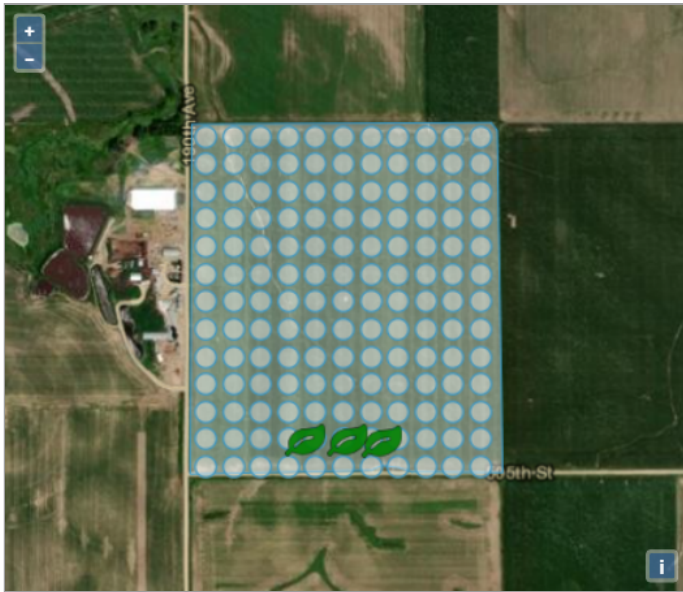


Product Trial Report

GROWER DETAILS	FIELD DETAILS	PLANTING/HARVEST DETAILS	Total Acre Final Report
Grower:	Total Acres: 141.70	Crop: Soybean	Report Date: 01/29/2025
City & State: Creston, NE	Soil Type: Please see Soil Type Map	Plant Date: 05/11/2024	Harvest Year: 2024
Zip Code: 68631	Tile: Spot Tile	Row Spacing: 30"	Crop: Soybean
	Irrigation: Pivot	Planting Depth: 2.00	Trial Name: Soil Boost Trial (Year 2 of 3 Year Trial)
	Fall Tillage: No Till	Harvest Date: 10/13/2024	Trial Type: Preplant
	Spring Tillage: No Till	Variety: P31A95BX	
	Previous Crop: Corn	Seed Company: Pioneer	
		Population: 110000	

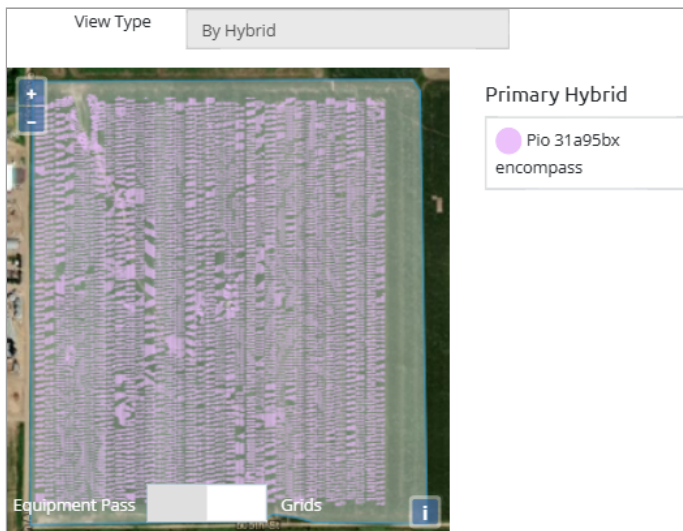
Field Map



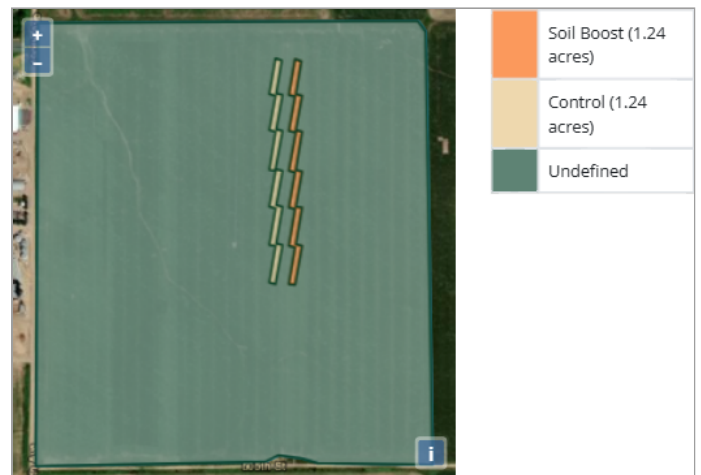
Soil Type



Planting Map



Trial Zones



Product Trial Report

Tissue Results Data

Date	GDUs	Water	Tissue Site	Nitrogen	Phosphorus	Potassium	Magnesium	Calcium	Sulfur	Zinc	Manganese	Copper	Iron	Boron	Aluminum	Molybdenum	Sodium
06/11/2024	516	-	Soil Boost	4.51 %	0.44 %	3.31 %	0.56 %	1.84 %	0.36 %	61.12 ppm	60.24 ppm	10.29 ppm	272 ppm	43.05 ppm		2.75 ppm	0.33 ppm
			Soil Boost Control	3.84 %	0.44 %	3.36 %	0.5 %	1.76 %	0.34 %	58.46 ppm	64.25 ppm	7.96 ppm	307 ppm	51.86 ppm		0.71 ppm	0.37 ppm
06/17/2024	672	1.4 in	Soil Boost	4.26 %	0.53 %	3.29 %	0.55 %	1.96 %	0.35 %	65.53 ppm	54.49 ppm	8.85 ppm	281 ppm	52.12 ppm		1.69 ppm	0.49 ppm
			Soil Boost Control	4.06 %	0.46 %	3.11 %	0.59 %	2.17 %	0.35 %	72.25 ppm	63.37 ppm	8.74 ppm	253 ppm	49.2 ppm		3.84 ppm	0.54 ppm
06/24/2024	845	1.8 in	Soil Boost	5.6 %	0.46 %	3.28 %	0.37 %	1.16 %	0.28 %	37.28 ppm	77.05 ppm	5.67 ppm	150.05 ppm	32.61 ppm		3.47 ppm	0.36 ppm
			Soil Boost Control	4.82 %	0.39 %	2.72 %	0.34 %	0.95 %	0.24 %	35.12 ppm	54.46 ppm	4.12 ppm	183 ppm	31.36 ppm		0.57 ppm	0.28 ppm
07/01/2024	1002	1 in	Soil Boost	5.01 %	0.41 %	2.51 %	0.32 %	1.02 %	0.33 %	42.9 ppm	70.5 ppm	9.51 ppm	210.05 ppm	52.91 ppm		3.52 ppm	0.49 ppm
			Soil Boost Control	5.3 %	0.44 %	2.32 %	0.3 %	1.11 %	0.3 %	47.2 ppm	72.87 ppm	7.97 ppm	213.45 ppm	60.42 ppm		3.96 ppm	0.62 ppm
07/08/2024	1142	2.2 in	Soil Boost	6.19 %	0.58 %	2.35 %	0.35 %	1.08 %	0.39 %	48.41 ppm	98.76 ppm	11.05 ppm	140.14 ppm	54.98 ppm		3.78 ppm	0.1 ppm
			Soil Boost Control	5.47 %	0.51 %	2.46 %	0.35 %	1.07 %	0.36 %	45.02 ppm	92.01 ppm	10.86 ppm	137.69 ppm	49.11 ppm		3.51 ppm	0.09 ppm
07/15/2024	1324	0 in	Soil Boost	5.69 %	0.44 %	2.33 %	0.31 %	0.93 %	0.3 %	38.61 ppm	70.13 ppm	10.12 ppm	202 ppm	49.18 ppm		2.44 ppm	0.62 ppm
			Soil Boost Control	5.72 %	0.47 %	2.27 %	0.39 %	1.13 %	0.34 %	44.87 ppm	132.51 ppm	11.03 ppm	288 ppm	51.73 ppm		3.96 ppm	0.62 ppm
07/22/2024	1496	0.3 in	Soil Boost	5.86 %	0.28 %	1.63 %	0.19 %	0.88 %	0.23 %	36.53 ppm	77.36 ppm	4.48 ppm	137.15 ppm	39.66 ppm		0.22 ppm	0.34 ppm
			Soil Boost Control	5.91 %	0.34 %	1.93 %	0.2 %	1 %	0.27 %	43.42 ppm	63.65 ppm	5.8 ppm	132.11 ppm	44.23 ppm		0.91 ppm	0.54 ppm
07/30/2024	1719	0 in	Soil Boost	6.16 %	0.43 %	2.33 %	0.31 %	1.16 %	0.38 %	97.62 ppm	135.07 ppm	12.56 ppm	195.49 ppm	91 ppm		3.81 ppm	0.29 ppm
			Soil Boost Control	6.04 %	0.37 %	2.24 %	0.28 %	1.29 %	0.33 %	98.92 ppm	99.22 ppm	11.62 ppm	161.3 ppm	102.98 ppm		3.69 ppm	0.26 ppm
08/08/2024	1941	0.2 in	Soil Boost	6.14 %	0.36 %	2 %	0.31 %	1.01 %	0.32 %	62.64 ppm	90.1 ppm	10.85 ppm	269 ppm	55.82 ppm		3.89 ppm	0.28 ppm
			Soil Boost Control	5.93 %	0.32 %	2 %	0.27 %	1.25 %	0.32 %	76.03 ppm	116.87 ppm	11.32 ppm	381.99 ppm	83.55 ppm		3.67 ppm	0.31 ppm
08/12/2024	2005	0.2 in	Soil Boost	5.21 %	0.41 %	2.81 %	0.21 %	1.14 %	0.32 %	59.59 ppm	82.24 ppm	9.21 ppm	104.17 ppm	55.83 ppm		2.77 ppm	0.4 ppm
			Soil Boost Control	4.99 %	0.37 %	2.25 %	0.29 %	1.2 %	0.35 %	44.93 ppm	140.78 ppm	9.91 ppm	117.42 ppm	56.1 ppm		2.07 ppm	0.26 ppm
08/19/2024	2161	1 in	Soil Boost	5.89 %	0.43 %	2.24 %	0.26 %	1.48 %	0.34 %	56.91 ppm	153.11 ppm	8.73 ppm	133.11 ppm	53.39 ppm		2.05 ppm	0.46 ppm
			Soil Boost Control	6.08 %	0.36 %	1.86 %	0.31 %	1.43 %	0.33 %	38.32 ppm	231.84 ppm	9.36 ppm	149.87 ppm	55.48 ppm		2.27 ppm	0.41 ppm

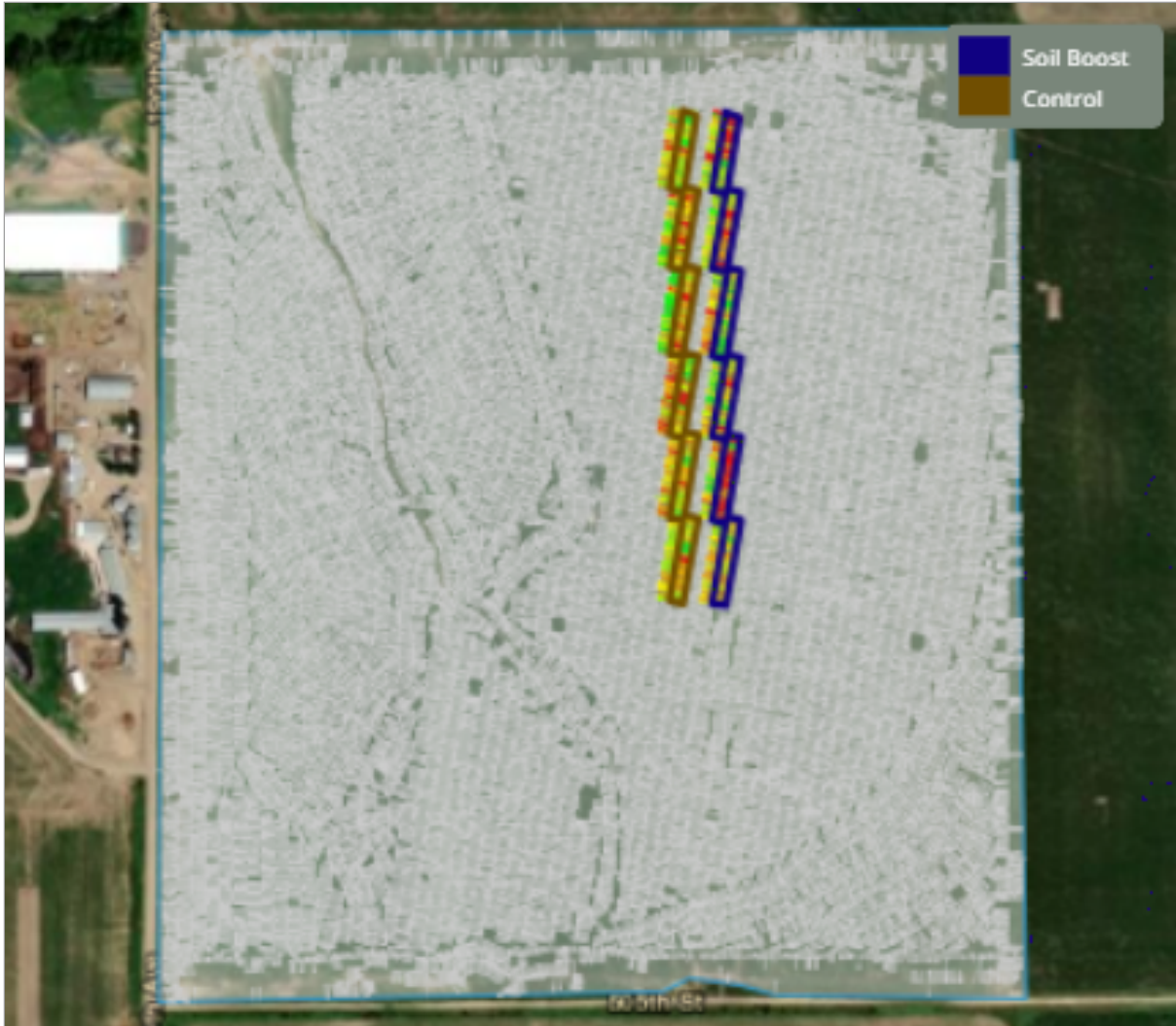
Product Trial Report

Date	GDU	Water	Tissue Site	Nitrogen	Phosphorus	Potassium	Magnesium	Calcium	Sulfur	Zinc	Manganese	Copper	Iron	Boron	Aluminum	Molybdenum	Sodium
08/26/2024	2333	0.4 in	Soil Boost	5.98 %	0.44 %	2.16 %	0.31 %	2.44 %	0.4 %	46.43 ppm	248.36 ppm	10.8 ppm	149.6 ppm	71.73 ppm		1.8 ppm	0.08 ppm
			Soil Boost Control	5.86 %	0.4 %	2.07 %	0.36 %	2.33 %	0.37 %	37.94 ppm	242.02 ppm	11.65 ppm	167.5 ppm	69.66 ppm		1.94 ppm	0.09 ppm
09/03/2024	2503	0.5 in	Soil Boost	4.35 %	0.34 %	1.74 %	0.24 %	1.37 %	0.37 %	35.12 ppm	158.86 ppm	6.72 ppm	147.42 ppm	31.04 ppm		1.57 ppm	0.1 ppm
			Soil Boost Control	4.35 %	0.32 %	1.77 %	0.28 %	1.16 %	0.36 %	29.55 ppm	303.67 ppm	9.68 ppm	179.74 ppm	29.51 ppm		0.53 ppm	0.1 ppm
09/09/2024	2610	0.1 in	Soil Boost	4.09 %	0.33 %	1.74 %	0.26 %	2.58 %	0.28 %	25.75 ppm	187.42 ppm	7.21 ppm	120.4 ppm	51.66 ppm		0.39 ppm	0.19 ppm
			Soil Boost Control	3.89 %	0.33 %	1.79 %	0.24 %	2.58 %	0.26 %	20.44 ppm	247.85 ppm	7.93 ppm	170.27 ppm	43.31 ppm		0.71 ppm	0.21 ppm
09/17/2024	2810	0.2 in	Soil Boost	3.1 %	0.27 %	1.95 %	0.28 %	2.7 %	0.26 %	21.95 ppm	241.11 ppm	5.41 ppm	129.27 ppm	50.55 ppm		0.48 ppm	0.12 ppm
			Soil Boost Control	2.77 %	0.27 %	1.76 %	0.42 %	2.48 %	0.26 %	23.25 ppm	244.58 ppm	5.81 ppm	104.67 ppm	61.08 ppm		0.51 ppm	0.17 ppm
09/23/2024	2923	0.2 in	Soil Boost	2.68 %	0.2 %	1.98 %	0.3 %	2.71 %	0.17 %	47.82 ppm	242.1 ppm	6.26 ppm	114.35 ppm	55.57 ppm		0.15 ppm	0.12 ppm
			Soil Boost Control	2.4 %	0.21 %	1.75 %	0.25 %	2.71 %	0.13 %	31.74 ppm	243.81 ppm	4.14 ppm	81.04 ppm	40.48 ppm		0.57 ppm	0.4 ppm

Product Trial Report

Yield Results Data

High Level Yield Heat Map



This data was filtered based on -1 / +2.5 St Dev

Yield Summary BPA	
<i>Location</i>	<i>Yield</i>
Soil Boost	88.52
Control	90.85
Yield Response	-2.33

Yield Values	
●	70.8 - 84.3
●	84.3 - 87.9
●	87.9 - 91.2
●	91.3 - 95.7
●	95.8 - 148.4

Product Trial Report

Product Trial Comments:

This plot is Year 2 of a 3 year study to reduce soil compaction using Soil Boost. Per the findings at the bottom of this report, this product is working at accomplishing this strategic objective. Due to harvest angle not aligning with product application passes plus interference from other trial activity, this trial had to be trimmed. This plot had a -2.33 bushel/acre yield response using the -1/+2.5 Standard Deviation measurement method to tighten yield data points.

Application Date and Details:

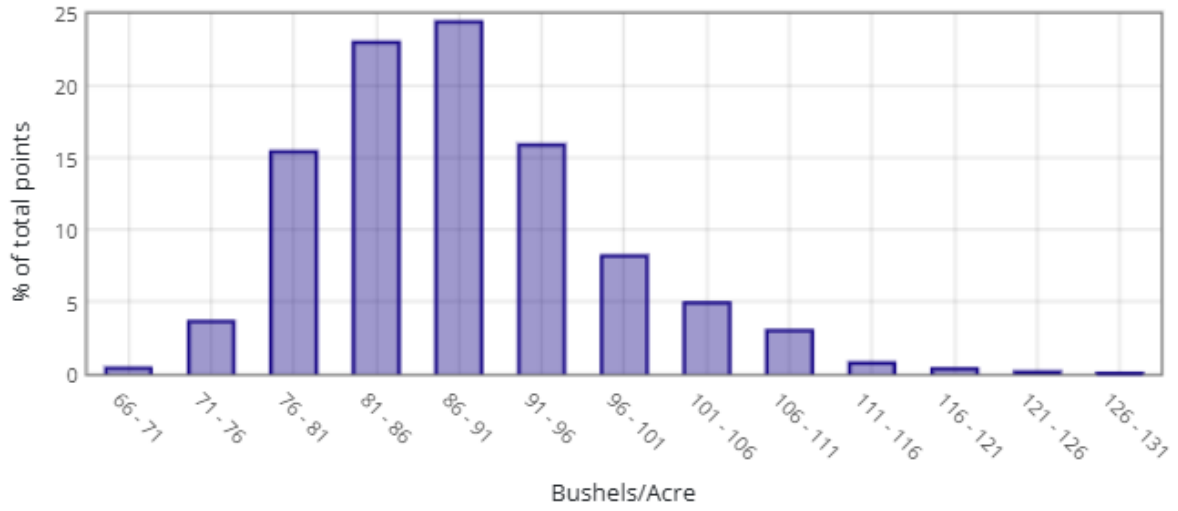
Application Date: 3/27/24

Application Method: Spreader Broadcast

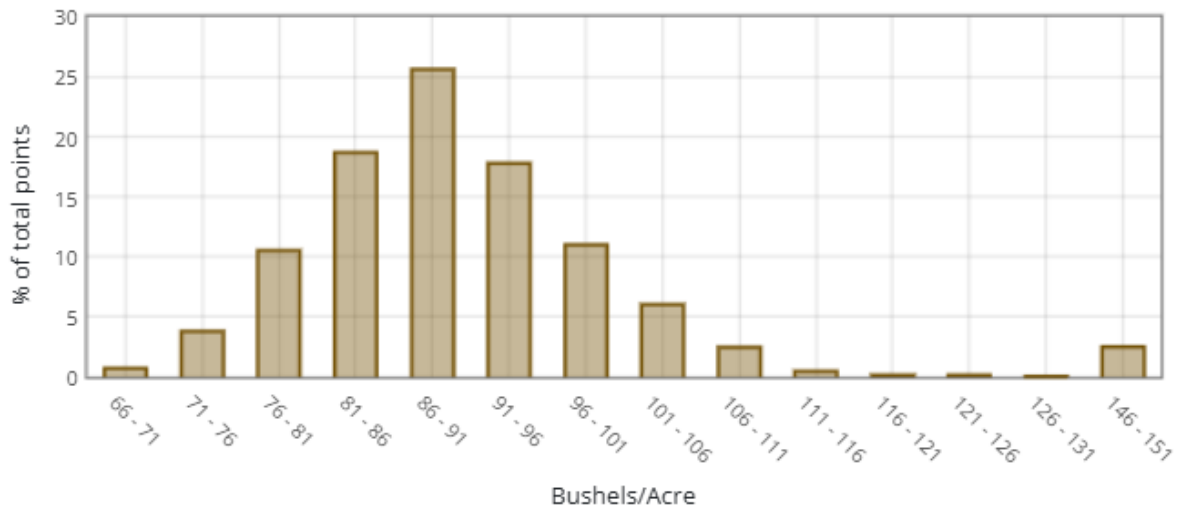
Product Application Rate/Acre: 150#

Product Trial Report

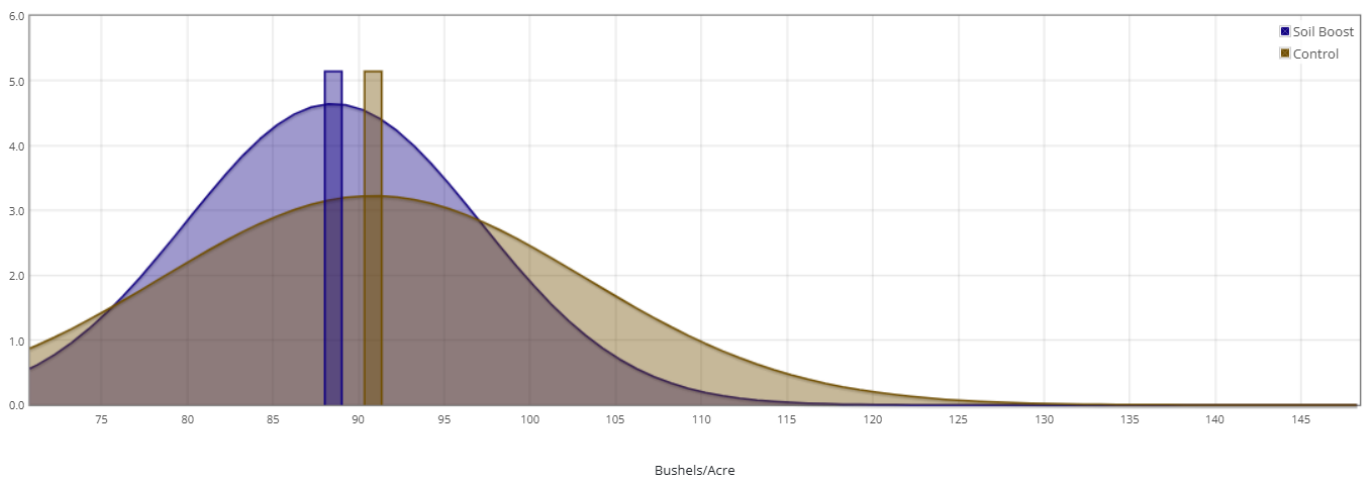
Soil Boost



Control



Normal Curve Distribution



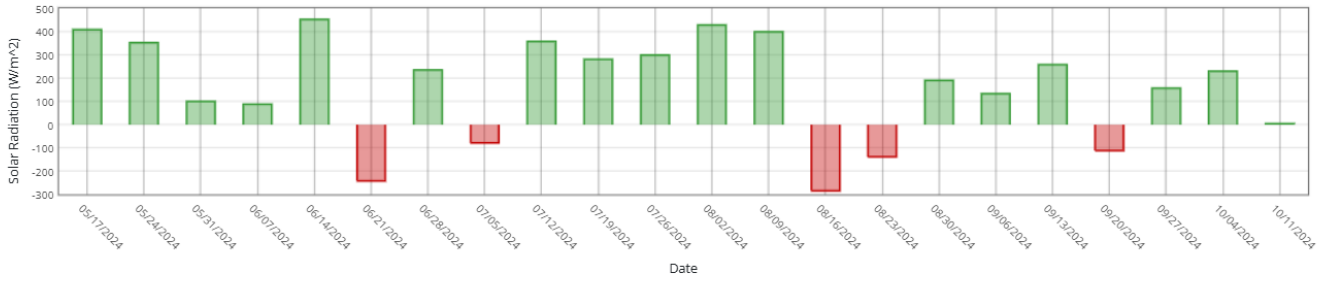
Product Trial Report

Trial Location Weather Data vs 5 Yr Avg

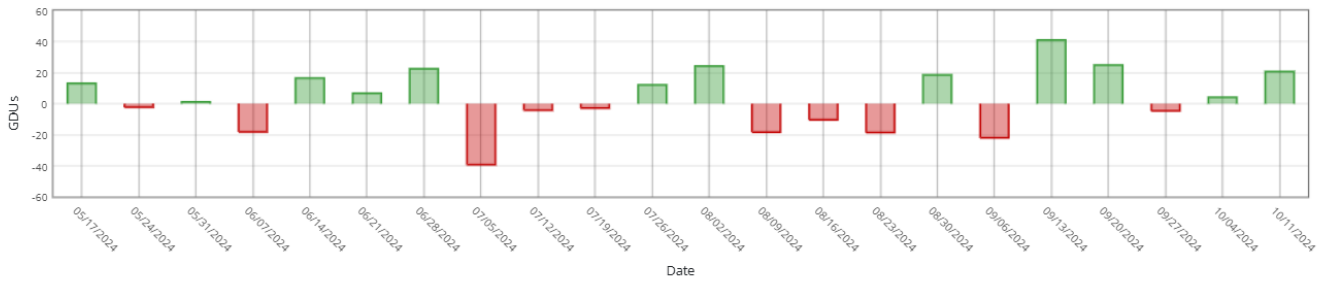
Historical Averages based on past years

Cumulative Week over Week

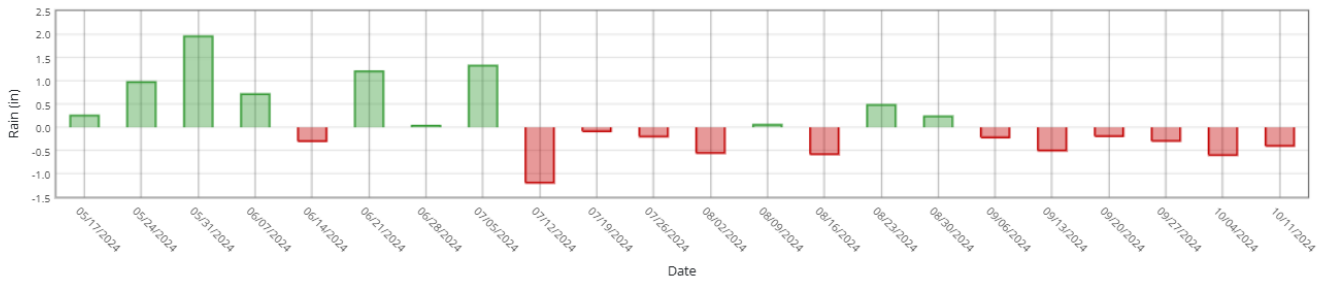
Sunlight



Heat (GDUs)



Rain



Product Trial Report

Additional References



With Soil Boost 27 inches deep.



With Soil Boost You can see how far the probe went into the soil.



Without Soil boost 20 inches.

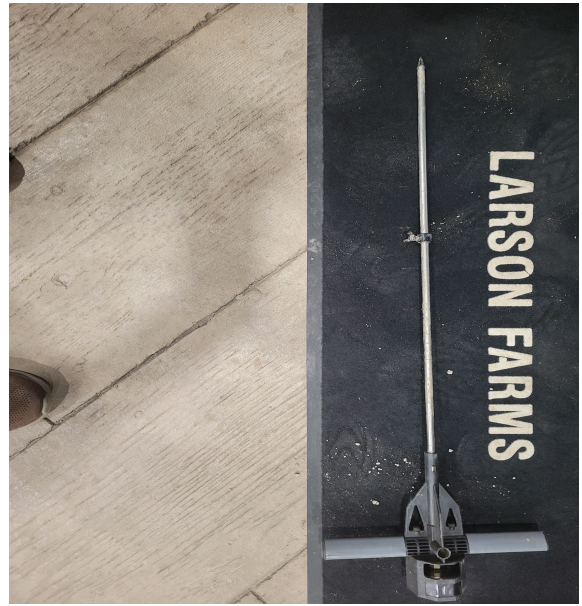


Without soil boost 21 inches

Product Trial Report



End of year soil test 18 inches with soil boost



End of season test with out soil boost 12 inches