

Super Charging No-Till Yields

Marion Calmer

Presented by:



Super Charging No-Till Yields

Marion Calmer



Marion Calmer

- 1975- Started Farming w/10 gilts & 80 acres
- 1985- Started doing independent on-farm research
- 1988- Started No-Tilling
- 1995- 1st Patentable Invention (15 Inch Corn Head)
- 2000- Founded Calmer Corn Heads, Inc.
- Holds 93 US & International Patents on Harvesting Grain





Success Strategies for Super Charging No-Till Soybeans

- Planting Date
- Seed Treatments
- Even Spacing
- Populations / Net Revenue
- A M S Liquid vs Dry
- Fungicide Timing
- 30 Years No-Till vs Conventional
- Chopping & Spreading Bean Stalks



Thank You for the Source of Information

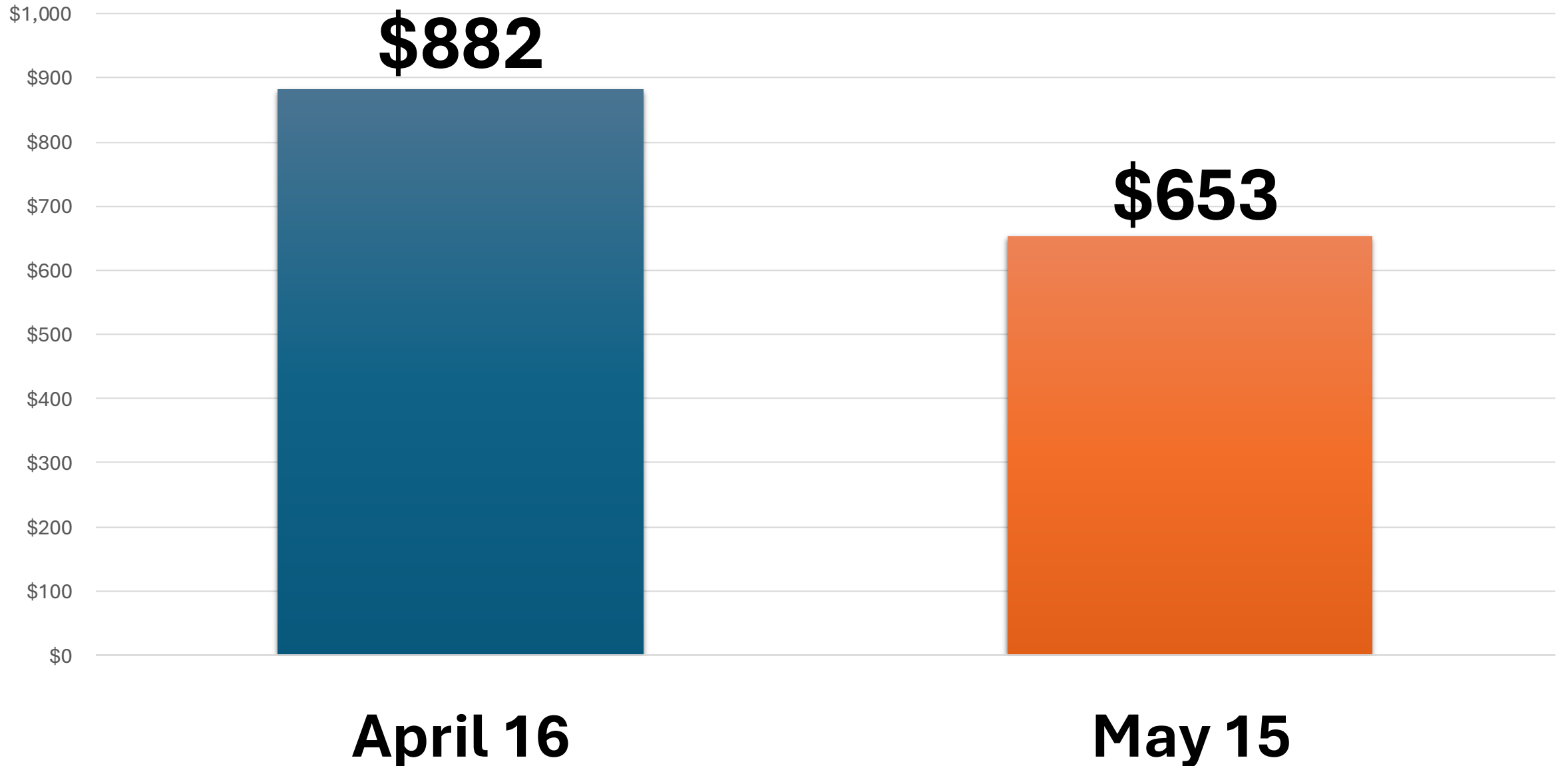


BECK'S

Practical Farm Research



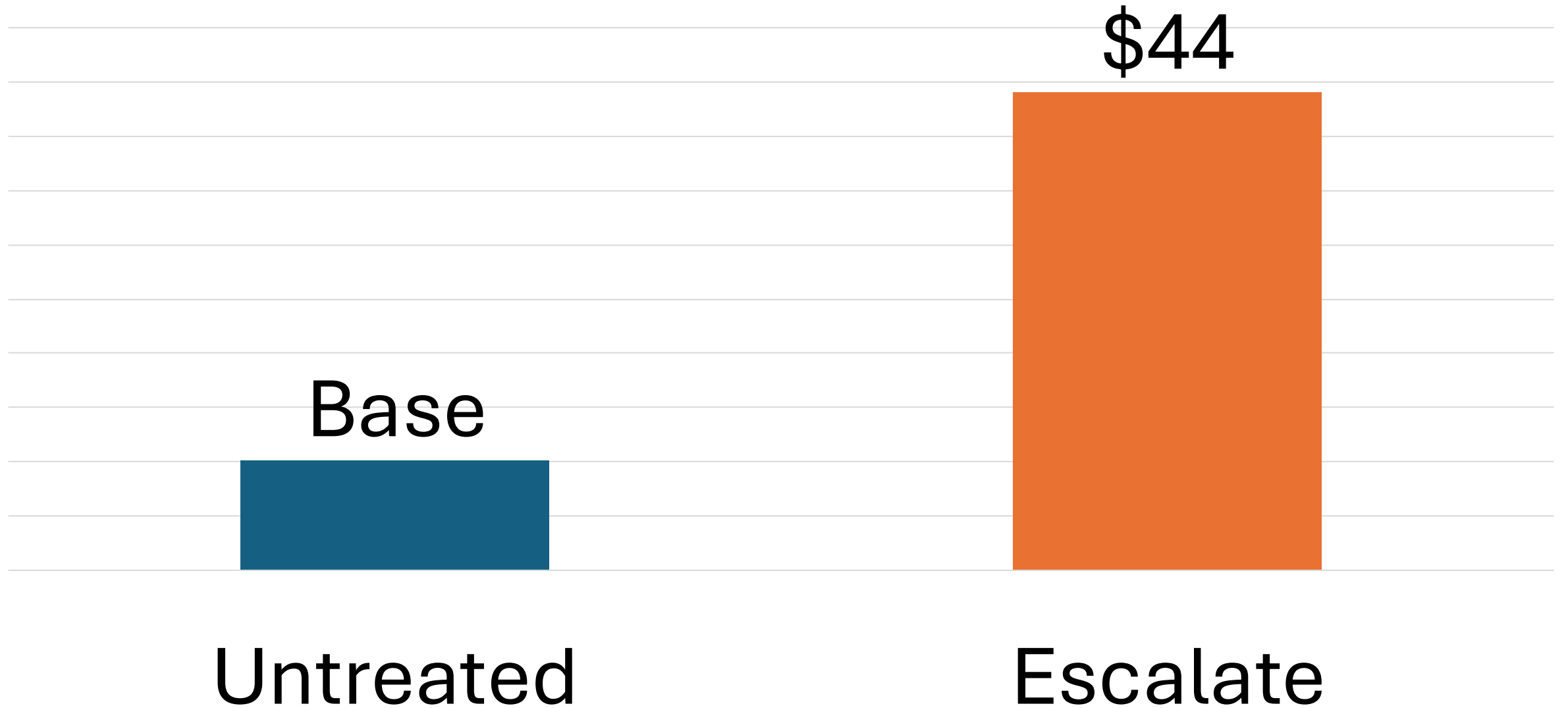
Planting Date





Seed Treatments

16 years



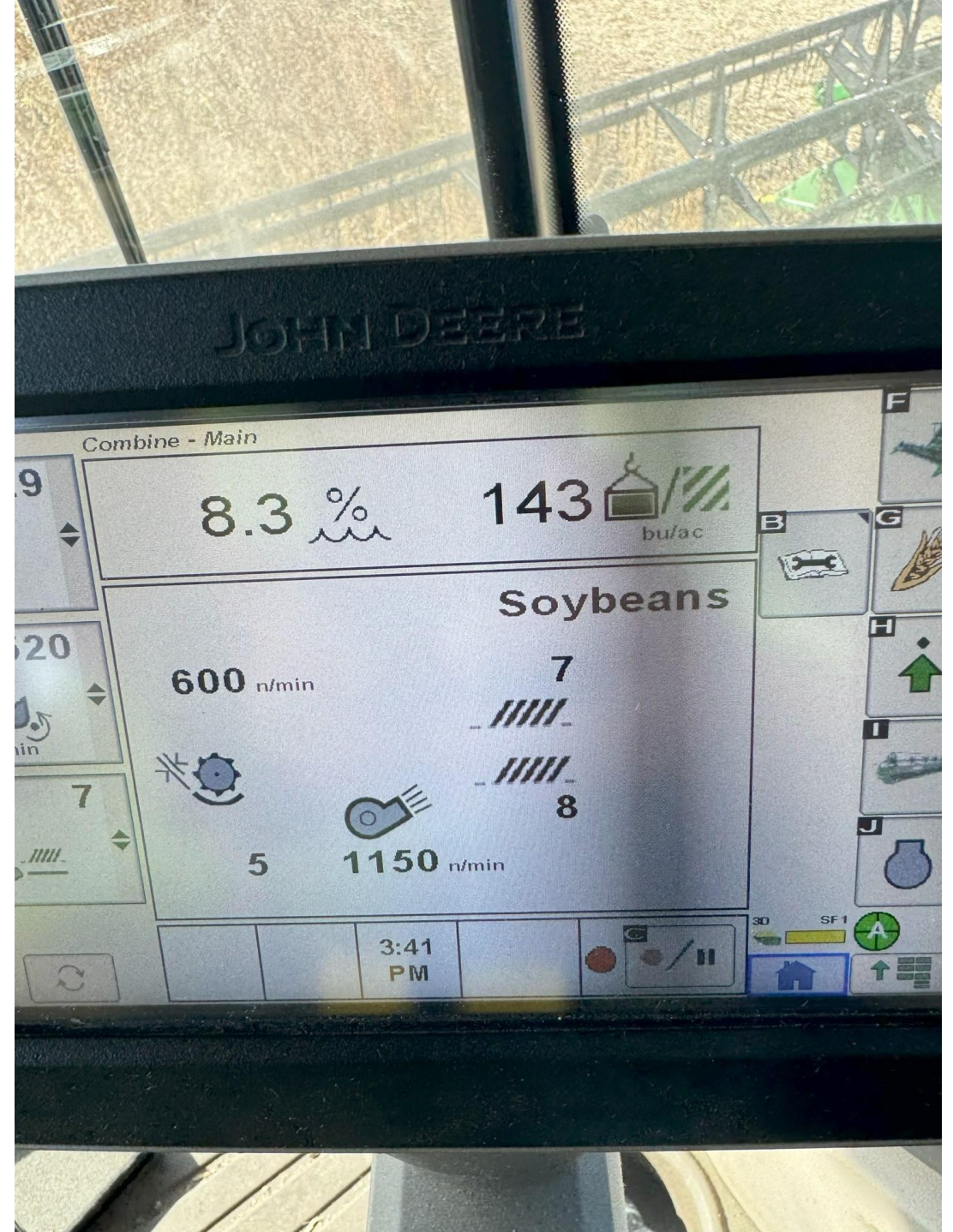




Source: Mike Staton, Michigan State University Extension







Root Architecture of a Soybean Plant



Plow Down
Phosphorus Moves 1 Inch
Potassium Moves 2
Inches



60' w/
P&K

60' w/o
P&K

60' w/
P&K

60' w/o
P&K

POPULATION VS NET REVENUE



160,000

130,000

100,000





Weeds Controlled by A M S



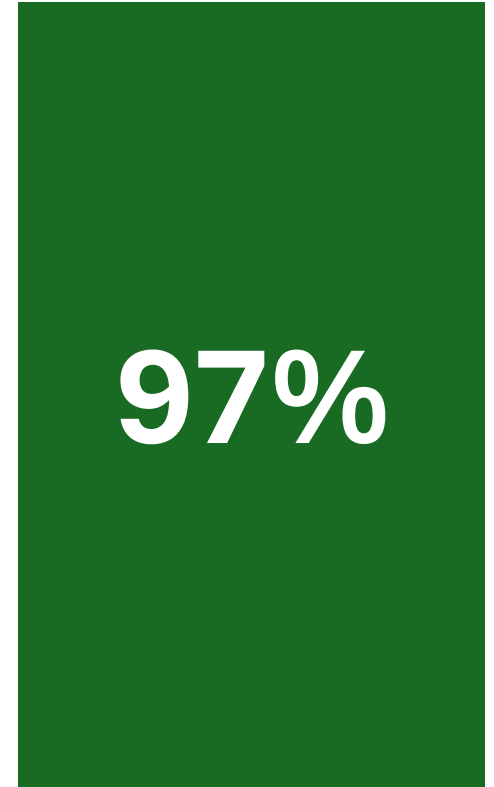
70%

ROUNDUP



87%

LIQUID



97%

DRY

Fungicide Timing

Photo Source: Eric Anderson and Jenna Falor, Michigan State University Extension



\$18

- \$4

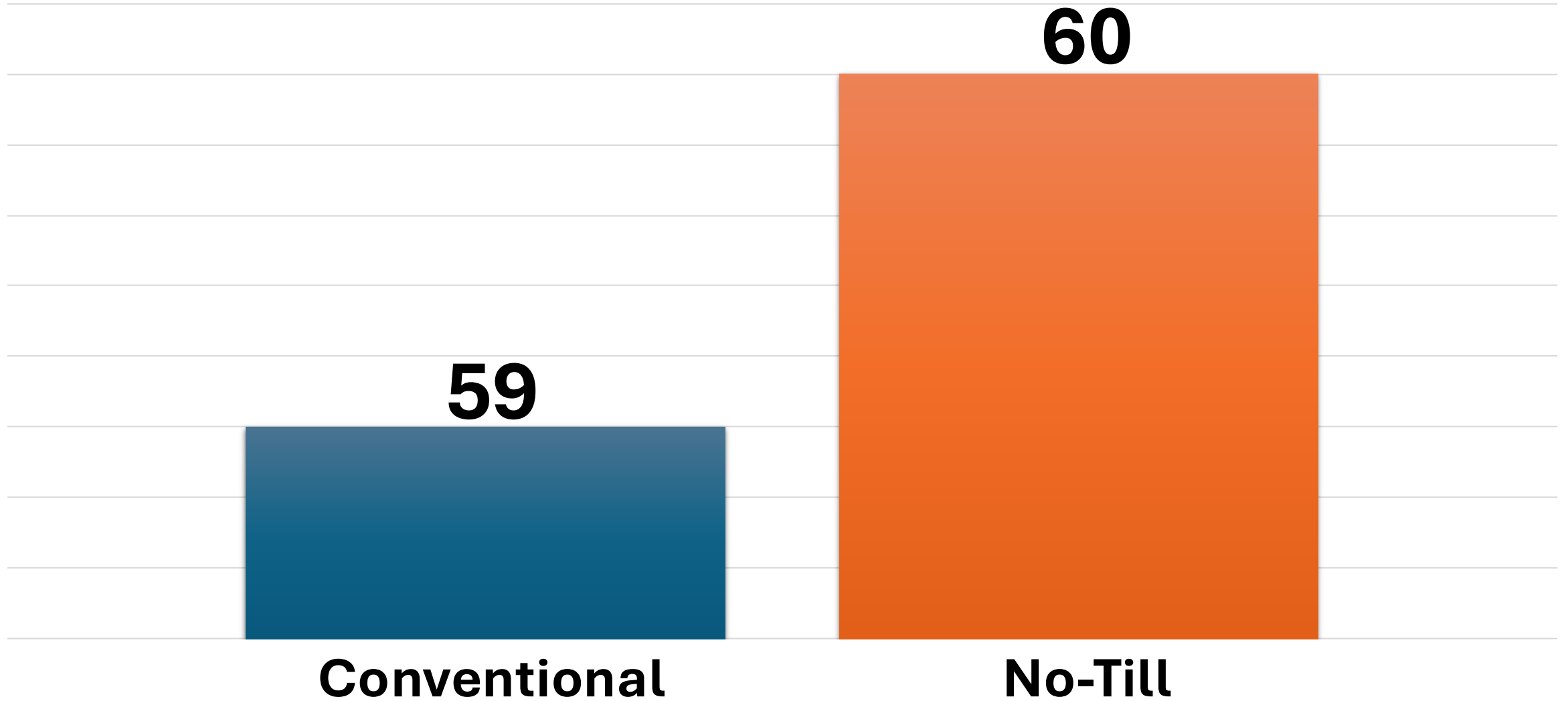
- \$3

R2

R3

R4

No-Till vs. Conventional 30 Year Study





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Success Strategies for Super Charging No-Till Corn

1. Strip-Till / Cover Crops
2. Planting Date
3. Tire Pressure
4. Closing Wheels
5. Fungicide / Timing / Applicator
6. Short Corn
7. Fall Harvest



Fall Strip-Till with Cover Crops



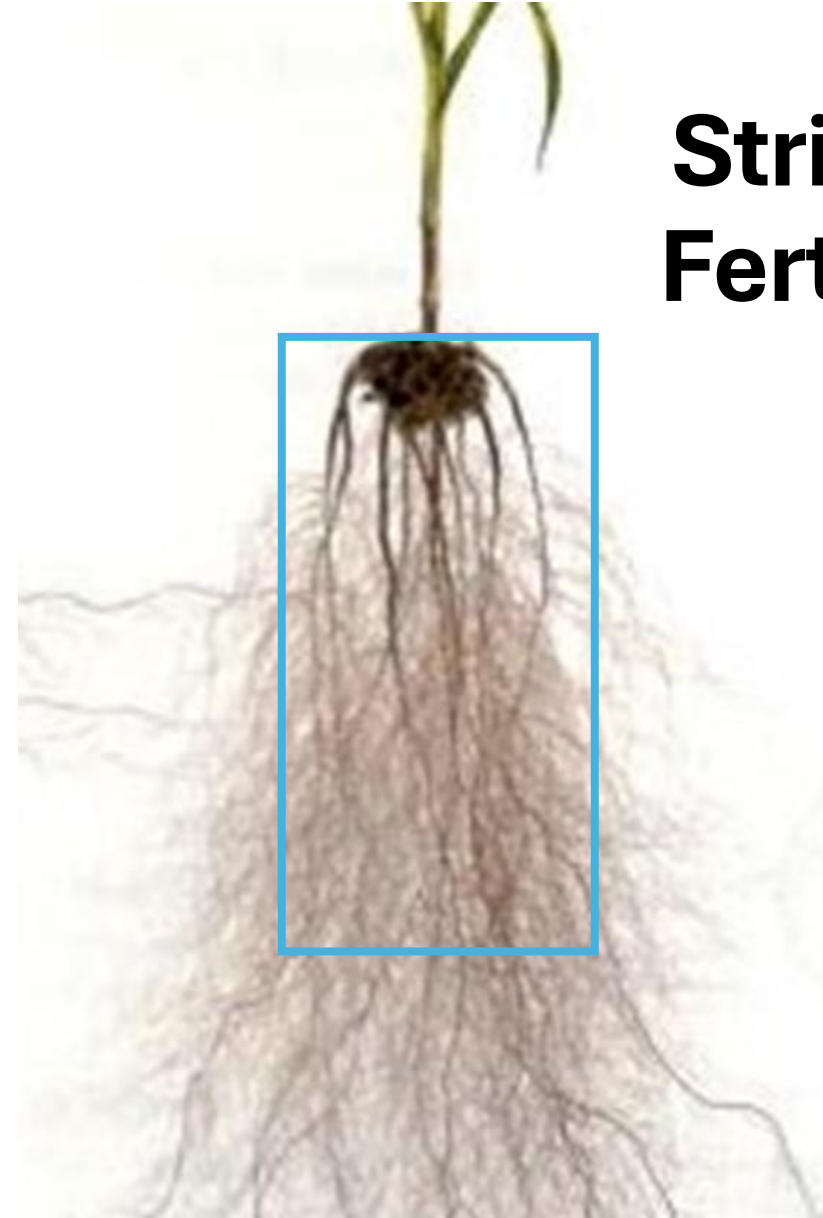


Vertical Root Architecture

**Broadcast
Fertilizer**



**Strip Till
Fertilizer**

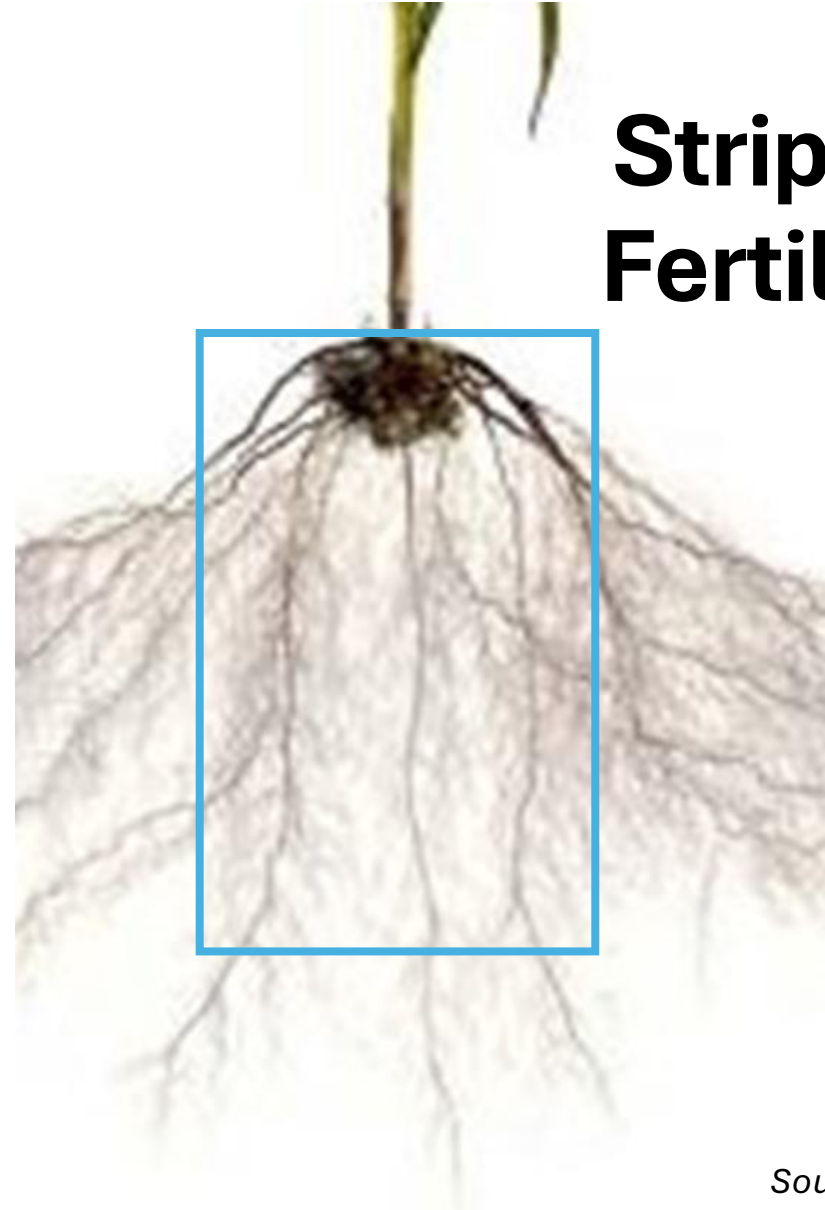


Horizontal Root Architecture

**Broadcast
Fertilizer**



**Strip Till
Fertilizer**



Compaction



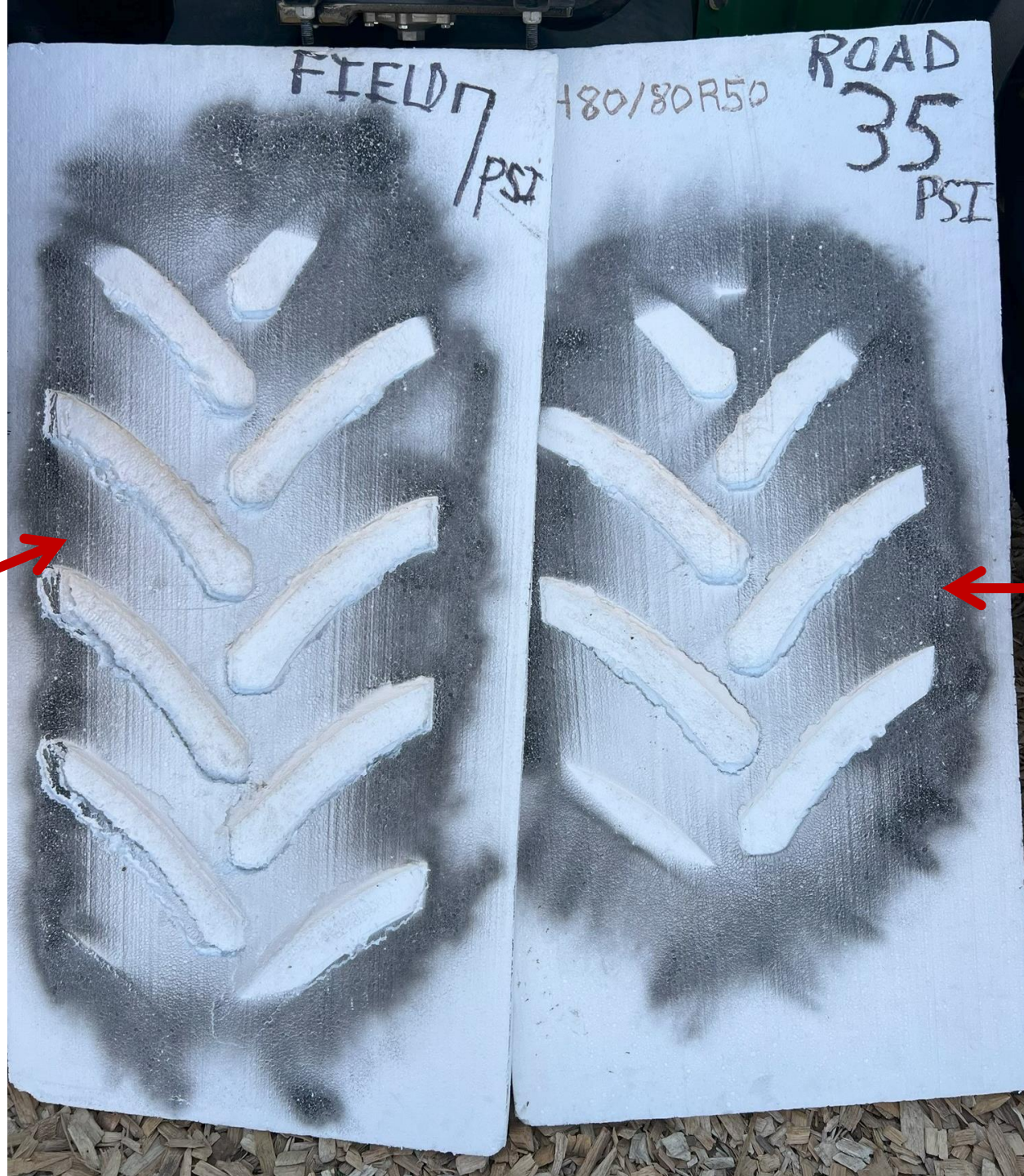
50 # / sq / in



6 # / sq / in

8 PSI

**Compaction
is 9 #/sq/in**



36 PSI

**Compaction
is 37 PSI**



Optimum Planting Window



Closing Wheel



Source: John Deere

John Deere



Source: New Ag Supply

Schaffert



Source: Yetter Farm Equipment

Yetter

Closing Wheel Impact on Yield

Baseline



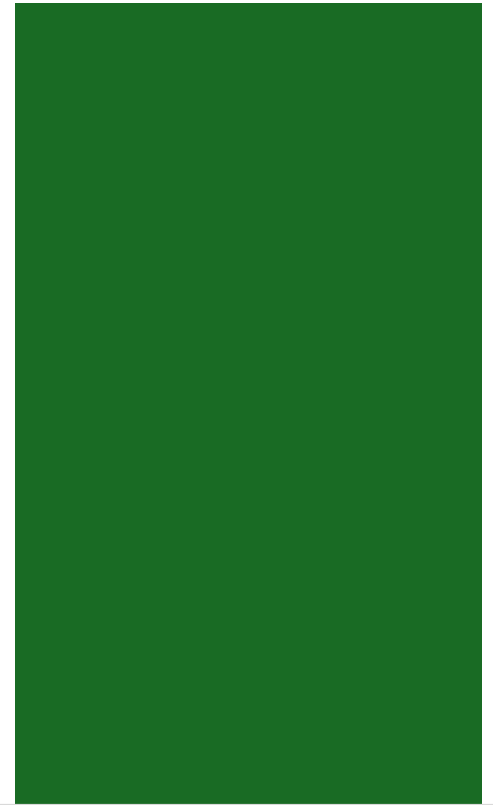
JD

+ 3.6 bu

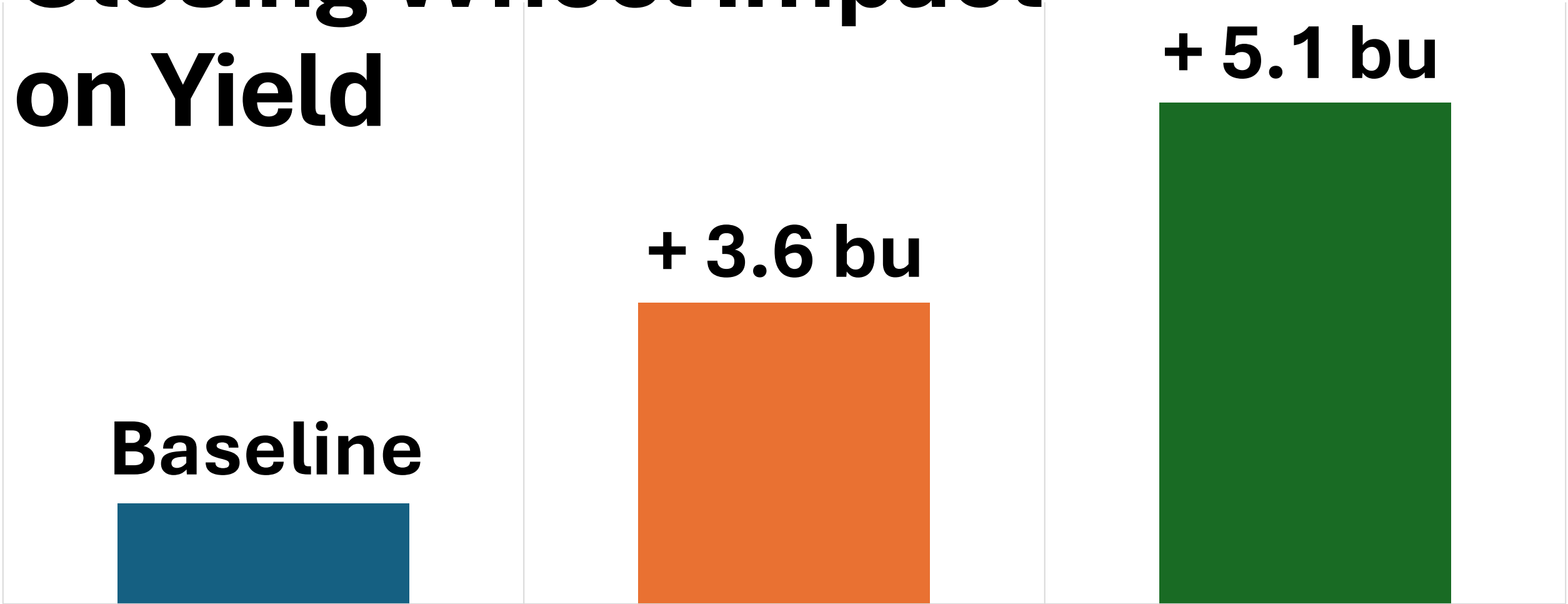


SCHAFFERT

+ 5.1 bu



YETTER

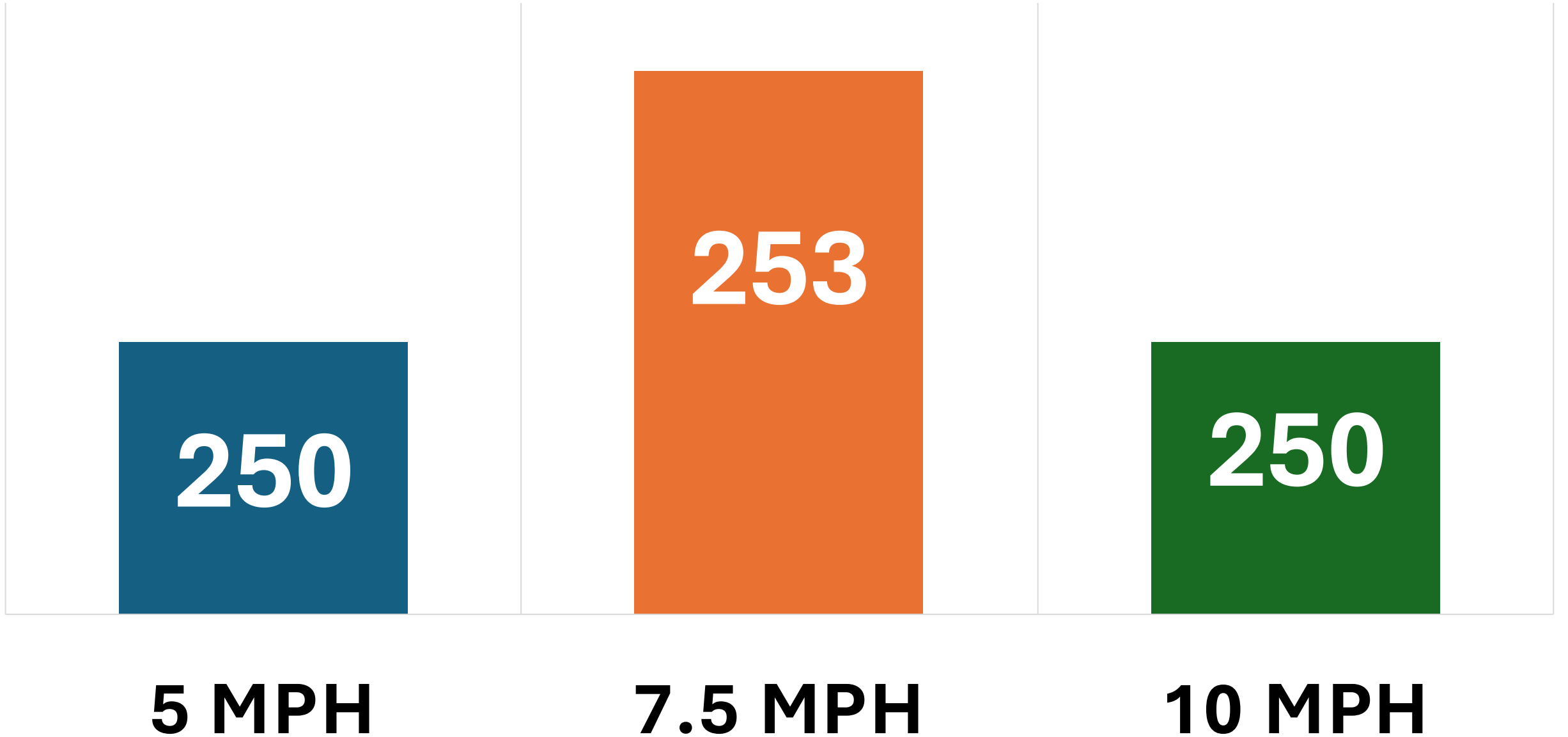




ExactEmerge™

John Deere

High-Speed Planting



Southern Rust



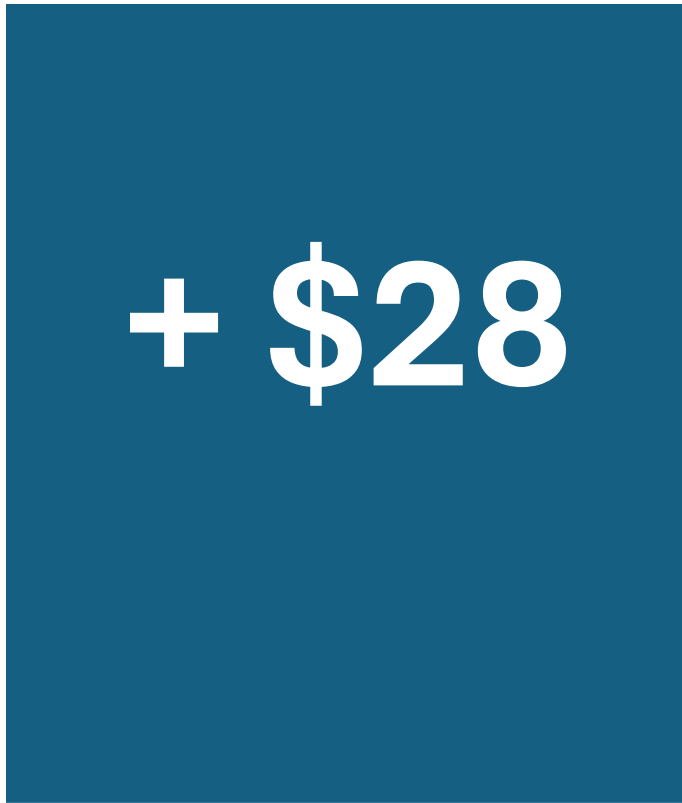
Source: Martin Chilvers, Michigan State University/msu.edu

Tar Spot

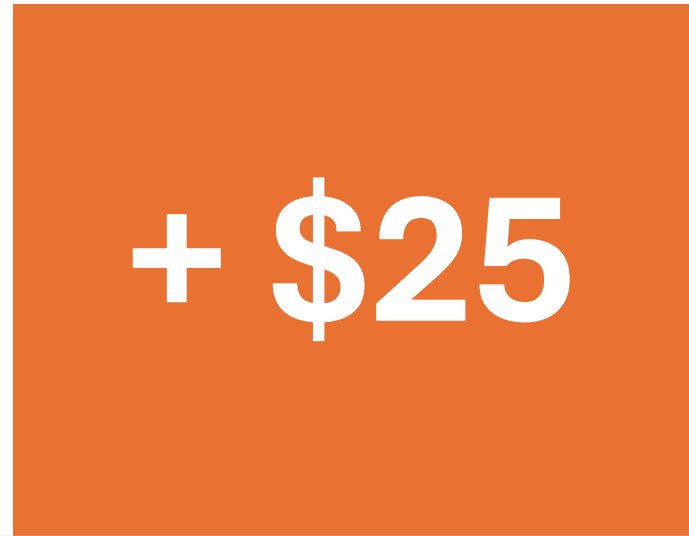


Source: Dean Malvick, University of Minnesota

Fungicide Products

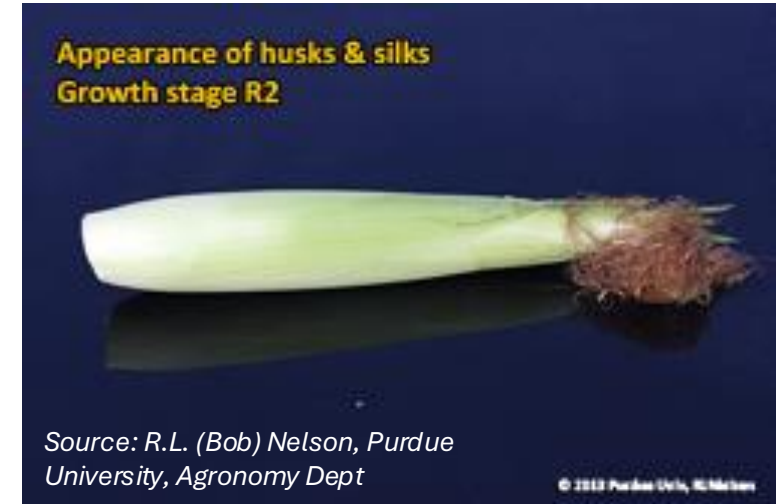


VELTHYMA



MIRAVIS NEO

Impact of Timing of Fungicide Application on Corn



\$8.91

V10

\$22.42

R1

\$5.21

R2

Fungicide Application Method



Fungicide Application Method

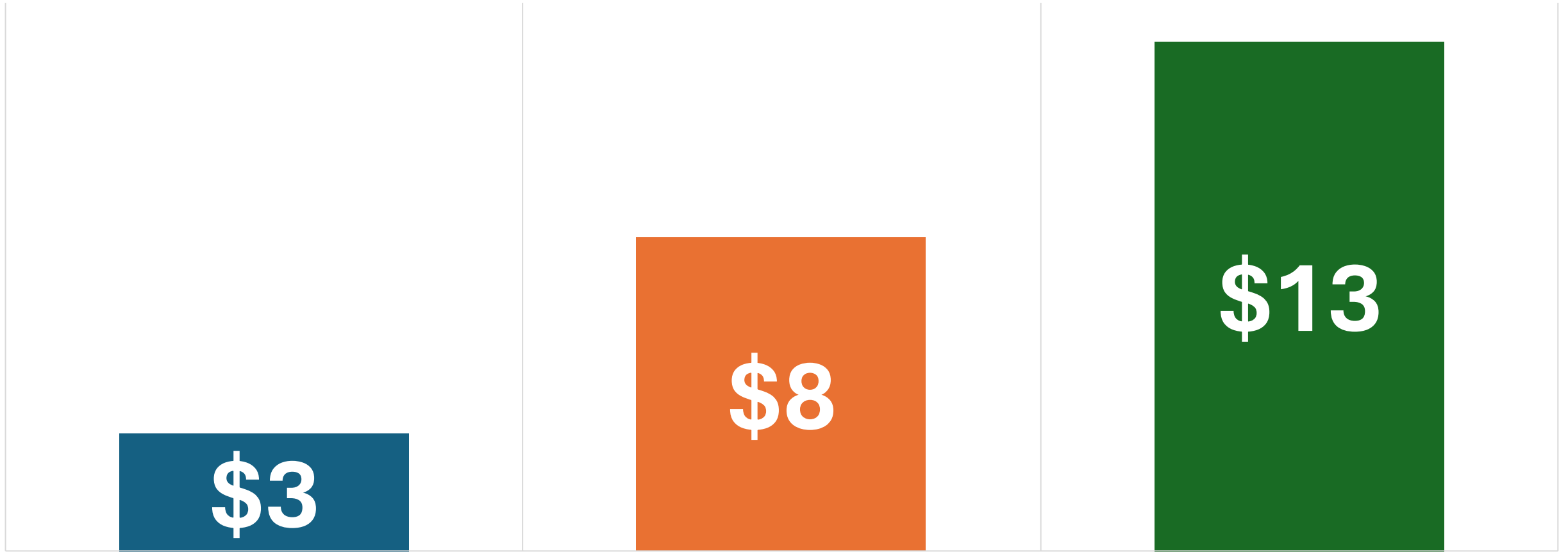


Source: Farm Progress

Fungicide Application Method



Fungicide Application Method



PLANE

GROUND

DRONE

Timing is Everything
in Fungicides!



Yield Advantage



A bar chart with two bars. The left bar is dark blue and contains the number 248. The right bar is orange and contains the number 254. The bars are positioned above the labels 'NORMAL' and 'SHORT' respectively. The chart is titled 'Yield Advantage' at the top center.

Category	Value
NORMAL	248
SHORT	254

248

254

NORMAL

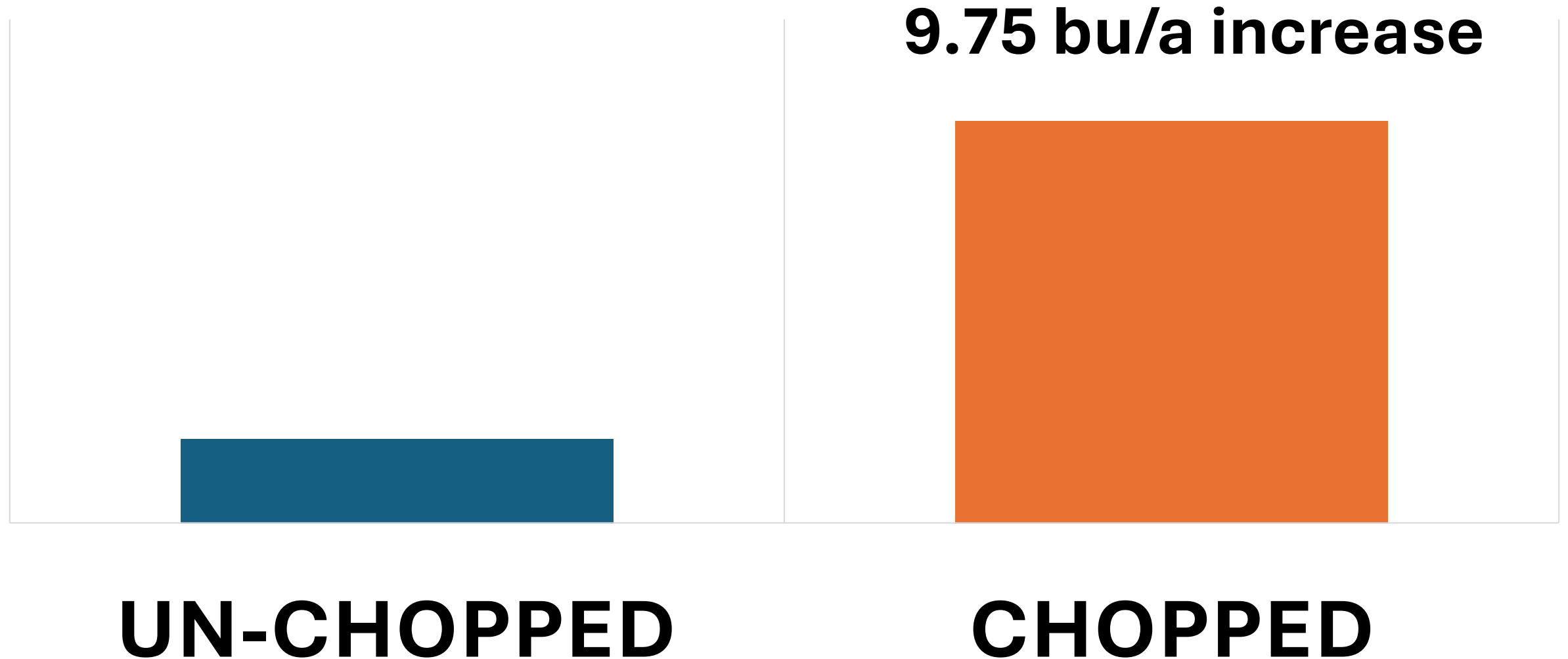
SHORT





Chopped vs Un-Chopped Corn Residue in Continuous Corn

Source: University of Illinois Research



20 Years of Continuous No-Till



190

212

CONVENTIONAL

NO-TILL

Success Strategies for Super Charging No-Till Corn

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Thank You!

Call me if you need anything:
(309) 368-1182 (Marion Calmer cell)



Website:

www.CalmerCornHeads.com

YouTube:

<https://www.youtube.com/@CalmerCornHeads>

