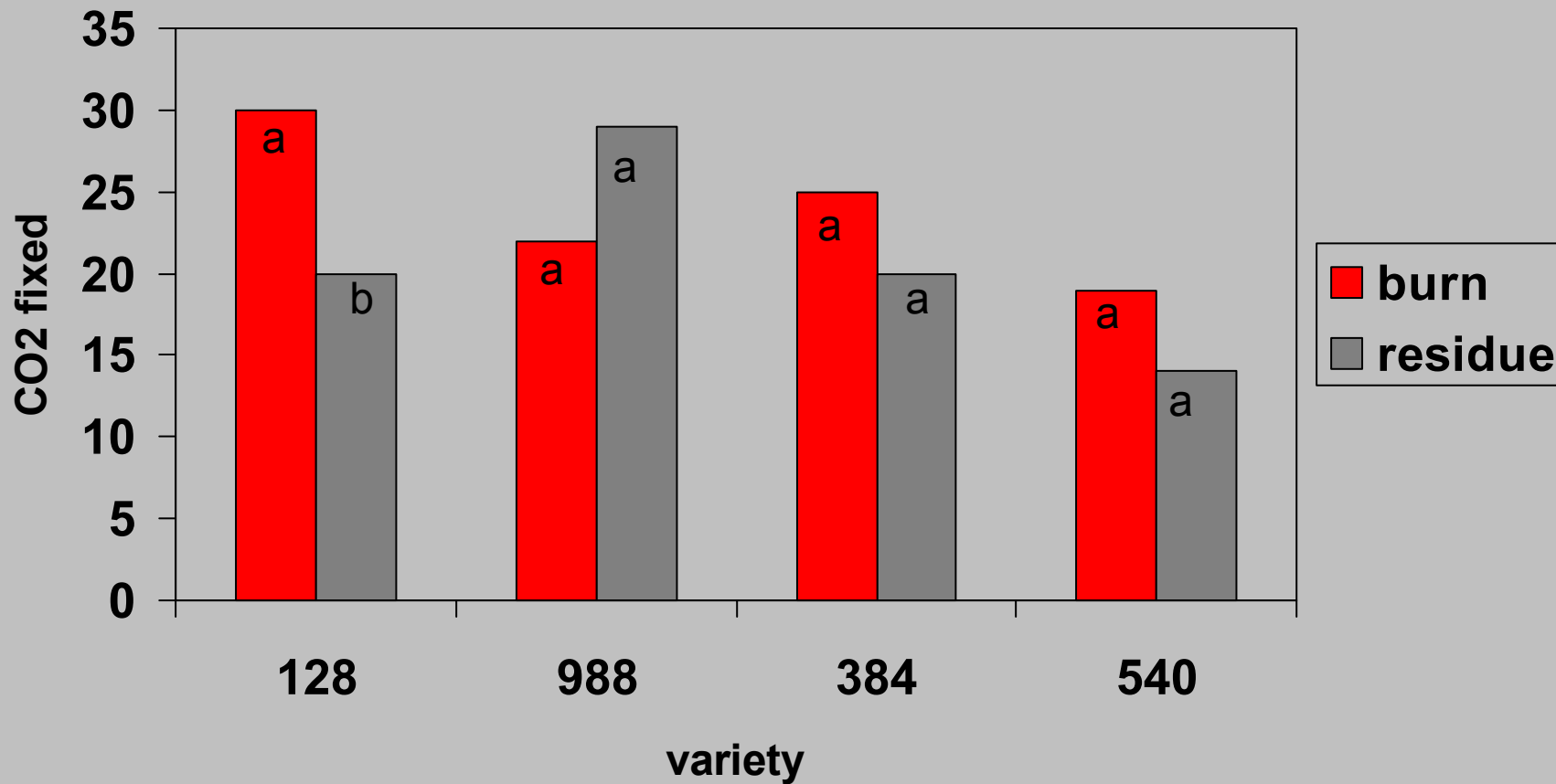
**-Stand counts in March, April, May.**

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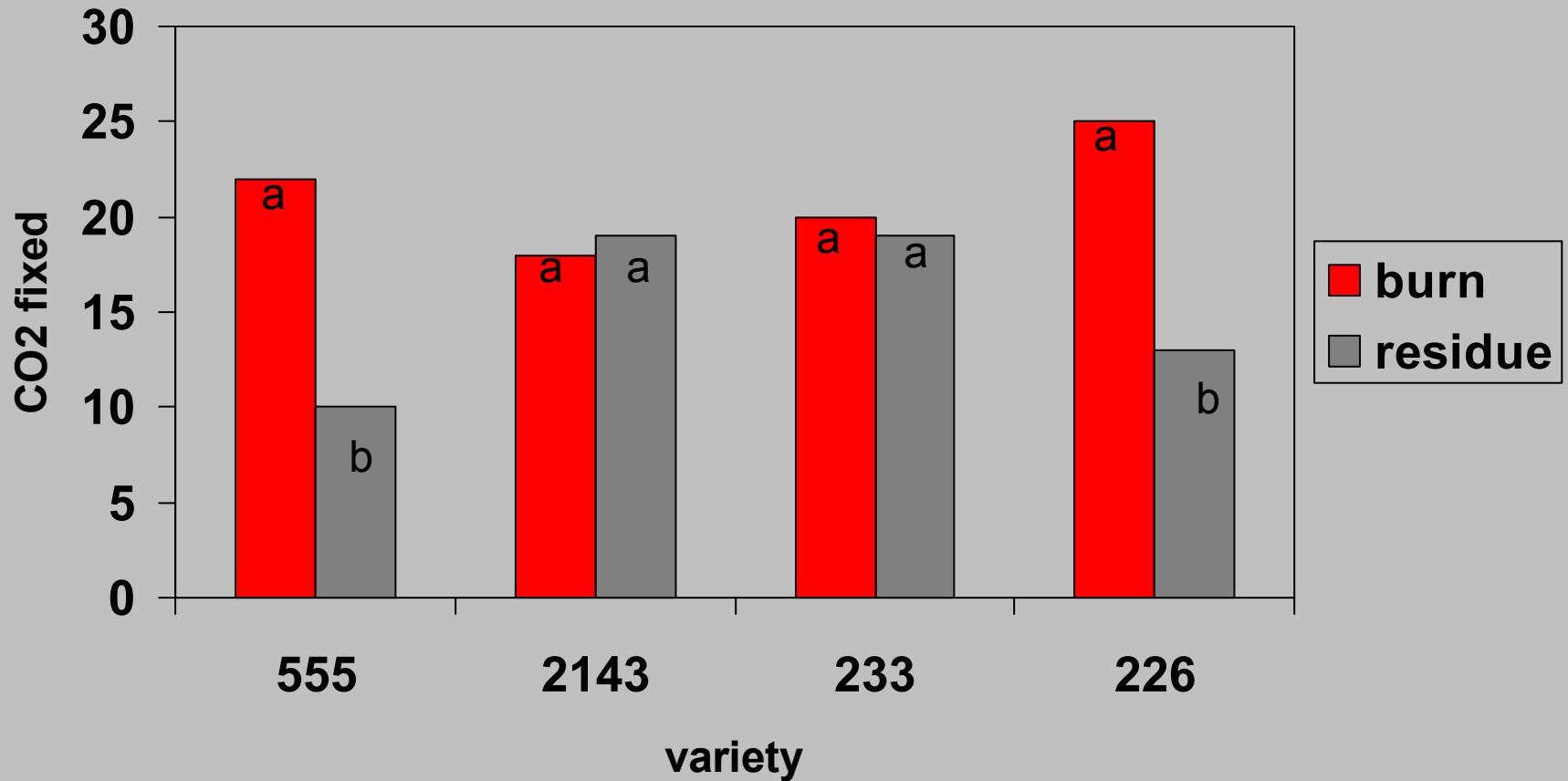
# Residue Effects on Shoot Counts



# Photosynthesis

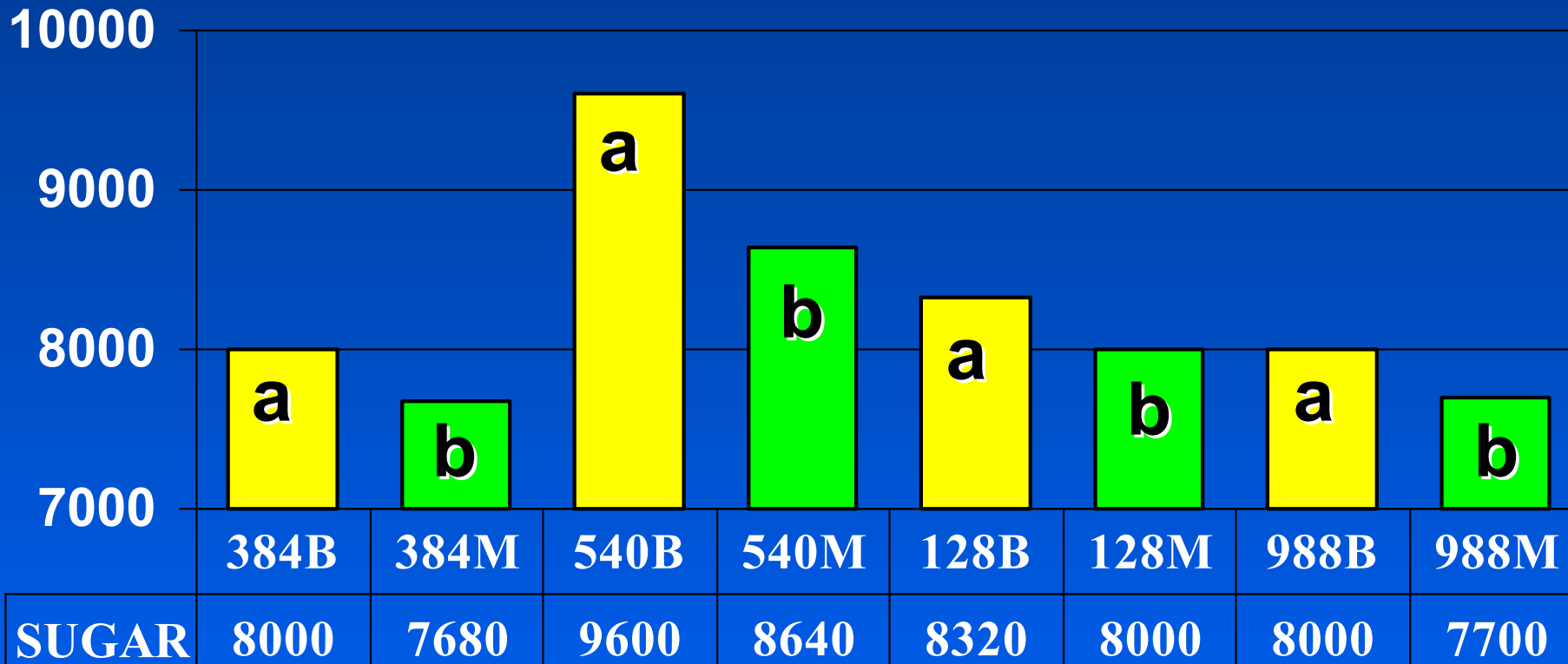


# Photosynthesis



# Sugar yield

( $p < 0.05$ )





# Sugar yield

( $p < 0.05$ )



# Long Term Mulch Test, 3<sup>rd</sup> Stubble

## Mulch Effects

Mulch	Tons	TRS	Sugar	Height	Pop
NR	17.0b	180.7b	3081b	163.1b	24000b
Burn	18.7a	189.4a	3544a	170.2a	26000a
Brush	18.0ab	186.2a	3359a	167.5ab	25000a
LSD (5%)	0.7	5.3	164.4	5.3	900

# Summary

- **Residue does not just affect emergence.**
- **All currently planted varieties have reduced shoot populations where residue is retained.**
- **Many varieties have reduced photosynthetic rates where the residue is retained.**

# Ripeners

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**-LCP 85-384**

**Ho 95-988**

**HoCP 96-540**

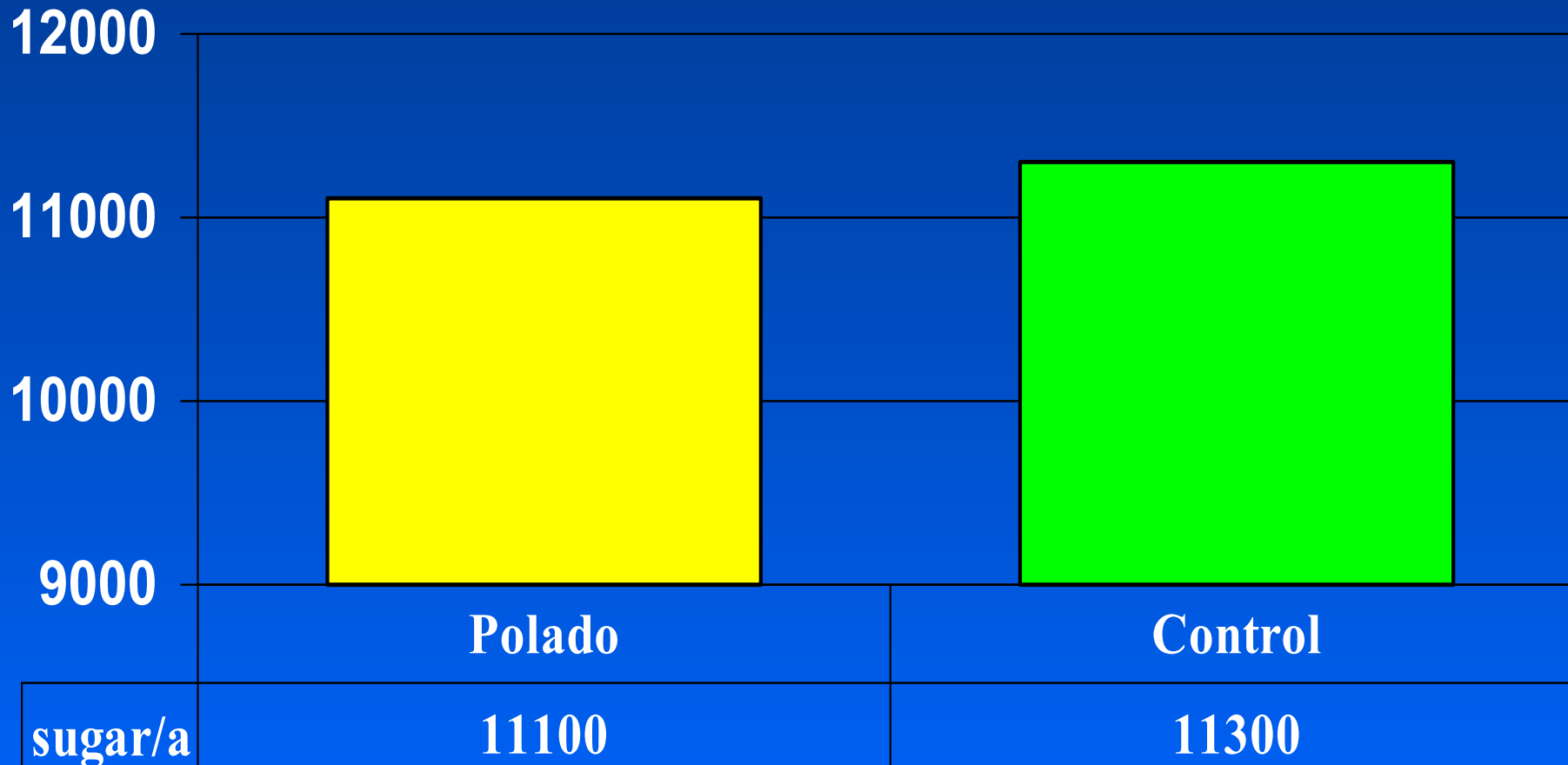
**L 97-128**

**-6 oz Polado or non-treated on Nov 1.**

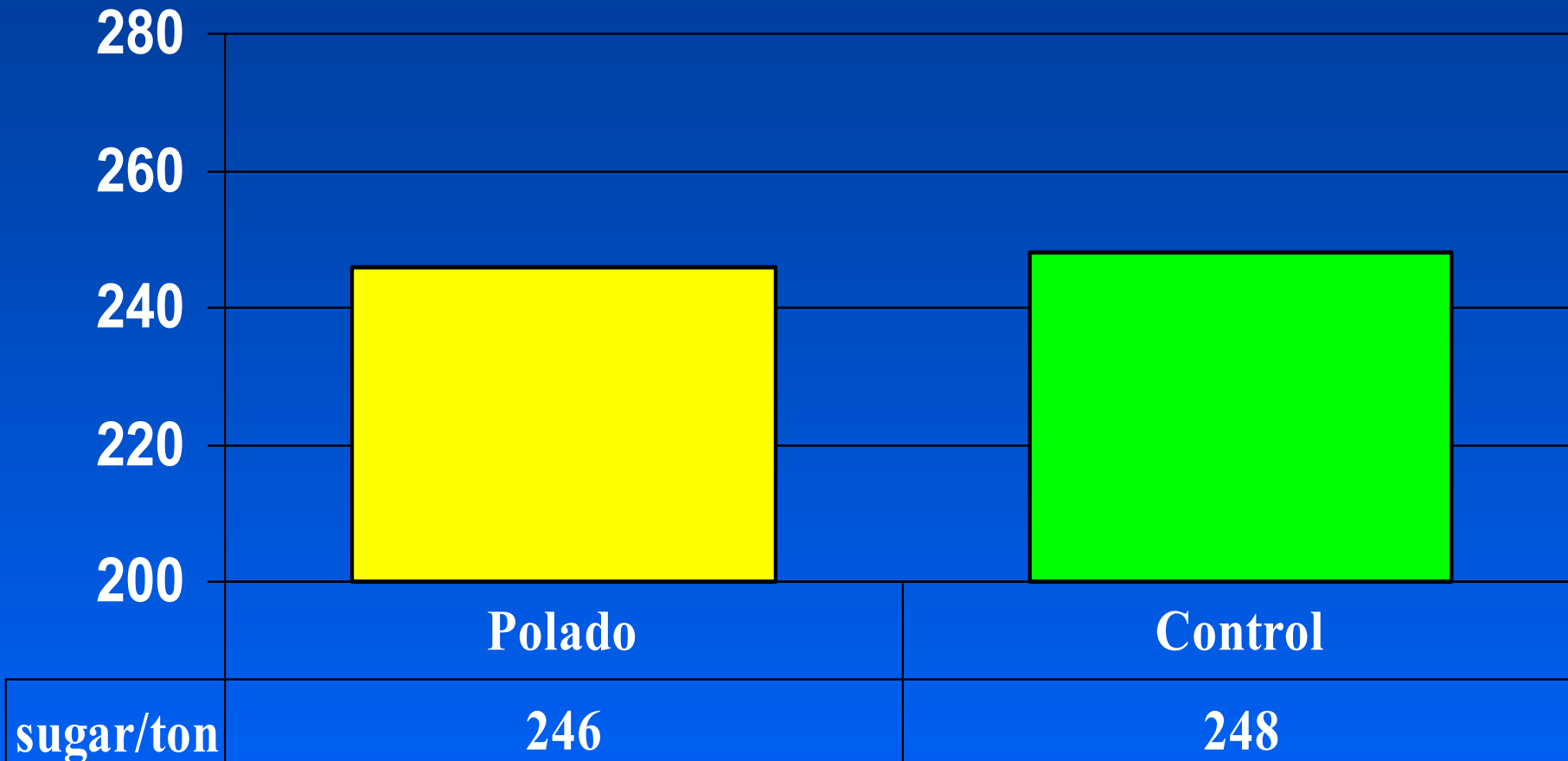
**-harvested 35 DAT 2005 and 2006.**

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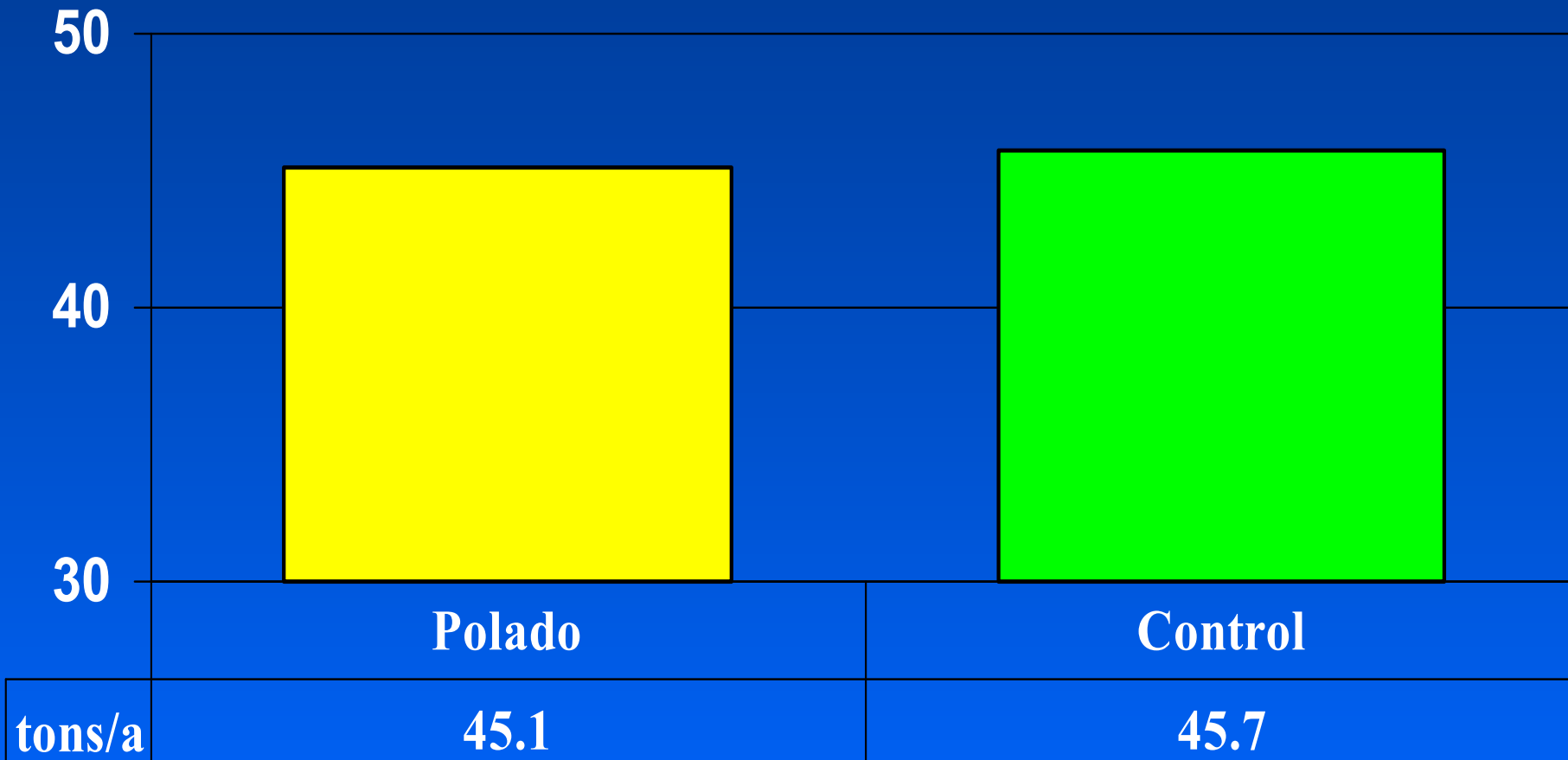
# Sugar yield



# TRS



# Tons



# Summary

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**-Should we apply ripeners late in the season?**

**-Is there any real benefit or is this a  
unneeded source of stress on the ratoon  
crop?**

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# **Residue and Ripeners on Ratoons**

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**-LCP 85-384**

**Ho 95-988**

**HoCP 96-540**

**L 97-128**

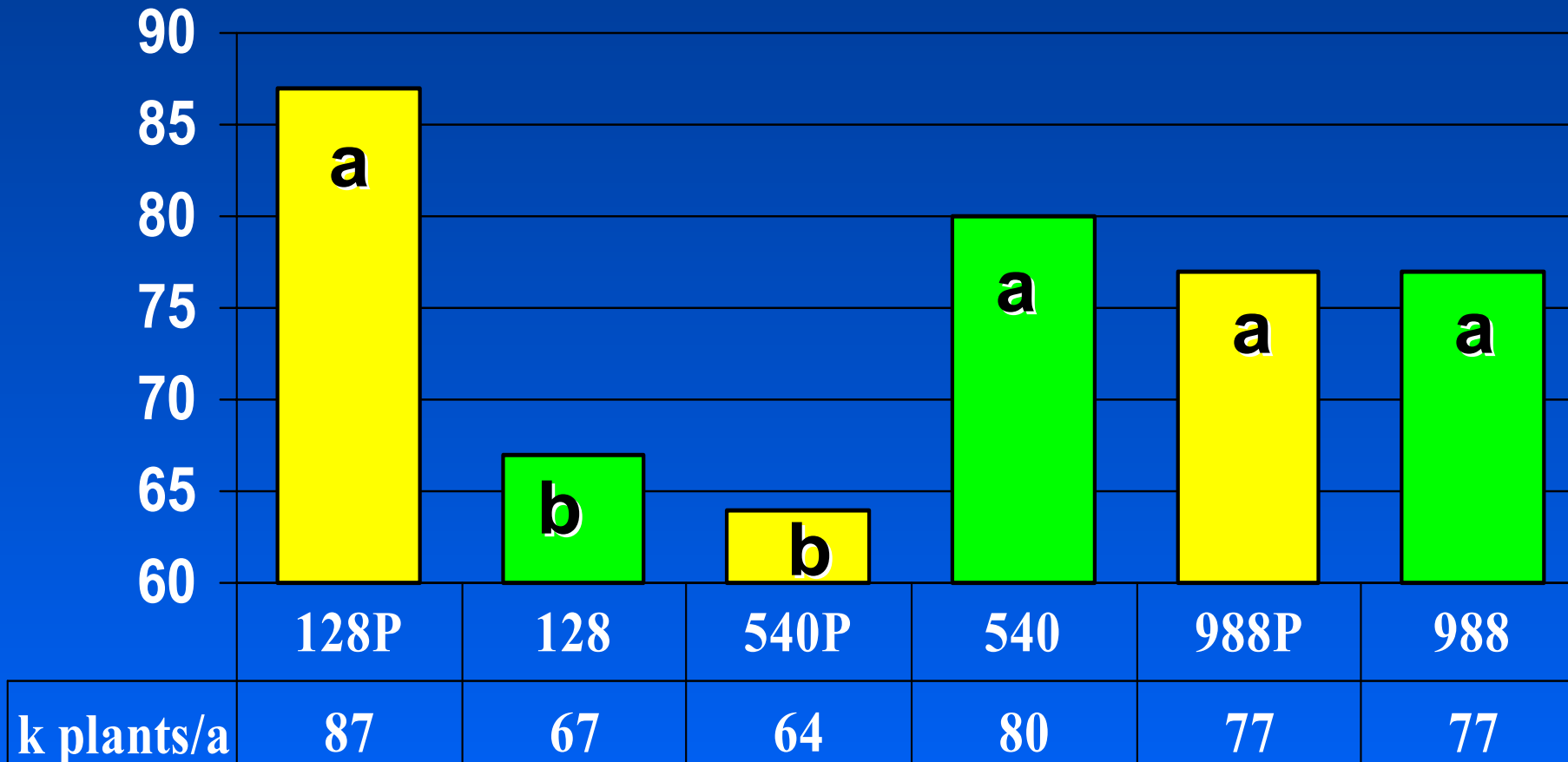
**-Whole plots: 6 oz Polado or non-treated**

**-Split plots: burn or residue undisturbed**

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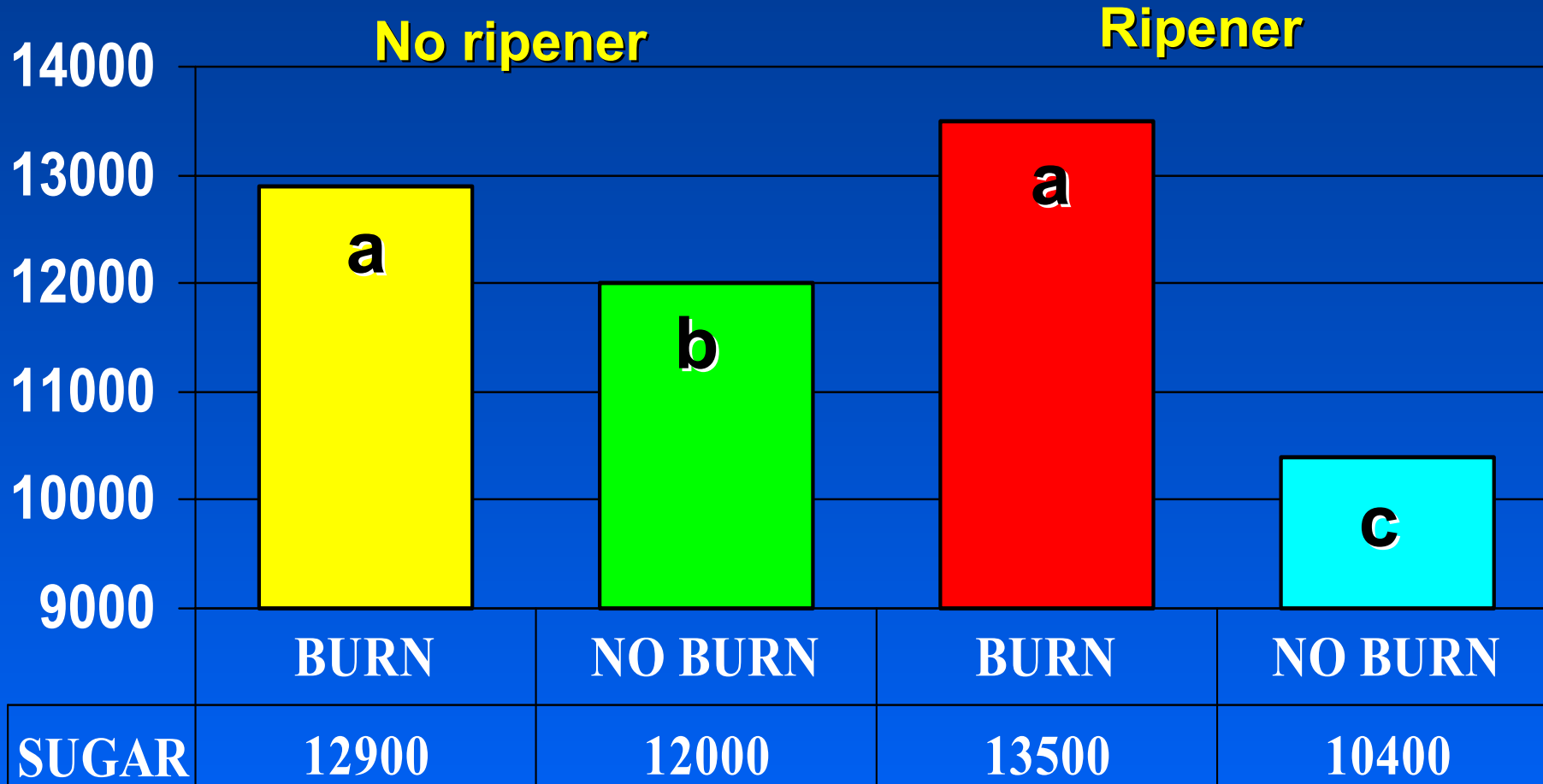
# Spring population

( $p < 0.05$ )



# Sugar yield

( $p < 0.05$ )



# Summary

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**-Reduce risks by eliminating unneeded ripening.**

**-Reduce ripener usage in areas where you can't remove the residue.**

**-Optimize yields over a cycle; not maximize yields for a year.**

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05/12/2003



**Planting Bitter Panicum.**



SEP 26 2006



SEP 26 2006



