

Trial Info.



- Planted: May 5, 2025
- Inoculated*: July 2, 2025
- Harvested: September 27, 2025
- Location: Akron Twp, Wilkin County, MN
- Variety: HIL 2325 (*Non-CR+*)
 - CLS Rating = 3.69
- Objective: Evaluate the yield and quality response (if any) of applying differing fungicide tank mixtures.

**This trial was inoculated, meaning we ensured that CLS was present by spreading infected leaves from the previous season, and as such was conducted under very high disease pressure. Disease ratings from this trial are higher than what we would expect in a typical field environment.*

2025 Non-CR+: CLS Program ~ Order

Minn-Dak Farmers Cooperative



Treatment #	Treatment Name	Products Applied	Application Date				
1	Proline app. 1 / Provysol app. 5	Proline + Manzate + NIS	June 30, 2025				
		AgriTin + Topsin	July 14, 2025				
		Headline + Manzate	July 29, 2025				
		AgriTin + Manzate	August 11, 2025				
		Provysol + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
2	Proline app. 1 / Inspire XT app. 5	Proline + Manzate + NIS	June 30, 2025				
		AgriTin + Topsin	July 14, 2025				
		Headline + Manzate	July 29, 2025				
		AgriTin + Manzate	August 11, 2025				
		Inspire XT + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
3	Headline app. 1 / Proline app. 3	Headline + Manzate	June 30, 2025				
		AgriTin + Topsin	July 14, 2025				
		Proline + Manzate + NIS	July 29, 2025				
		AgriTin + Manzate	August 11, 2025				
		Provysol + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
4	Headline app. 1 / Proline app. 2	Headline + Manzate	June 30, 2025				
		Proline + Manzate + NIS	July 14, 2025				
		AgriTin + Topsin	July 29, 2025				
		Provysol + Manzate	August 11, 2025				
		AgriTin + Manzate	August 25, 2025				
		Manzate	September 8, 2025				
5	Proline app. 1 / Headline app. 2	Proline + Manzate + NIS	June 30, 2025				
		Headline + Manzate	July 14, 2025				
		AgriTin + Topsin	July 29, 2025				
		Provysol + Manzate	August 11, 2025				
		AgriTin + Manzate	August 25, 2025				
		Manzate	September 8, 2025				

Rates:

Manzate Max	1.6 qt/a
Proline 480 SC	5.7 fl oz/a
NIS	0.125% v/v
AgriTin	8 fl oz/a
Topsin	10 fl oz/a
Headline	9 fl oz/a
Provysol	4 fl oz/a
Inspire XT	7 fl oz/a
Verpixo	20.5 fl oz/a



6	EBDC app. 1	Manzate	June 30, 2025				
		Proline + Manzate + NIS	July 14, 2025				
		Headline + Manzate	July 29, 2025				
		AgriTin + Topsin	August 11, 2025				
		Provysol + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
7	ACSC rec.	Proline + Manzate + NIS	June 30, 2025			<i>Rates:</i>	
		Manzate	July 14, 2025			<i>Manzate Max</i>	1.6 qt/a
		AgriTin + Topsin	July 29, 2025			<i>Proline 480 SC</i>	5.7 fl oz/a
		Provysol + Manzate	August 11, 2025			<i>NIS</i>	0.125% v/v
		Manzate	August 25, 2025			<i>AgriTin</i>	8 fl oz/a
		Headline + AgriTin	September 8, 2025			<i>Topsin</i>	10 fl oz/a
						<i>Headline</i>	9 fl oz/a
8	Headline app. 3 / Verpixo app. 4	Proline + Manzate + NIS	June 30, 2025			<i>Provysol</i>	4 fl oz/a
		AgriTin + Topsin	July 14, 2025			<i>Inspire XT</i>	7 fl oz/a
		Headline + Manzate	July 29, 2025			<i>Verpixo</i>	20.5 fl oz/a
		Verpixo + Manzate	August 11, 2025				
		AgriTin + Manzate	August 25, 2025				
		Provysol + Manzate	September 8, 2025				
9	Headline app. 2 / Verpixo app. 4	Proline + Manzate + NIS	June 30, 2025				
		Headline + Manzate	July 14, 2025				
		AgriTin + Topsin	July 29, 2025				
		Verpixo + Manzate	August 11, 2025				
		Provysol + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
10	Verpixo app. 1	Verpixo + Manzate	June 30, 2025				
		Proline + Manzate + NIS	July 14, 2025				
		Headline + Manzate	July 29, 2025				
		AgriTin + Manzate	August 11, 2025				
		Provysol + Manzate	August 25, 2025				
		AgriTin + Manzate	September 8, 2025				
11	Untreated Check						



<i>Applications</i>						
<i>Date:</i>	Jun-30-2025	Jul-14-2025	Jul-29-2025	Aug-11-2025	Aug-25-2025	Sep-8-2025
<i>Start Time:</i>	4:38 PM	4:36 PM	2:34 PM	3:11 PM	1:45 PM	12:50 PM
<i>End Time:</i>	5:40 PM	5:31 PM	3:37 PM	4:00 PM	2:25 PM	1:39 PM
<i>Application Method:</i>	Spray	Spray	Spray	Spray	Spray	Spray
<i>Application Timing:</i>	Preventative	Fixed Interval	Fixed Interval	Fixed Interval	Fixed Interval	Fixed Interval
<i>Application Placement:</i>	Foliar	Foliar	Foliar	Foliar	Foliar	Foliar
<i>Temperature (F):</i>	75	89	80	84	68	72
<i>Humidity (%):</i>	63	48	63	66	47	67
<i>Wind Velocity (MPH):</i>	7	4.5	3	3	4	4
<i>Wind Direction:</i>	NW	SSE	N	S	NW	S

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



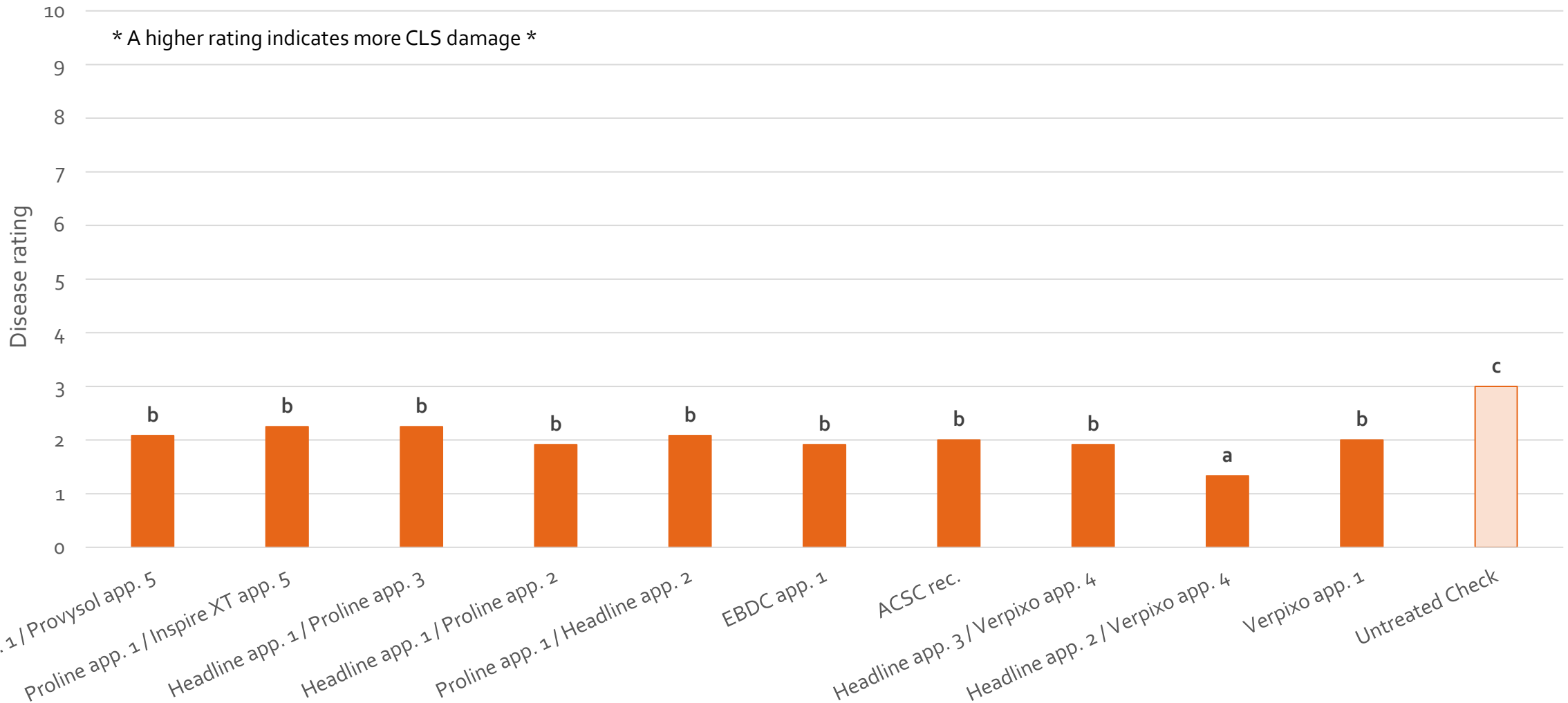
Category 10
50% severity

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.56
CV: 22.57



CLS Rating – August 1, 2025



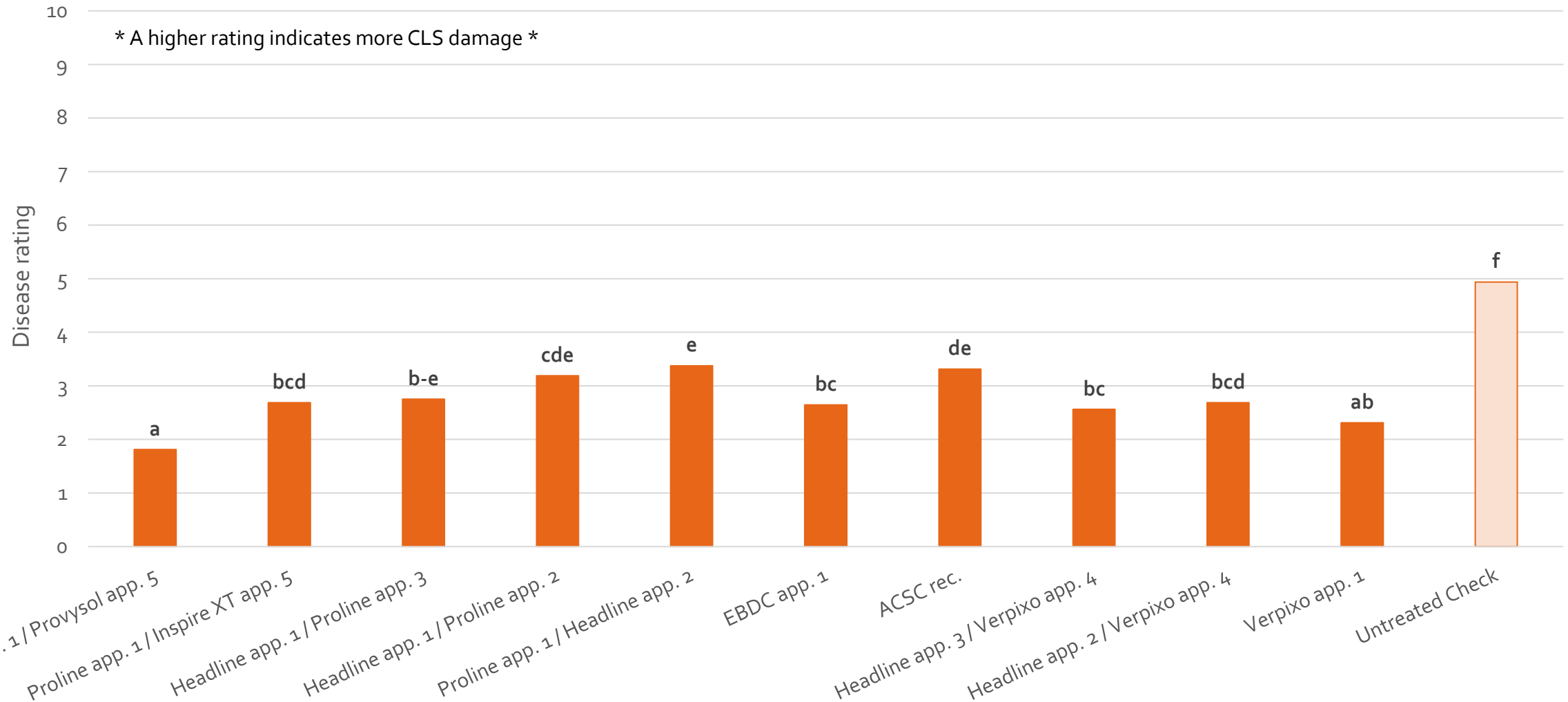
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.63
CV: 17.76



CLS Rating – August 7, 2025



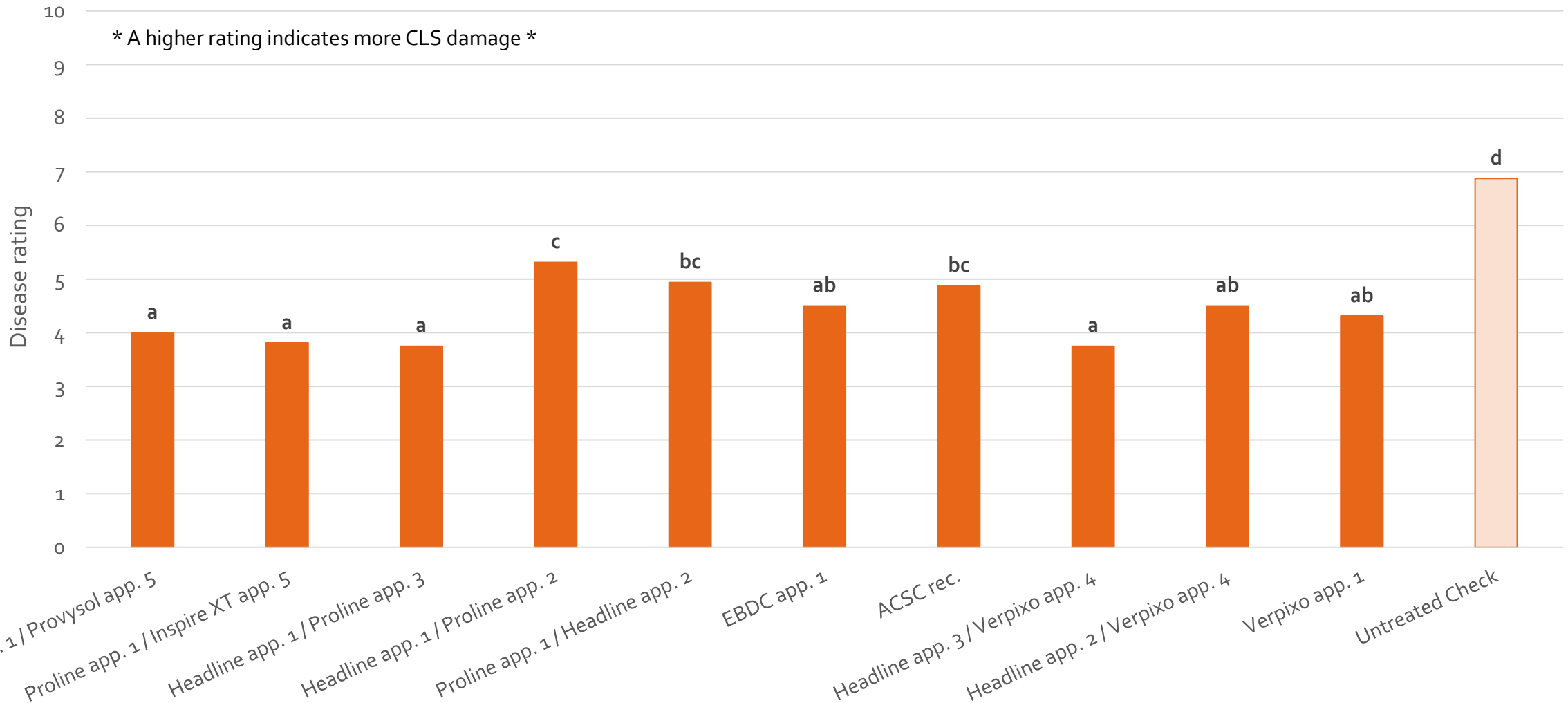
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.79
CV: 14.26



CLS Rating – August 11, 2025



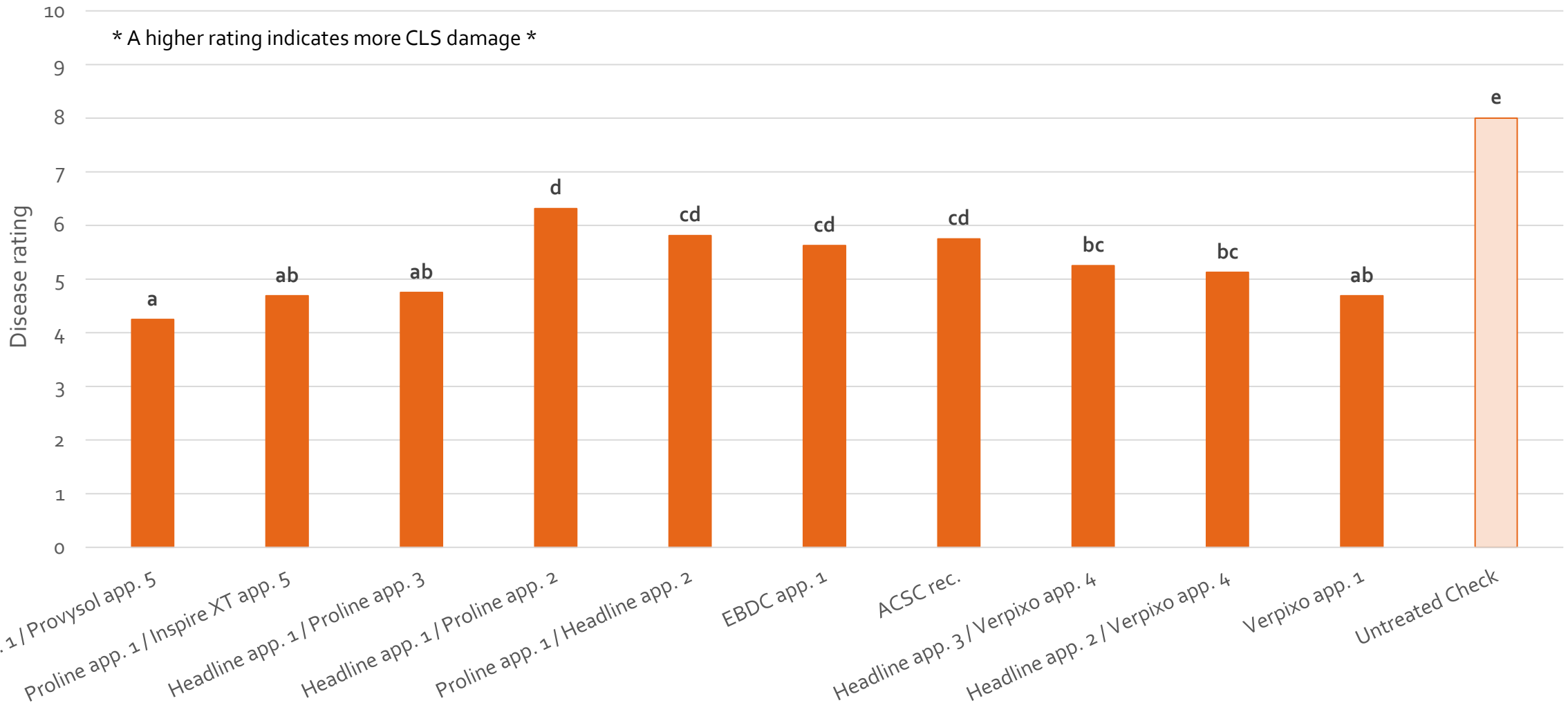
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.85
CV: 12.96



CLS Rating – August 14, 2025



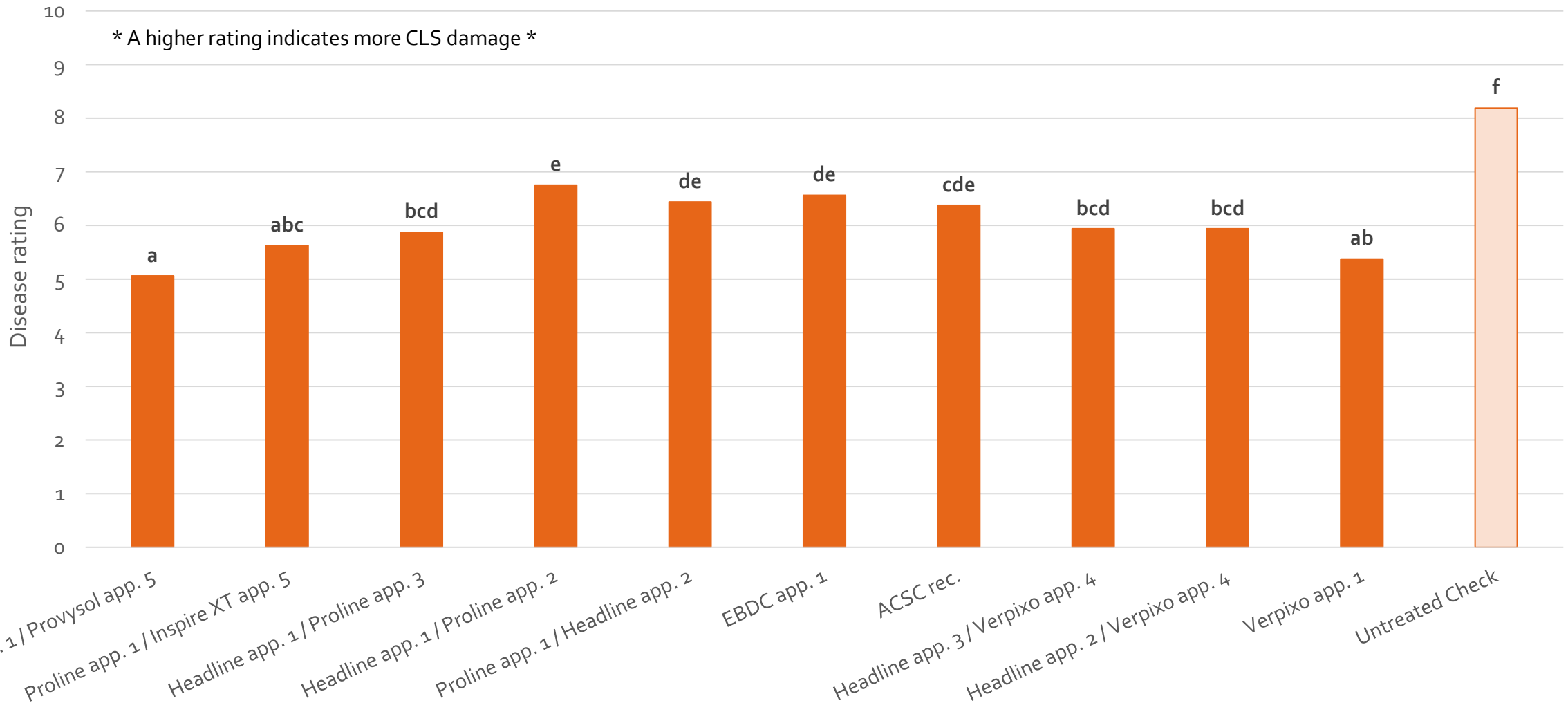
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.77
CV: 10.30



CLS Rating – August 18, 2025



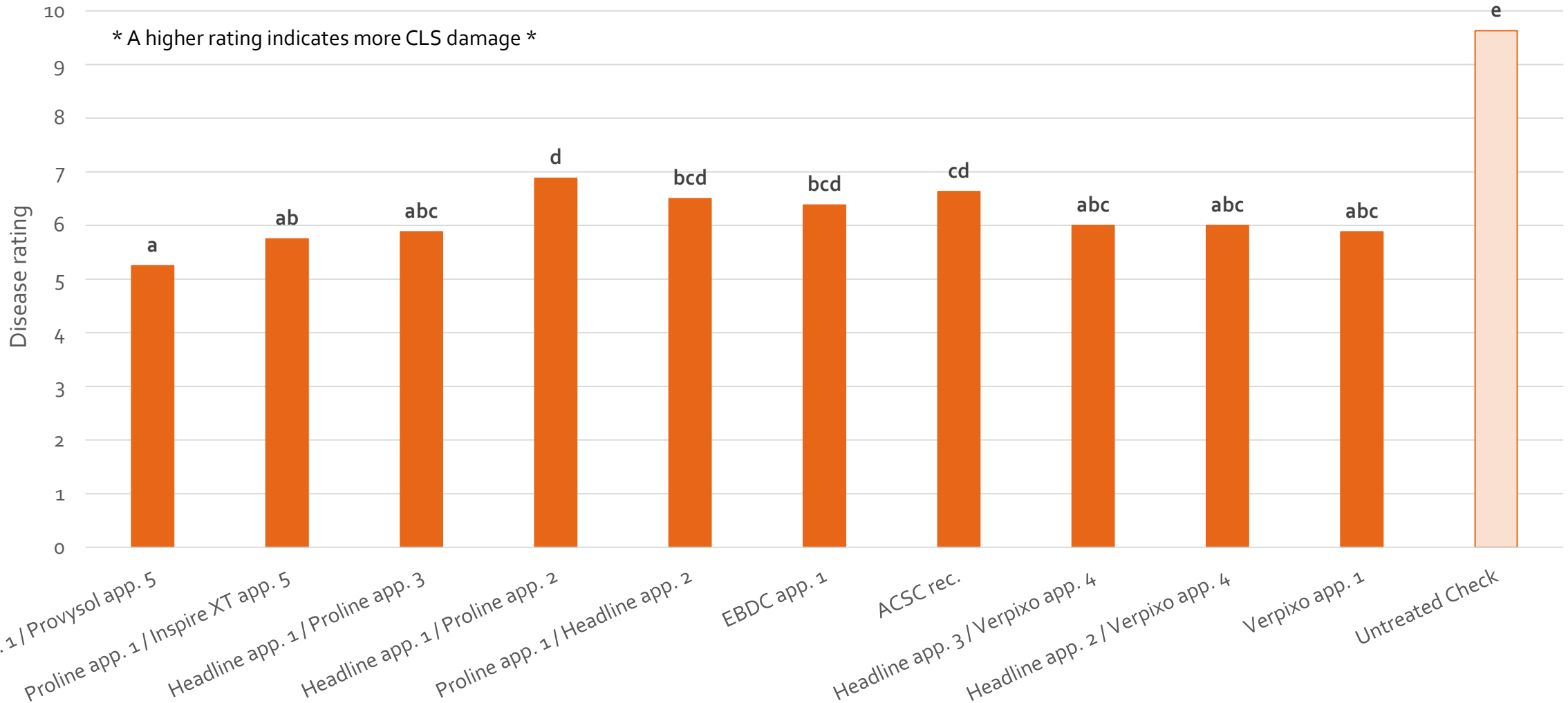
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.77
CV: 10.02



CLS Rating – August 21, 2025

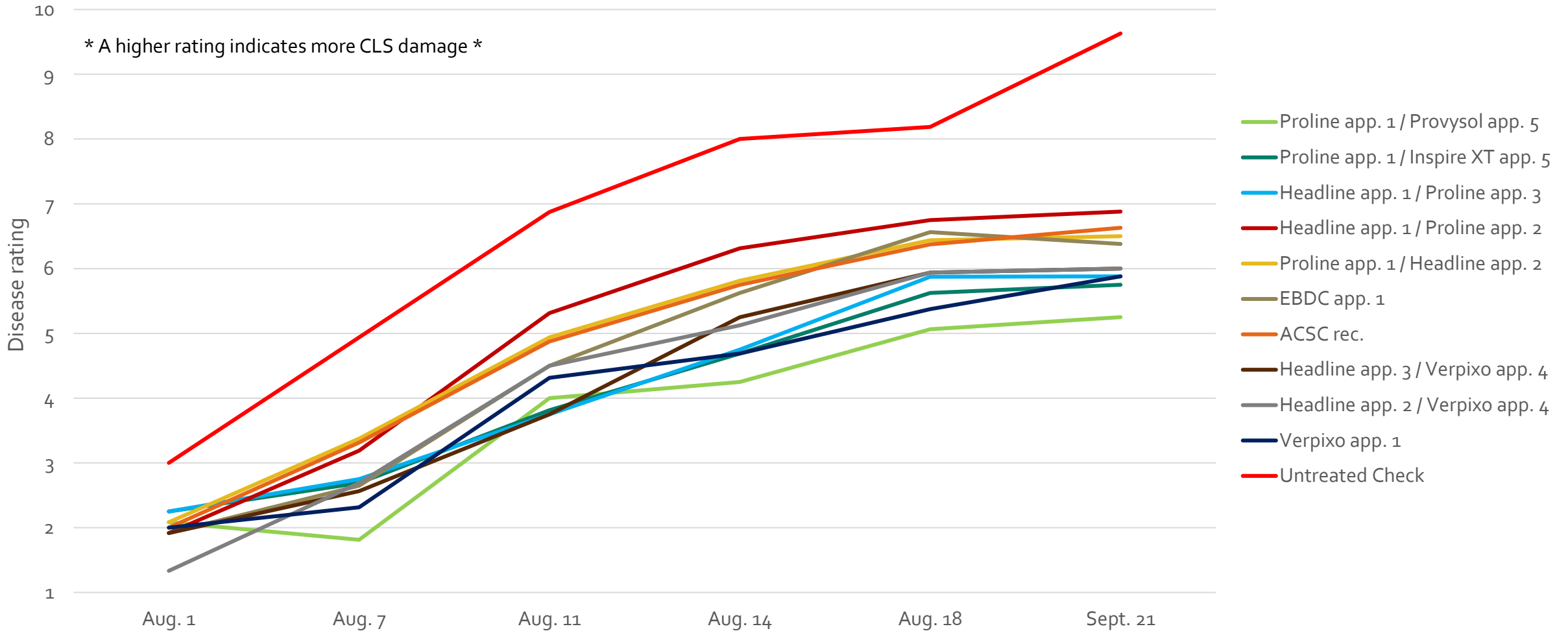


Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order



CLS Rating – Season-long

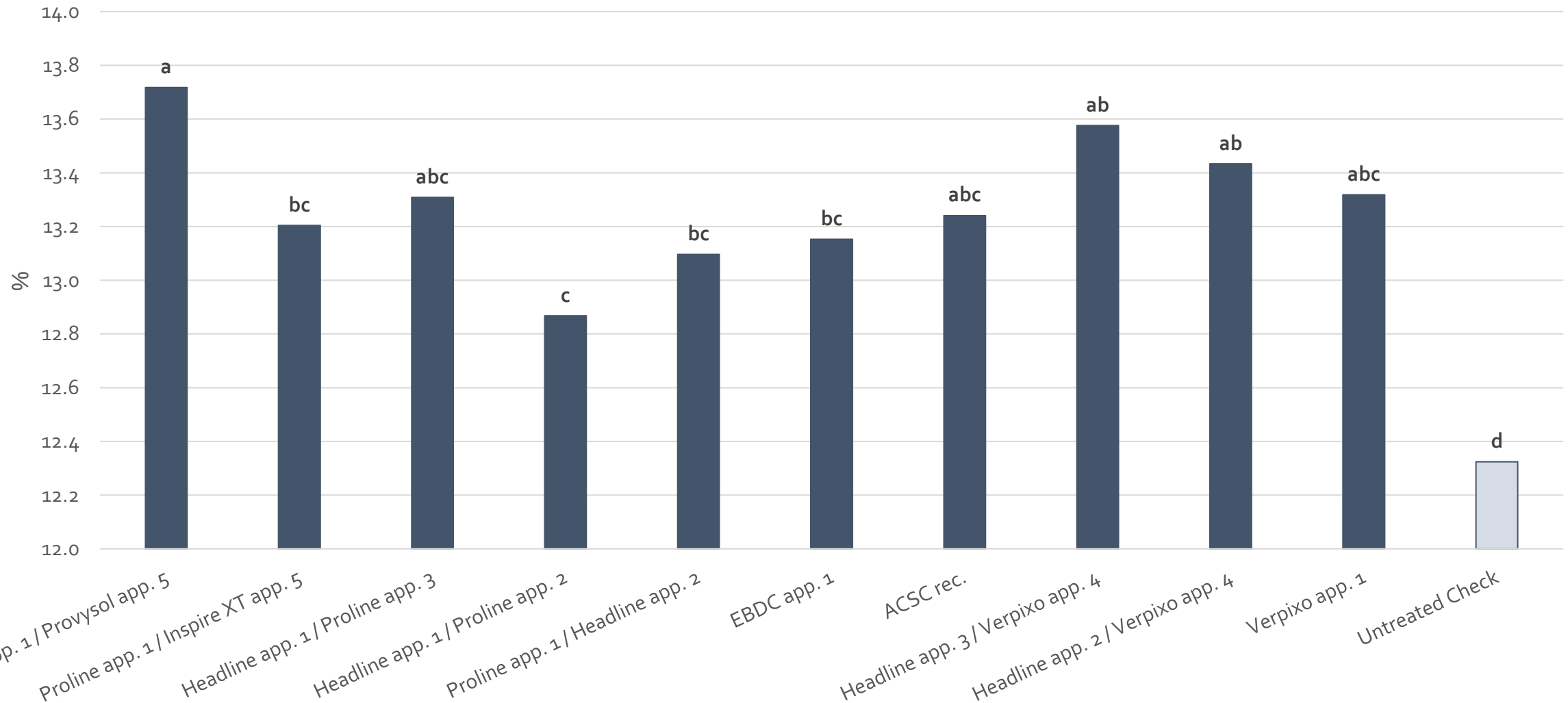


Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): 0.48
CV: 3.03



% Sugar



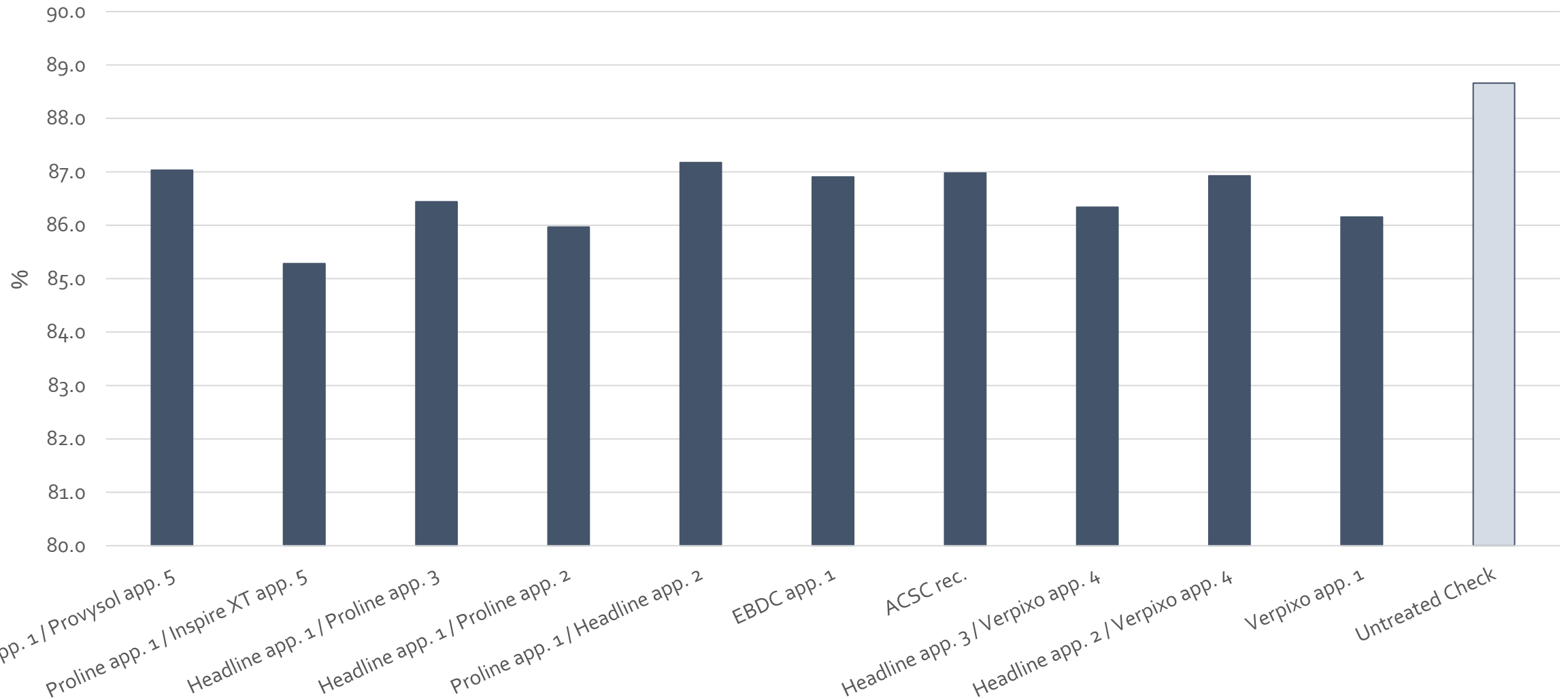
Treatments with the same letter are not statistically different

Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): NS
CV: 1.48



% Purity

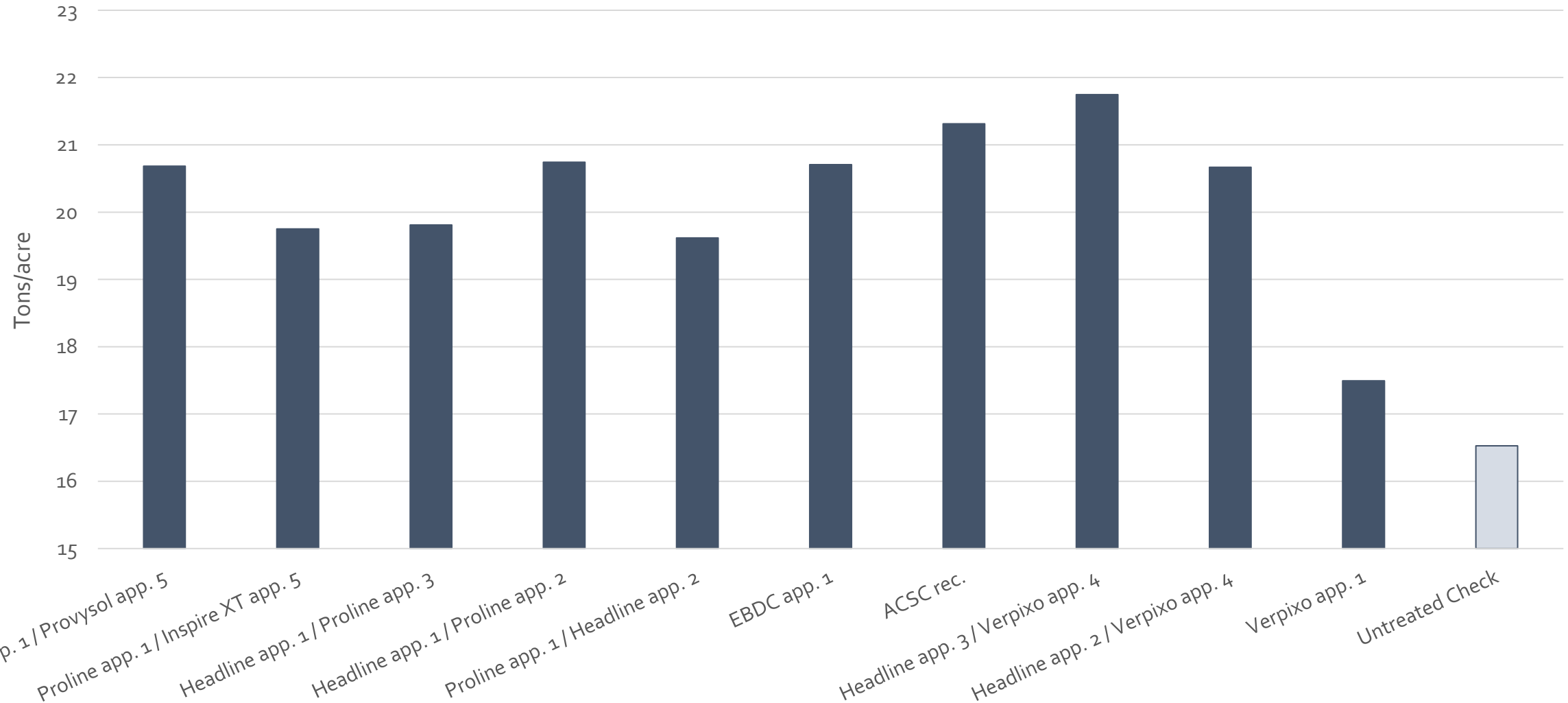


Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): NS
CV: 20.42



Root Yield

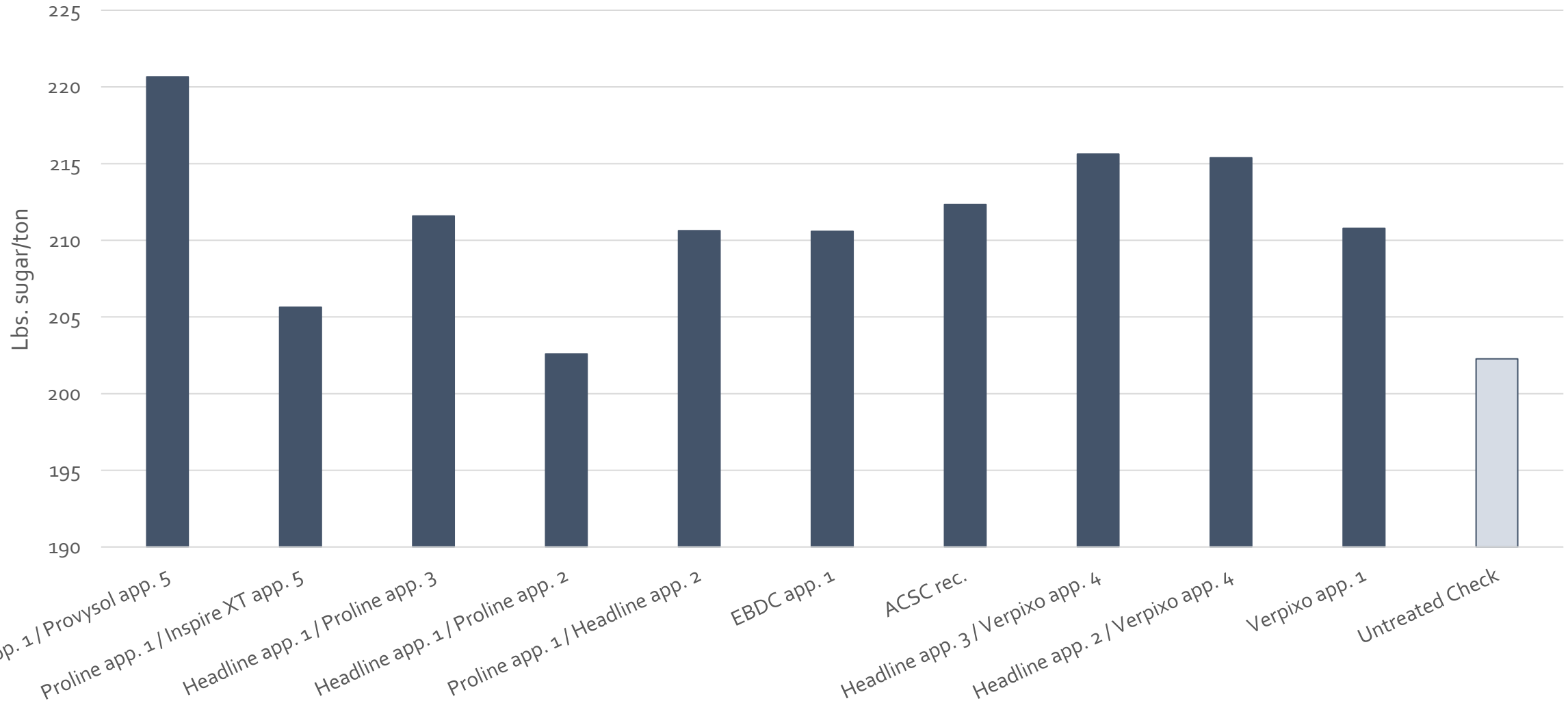


Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): NS
CV: 4.90



Recoverable Sugar per Ton



Non-CR+: CLS Fungicide Program ~ Order

LSD (p=0.10): NS
CV: 22.82



Recoverable Sugar per Acre

