



RESEARCH BREEDS CONFIDENCE

# Trial Info. – BTS CR+

- Planted: May 15, 2020
- Inoculated: July 7, 2020
- Harvested: September 18, 2020
- Location: Sec. 1, NW ¼; Champion Twp., Wilkin County
  
- Objective: Determine the best fungicide program for the new CLS tolerance varieties.

# Trial Info. – BTS CR+



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- Three fungicide programs were tested:
  - Early
    - Start on time but only 3 applications were made (last spray July 31)
  - Late
    - Start at the end of July and only spray 3 applications
  - Season-long
    - Follow the MDFC program – start on time and spray all season
- Three varieties were tested:
  - CR+ ~ CLS rating 1.90 ~ Beta 7996
  - CR<sub>1</sub> ~ CLS rating 2.52 ~ Beta 7974
  - Traditional ~ CLS rating 3.91 ~ Beta 7741

# CLS Rating Scale



**Category 1**  
1-5 spots/leaf  
0.1% severity



**Category 2**  
6-12 spots/leaf  
0.35% severity



**Category 3**  
13-25 spots/leaf  
0.75% severity



**Category 4**  
26-50 spots/leaf  
1.5% severity



**Category 5**  
51-75 spots/leaf  
2.5% severity



**Category 6**  
3% severity  
PROVEN ECONOMIC DAMAGE



**Category 7**  
6% severity



**Category 8**  
12% severity



**Category 9**  
25% severity



**Category 10**  
50% severity



# BTS CR+

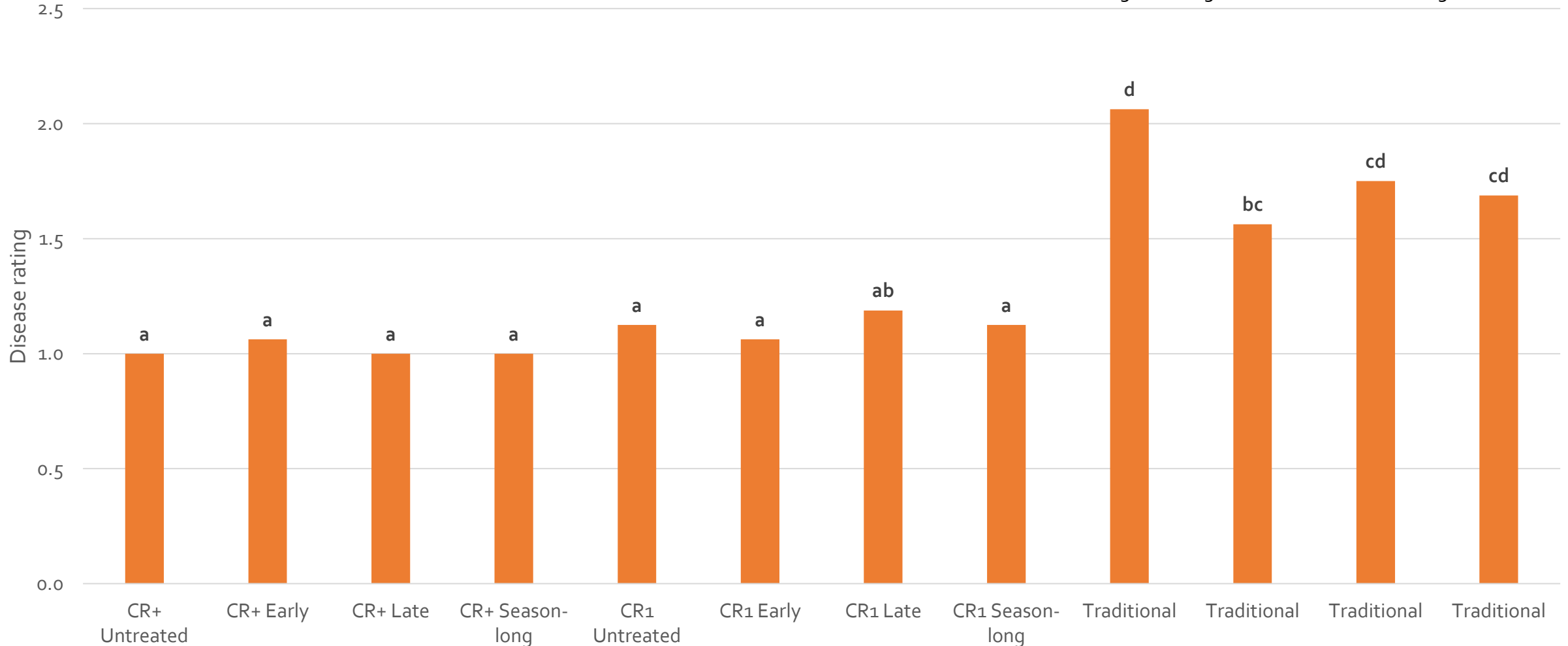
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LSD (p=0.10): 0.38  
CV: 24.12

## CLS Rating ~ August 11, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*





# BTS CR+

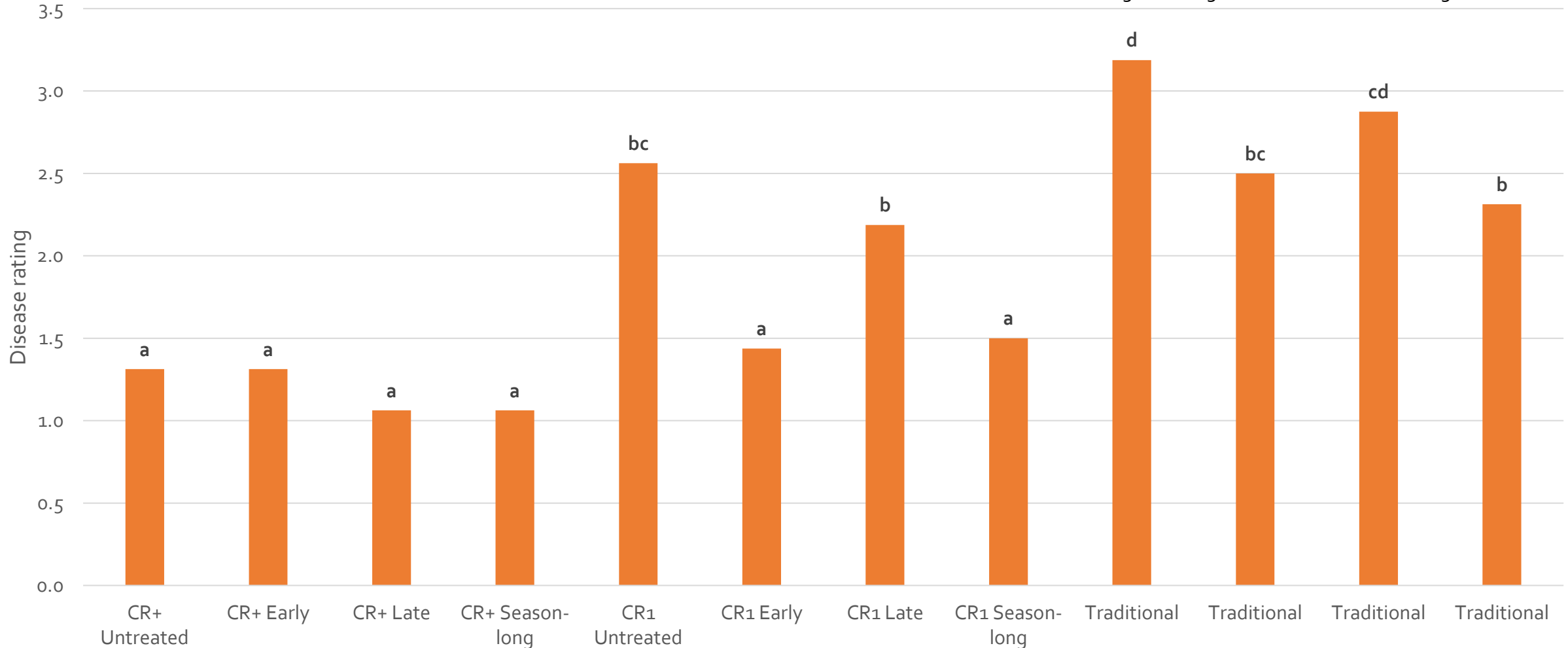
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LSD (p=0.10): 0.53  
CV: 22.90

## CLS Rating ~ August 19, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*



# BTS CR+

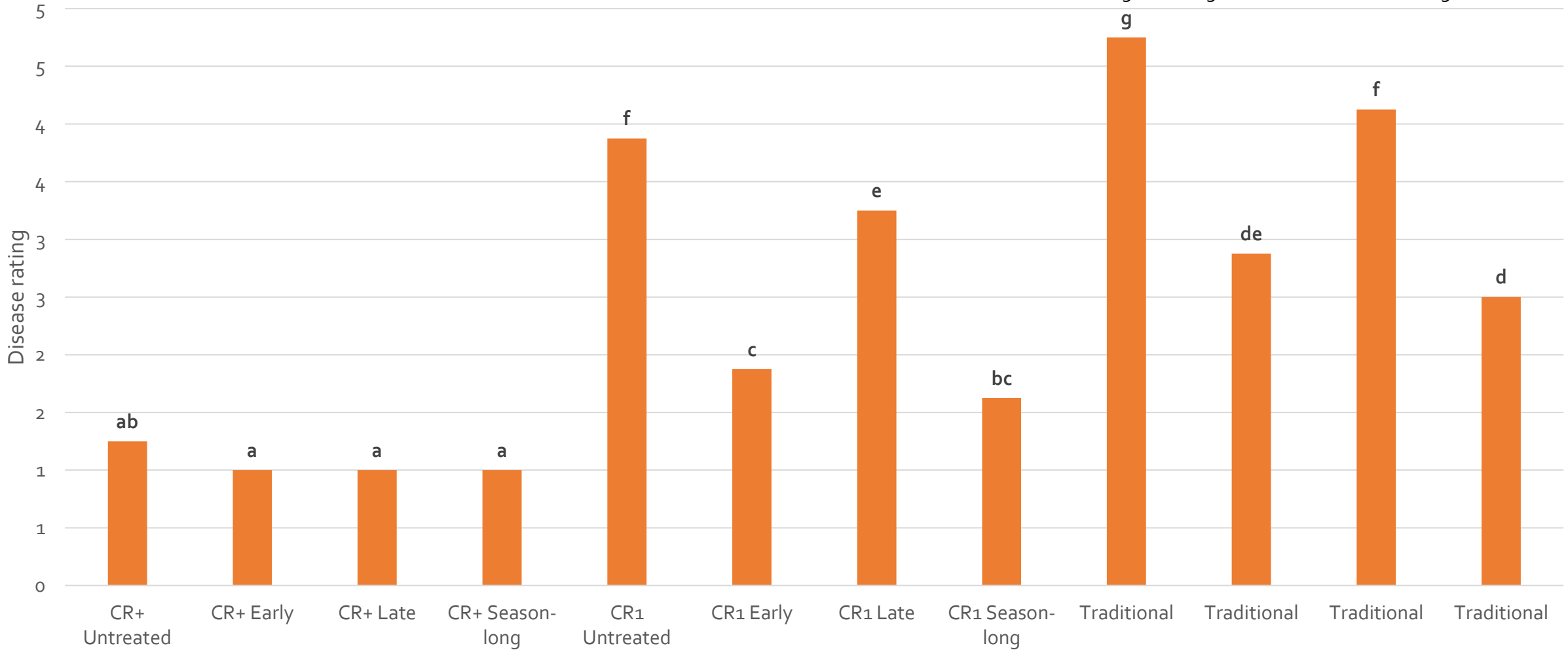
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LSD (p=0.10): 0.45  
CV: 15.36

## CLS Rating ~ August 26, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*



# BTS CR+

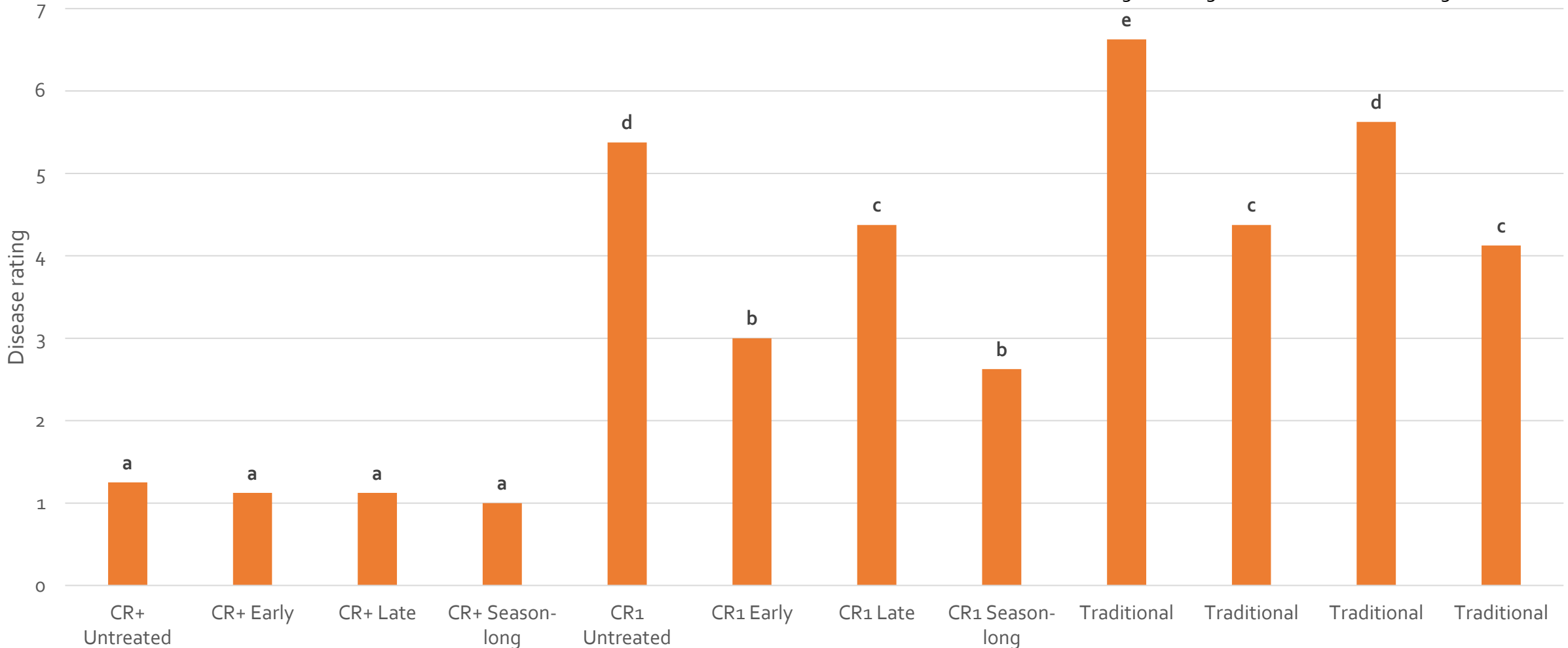
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LSD (p=0.10): 0.73  
CV: 18.12

## CLS Rating ~ September 2, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*



# BTS CR+

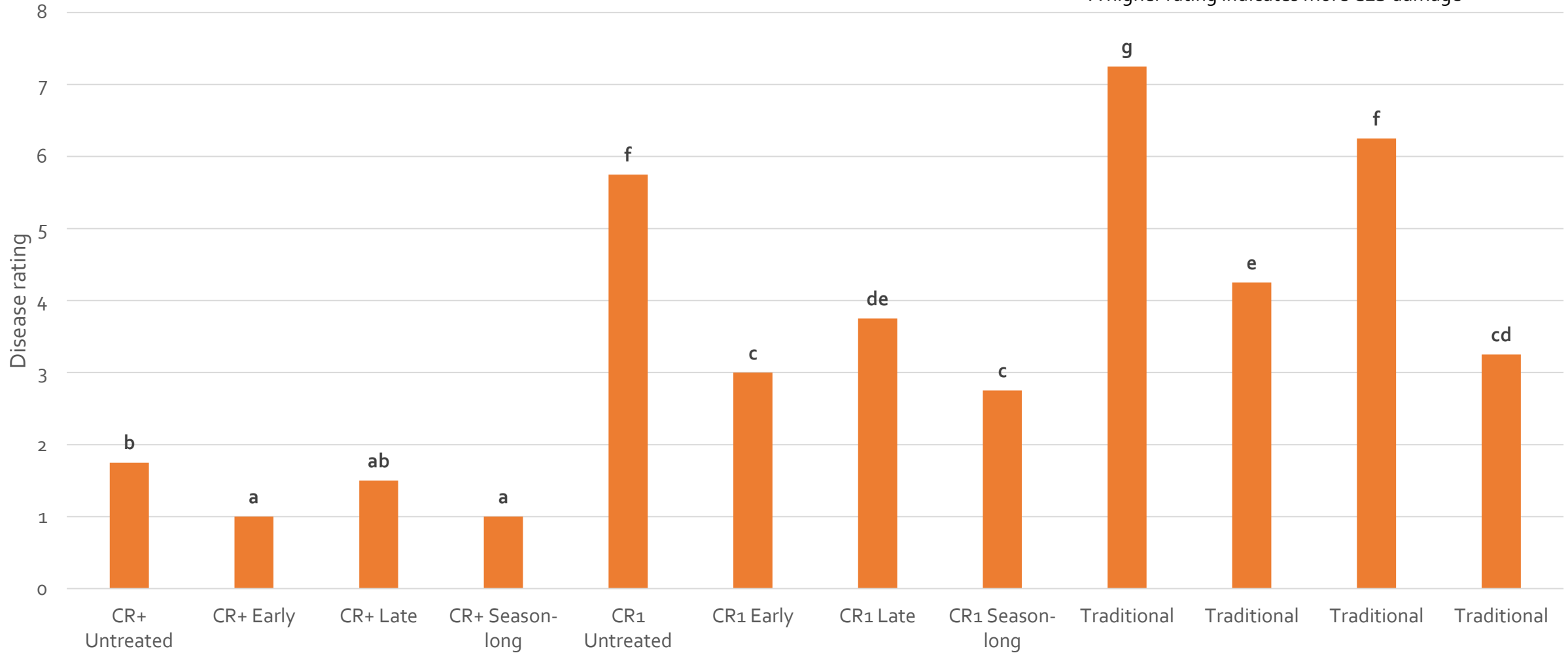
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LSD (p=0.10): 0.75  
CV: 18.09

## CLS Rating ~ September 8, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*



# BTS CR+

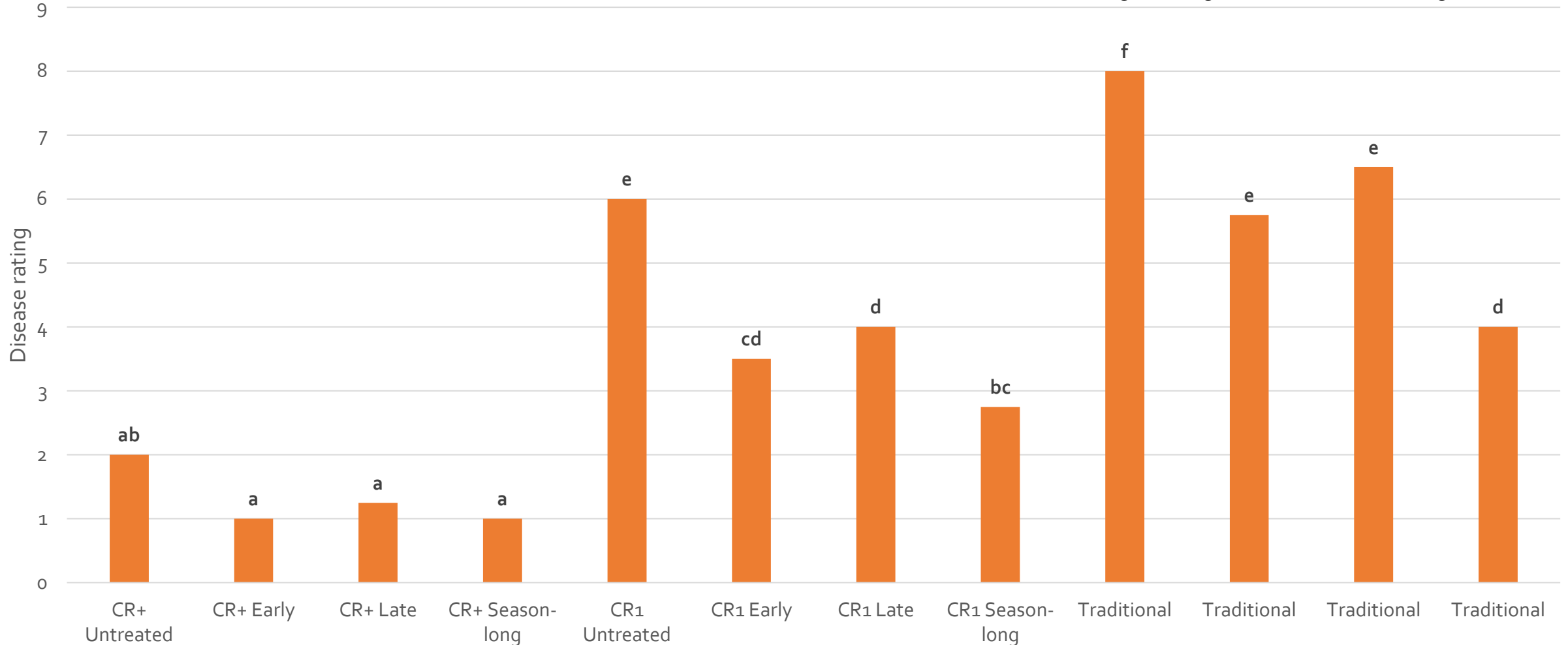
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LSD (p=0.10): 1.16  
CV: 25.43

## CLS Rating ~ September 15, 2020

\* A higher rating indicates more CLS damage \*



\*Treatments with the same letter are not statistically different\*



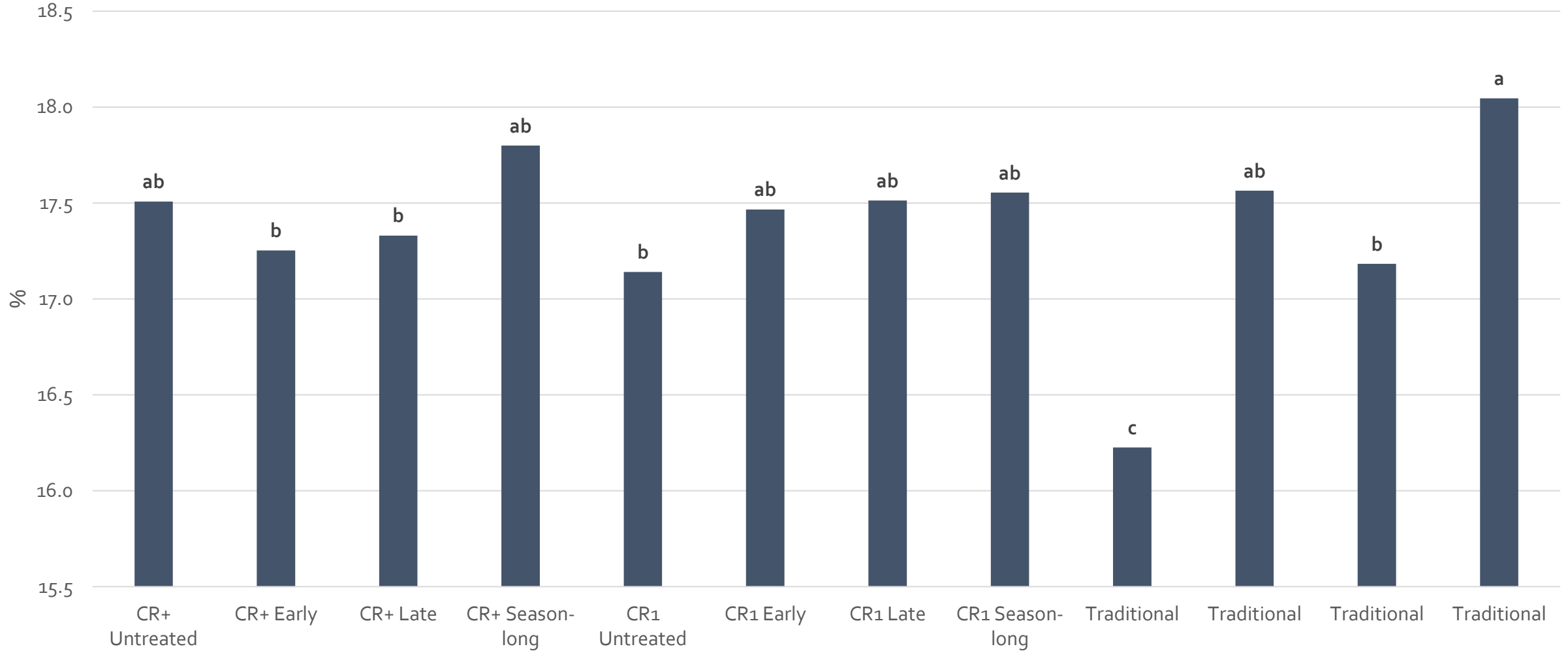
# BTS CR+

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LSD (p=0.10): 0.68  
CV: 3.29

## % Sugar



\*Treatments with the same letter are not statistically different\*





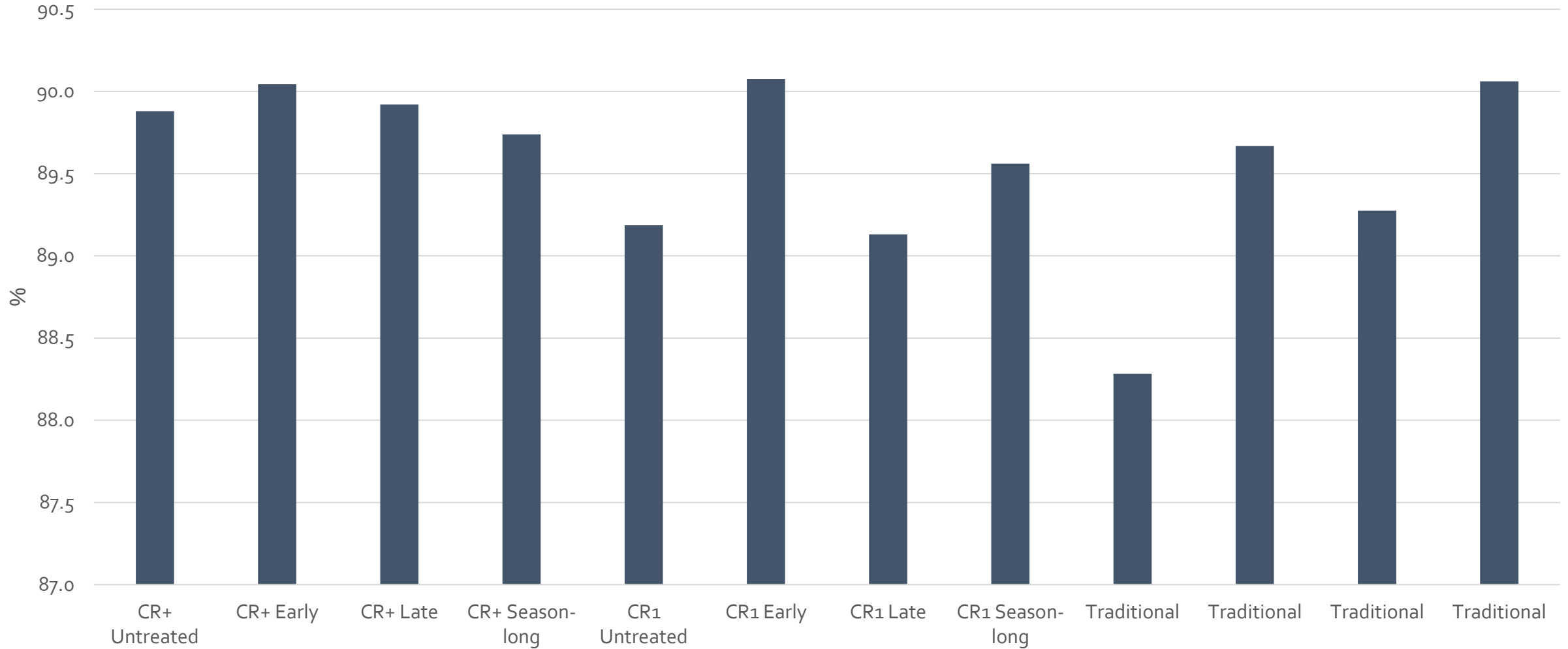
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# BTS CR+



LSD (p=0.10): NS  
CV: 1.00

% Purity





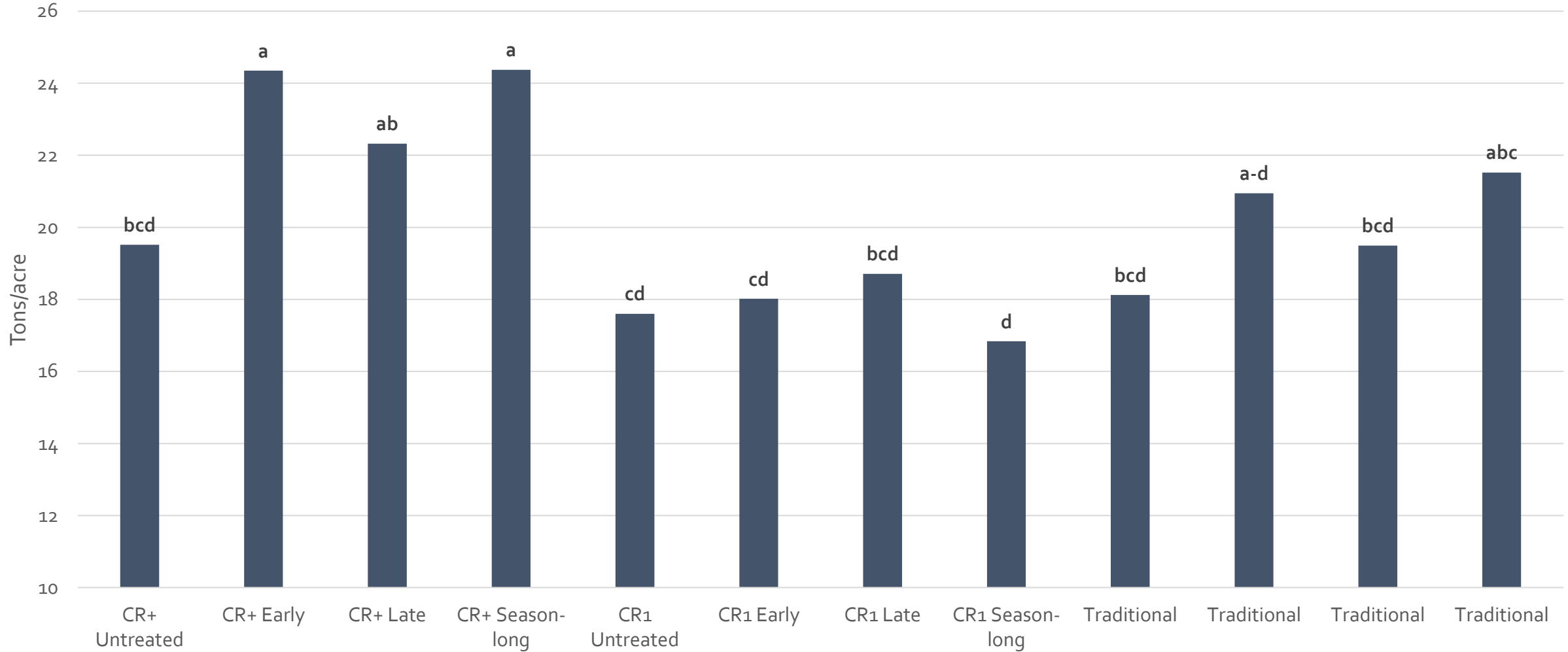
# BTS CR+

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LSD (p=0.10): 4.26  
CV: 17.65

## Root Yield



\*Treatments with the same letter are not statistically different\*



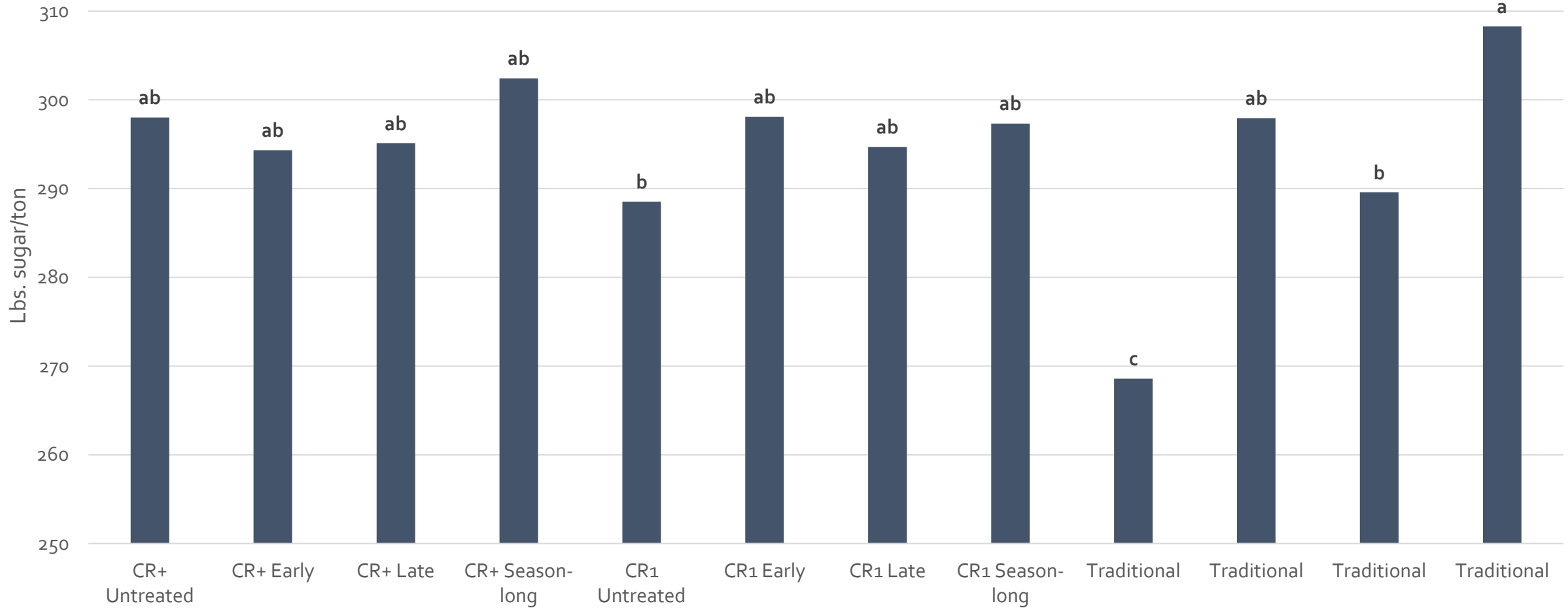
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# BTS CR+



LSD (p=0.10): 14.09  
CV: 4.00

## Recoverable Sugar per Ton



\*Treatments with the same letter are not statistically different\*



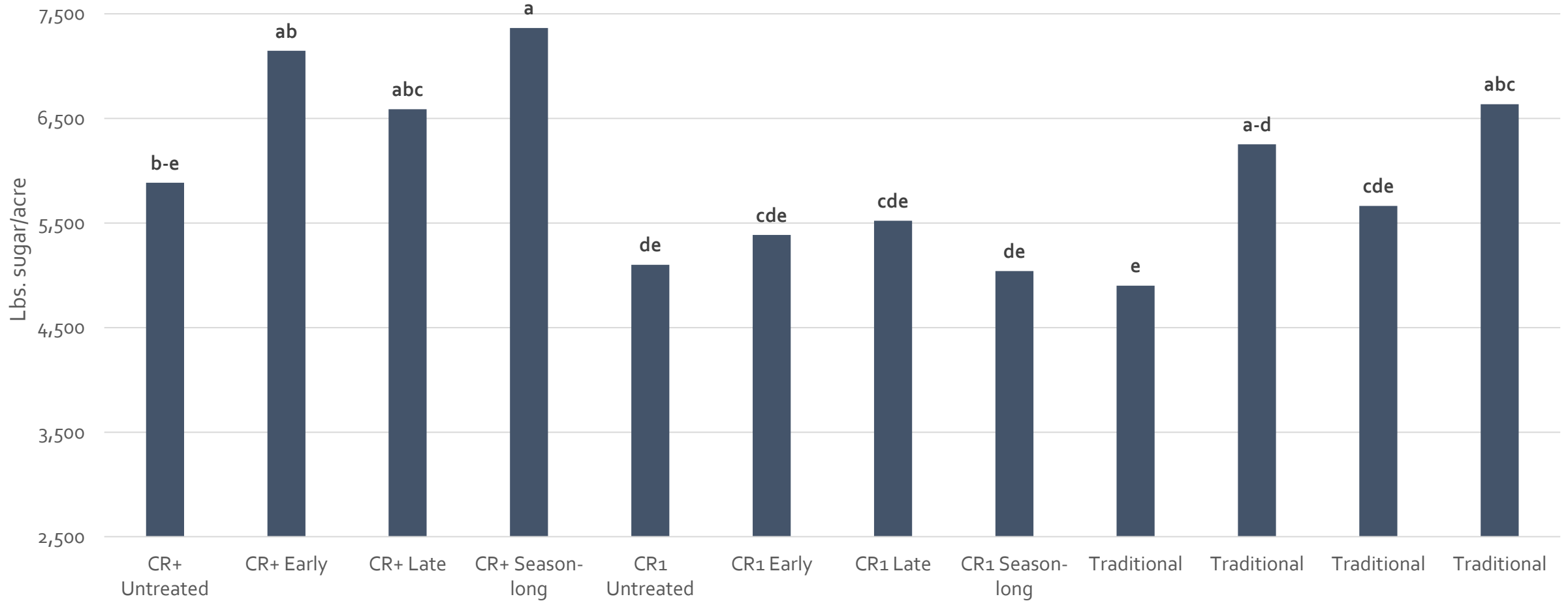
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# BTS CR+



LSD (p=0.10): 1,338.06  
CV: 18.77

## Recoverable Sugar per Acre



\*Treatments with the same letter are not statistically different\*





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CR+ Untreated ~ 9/15/2020





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CR+ Early ~ 9/15/2020





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CR+ Late ~ 9/15/2020





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CR+ Season-long ~ 9/15/2020





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CR1 Untreated ~ 9/15/2020





RESEARCH BREEDS CONFIDENCE



CR1 Early ~ 9/15/2020





RESEARCH BREEDS CONFIDENCE



CR1 Late ~ 9/15/2020





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CR<sub>1</sub> Season-long ~ 9/15/2020





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Traditional Untreated ~ 9/15/2020





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Traditional Early ~ 9/15/2020





RESEARCH BREEDS CONFIDENCE



Traditional Late ~ 9/15/2020





RESEARCH BREEDS CONFIDENCE



Traditional Season-long ~ 9/15/2020

