



Soybean Trial

UAS

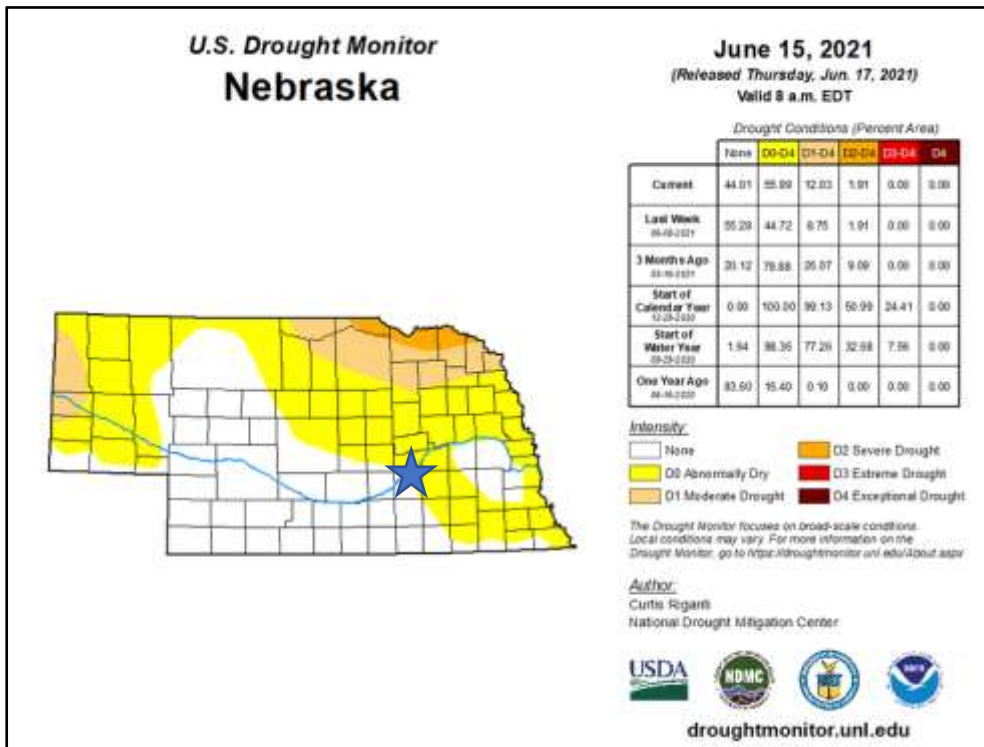
Unified Ag Solutions



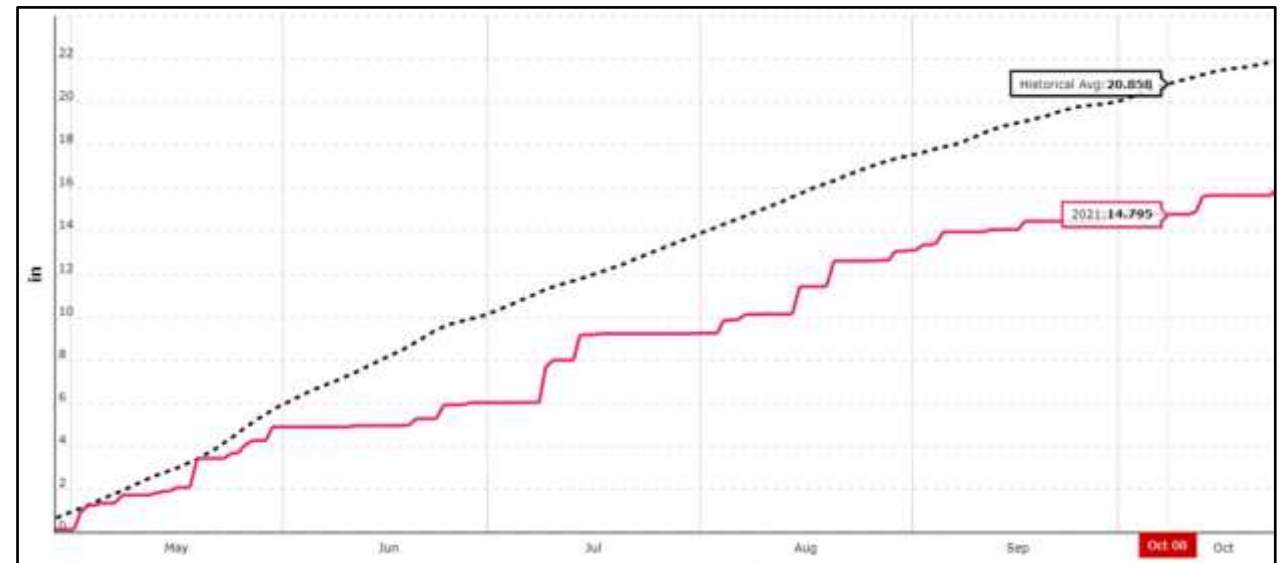
Soybean

Trial Location: *Aurora, NE*

Drought Monitor



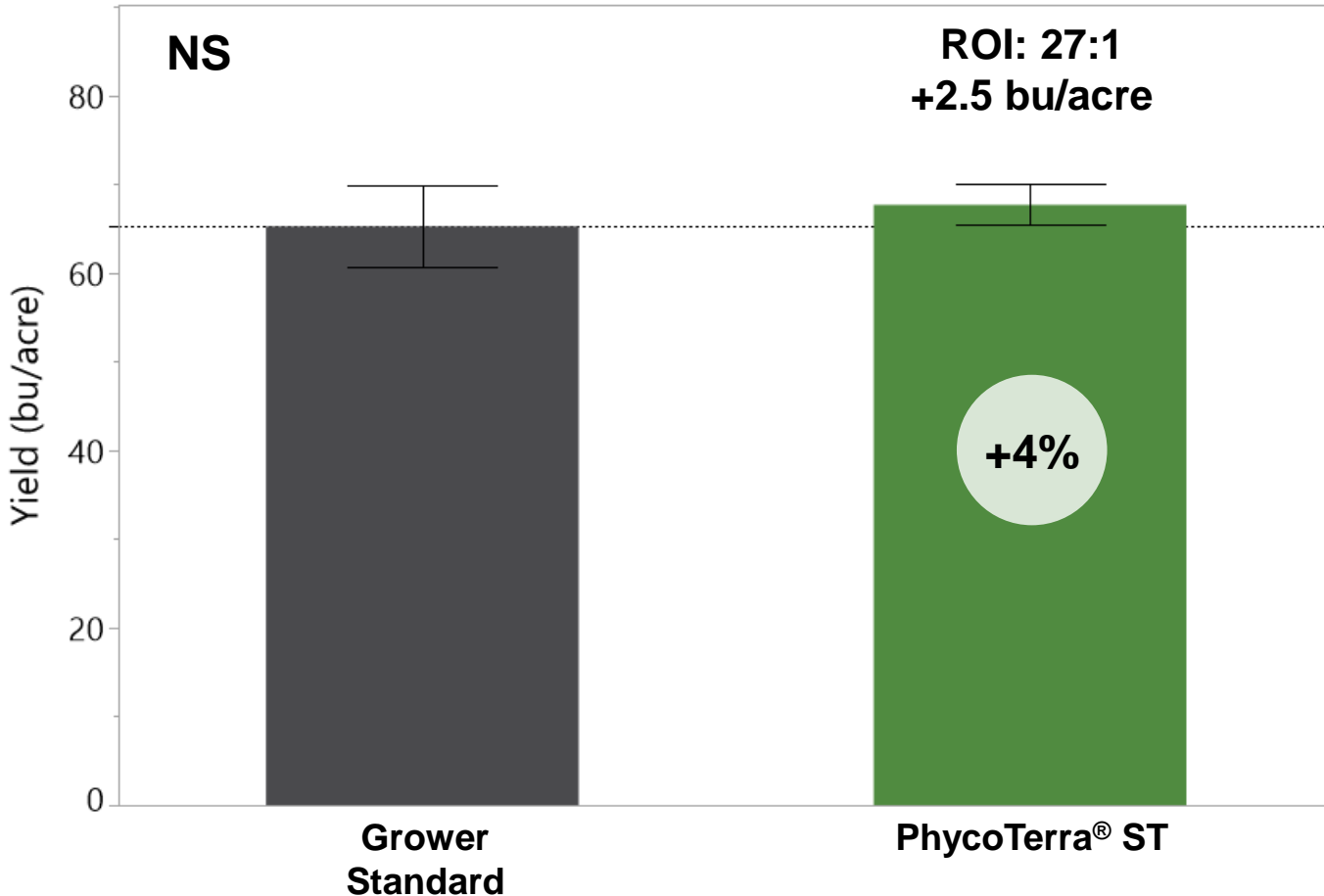
Rainfall





Soybean

Trial Location: *Aurora, NE*



SOIL TYPE:
Silty Clay Loam

APPLICATION RATE:
PhycoTerra® ST (2 fl oz/CWT)

ORGANIC MATTER:
3.6%

APPLICATION TIMING:
PhycoTerra® ST applied on top of standard seed treatment

VARIETY:
AG29X9

TRIAL INFO:
3rd Party CRO

PLANTING/HARVEST INFO:
May-October 2021

**Error bars represent 90% Confidence Interval, Significance tested using LSMeans Dunnett ($\alpha=0.1$)*

PhycoTerra[®] ST Soybeans

APPLICATION RATE:
PhycoTerra[®] ST (1 fl oz/CWT)
Win Rate: 69%
Average ROI When Won: 36:1

When Won:		
vs. Grower Standard	Difference	Percent Change
Yield (bu/acre)	+2.4	+4.1%



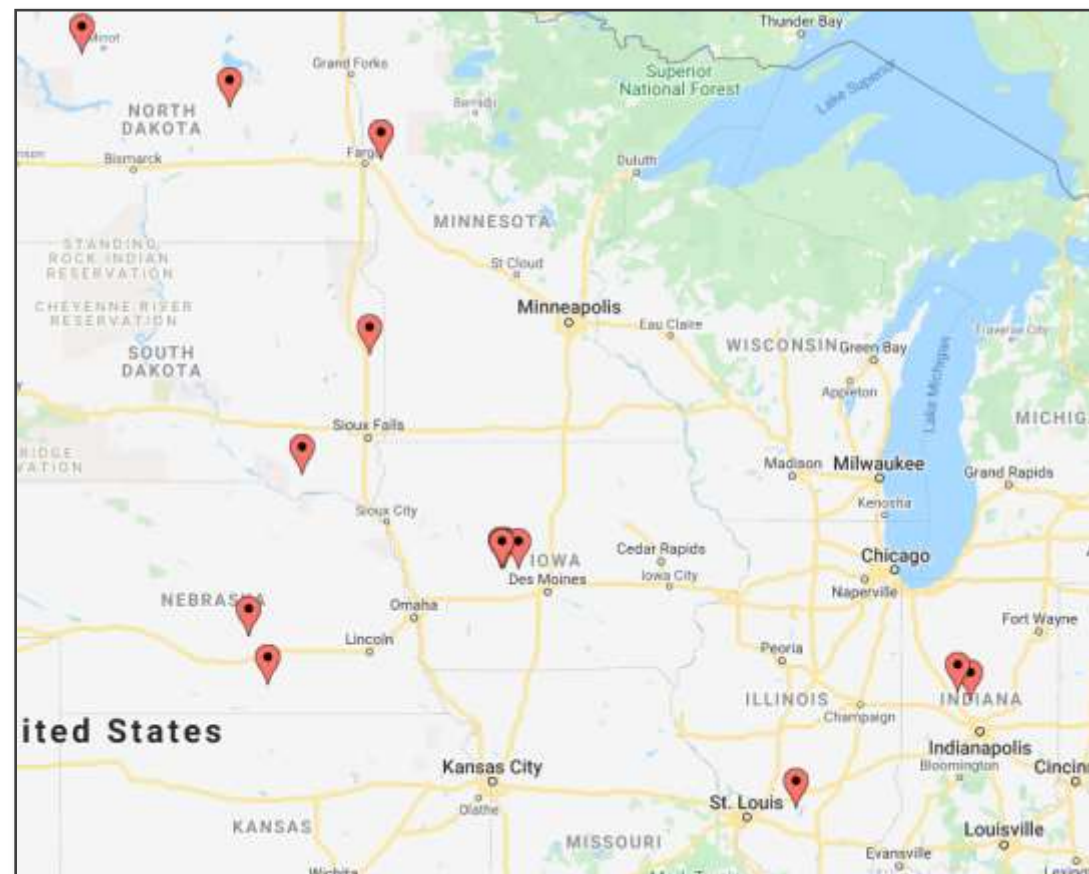


PhycoTerra[®] ST Soybean

APPLICATION RATE:
PhycoTerra[®] ST (5 fl oz/CWT)

Win Rate: 54%
Average ROI When Won: 5:1

When Won:		
vs. Grower Standard	Difference	Percent Change
Yield (bu/acre)	+2.4	+6.3%
Test Weight (lb/bu)	+0.6	+1.0%

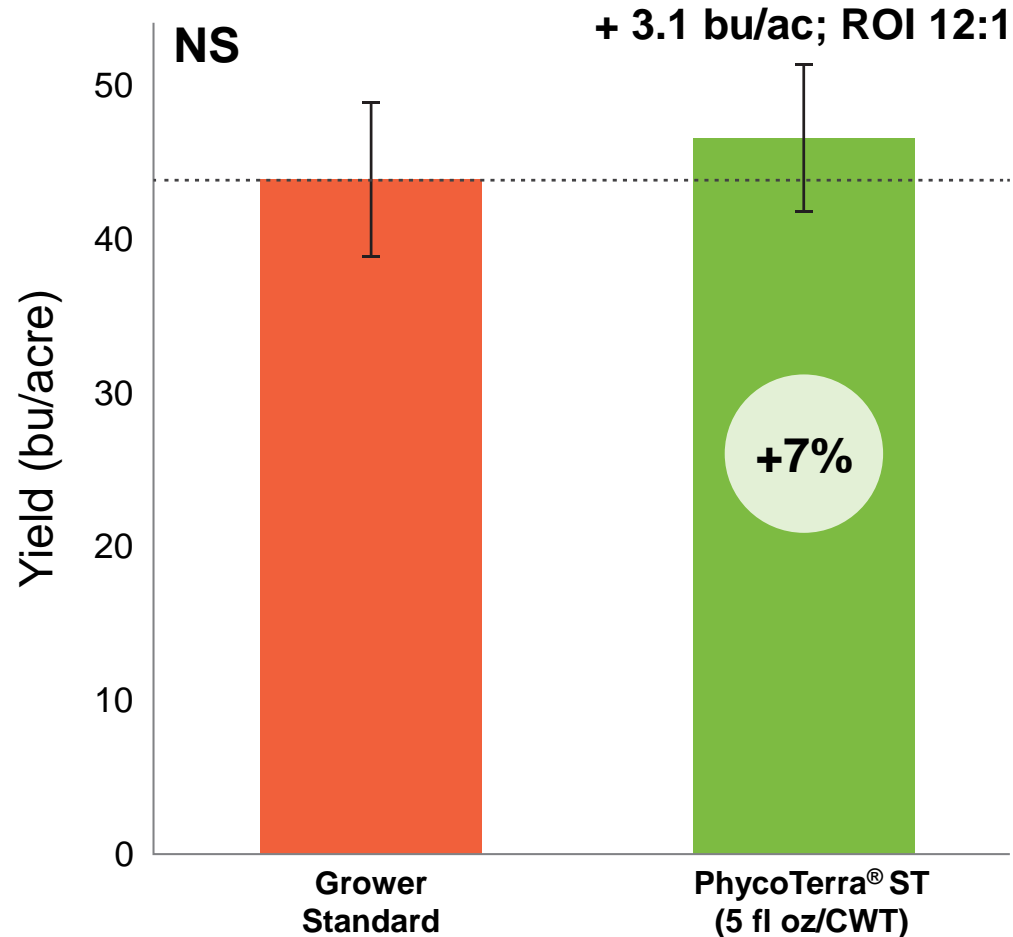




PhycoTerra® **ST**

Soybean

Trial Location: *Perry, IA*



Error bars represent 90% Confidence Interval, Significance tested using LSMMeans Dunnett ($\alpha=0.1$)

SOIL TYPE:

Wadena Loam

ORGANIC MATTER:

1.7%

VARIETY:

Beck's 3082FP

TRIAL INFO:

3rd Party CRO

PLANTING/HARVEST INFO:

June-October 2021

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra® ST applied on top of standard seed treatment

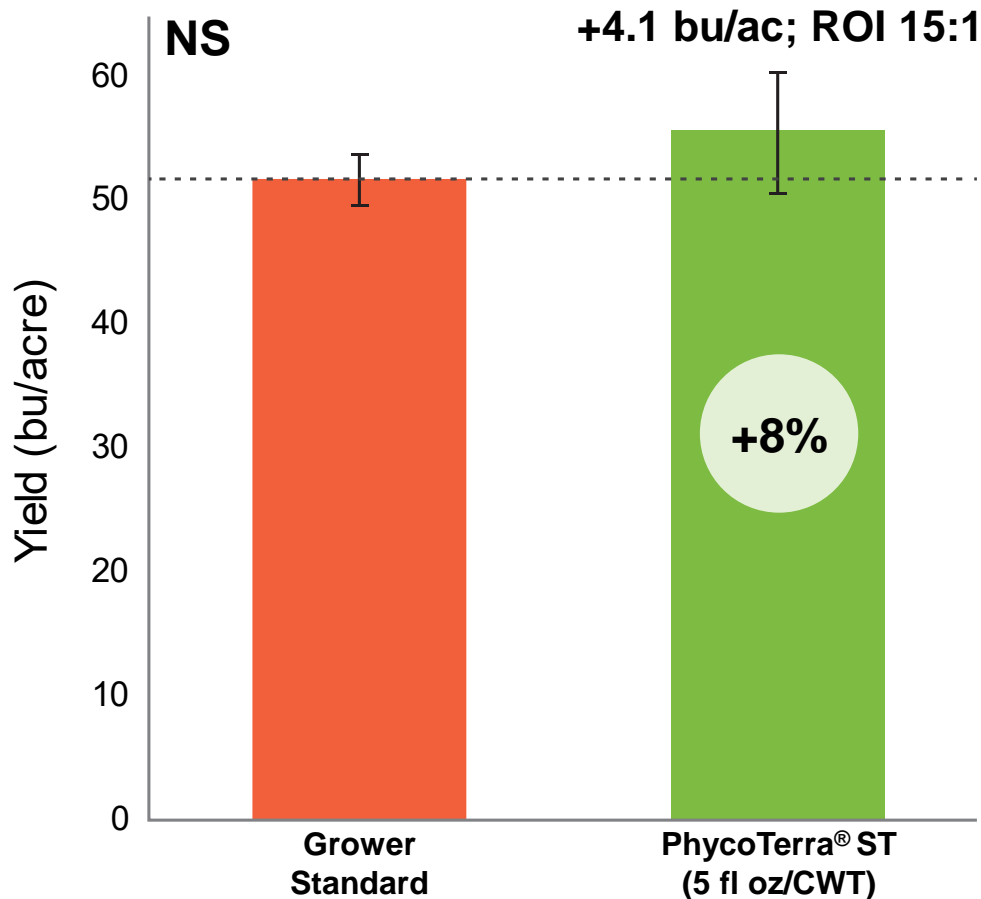
All plots included a standard seed treatment of sedaxane, fludioxonil, thiamethoxam, mefenoxam, and a Bradyrhizobium inoculant



PhycoTerra® **ST**

Soybean

Trial Location: *Bagley, IA*



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SOIL TYPE:

Webster Clay Loam

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

ORGANIC MATTER:

2.3%

APPLICATION TIMING:

PhycoTerra® ST applied on top of standard seed treatment

VARIETY:

Beck's 3082FP

TRIAL INFO:

3rd Party CRO

PLANTING/HARVEST INFO:

May-October 2021

All plots included a standard seed treatment of sedaxane, fludioxonil, thiamethoxam, mefenoxam, and a Bradyrhizobium inoculant

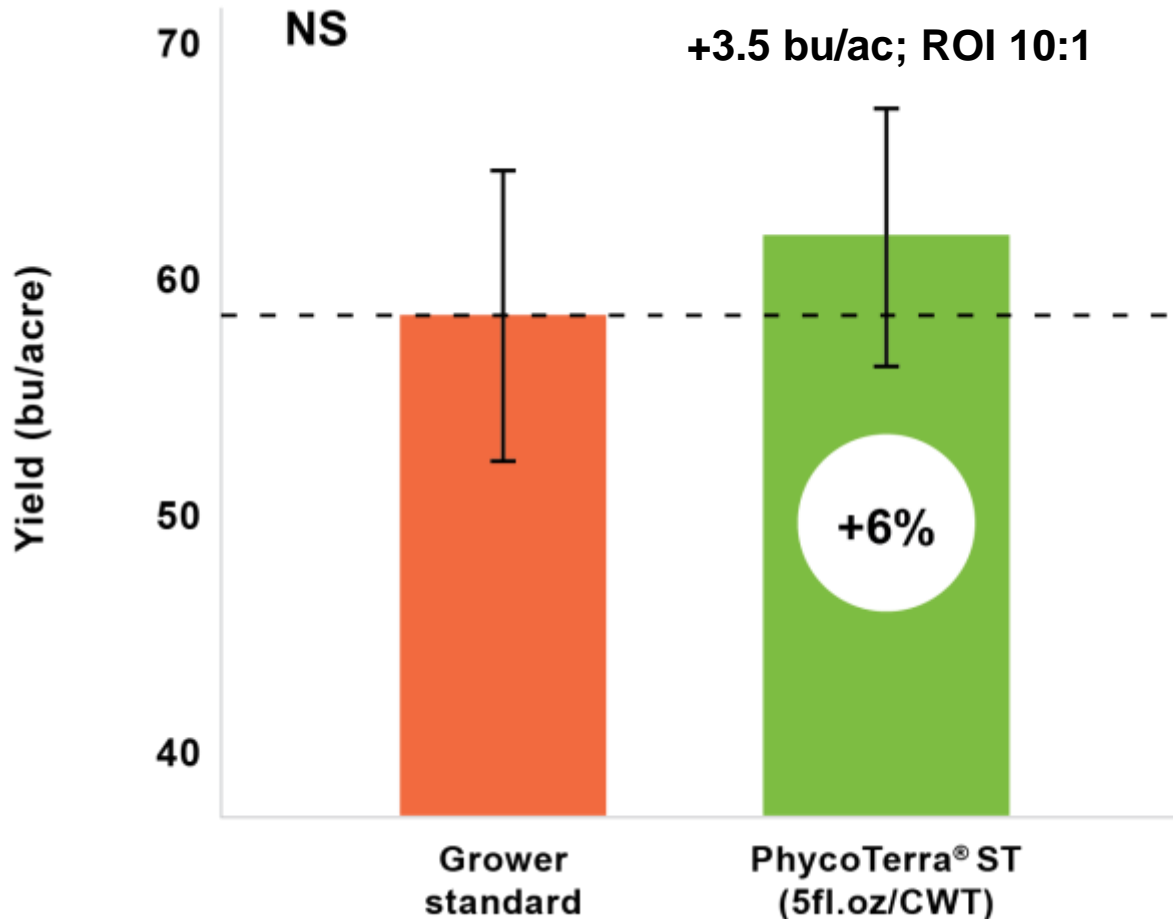


PhycoTerra[®] ST

Soybeans

Trial Location: *Toronto, SD*

Silty Clay Loam, 3.8% OM; var. Glycine Max; 3rd Party CRO; treatments applied in furrow at planting



SOIL TYPE:
Silty Clay Loam

ORGANIC MATTER:
3.8%

VARIETY:
Glycine Max

TRIAL INFO:
3rd Party CRO

Seeds were planted without additional seed treatment

APPLICATION RATE:
PhycoTerra[®] ST (5 fl oz/CWT)

APPLICATION TIMING:
PhycoTerra[®] ST applied in furrow at planting

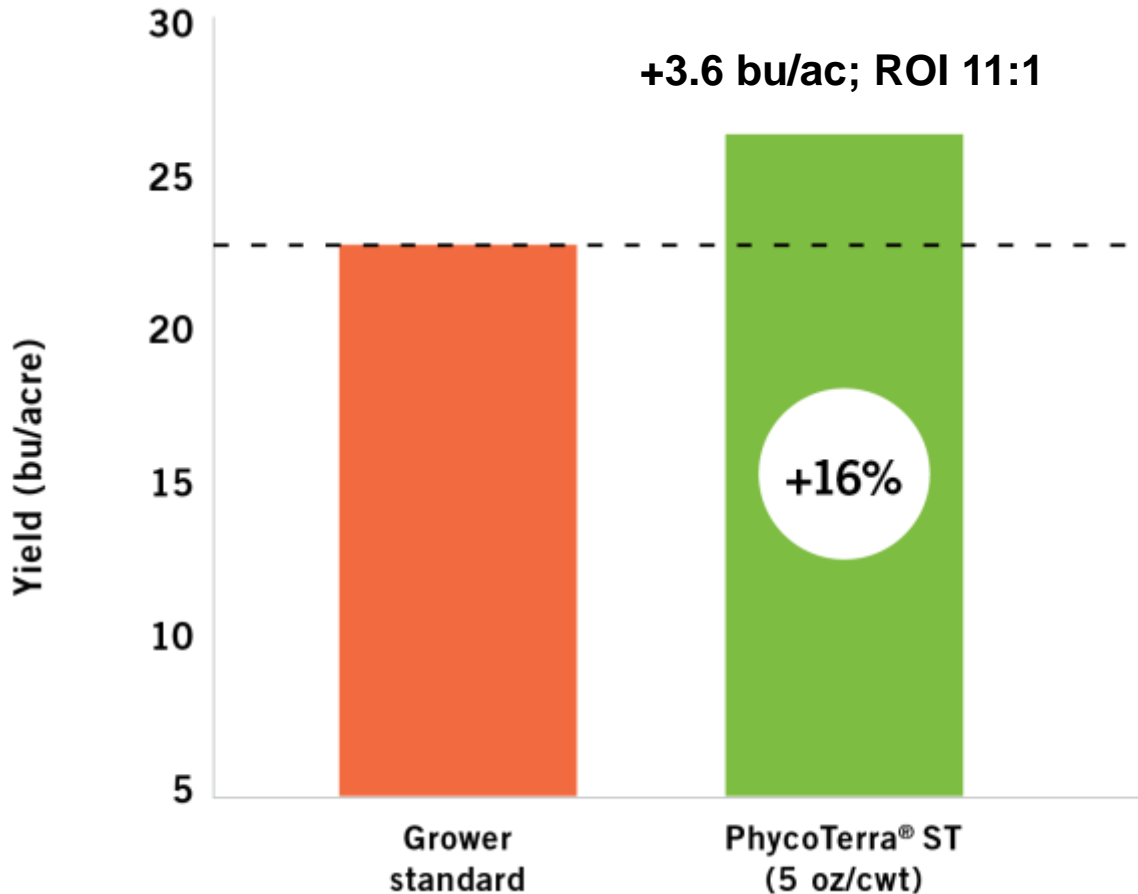
Error bars represent 90% Confidence Interval, Significance tested using LSMeans Dunnett ($\alpha=0.1$)



PhycoTerra[®] ST

Soybean – No Till

Trial Location: *Des Lacs, ND*



SOIL TYPE:

Silty Clay

ORGANIC MATTER:

Unknown

VARIETY:

Beck's 3082FP

TRIAL INFO:

3rd Party CRO

PLANTING/HARVEST INFO:

Spring-Fall 2020

APPLICATION RATE:

PhycoTerra[®] ST (5 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra[®] ST applied with grower standard in slurry before planting

Strip trial: 44.9 acres treated

All plots include: Custom mix of insecticide, fungicide, and inoculant



Soybean – Early Season

Trial Location: Des Lacs, ND

PhycoTerra® ST

Standard practice



Picture taken 5 days after planting

SOIL TYPE:

Silty Clay

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

ORGANIC MATTER:

Unknown

APPLICATION TIMING:

PhycoTerra® ST applied
1x at planting

VARIETY:

Ag02X8

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

May 2020



Soybean – Early Season

Trial Location: *Des Lacs, ND*

PhycoTerra® ST
5oz/cwt

Standard practice



Picture taken 16 days after planting

SOIL TYPE:

Silty Clay

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

ORGANIC MATTER:

Unknown

APPLICATION TIMING:

PhycoTerra® ST applied

1x at planting

VARIETY:

Beck's 3082FP

Strip trial: 44.9 acres treated

TRIAL INFO:

3rd Party CRO

PLANTING/HARVEST INFO:

May 2020



Soybean – Early Season

Trial Location: Des Lacs, ND

PhycoTerra® ST
5oz/cwt



Pictures taken 32 days after planting



Standard practice

SOIL TYPE:

Silty Clay

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

ORGANIC MATTER:

Unknown

APPLICATION TIMING:

PhycoTerra® ST applied

1x at planting

VARIETY:

Beck's 3082FP

Strip trial:44.9 acres treated

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

May 2020



Soybean – Early Season

Trial Location: Des Lacs, ND

PhycoTerra® ST
5oz/cwt

Standard practice



Picture taken 32 days after planting

SOIL TYPE:

Silty Clay

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

ORGANIC MATTER:

Unknown

APPLICATION TIMING:

PhycoTerra® ST applied
1x at planting

VARIETY:

Beck's 3082FP

Strip trial: 44.9 acres treated

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

May 2020



Soybean – Middle Season

Trial Location: Des Lacs, ND

PhycoTerra® ST
5oz/cwt

Standard practice



Picture taken 51 days after planting

SOIL TYPE:

Silty Clay

ORGANIC MATTER:

Unknown

VARIETY:

Beck's 3082FP

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

May 2020

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra® ST applied
1x at planting
Strip trial: 44.9 acres treated



Soybean – Late Season

Trial Location: Des Lacs, ND

PhycoTerra[®] ST
5oz/cwt

Standard practice



Picture taken 76 days after planting

SOIL TYPE:

Silty Clay

APPLICATION RATE:

PhycoTerra[®] ST (5 fl oz/CWT)

ORGANIC MATTER:

Unknown

APPLICATION TIMING:

PhycoTerra[®] ST applied

1x at planting

VARIETY:

Beck's 3082FP

Strip trial: 44.9 acres treated

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

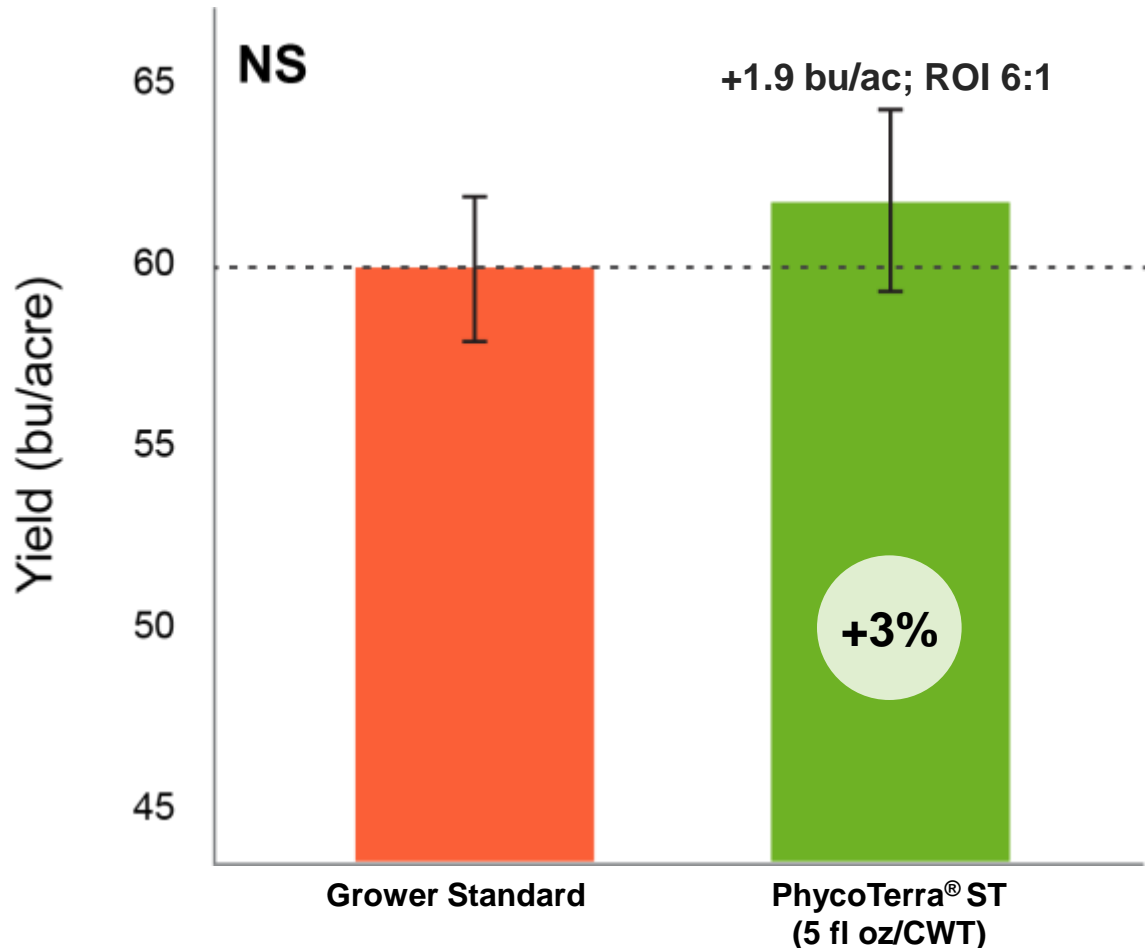
May 2020



PhycoTerra® **ST**

Soybean

Trial Location: **Glyndon, MN**



SOIL TYPE:
Fine Sandy Loam

ORGANIC MATTER:
Unknown

VARIETY:
Alligent 04XBN

TRIAL INFO:
3rd Party CRO

Standard insecticide and fungicide seed treatments used for all plots

APPLICATION RATE:
PhycoTerra® ST (5 fl oz/CWT)

APPLICATION TIMING:
PhycoTerra® ST applied as seed coating

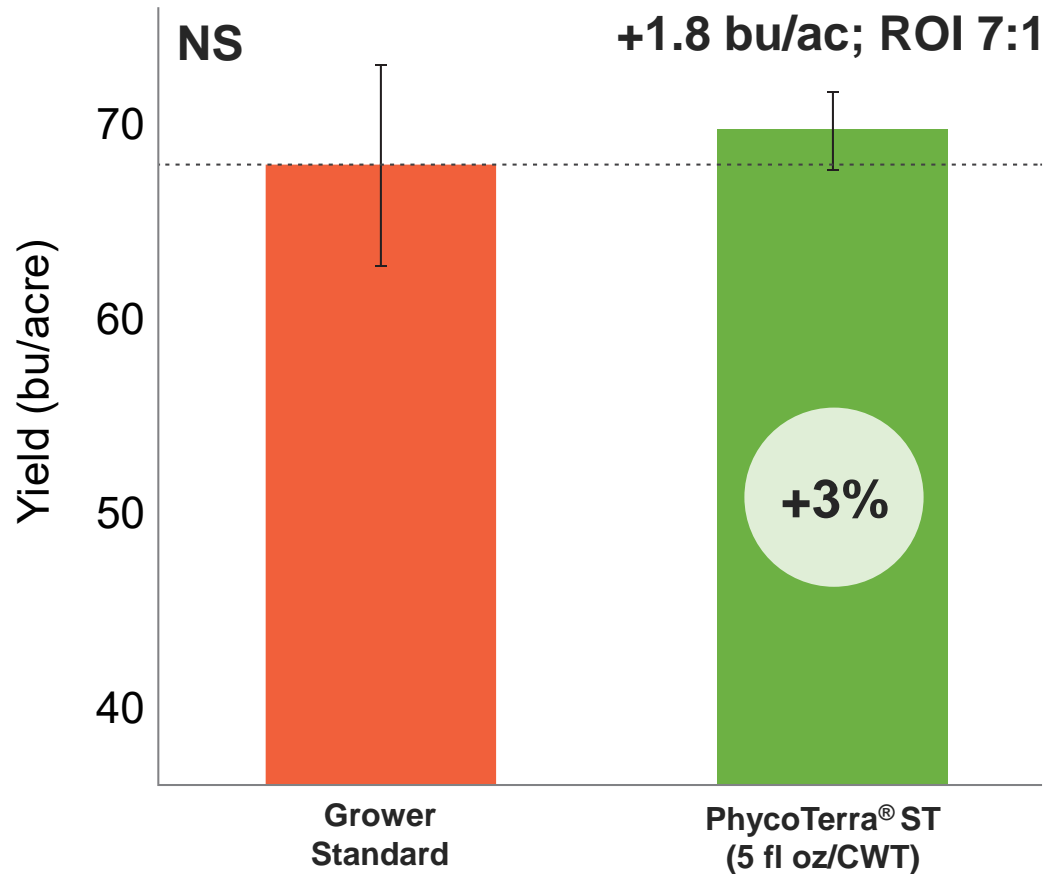
Error bars represent 90% Confidence Interval, Significance tested using LSMMeans Dunnett ($\alpha=0.1$)



PhycoTerra® **ST**

Soybean

Trial Location: *Ravenna, NE*



SOIL TYPE:

Silty Loam

ORGANIC MATTER:

2.0%

VARIETY:

PV2419X

TRIAL INFO:

3rd Party CRO

Standard fungicide and insecticide seed treatments were applied in all plots

APPLICATION RATE:

PhycoTerra® ST (5 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra® ST applied in seed coating at planting

Error bars represent 90% Confidence Interval, Significance tested using LSMMeans Dunnett ($\alpha=0.1$)



Mid-Season Progress

Trial Location: Crestwood, KY



**Grower
Standard**

**PhycoTerra® ST
2 oz/CWT**

SOIL TYPE:

Silty Loam

ORGANIC MATTER:

Unknown

VARIETY:

Crider & Lowell

TRIAL INFO:

3rd Party CRO

APPLICATION RATE:

PhycoTerra® ST (2 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra® ST applied on
seed before planting



Yield Results

Trial Location: **Crestwood, KY**

Variable	Grower Standard Avg.	PhycoTerra [®] ST (2 oz/CWT)
Yield (bu/ac)	21.6	23.7
Yield Difference (bu/ac)	-	+2.1
% Yield Difference	-	+8.9%
\$/acre @ \$10.66/bu	230.26	252.64
ROI	-	19:1

SOIL TYPE:

Silty Loam

ORGANIC MATTER:

Unknown

VARIETY:

Crider & Lowell

TRIAL INFO:

3rd Party CRO

APPLICATION RATE:

PhycoTerra[®] ST (2 fl oz/CWT)

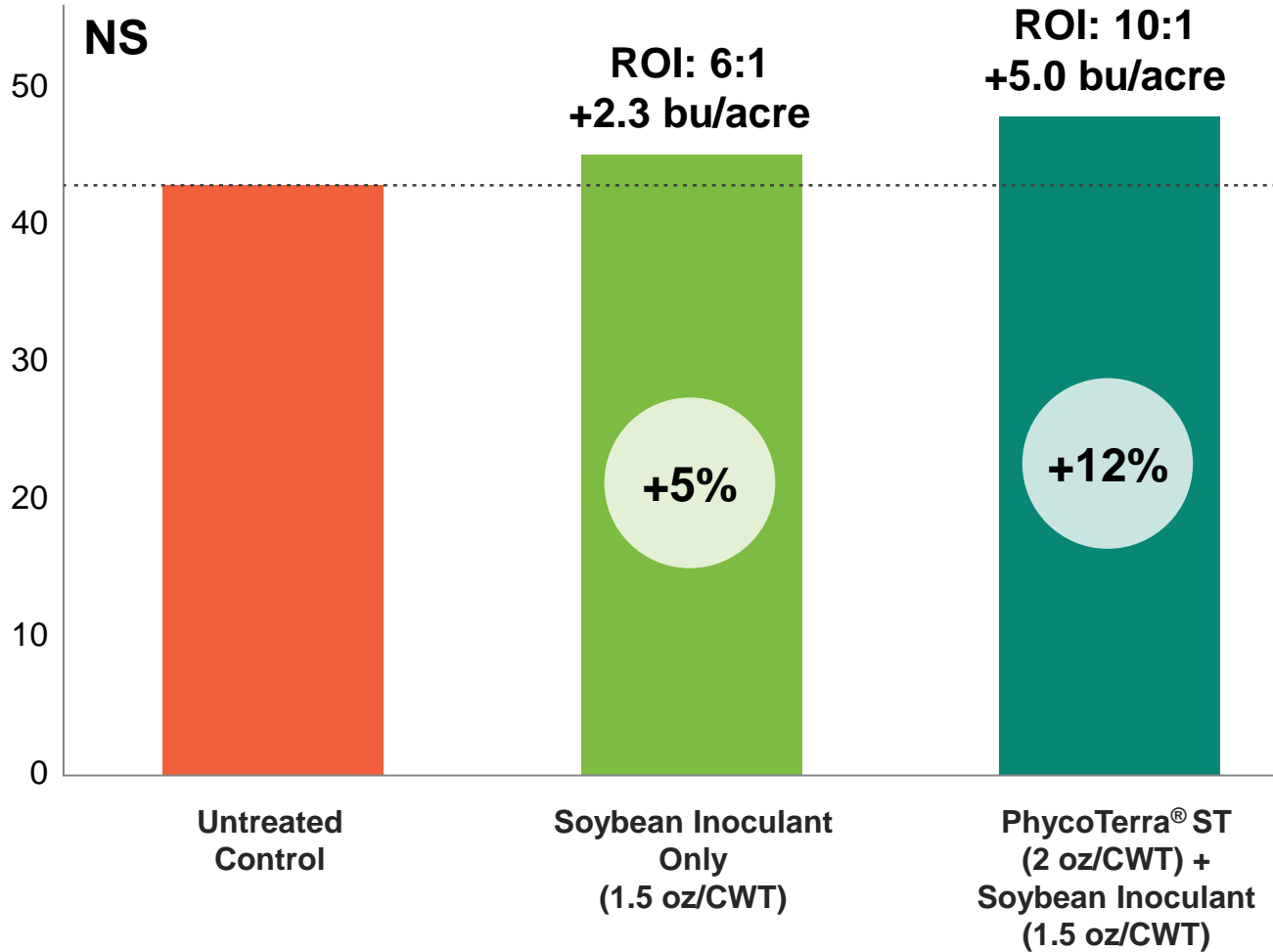
APPLICATION TIMING:

PhycoTerra[®] ST applied on seed before planting



Soybean Inoculant Synergy

Trial Location: *Brown County, SD*



SOIL TYPE:
Silty Loam

ORGANIC MATTER:
6.0%

VARIETY:
NK S14-U9X

TRIAL INFO:
3rd Party CRO

PLANTING INFO:
June 2020

APPLICATION RATE:
PhycoTerra® ST (2 fl oz/CWT)

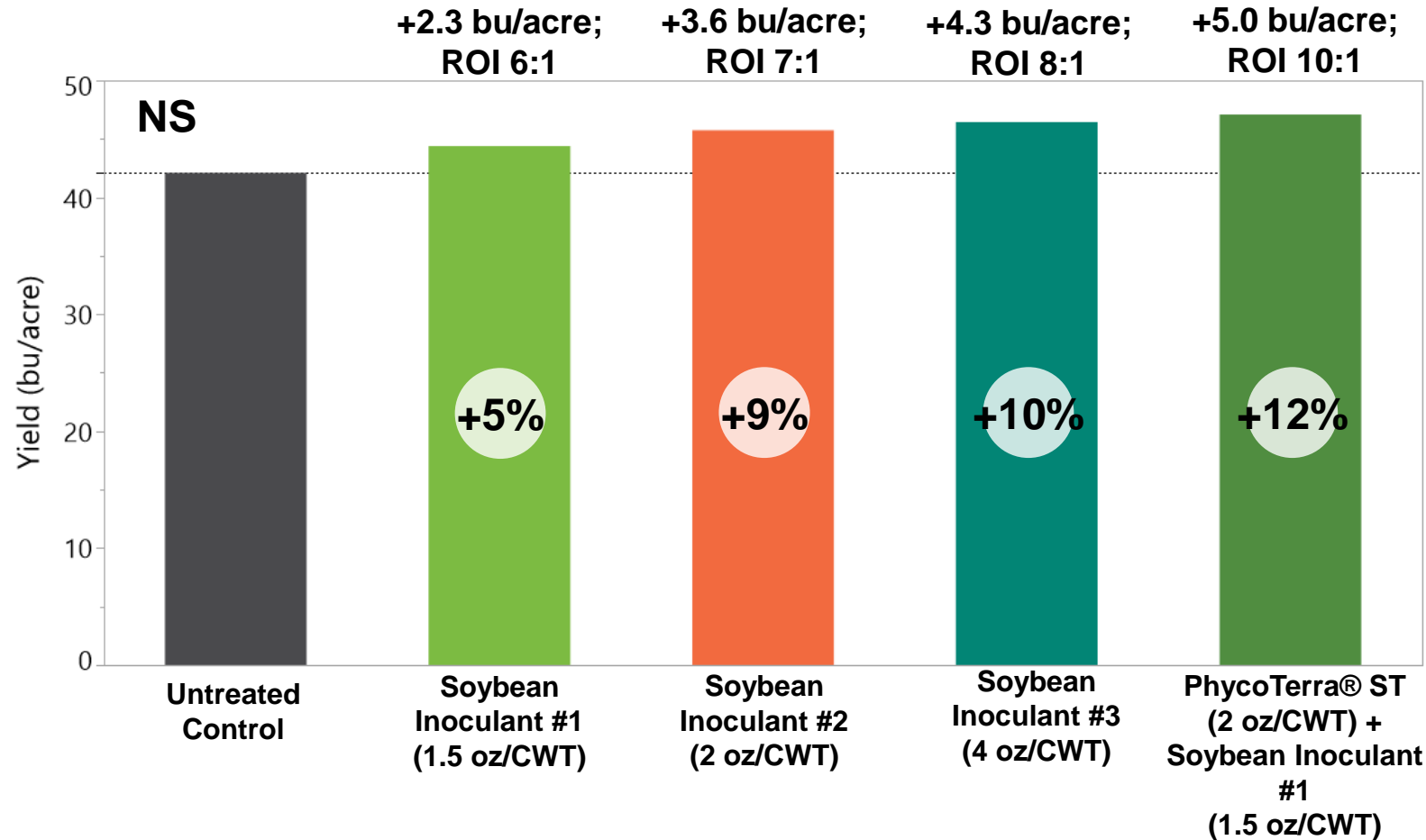
APPLICATION TIMING:
PhycoTerra® ST applied on seed or in furrow at planting



PhycoTerra[®] ST

Soybean

Trial Location: *Brown County, SD*



SOIL TYPE:

Silty Loam

ORGANIC MATTER:

6.0%

VARIETY:

NK S14-U9X

TRIAL INFO:

3rd Party CRO

PLANTING INFO:

June 2020

APPLICATION RATE:

PhycoTerra[®] ST (2 fl oz/CWT)

APPLICATION TIMING:

PhycoTerra[®] ST applied on seed or in furrow at planting