

# Evaluation of Sugarcane Ripeners

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# Varietal Response to Ripener Application

## .. Study Information:

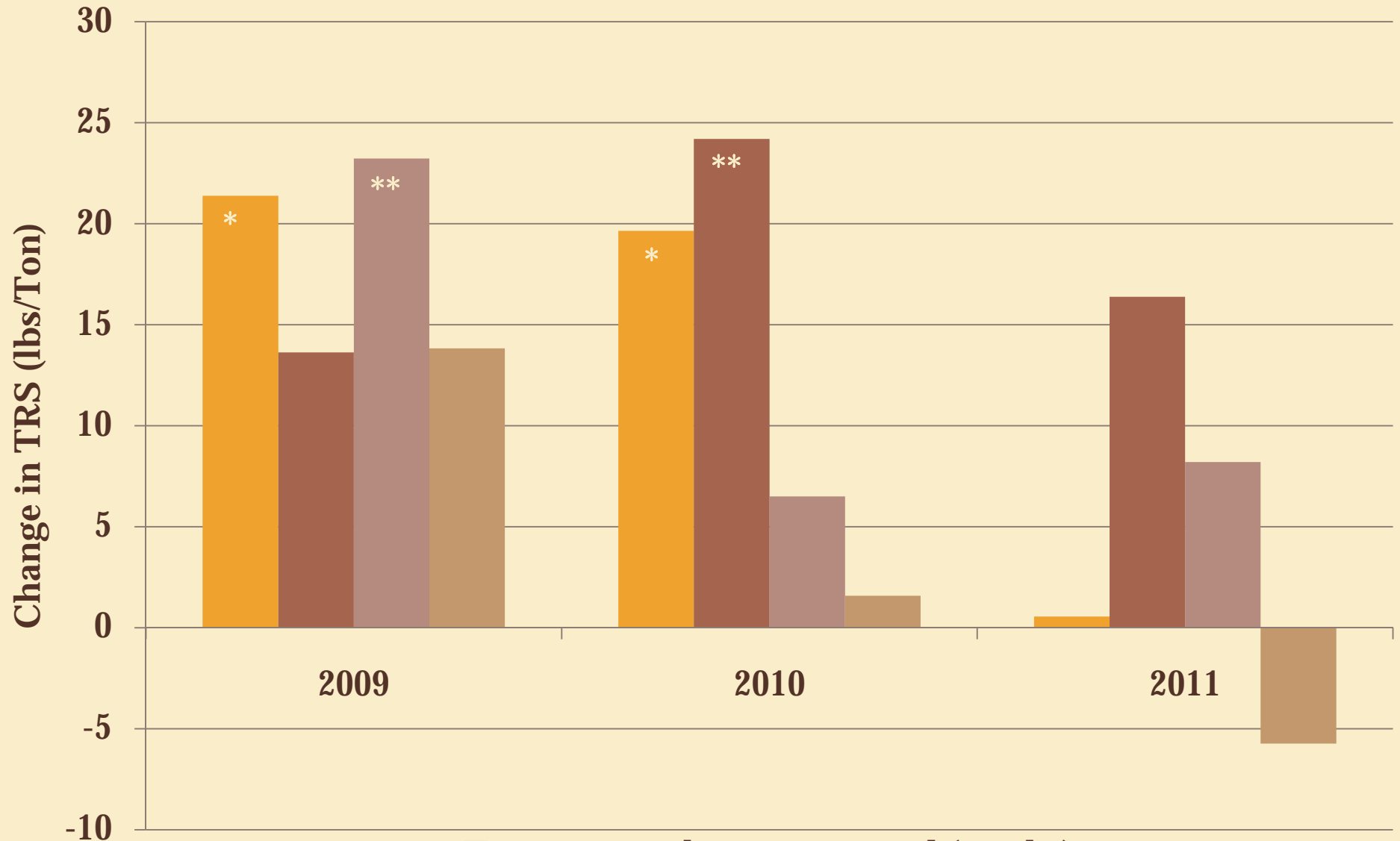
- ı Ripener: Roundup PowerMax
- ı Rate: 5.3 oz/A
- ı Reps: 4
- ı Application Dates:
  - ú Aug 24, 2009
  - ú Sept 3, 2010
  - ú Aug 22, 2011
- ı Harvest: Hand-cut
  - ú 4, 5, 6, and 7 at weeks

## .. Varieties Tested:

- ı Ho 95-988
- ı HoCP 96-540
- ı L 97-128
- ı L 99-226 (2010, 2011)
- ı L 99-233
- ı Ho 00-950
- ı L 01-283
- ı L 03-371 (2010, 2011)

# Ho 95-988

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

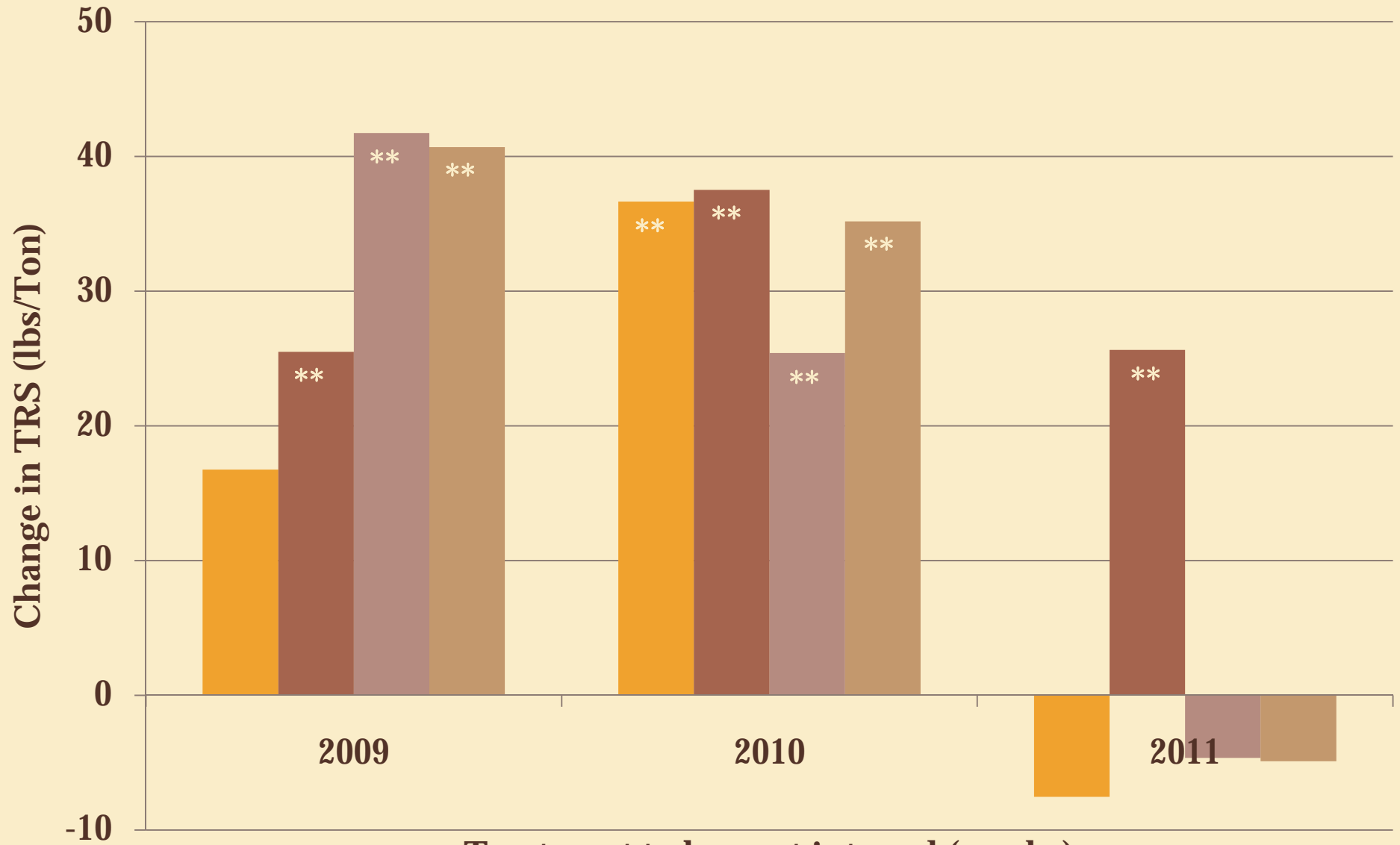


\*\* p<0.05; \* p<0.10

Treatment to harvest interval (weeks)

# HoCP 96-540

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

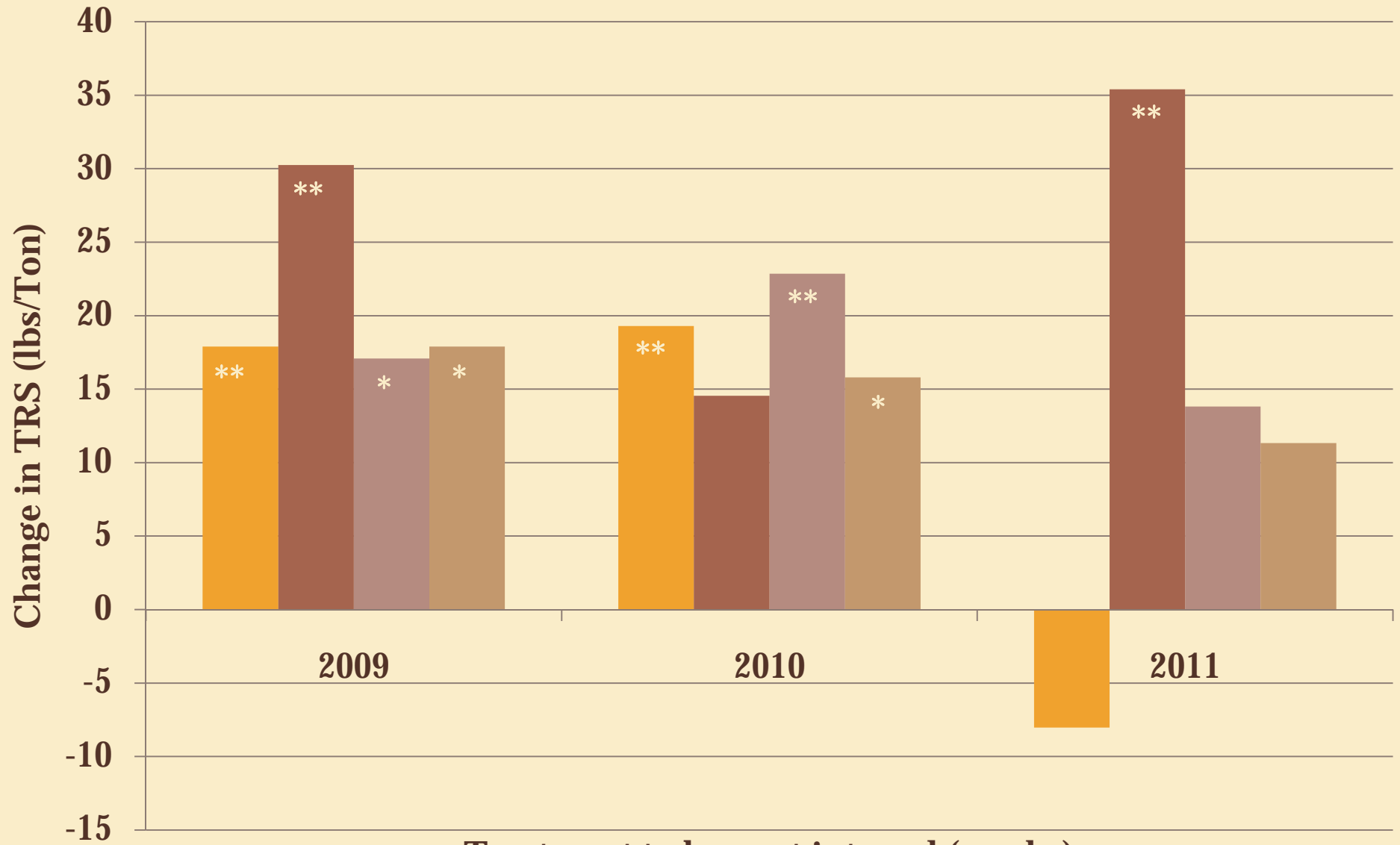


\*\*  $p < 0.05$ ; \*  $p < 0.10$

Treatment to harvest interval (weeks)

# L 97-128

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

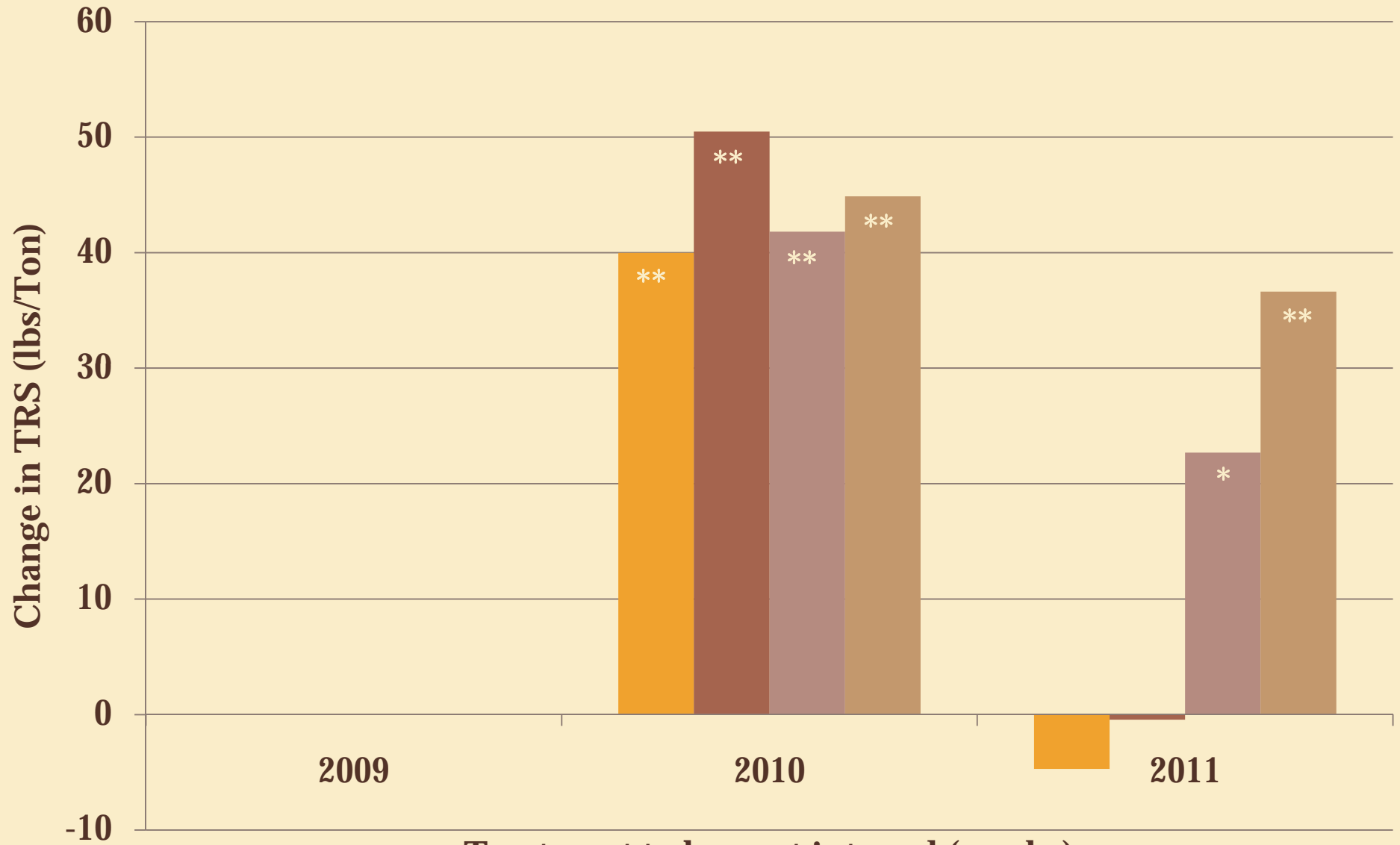


\*\* p < 0.05; \* p < 0.10

Treatment to harvest interval (weeks)

# L 99-226

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

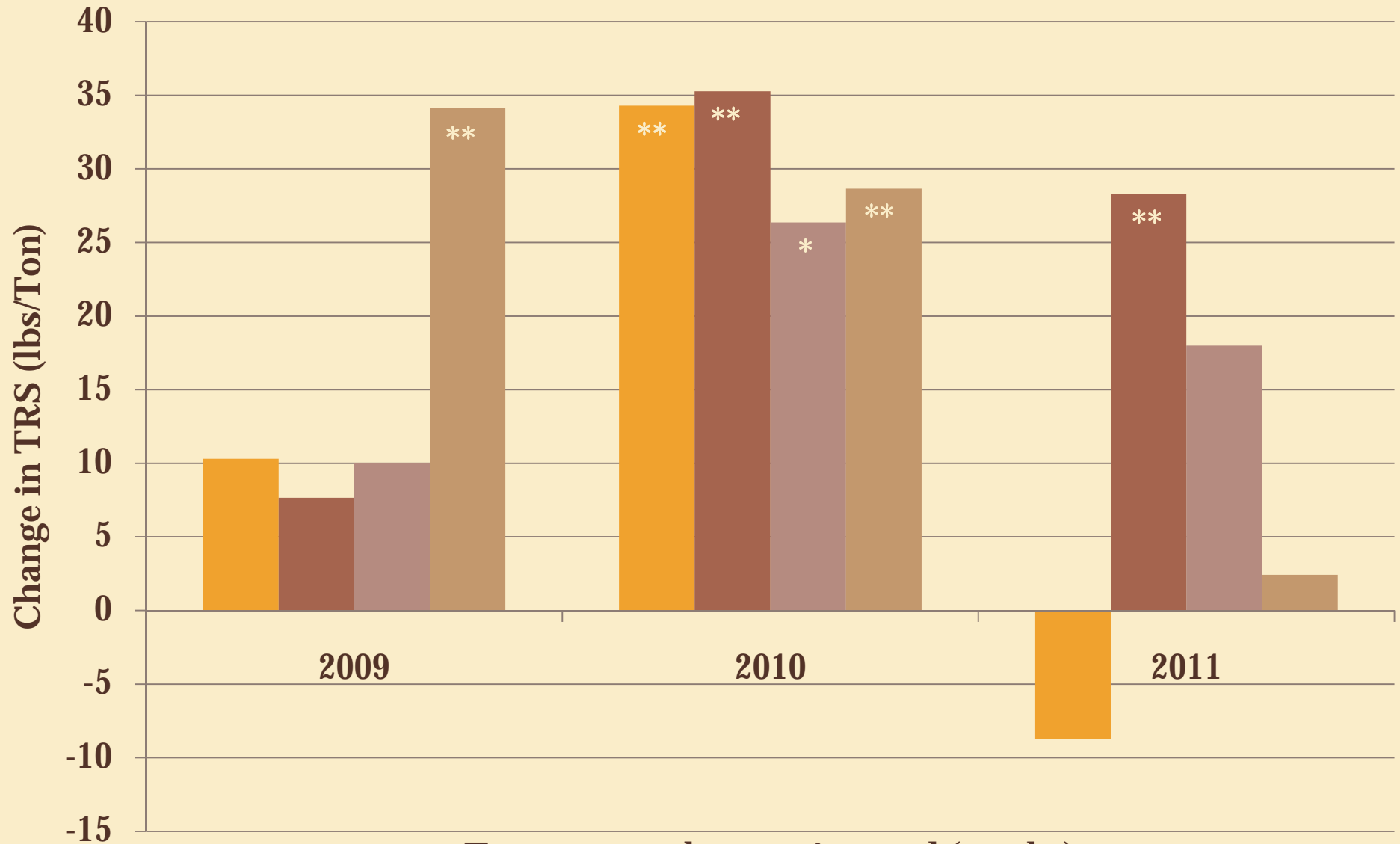


\*\* p<0.05; \* p<0.10

Treatment to harvest interval (weeks)

# L 99-233

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

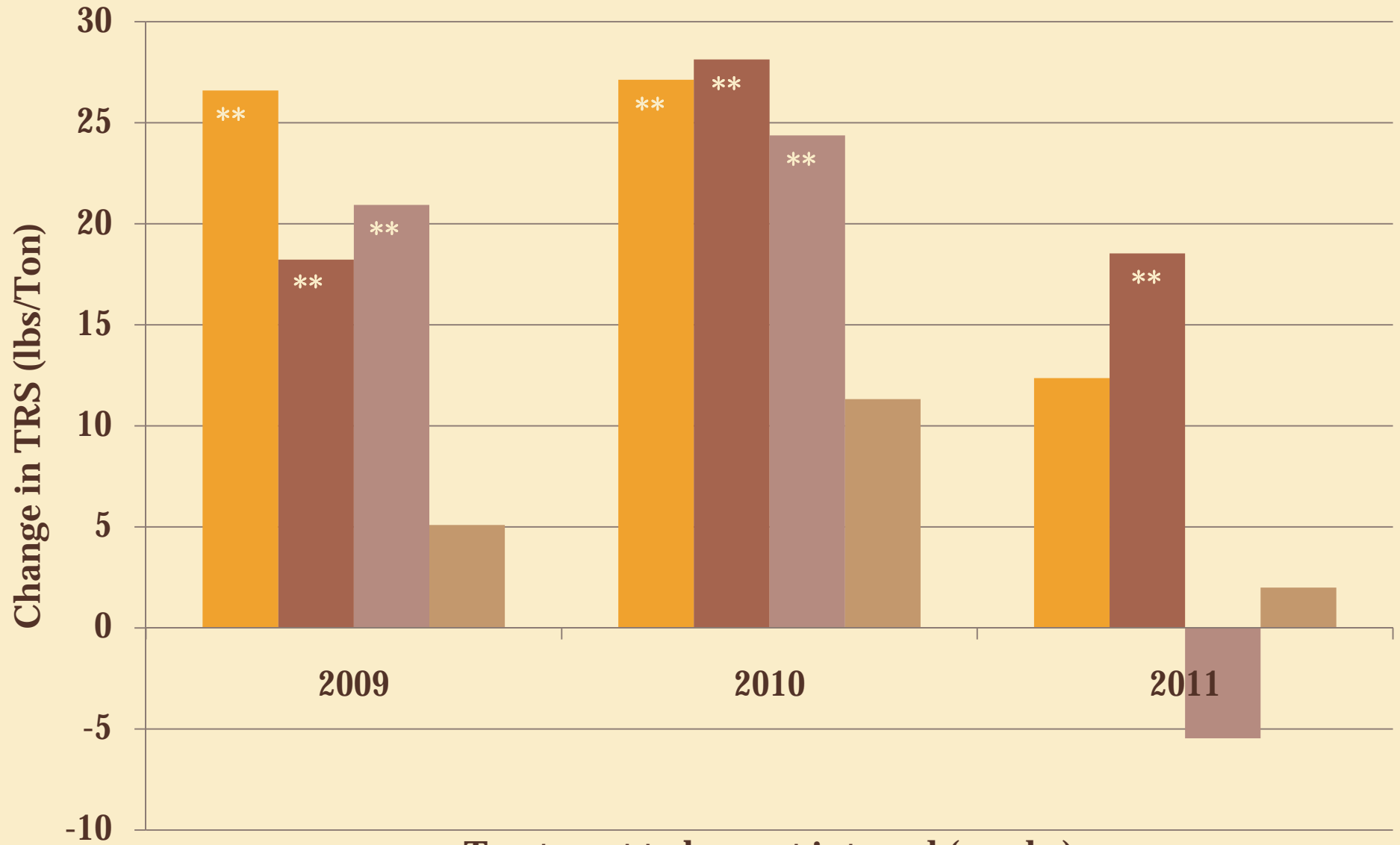


\*\*  $p < 0.05$ ; \*  $p < 0.10$

Treatment to harvest interval (weeks)

# HoCP 00-950

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7



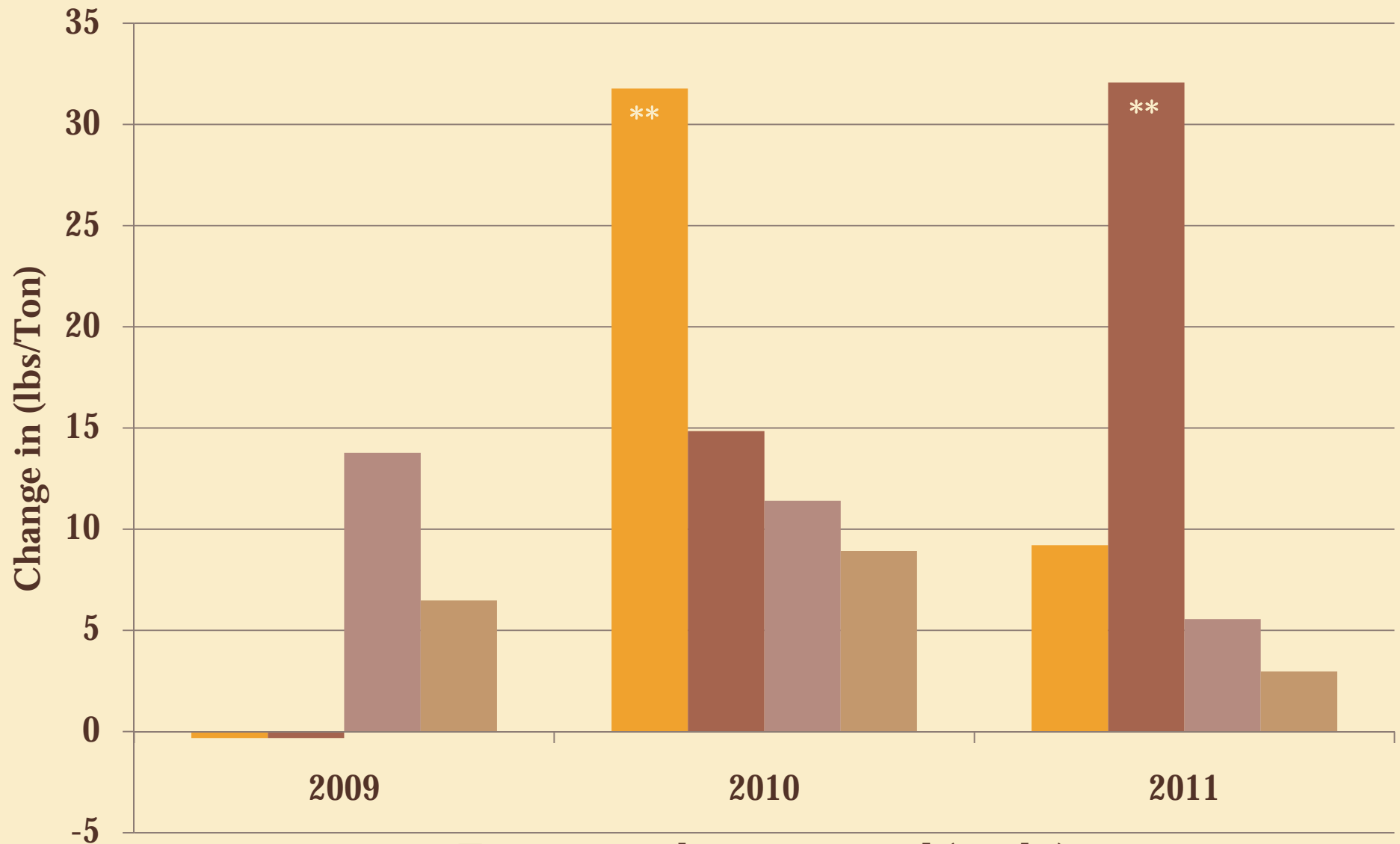
\*\*  $p < 0.05$ ; \*  $p < 0.10$

Treatment to harvest interval (weeks)



# L 01-283

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7

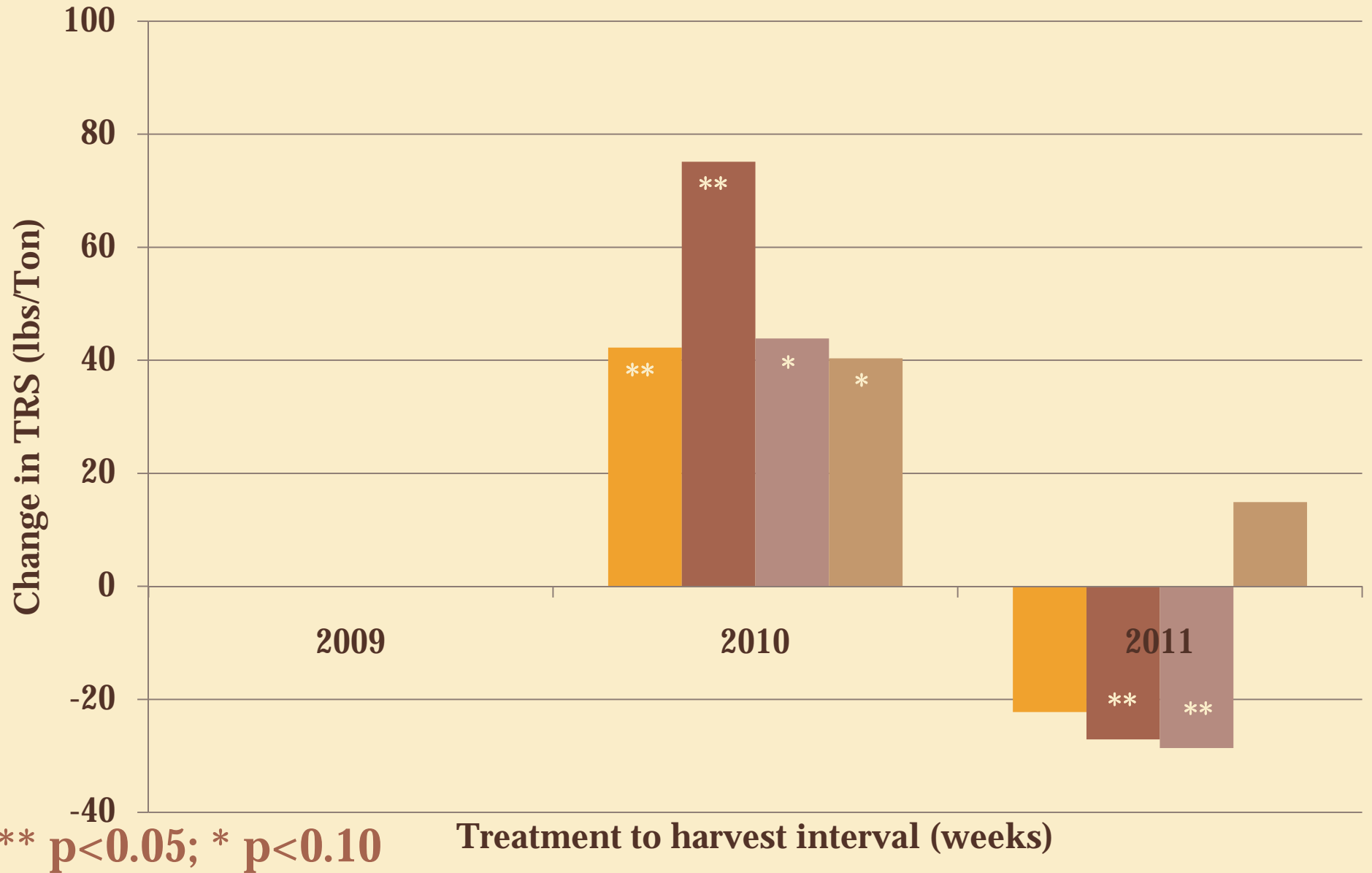


\*\*  $p < 0.05$ ; \*  $p < 0.10$

Treatment to harvest interval (weeks)

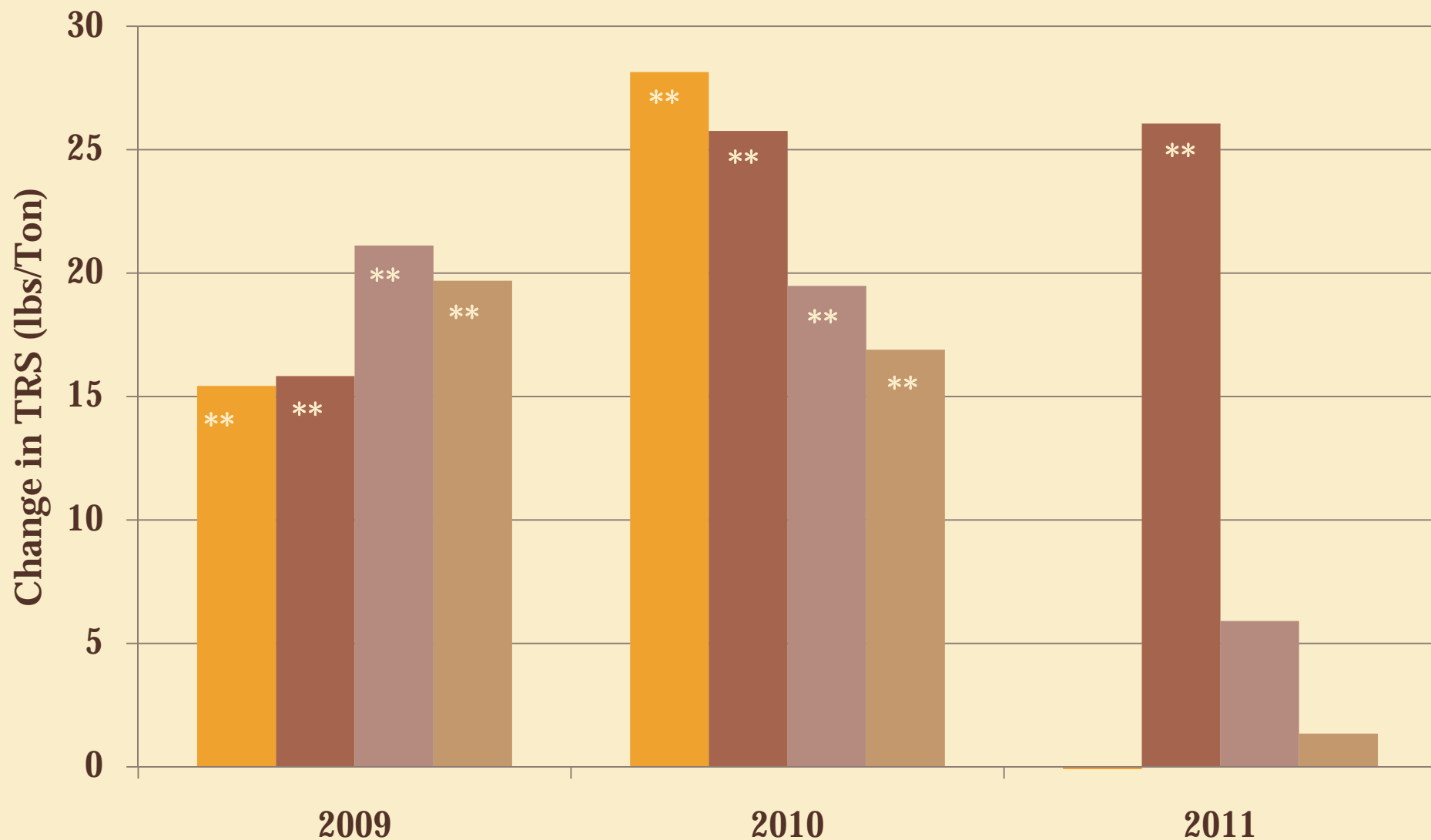
# L 03-371

Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7



# Average of all varieties

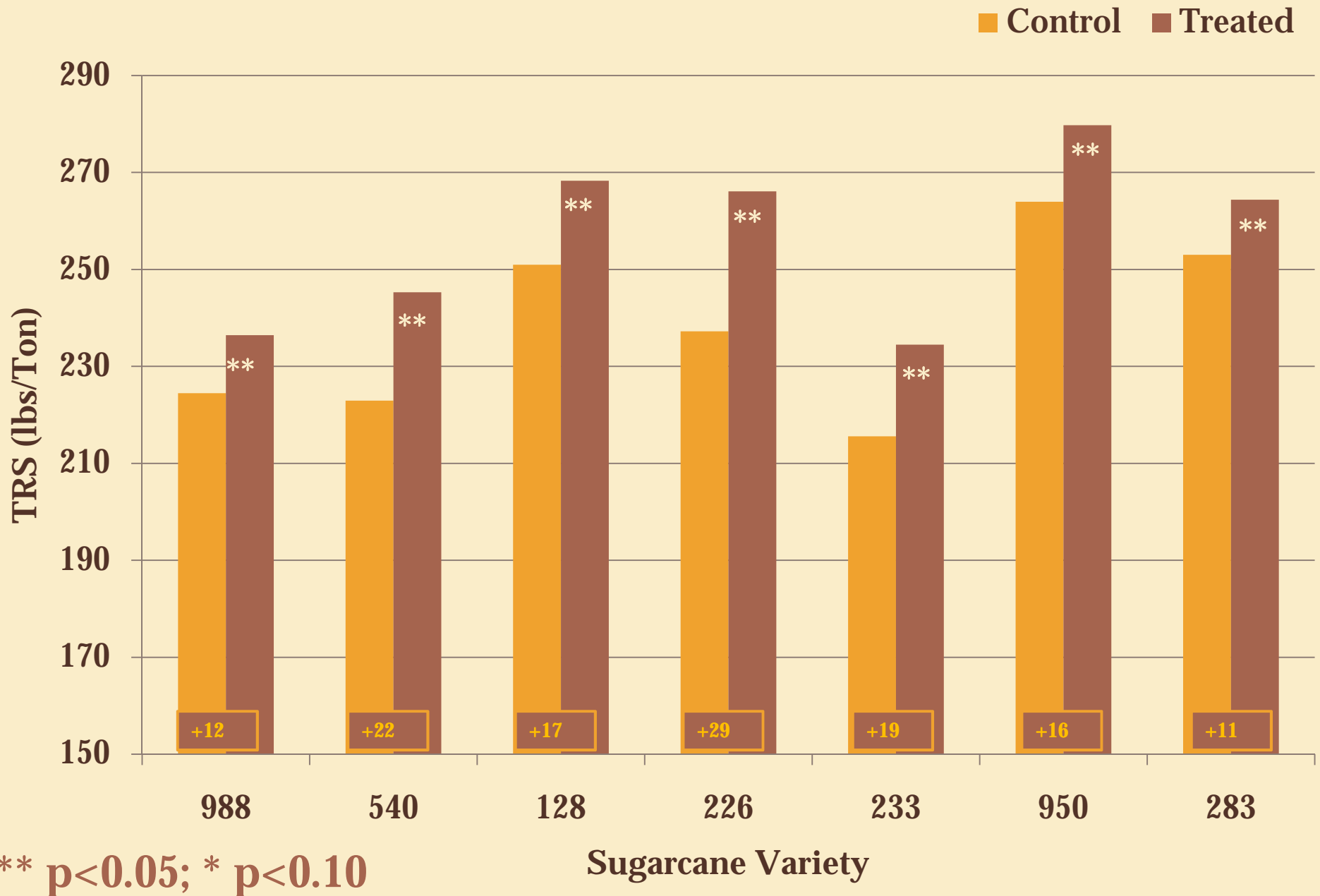
Treatment to harvest interval (weeks) ■ 4 ■ 5 ■ 6 ■ 7



\*\*  $p < 0.05$ ; \*  $p < 0.10$

Treatment to harvest interval (weeks)

# Average of 4 harvest dates



# Varietal Response to Glyphosate

## Sensitive (>20 lbs/T)

- i HoCP 96-540
- i L 99-226

## Moderate (15-20 lbs/T)

- i L 97-128
- i L 99-233
- i L 00-950

## Poor (<15 lbs/T)

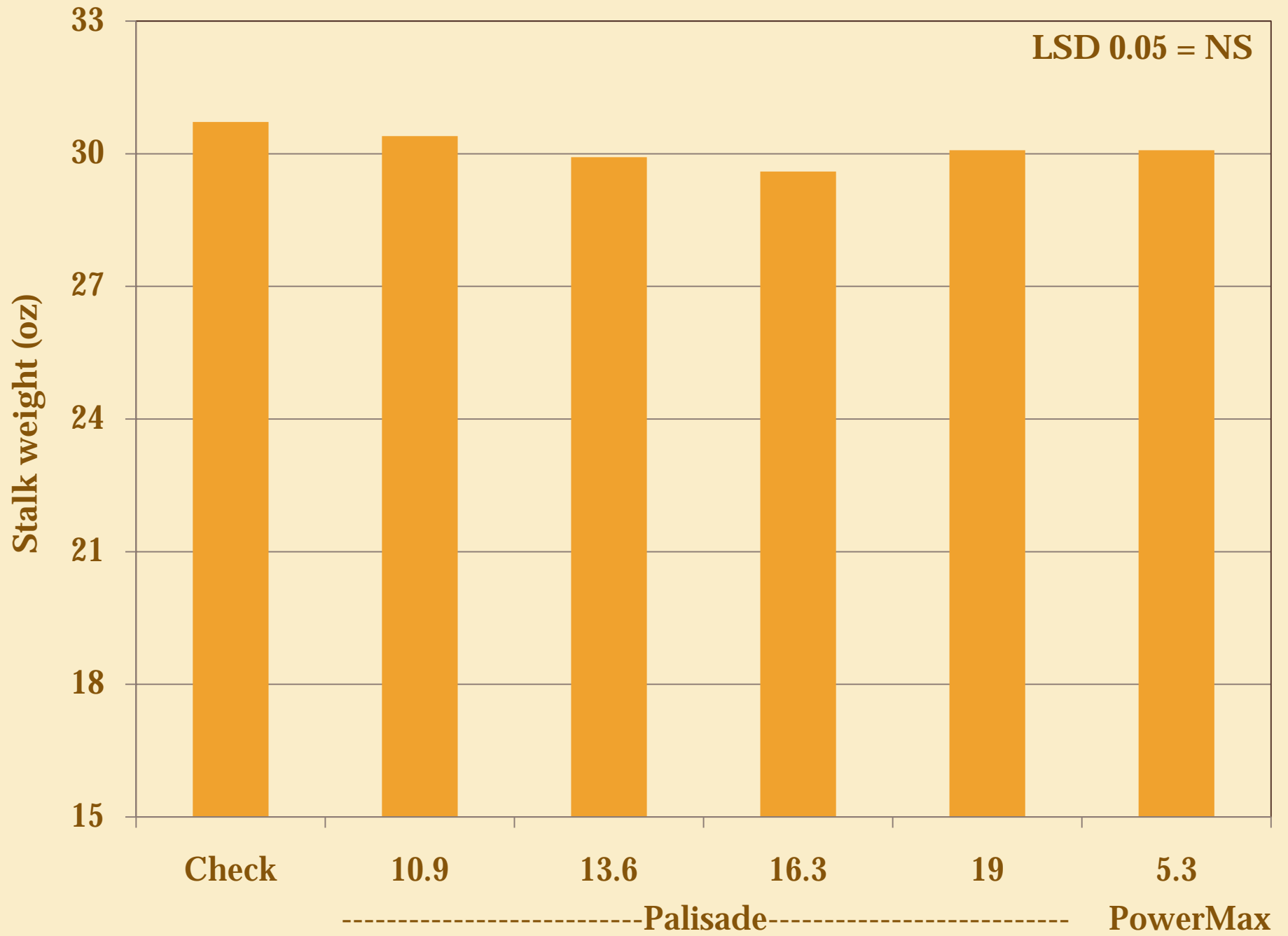
- i HoCP 95-988
- i L 01-283

# Palisade (trinexapac-ethyl)

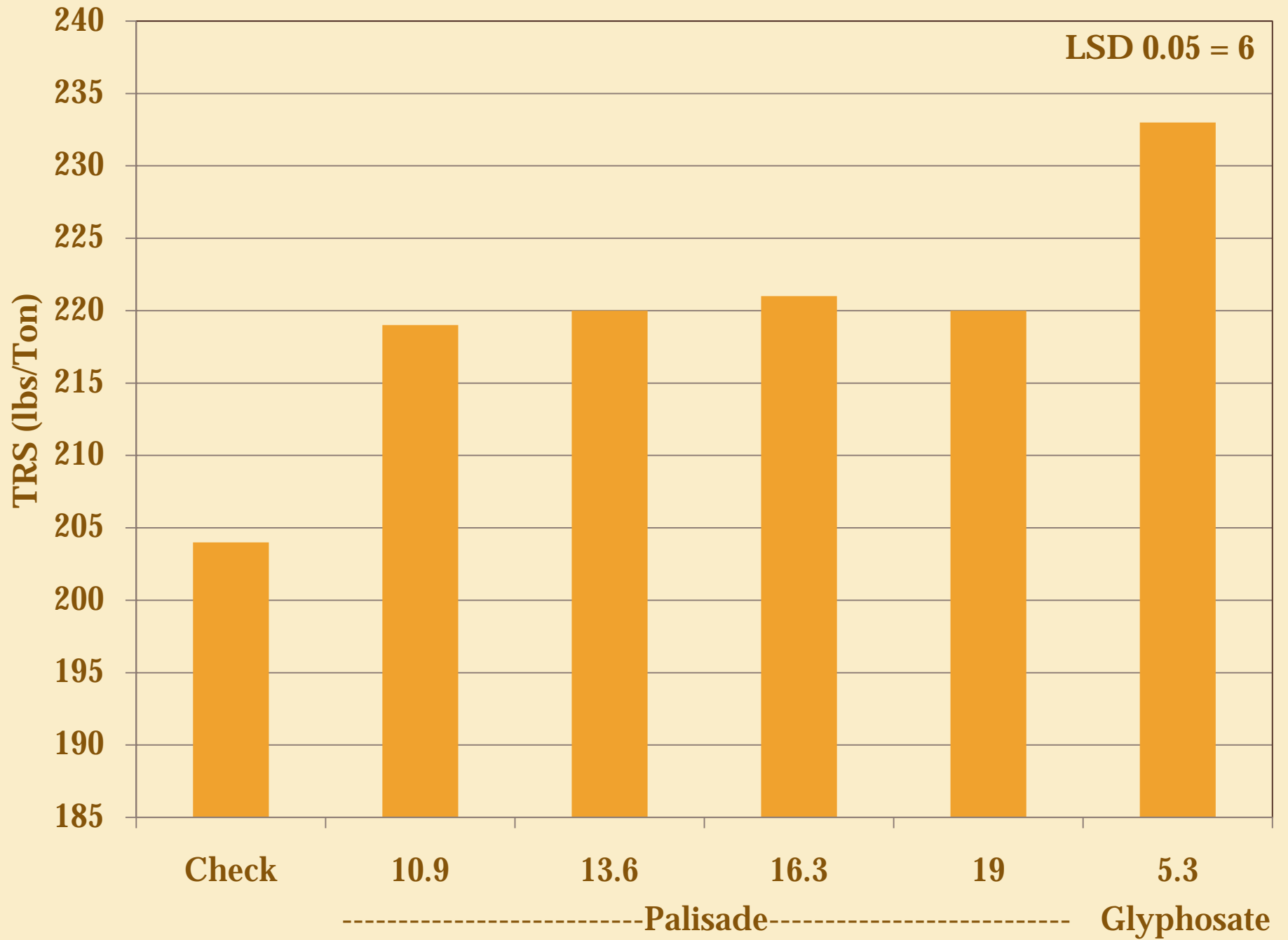
- Likely to be registered for 2012 harvest season
- Is not an herbicide;
  - It regulates cell elongation through inhibition of gibberellins
  - Results in short internodes (~one inch)
- Effects are temporary
  - Only 3 to four internodes are affected
- Should not impact subsequent stubble crops
  - Will not hurt cane if harvest is delayed
  - No observations of injury to cane emerging after application

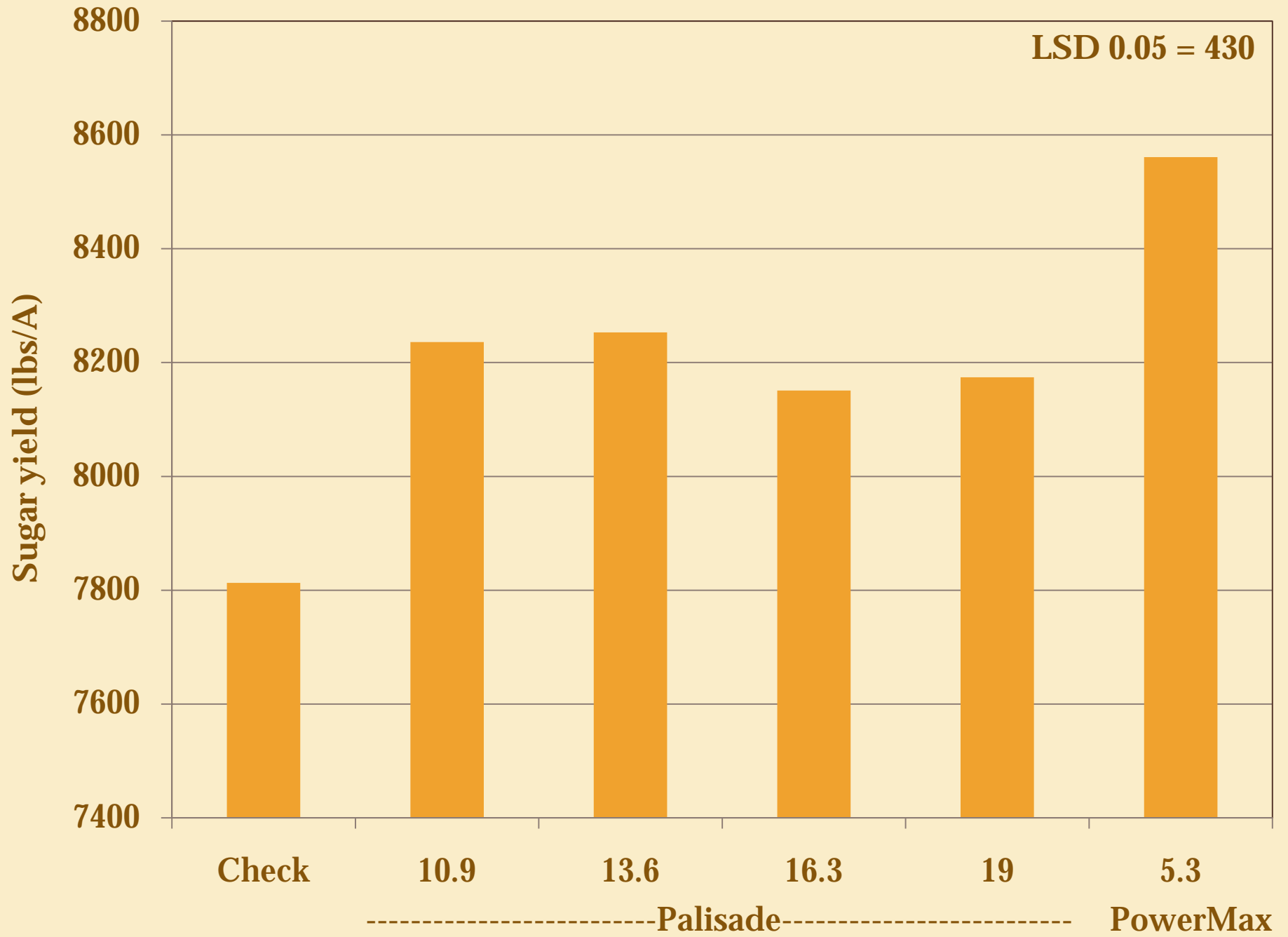
# Palisade (trinexapac-ethyl)

- .. **Trials with Palisade 2.1 EC at USDA-ARS**
  - ¡ **Nine studies conducted from 2004-2010**
  - ¡ **Rates evaluated: from 10.9 to 19 oz/A**
  - ¡ **Compared to glyphosate**
    - ú **5.3 oz Roundup PowerMax**
    - ú **6 oz Polado L**
    - ú **5.7 oz Touchdown Total**
  - ¡ **Most trials were conducted in HoCP 96-540, but also in LCP 85-384 and L 97-128**









# Palisade (trinexapac-ethyl)

- .. **Will increase TRS in sugarcane**
  - ¡ May not increase TRS as much as glyphosate
    - ú 16 lbs/Ton increase vs 29 lbs/Ton
    - ú Some varieties may respond better
  - ¡ Risk to crop will be less
    - ú Could be used in plant cane
    - ú No injury due to drift
- .. **Research needed**
  - ¡ Varietal response to Palisade
  - ¡ Effects of repeated annual applications through complete crop cycle
  - ¡ Sugarcane response to timing of application during harvest season (early, mid, late)
  - ¡ Possible tank-mixes that may improve performance

