PURPOSE DRIVEN. BRAND PROVEN.

REDSTAR

2025 PLOT DATA

REDSTAR

2022 - 2023 - 2024 - 2025 PLOTS

2024 PLOT WORK

- Goal of plots is to learn and identify how products work right here on our soils and environment.
- Utilizing these plots takes the "bias" out of it because it's done in our local area with our team. GREAT WAY TO LEARN TOGETHER.
- Identify new technologies that work to help increase ROI for our customers.
- Education and new technologies: allows us see new products and technologies coming to agriculture. Also helps us learn more about agronomy to help drive yield improvement with our customers.

WHAT IS SEED QUALITY?

- The ultimate goal is to reduce the possibility that seed viability and vigor affect hybrid performance in the grower's fields where environments present their own variables.
- It is understood that late emerging seedlings, regardless of cause, have difficulty in competing with adjacent corn plants. They often remain less vigorous because competitors reduce light on leaves and out compete the late-emerging plant's roots for minerals and water.
- Often late emerging plants produce ear shoots later than most adjacent plants resulting in poorly pollinated ears resulting in reduced yield potential.

SEED QUALITY

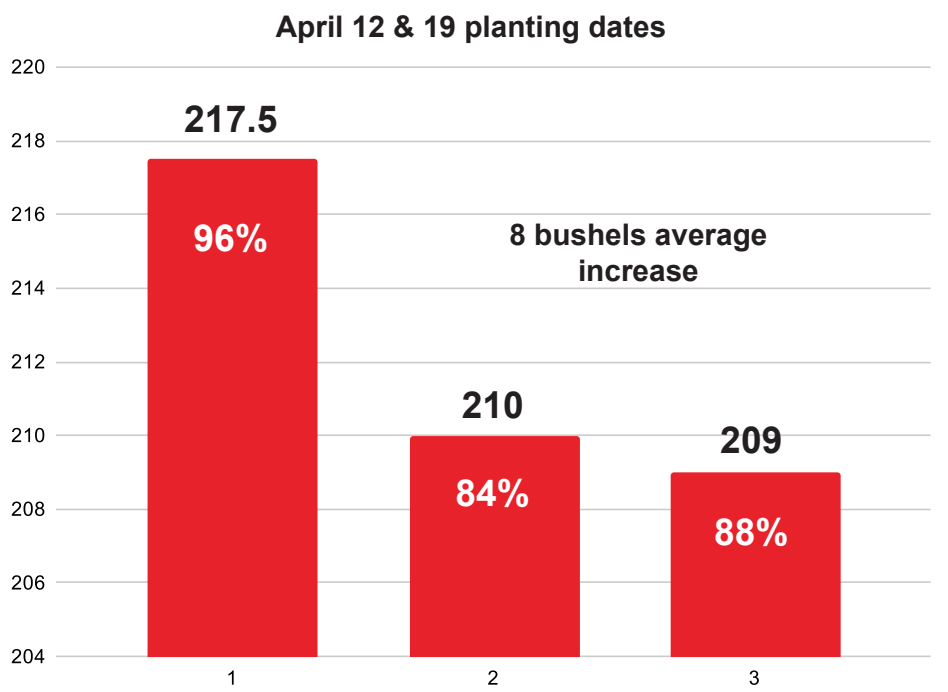
Starting on April 12, 2023, we planted every Monday through May 3, 2023. Our goal was to determine the value provided by planting High Cold Germination corn versus Average Cold Germination corn. The following data is the yield by date showing the difference in each Cold Germination value.

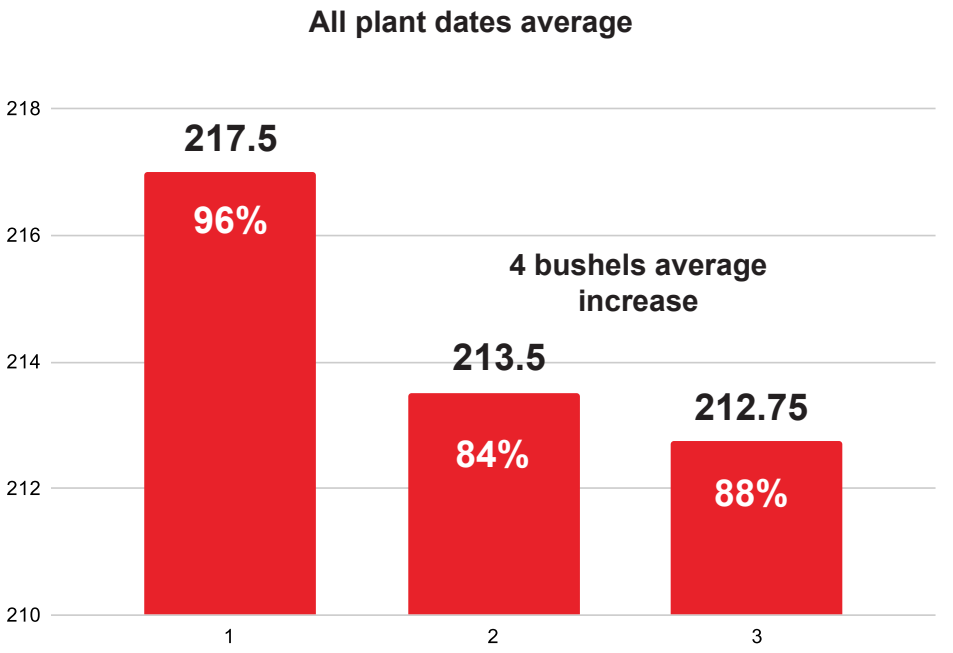
- Early planting (4-12/4-19) 96% Cold Germ averaged 8 bushels advantage = $38.00/A
- 96% Cold Germ averaged 4 bushel advantage over all 4 planting dates. ($19.00/A)
- Quality Stand = Quality Yield

REDSTAR

2022 - 2023 - 2024 - 2025 PLOTS

SEED QUALITY

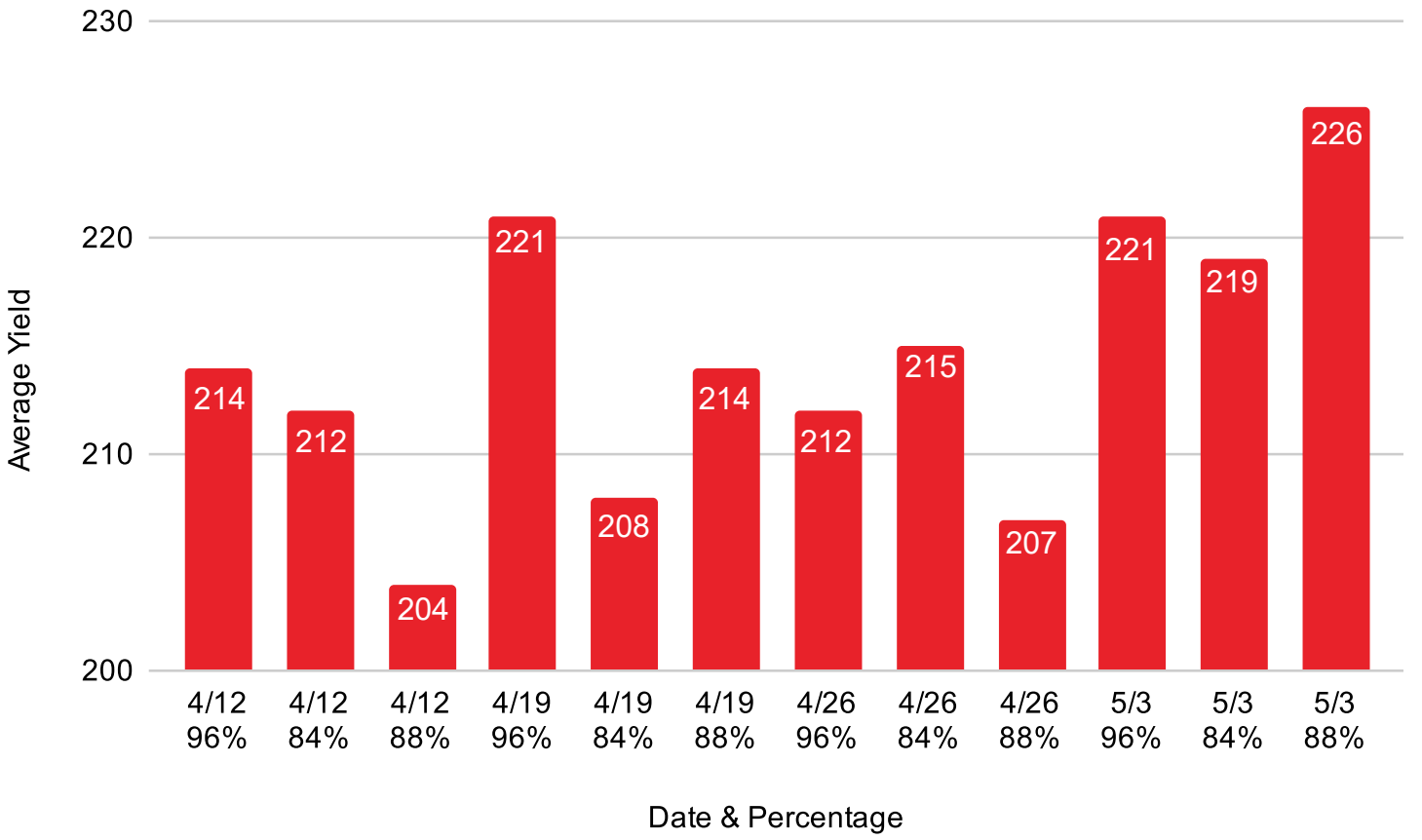




2022 - 2023 - 2024 - 2025 PLOTS

2023 SEED QUALITY

HYBRID - DKC 59-82



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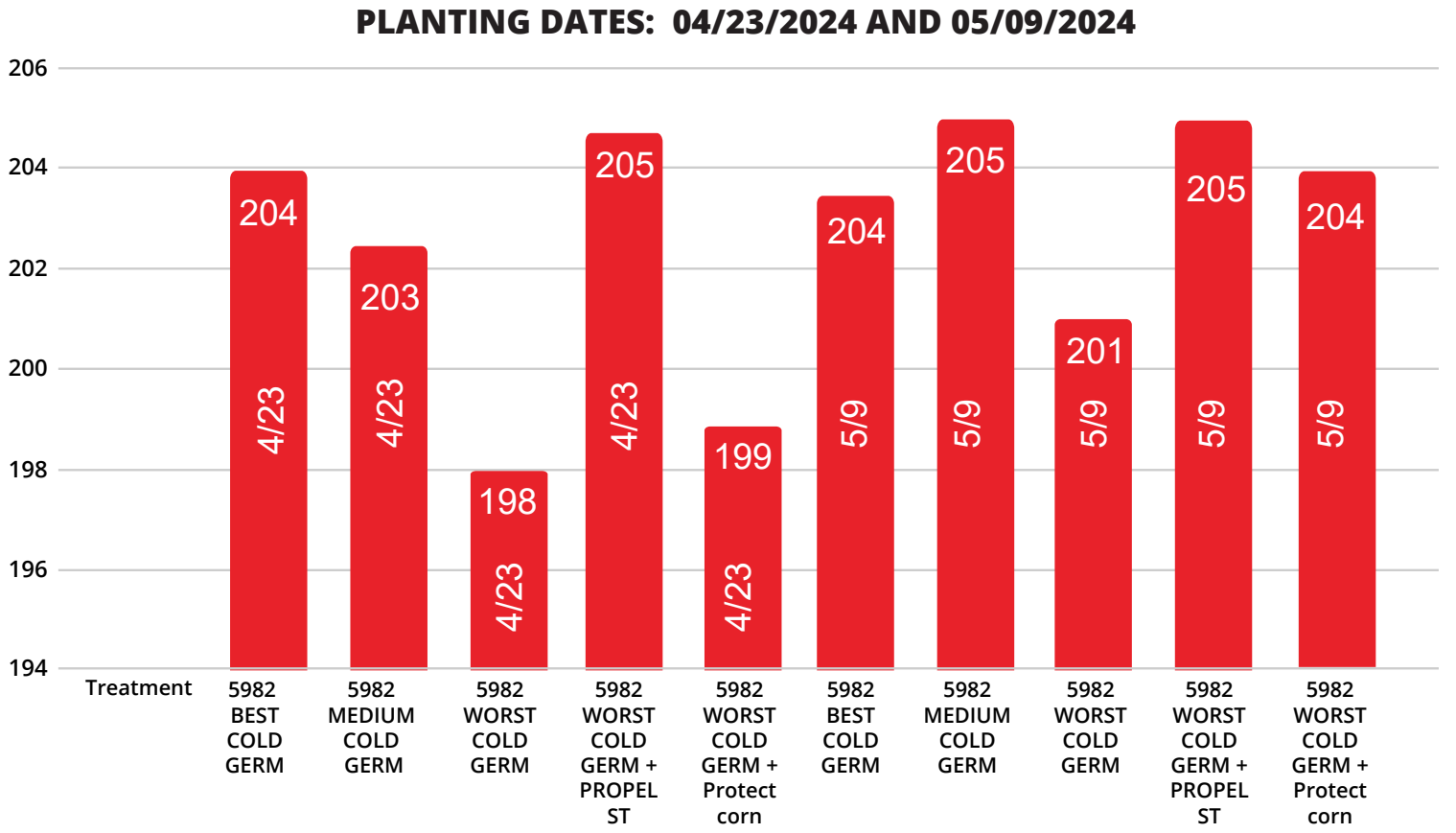
2022 - 2023 - 2024 - 2025 PLOTS

2024 SEED QUALITY



2022 - 2023 - 2024 - 2025 PLOTS

THE COST OF HIDDEN COMPACTION ON GRAIN YIELD

Tractor and planter wheel traffic can quietly create a “pinch-row” effect in the rows that sit directly behind or between those tires, and the yield hit is very real. Heavy axle loads and high tire pressures concentrate compaction in those wheel tracks, squeezing pore space, restricting early root growth, and reducing the plant’s ability to access water and nutrients. University and private research back this up: Ontario field trials found a 6 bu/ac yield reduction in corn for rows sandwiched between two row-crop tires compared to rows away from tire traffic, even when overall field averages looked similar.Field Crop News AGCO Crop Tour work and related planter studies have documented pinch-row losses around 9 bu/ac in the center rows where tractor and planter tires overlap, turning into a 1–2 bu/ac loss averaged across a 16-row planter.Farm Progress+1 Broader extension estimates from Iowa State suggest that severe wheel-traffic compaction can trim yields by 10–20% in affected zones.Integrated Crop Management. In our 2025 Red Acres on-farm research, we are consistently seeing 5–9 bushels of corn yield loss in the rows behind tractor and planter wheels, which lines up closely with this published data and underlines the importance of managing tire pressure, axle load, and traffic patterns to protect every row—not just the ones between the tracks.

CLICK LINK TO ARTICLE
https://fieldcropnews.com/2022/08/do-you-need-to-worry-about-tire-soil-compaction-in-the-rows-during-corn-planting/?utm_source=chatgpt.com

	OFF THE WHEEL TRACKS	**ON THE WHEEL TRACKS**
REDSTAR Wholefield #1 Ave.	211 bushels	202 bushels
REDSTAR Wholefield #2 Ave.	209 bushels	204 bushels

IN SUMMARY:
There are many factors that affect corn grain yield, and pre-season and in-season tillage and applications can have a significant impact on final grain yield. As with many things, weather and soil conditions dictate how and when are crop gets planted. Trying to minimize the compaction from your equipment will be determined by weather and soil conditions. For more information on how compaction can impact your fields, utilize the RX 360 Till Mapper to effectively identify and eliminate compaction. For more information please visit www.redstarne.com or call REDSTAR at 844-502-9368.

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2022 - 2023 - 2024 - 2025 PLOTS

2025 CORN SEED QUALITY

THE IMPORTANCE OF SEED QUALITY TESTING & INFORMATION AT REDSTAR LLC

Cold germination testing is essential for predicting how corn seed will perform under early-season stress, as it simulates the cold, wet soil conditions that can slow emergence and expose weaknesses in seed vigor. By verifying that each seed lot can withstand these challenging environments, the test helps ensure strong, uniform emergence and better stand establishment. Just as important is monitoring the percentage of “abnormals” — seedlings that sprout but develop improperly and cannot produce a full, healthy ear. Minimizing these abnormals ensures that more plants reach their full yield potential. Together, high cold-germ scores and low abnormal counts give growers greater confidence that their seed will deliver consistent stands, uniform development, and maximum yield potential even when early-season conditions are less than ideal.

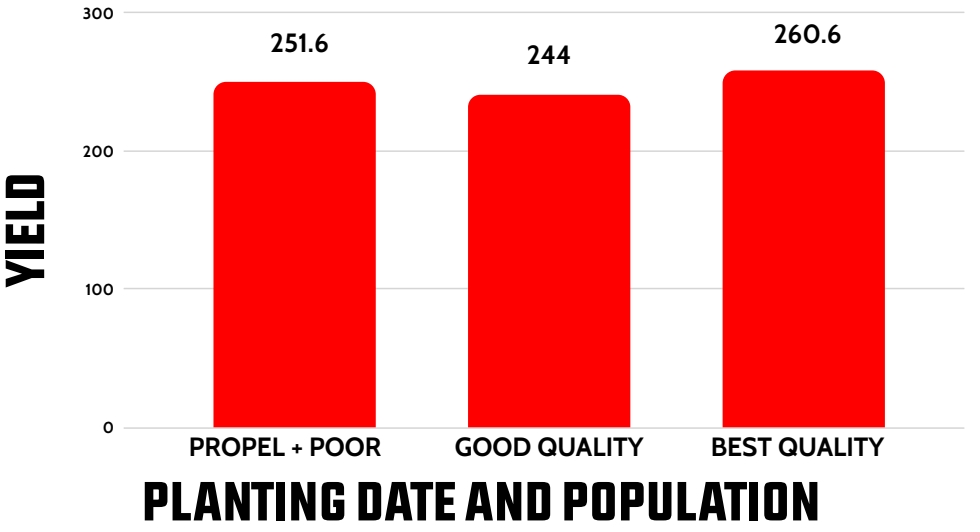
WHAT WE LEARNED IN 2025 ABOUT SEED QUALITY AND YIELD IMPACT

· PROPEL ST nutritional seed treatment averaged 11.2 bushel yield increase when PROPEL ST was applied to lower cold germination seed. PROPEL ST provides the germinating corn plant with additional energy and nutrients to ensure the young corn seedling can survive and thrive in our cold, wet soils to help overcome low vigor seed quality when planted early.

· When we have identified low Cold Germ seed quality, there are 2 things we need to do in order to manage our yield higher. 1. We need to apply PROPEL ST seed treatment, which added 11.2 bushels of yield. 2. We need to delay planting until soil temperatures and conditions are warm and improving to maximize yield.

· It's always best to make sure you have the BEST cold germination scores when planting corn in April. And secondly, it's best to apply PROPEL ST seed treatment, which helps provide the corn seedling with additional nutrients to help get through tough environmental conditions. AVERAGE OF 11.2 bushels yield increase.

CORN QUALITY APRIL 11TH



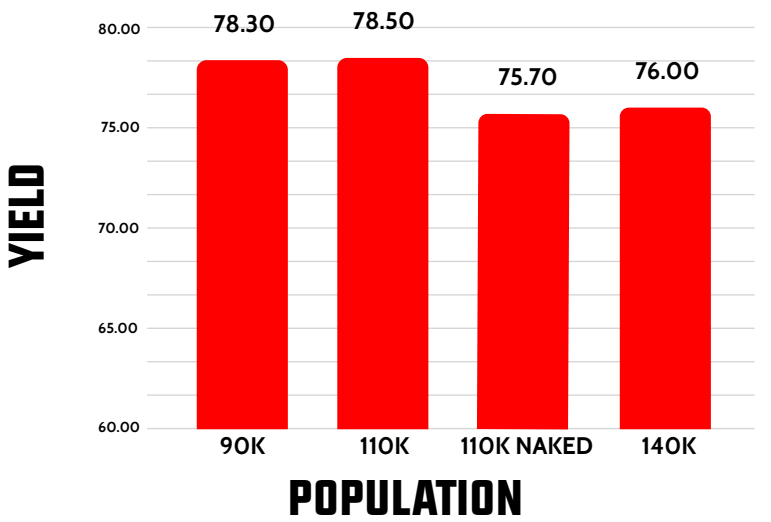
CORN QUALITY APRIL 17TH

CORN QUALITY APRIL 27TH

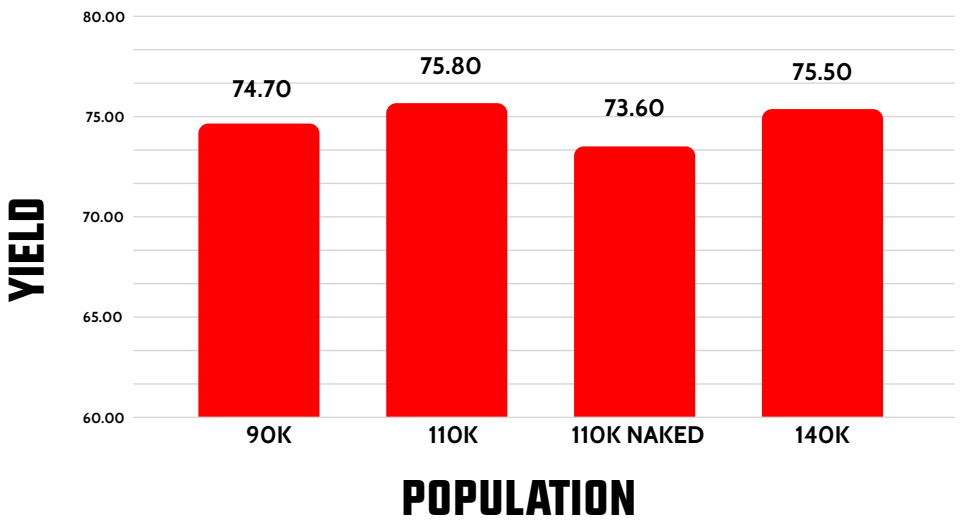
2025 SOYBEAN POPULATION & PLANTING DATE TRIALS

· Planting Dates: April 10th, April 17th & May 1st 2025
· Early planted Soybeans average 3.25 bushel Yield Increase
· 90k Seeds / acre is the Sweet Spot for Yield & Seed Cost Savings at all planting dates.
· PROTECT COMPLETE seed treatment added 2.8 bushels of Soybeans.
· 90k vs. 140k Saves $24.29 / Acre seed Cost
· 90k vs. 140k gave 4.2 bushels more yield ($45.57 Revenue Increase).
· 90k vs. 110k very similar, but 90k wins based on seed cost savings.
· Late Planted Soybeans need SEED TREATMENT !

YIELD BY POPULATION APRIL 10TH 2025



SOYBEAN POPULATION TRIAL APRIL 17TH 2025



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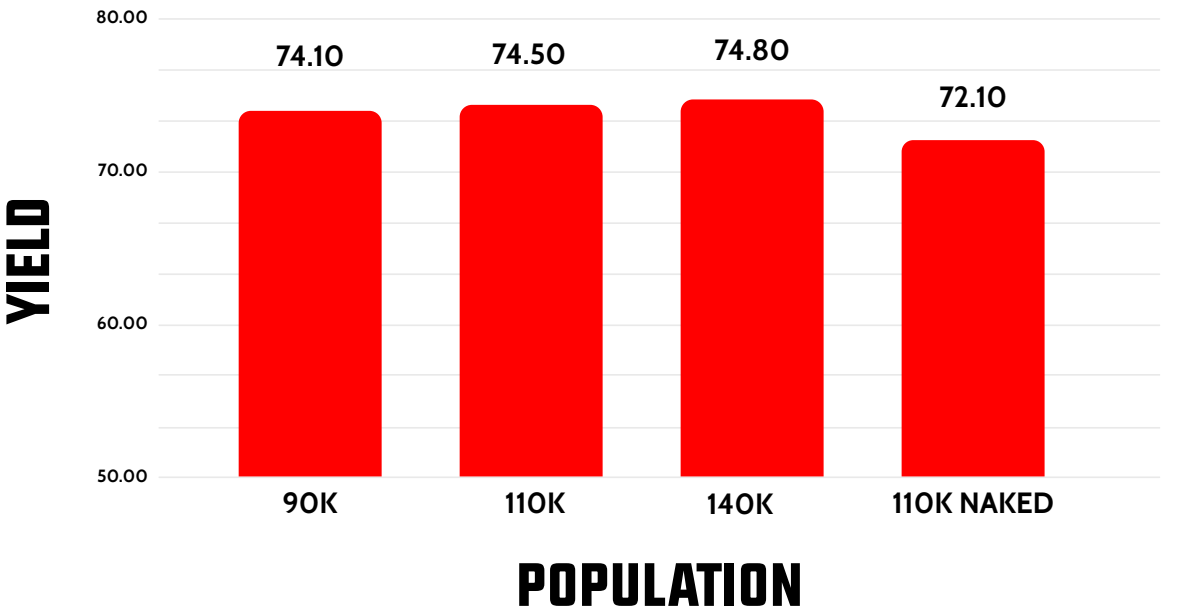
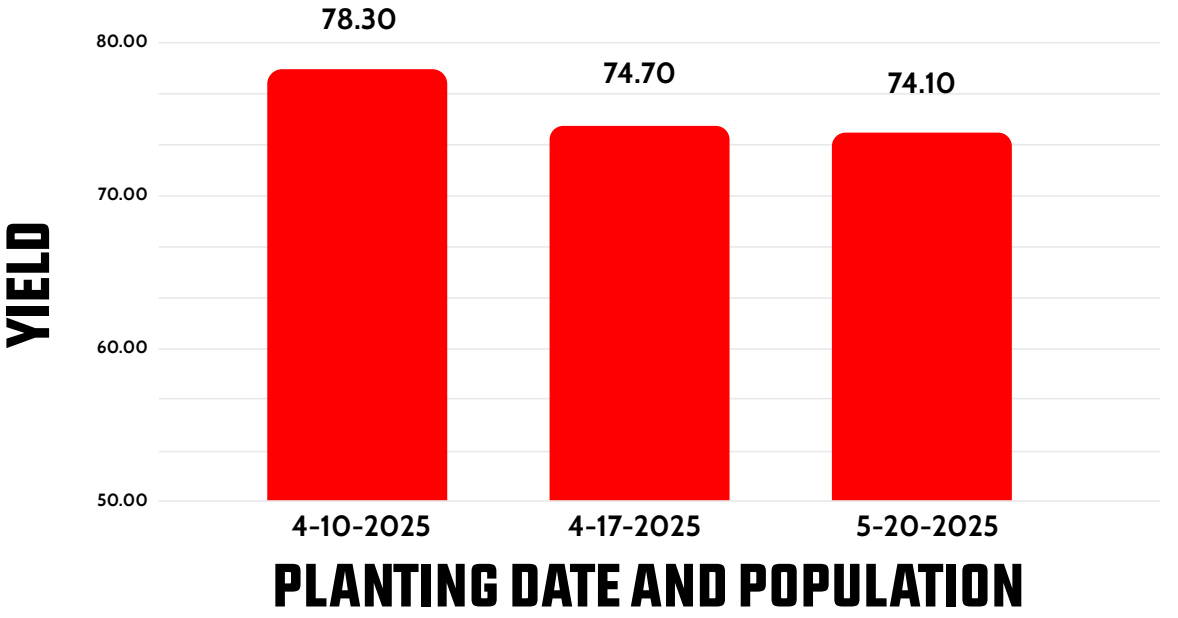
2022 - 2023 - 2024 - 2025 PLOTS

SOYBEAN POPULATION TRIAL MAY 1ST 2025



YIELD OF 90,000 POPULATION BY PLANTING DATE



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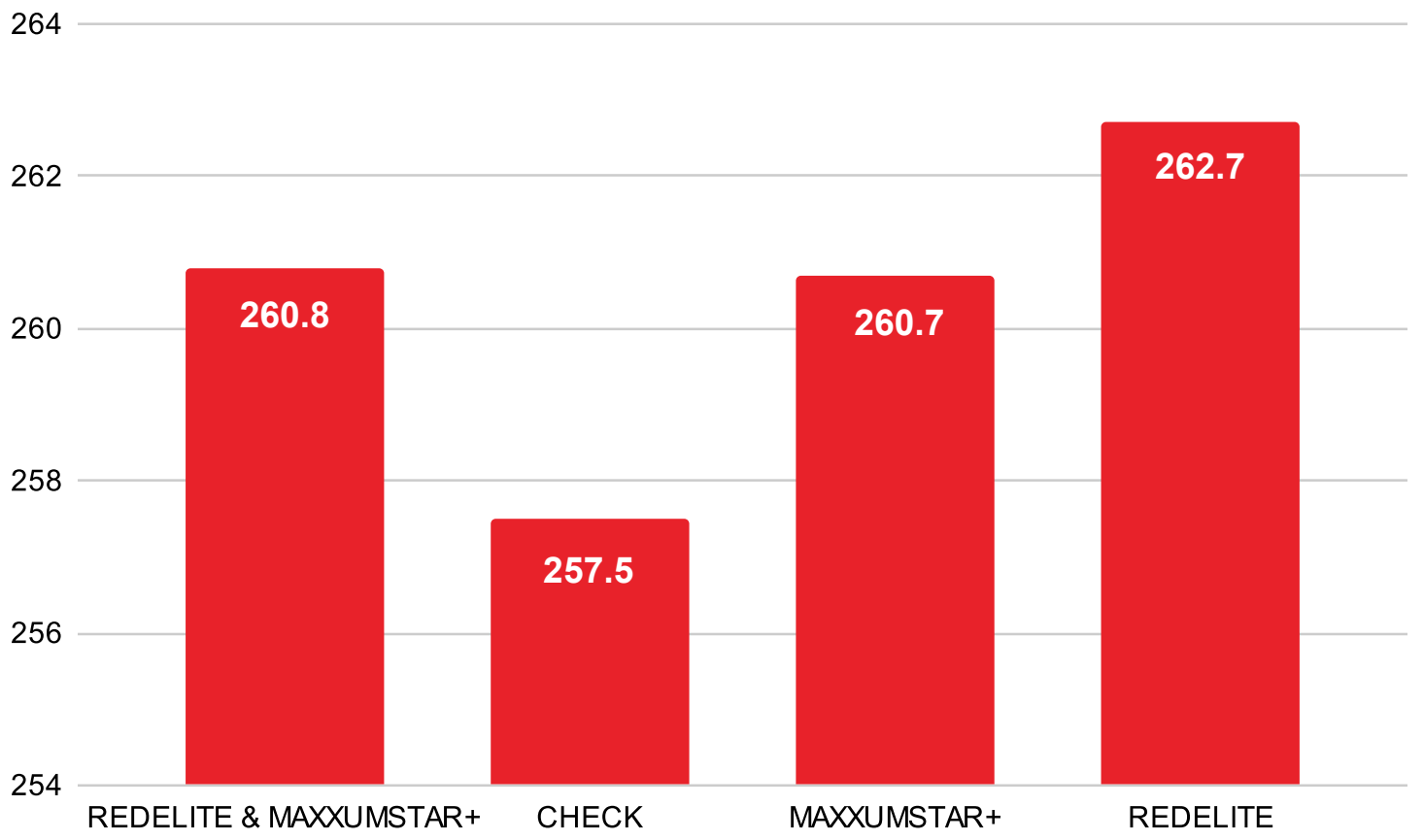
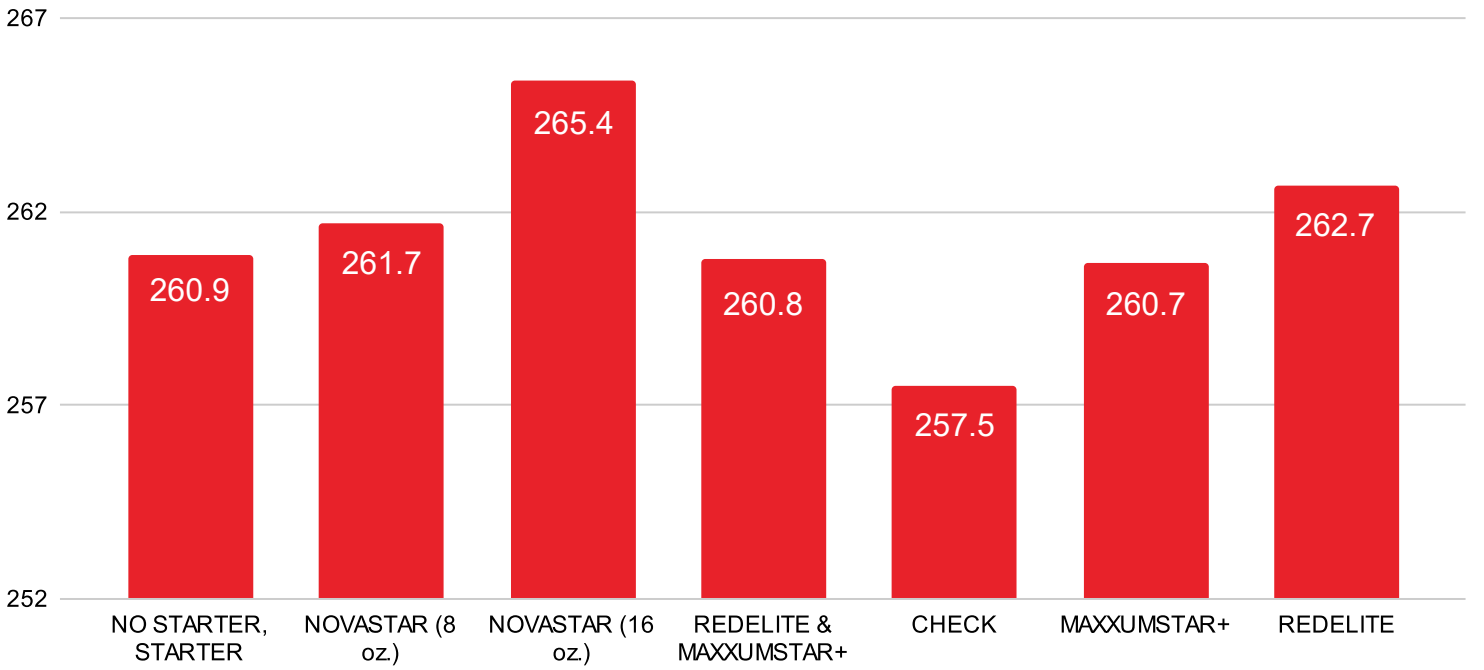
2022 - 2023 - 2024 - 2025 PLOTS

2023 RED ELITE VS. MAXXUMSTAR+



2022 - 2023 - 2024 - 2025 PLOTS

NOVASTAR VS. MAXXUMSTAR+



NOVASTAR is a novel amino acid / poly-peptide product derived from 100% plant based crops. NOVASTAR is unique in the industry as it contains key amino acids and peptides from both mono-cot and dicot plants, which help it to better alleviate abiotic stresses during the growing season. In-furrow applications of NOVASTAR with both MAXXUMSTAR+ and RED ELITE+ have shown to significantly improve yields and root growth of young seedling plants.

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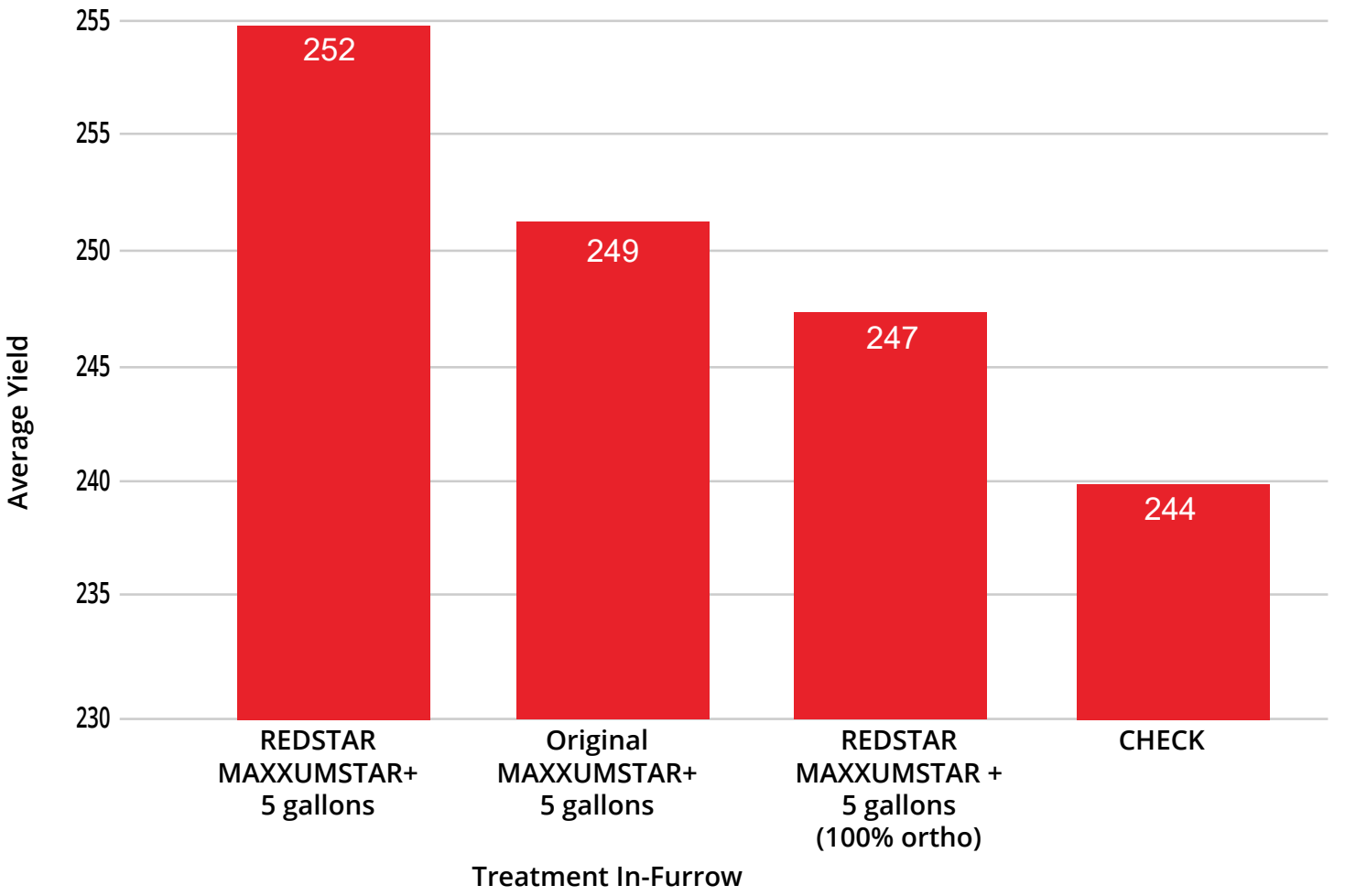
2022 - 2023 - 2024 - 2025 PLOTS

MAXXUMSTAR IN - FURROW



THOUGHTS FROM THE TURN ROW:

- 100% Ortho phosphorus doesn't appear to show any additional value compared to 80 ortho/20 poly. However, the 3-5 bushels can just be the result of chance. Historically in the lower Midwest 100% orthos don't out perform 80/20 significantly. Hence the additional cost may not be well spent unless you're using a specialty type crop.

- Redstar's ability to now control the quality of the phosphoric acid used helps us to make sure we provide the best quality products for our customers.

- This plot is extremely high fertility, and the results show the carbon and extraction technologies we are using in Maxxumstar+ are working to help improve yield and quality .

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2022 - 2023 - 2024 - 2025 PLOTS

2019 REDELITE

How much better? See for yourself:

REDELITE
(3 GALS.)

10-34-0
(4 GALS.)

REDELITE

REDSTAR

2022 - 2023 - 2024 - 2025 PLOTS

WHAT ARE NANO-FERTILIZERS

Nano fertilizers are essential resources in agriculture in order to increase crop production, quality, productivity, and boost nutrient uptake. Nano-fertilizer is efficient for specific use of nutrients at appropriate time of plant growth and can provide nutrients as a whole with the crop. Growing crops with heavier fertilizer concentrations further increases may be limiting to crop growth due to nutrient toxicity. Nano-fertilizers provide more area for photosynthesis, leading to more sunlight absorption and greater yields of the crop. It will help plants survive challenging environmental factors such as drought. Limitations in agricultural land and water supplies can improve production land and water use productivity through the use of new technologies. Nanotechnology has the potential of transforming both personal use and development. Nano-structured formulations may also be developed in order to deliver active ingredients in response to environmental cues and biological demands more properly. The principle of fertilizer use is known to use less resource and to be free from chemical side effects. Nanotechnology has enormous potential to contribute significantly to sustainable agricultural production, particularly in developing countries.

2023 WHAT WE LEARNED

- New technology utilizing Nano-Fertilizer technology performed the SAME as standard MAXXUMSTAR+ with a lower analysis and lower cost.
- NOVASTAR In-Furrow at 8 or 16 oz. adds yield and return on investment for growers.
- MICROSTAR (fulvic + sugar + micro-nutrients) help drive In-Furrow success!
- NSS (No Starter, STARTER) performed very well: NEW MARKET OPPORTUNITY
- AQUAMAX and REDSHIELD (potassium-phosphite) both worked well and showed great promise finishing in the TOP FIVE.

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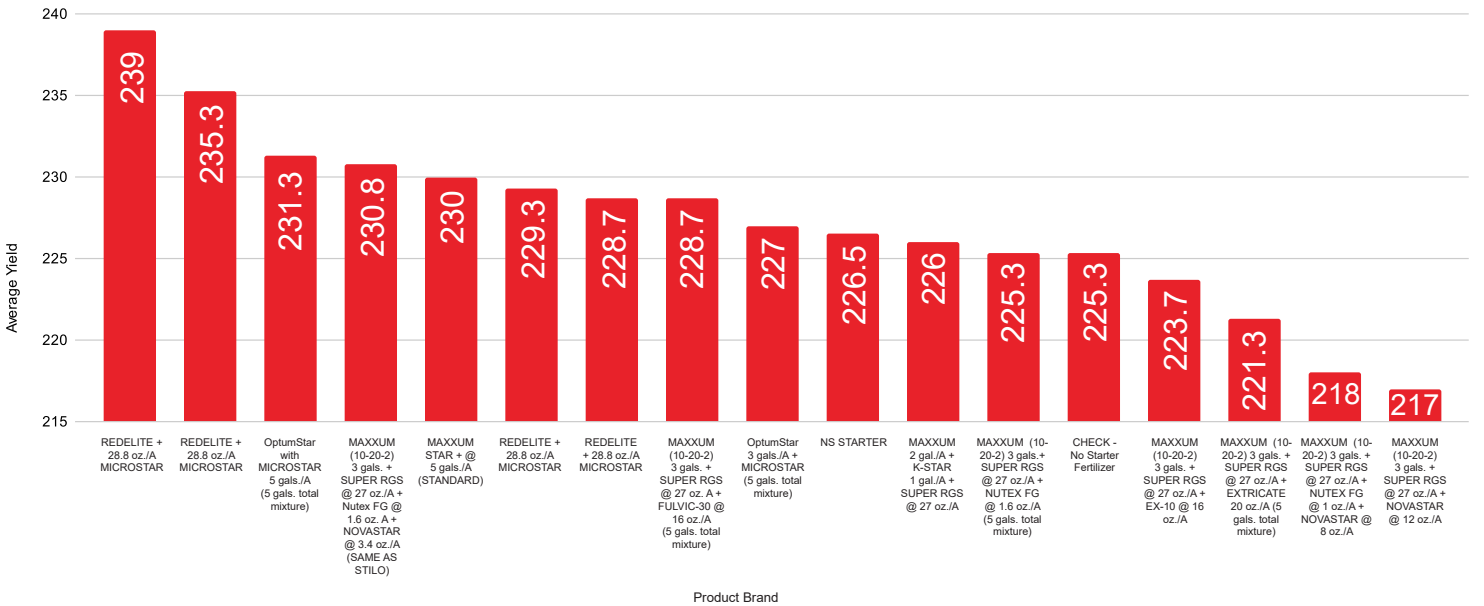
2022 - 2023 - 2024 - 2025 PLOTS

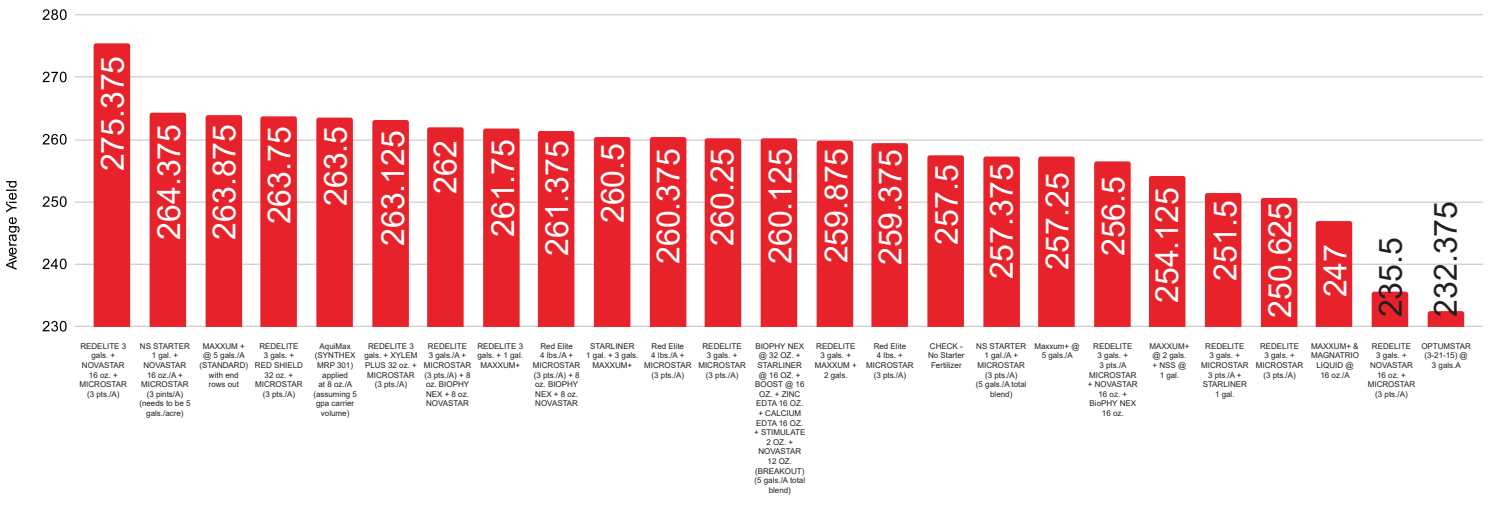
2022 CORN IN - FURROW

4 REPLICATIONS

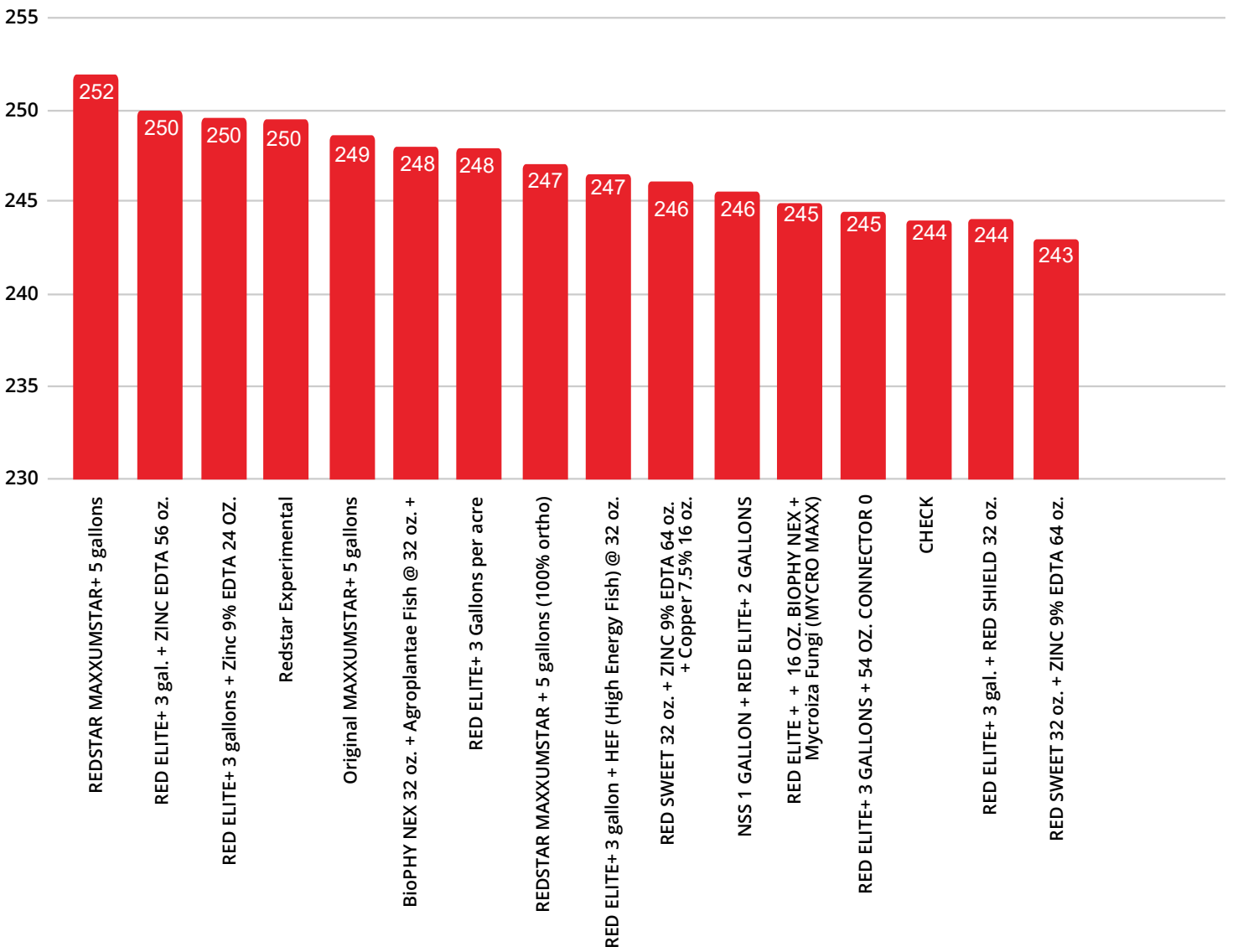


2023 CORN IN - FURROW

8 REPLICATIONS



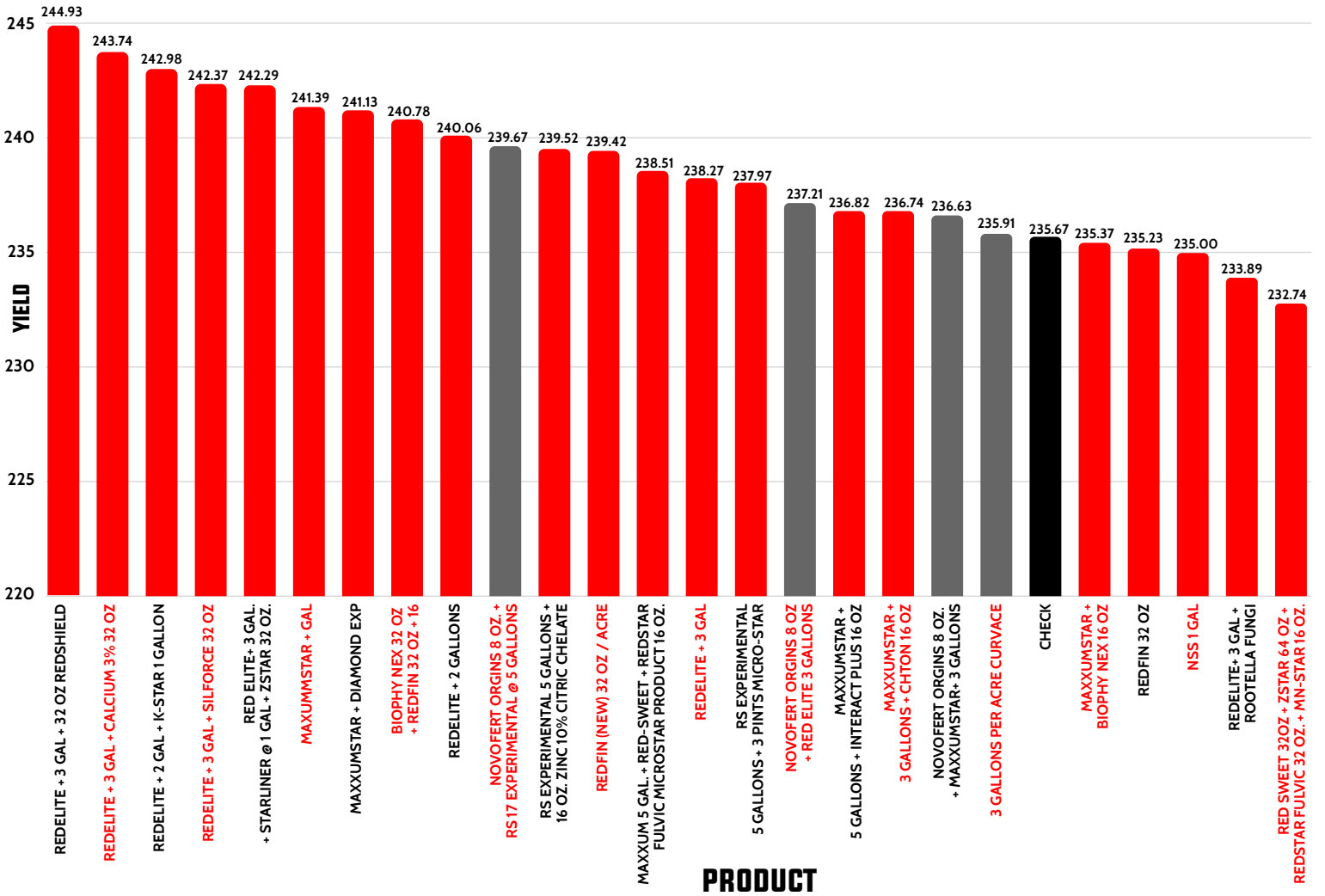
2024 CORN IN - FURROW



WHAT WE LEARNED FROM IN-FURROW

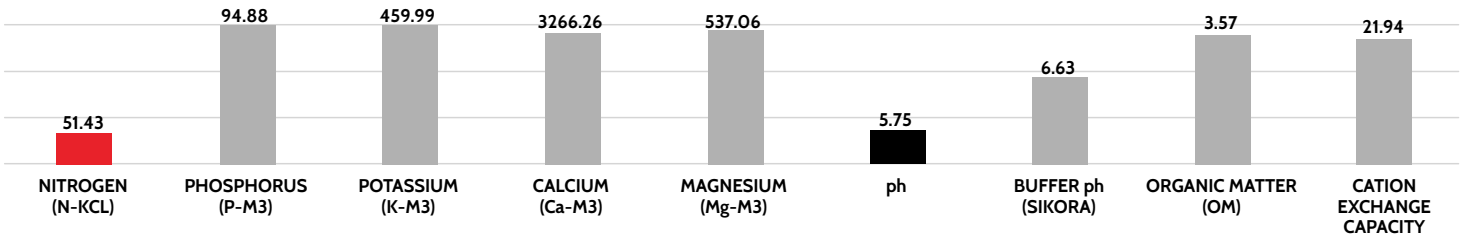
- Farm is 8 years corn on corn with really high fertility levels. REDSTAR RX 360 AVAILABLE UPON REQUEST TO SEE WHOLE FARM FERTILITY. (P: 90 ppm; K: 475 ppm; Zn: 4.49 ppm; pH: 5.75)
- REDSTAR MAXXUMSTAR+ SHOWED AN 8 BUSHEL IN 2024. 3-YEAR AVERAGE OF 6.36 BUSHELS AVERAGE INCREASE
- RED ELITE+ CONTINUES TO BE AT THE TOP OF THE PLOT BY DRIVING INCREASED BIO-DIVERSITY AND IMPROVED SOIL HEALTH AT LOW RATE OF 3 GALLONS PER ACRE.
- TOP 5 PRODUCTS ALL CONTAIN ZINC EDTA, MEANING ZINC EDTA + PHOSPHORUS IS A MUST IN-FURROW
- Quality of your starter matters to both your soil and your crop. REDSTAR strives to utilize the most advanced high quality fertilizer to manufacture our REDSTAR Branded products.
- Again, we continue to see our key technologies drive the success of REDSTAR Branded Fertilizer products in our plots and out customers fields. For more information on choosing the right product for your crop, please reach out to us at www.redstarne.com or www.redstarbranded.com

2025 CORN IN-FURROW FERTILIZER 2025



2025 CORN FERTILIZER IN-FURROW PLOT TRIALS

This trial farm has been Corn/Corn for 10 years. Has 59 ppm Phosphorus & 398 ppm Potassium levels. The farm is high fertility, so when we test products and we get a response, we know it will perform well on your farm. (See Graph Below).



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2022 - 2023 - 2024 - 2025 PLOTS

THOUGHTS FROM THE TURNROW

STARTER FERTILIZER continues to show proven results in helping crops get up and out of the ground, even in high available phosphorus soils like this one.

· MAXXUMSTAR+ continues to show MAXXIUM consistency even in high phosphorus soil environments like this farm.

· TOP 7 products all contain ZINC and MANGANESE EDTA. Zn and Mn are a MUST in all in-furrow applications to drive early growth & vigor

· RED ELITE+ continues to be at the Top of the Plot, driving increased Biodiversity and improved Soil Health benefits to maximize nutrient extraction from the soil.

· REDSTAR BRANDED STARTERS CONTINUE TO DRIVE EFFICIENCY THROUGH PROPER PLACEMENT & ENHANCED NUTRIENT FORMS TO IMPROVE YIELDS.

2022 - 2023 - 2024 - 2025 PLOTS

REDSTAR BRANDED STARTERS

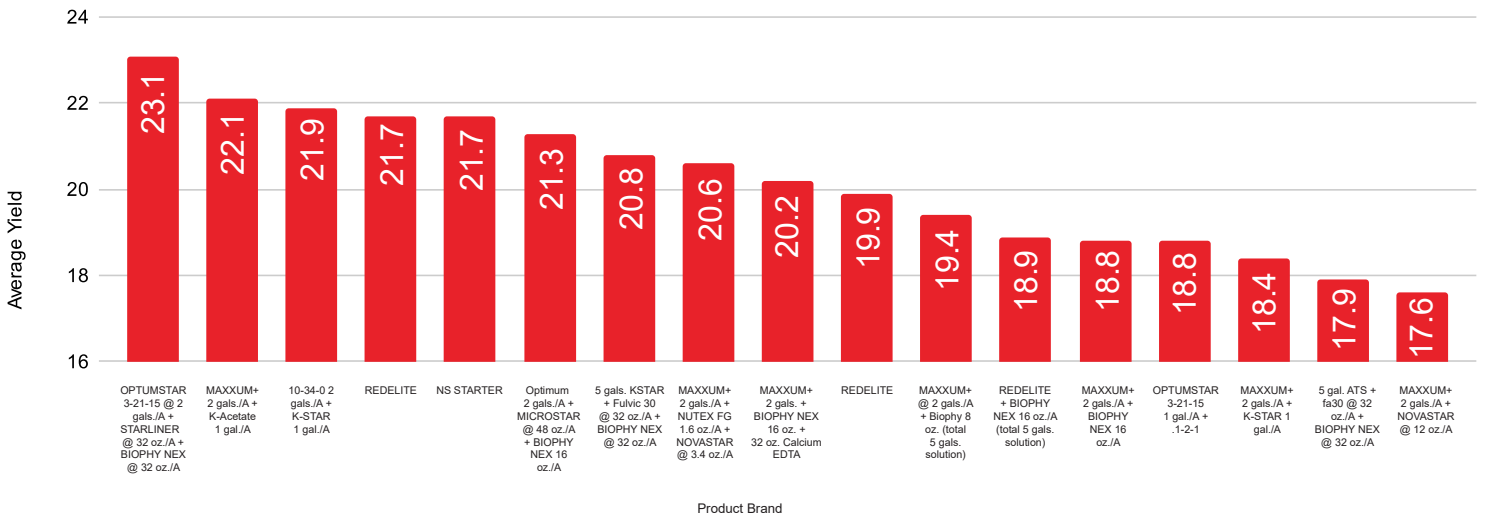
REDSTAR BRANDED STARTERS	2025	2024	2023	2022	4 YEAR AVERAGE YIELD	Yield vs. CHECK
MAXXUMSTAR+ 5 GALLONS	238.64	252	263.88	230	246.13	6.36
RED ELITE+ 3 gallons FORM#1	240.92	249.5	262	239	247.85	7.9
RED ELITE+ 3 gallons FORM#2	240.06	248.5	261.38	235.3	246.31	6.13
OPTUMSTAR 3 gallons	-	-	232.4	231.3	231.85	-9.85
NSS (No Starter, Starter)	235	242	264.38	226.5	241.97	2.03
NOVASTAR IN BLEND	240.71	247.6	265	232.62	246.48	6.14
CHECK	235.67	244	257.5	225.3	240.62	0

3-YEAR DATA POINTS	2025	2024	2023	2 YEAR AVERAGE YIELD	Yield vs. CHECK
CALCIUM IN-FURROW	243.74	249.5	260.13	254.815	4.07
RED ELITE+ 3 gal. + NOVASTAR 16 OZ.	-	239.5	275.35	257.425	6.68
RED ELITE+ 3 gal + RED SHIELD 32 oz.	244.93	244	263.75	253.875	3.13
CHECK	235.67	244	257.5	250.75	

REDSTAR

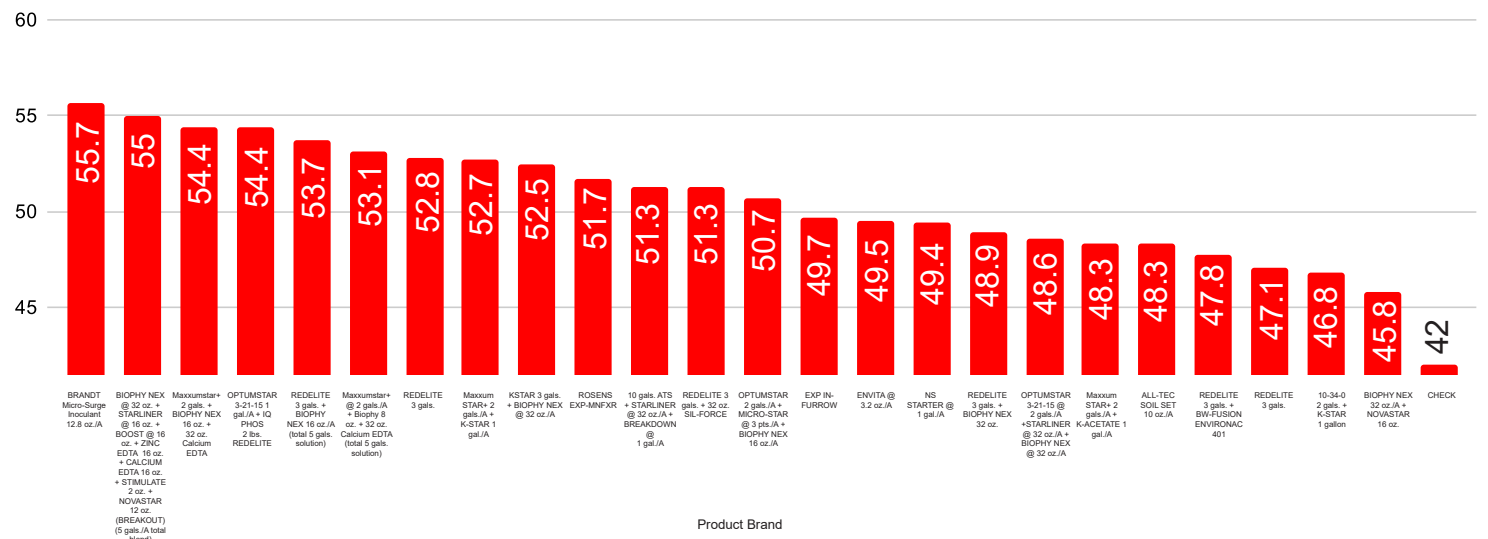
2022 - 2023 - 2024 - 2025 PLOTS

2022 SOYBEAN IN - FURROW **SEVERE DROUGHT YEAR**



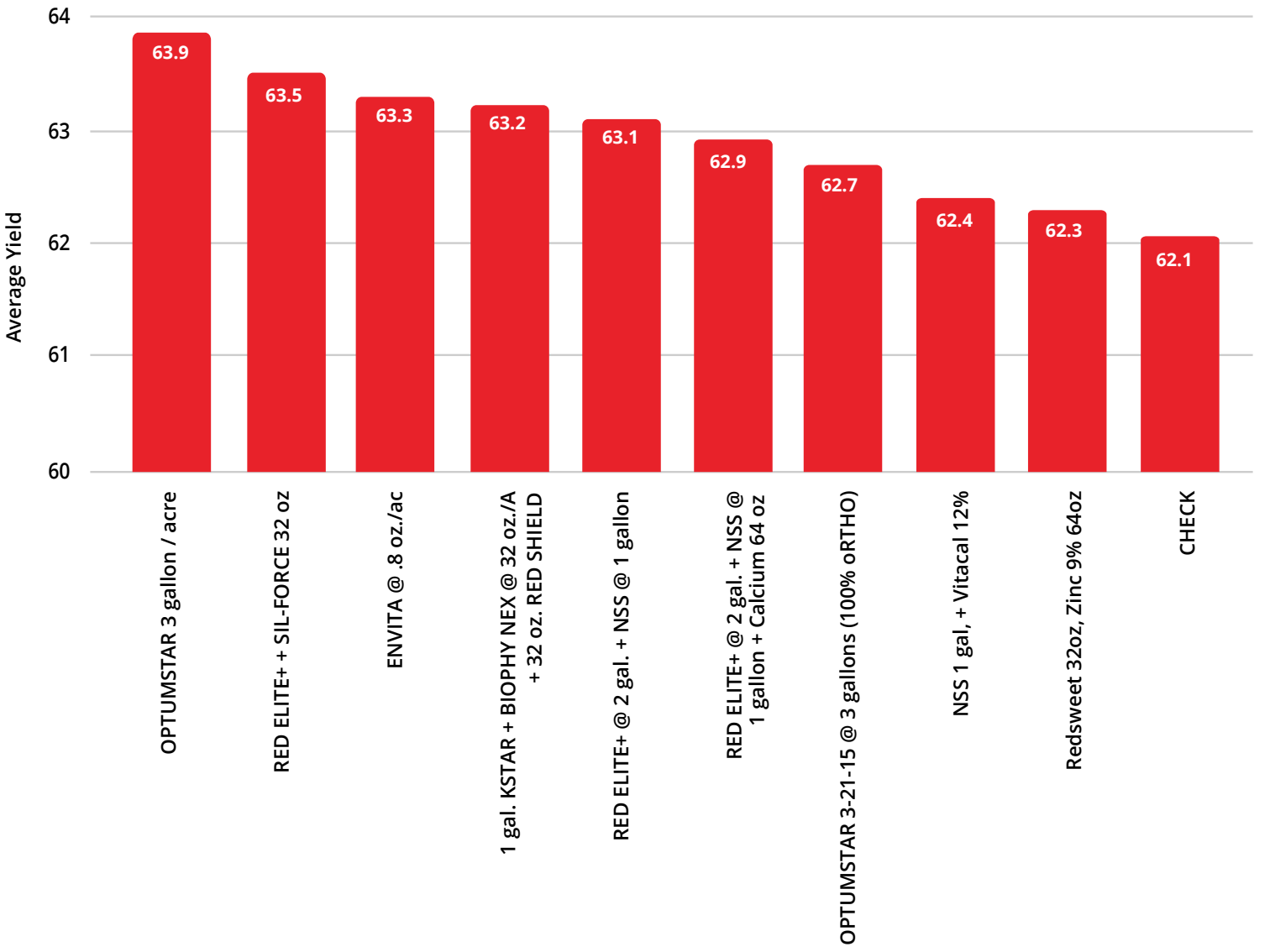
2023 SOYBEAN IN - FURROW

10 REPLICATIONS



2022 - 2023 - 2024 - 2025 PLOTS

2024 SOYBEAN IN - FURROW



THOUGHTS FROM THE TURN ROW

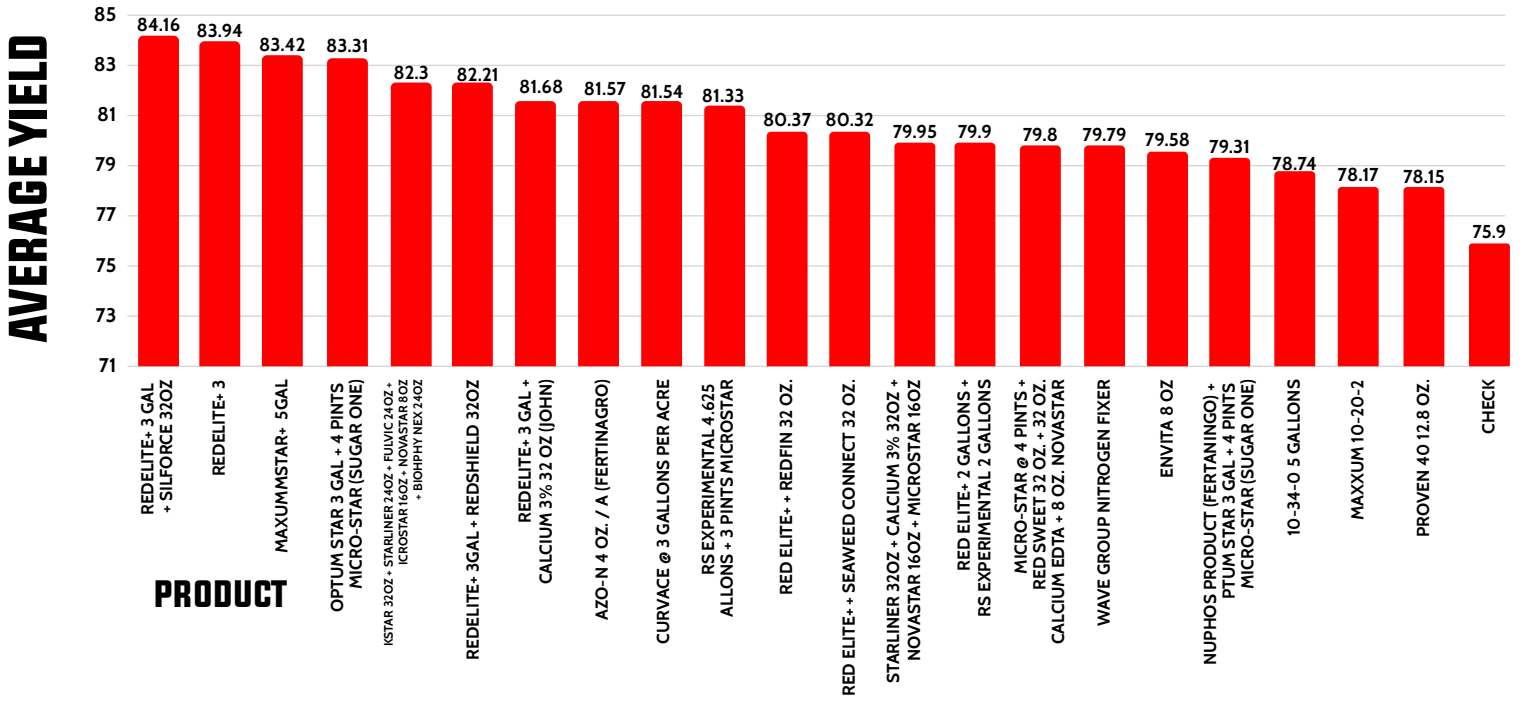
· Rain makes grain. Lack of rain in July, August and September limited potential.

· Several products improved yield focused around Nitrogen, Phosphorus and Potassium

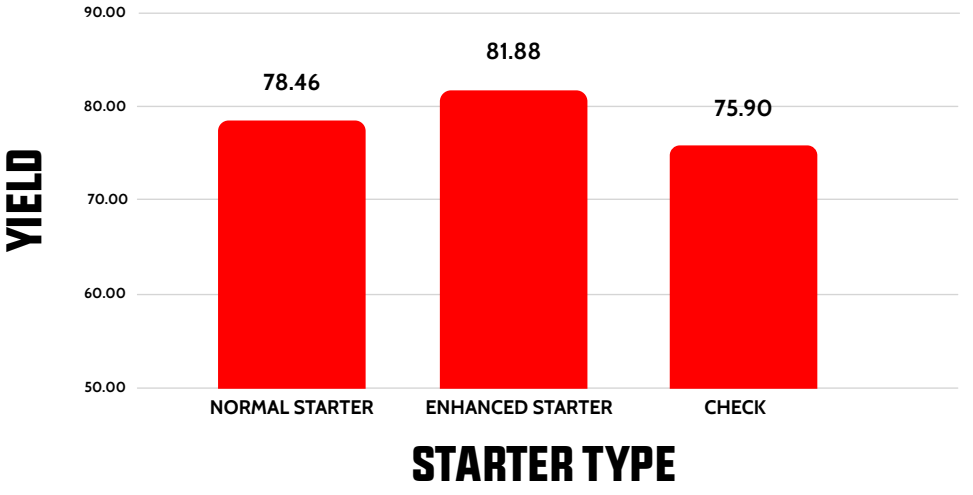
· Red Elite was very consistent in providing additional yield showing Biological activity is crucial

· No Treatment provided a positive ROI due to low rainfall.

2025 SOYBEAN IN-FURROW



STANDARD STARTER VS ENHANCED STARTER



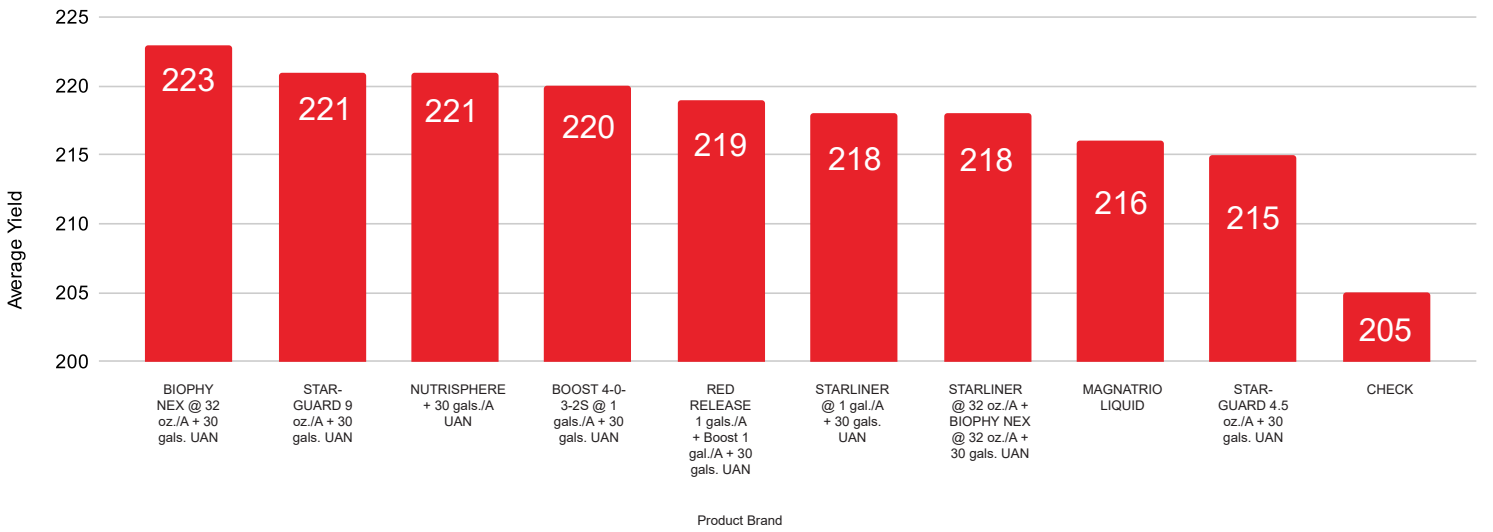
2025 SOYBEAN FERTILIZER IN-FURROW PLOT

THOUGHTS FROM THE TURN ROW

· NOVASTAR + Sugar + Fulvic Acid averaged 5.84 Bushel Yield increase over check ($63.36 / Acre)
· Starter fertilizer on Soybeans WORKS..... when we get enough rainfall during August and September
· NITROGEN FIXING BACTERIA AVERAGED $40.95 PER ACRE YIELD ADVANTAGE (3.87 BU.)
· Enhanced Starters (RED ELITE+ & MAXXUMSTAR+) average 3.42 bushels more than straight 10-34-0
· When trying to push yields, Enhanced in-furrow Starters from REDSTAR provided a 5.98 bushel yield increase ($64.88 / acre)

2022 - 2023 - 2024 - 2025 PLOTS

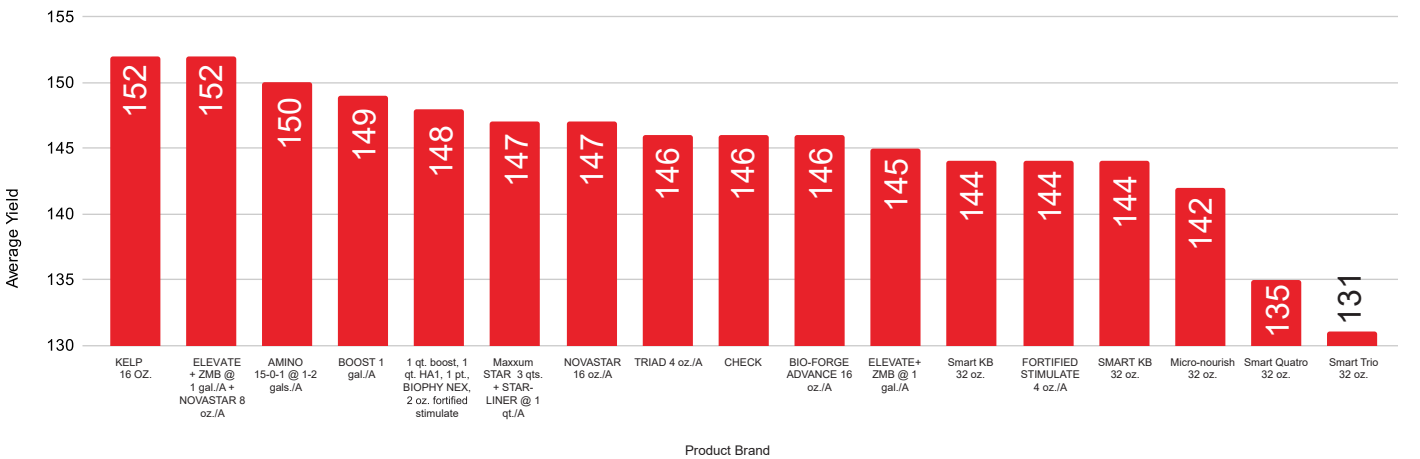
2022 PREPLANT NITROGEN



Improving overall fertilizer efficiency is extremely important to our producers who spend years trying to improve soil fertility and soil health. REDSTAR is alway looking for products and technology to help improve the availability and uptake of key nutrients by the crop. However, we also need to make sure we help reduce the loss of key nutrient like nitrogen, sulfur and boron as well. BioPHY NEX was used in 3 of the above trials and showed very consistent results in helping to improve overall nitrogen efficiency while also helping to improve uptake of phosphorus, potassium and micro-nutrients.

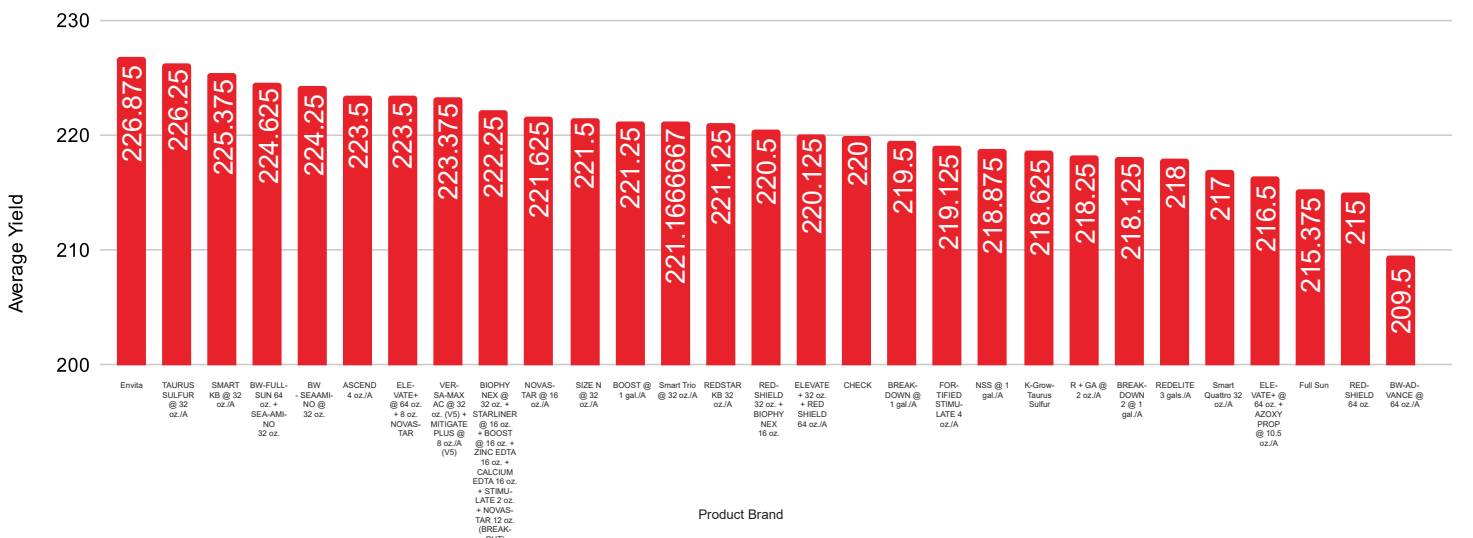
2022 - 2023 - 2024 - 2025 PLOTS

2022 POST CORN



2023 POST CORN

8 REPLICATIONS



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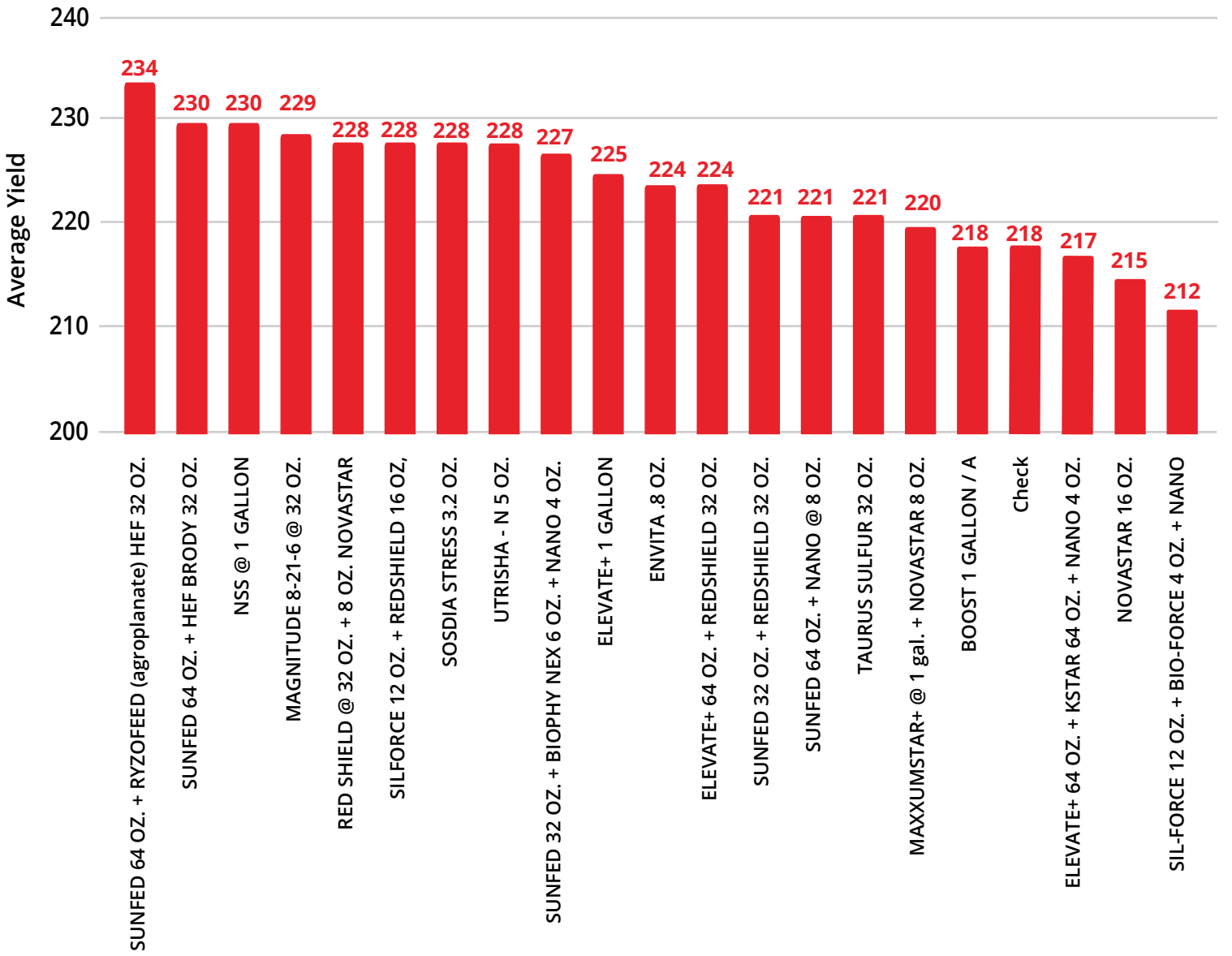
2022 - 2023 - 2024 - 2025 PLOTS

WHAT WE LEARNED POST CORN APPLICATION

- Anything to help mitigate stress mostly showed a positive yield response.
- Envita foliar nitrogen fixer showed strong performance just like in the In-Furrow nitrogen plot.
- Nitrogen, sulfur, potash and boron products finished 1-2-3. Nutrient demand curves work.

2024 POST CORN



THOUGHTS FROM THE TURN ROW

· Overall Excellent results of all Foliar products in the Corn plot

· ELEVATE+ 7 bushel increase continued to show strong yield with its SRN Nitrogen, Potassium, Sulfur and Micro package.

· New Product SUNFED and it's chloride based amino-acid nutrients showed significant yield gain versus un-treated check

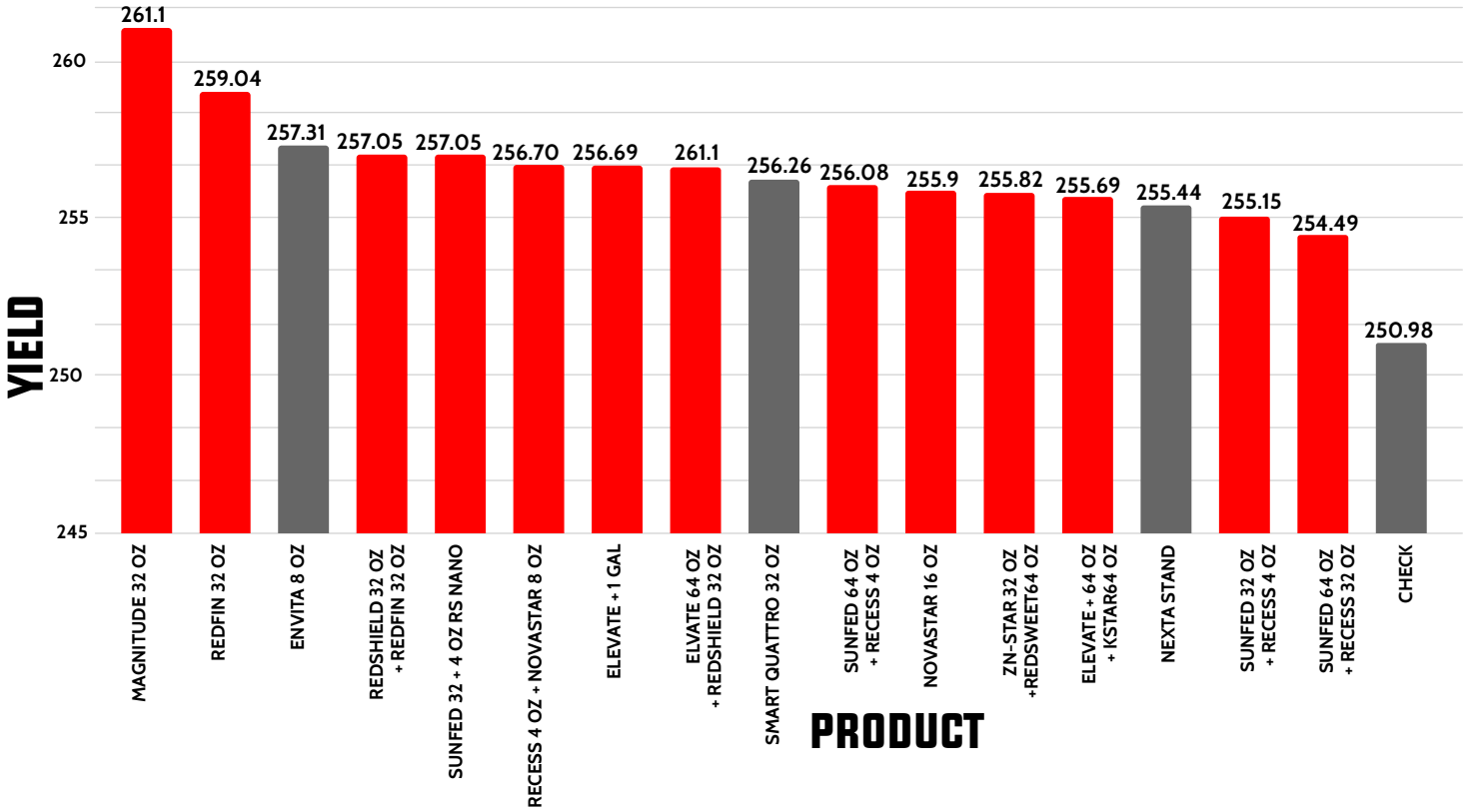
· NOVASTAR Amino-Peptide technology continues to show excellent results as it's in several of the top tier products in our plot.

2025 CORN FOLIAR FERTILIZER (V4) TRIALS:

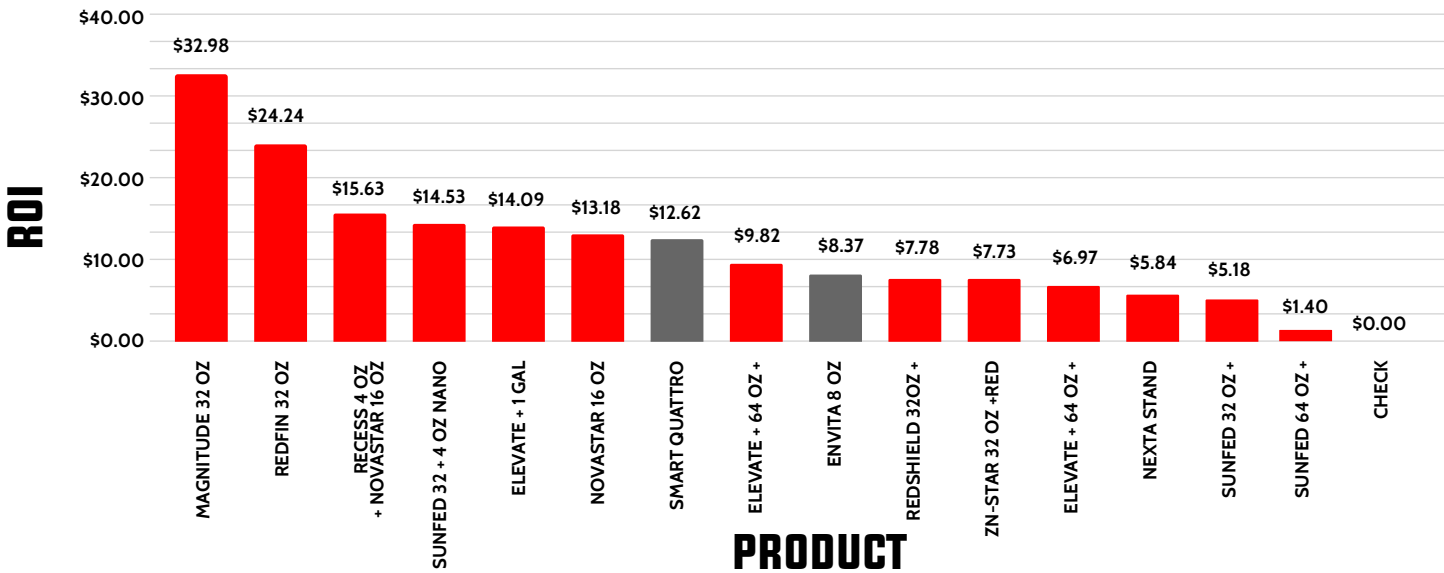
THOUGHTS FROM THE TURN ROW

- Foliar applications all showed success in 2025 with an average Yield Increase of 5.58 bushels.
- NOVASTAR Technology averaged 5.66 bushel yield increase
- NOVASTAR, ELEVATE+, REDSHIELD and SunFED PRODUCTS averaged over 5+ bushels more corn.
- Amino Acids, Peptides and Bio-stimulants with Nutrients lead to higher Yields
- REDUCING STRESS WORKS TO IMPROVE PLANT PERFORMANCE.

2025 CORN FOLIAR (V4) TIMING



ROI BY PRODUCT V4 FOLIAR FEED 2025

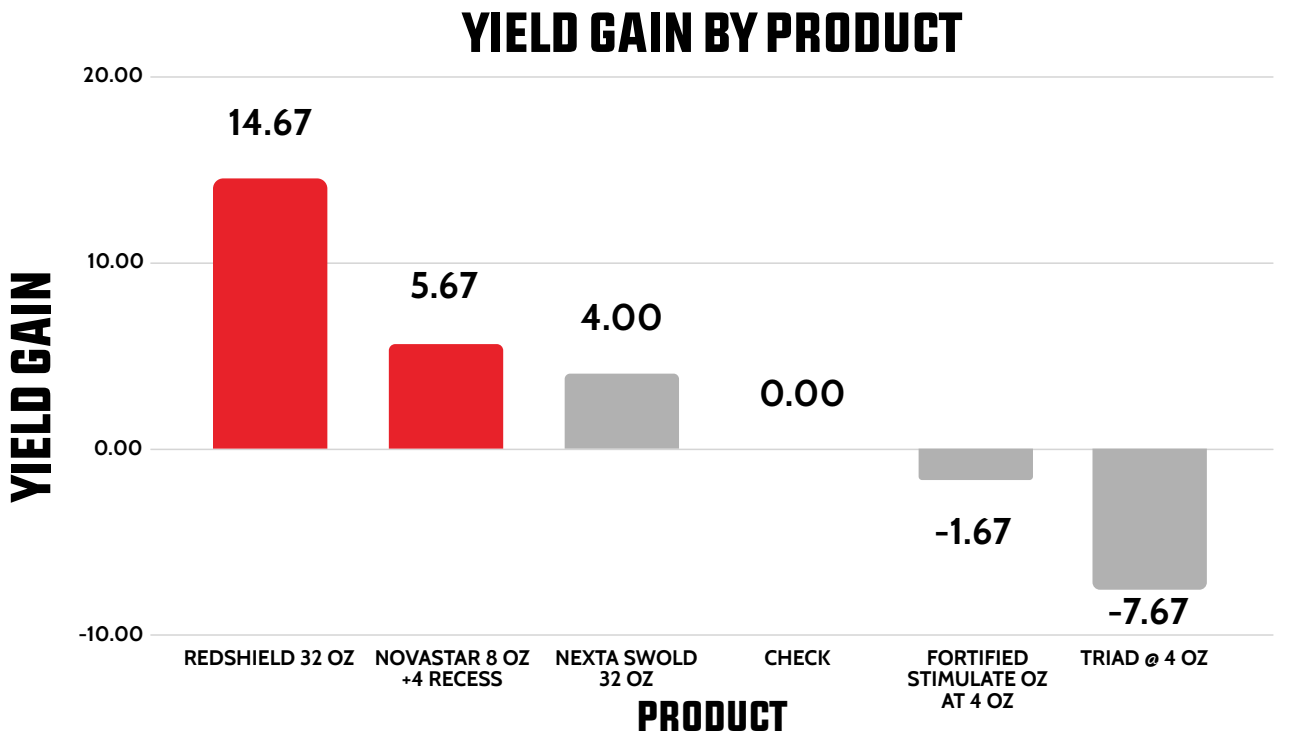


2025 SHORT-CORN FOLIAR RESEARCH PLOT

Short-stature (or short corn) hybrids are a new generation of corn varieties bred to grow significantly shorter than traditional hybrids while maintaining—or even improving—yield potential. By reducing plant height, these hybrids offer major advantages: they are more resistant to wind damage and lodging, easier to manage with ground-based equipment throughout the season, and better able to withstand storm pressure, giving farmers more harvest security and operational flexibility. However, because short corn plants have different architecture, root structure, and nutrient-use patterns, it's important for growers to understand how today's fertilization strategies—especially nitrogen timing, placement, and the use of biologicals, synthetic hormones, or foliar nutrients—may interact with these hybrids. REDSTAR will continue to look at Short Corn and the impact Bio-stimulants, both natural and synthetic will have on it long before we have Short corn commercially available for sale, in order to help our customers understand their impacts.

THOUGHTS FROM THE TURN-ROW
· REDSHIELD is a bio-stimulant designed to help nutrients move and flow inside the plant to ensure nutrients are available at key growth stages. REDSHIELD appears to be doing its job well with the new short corn varieties.

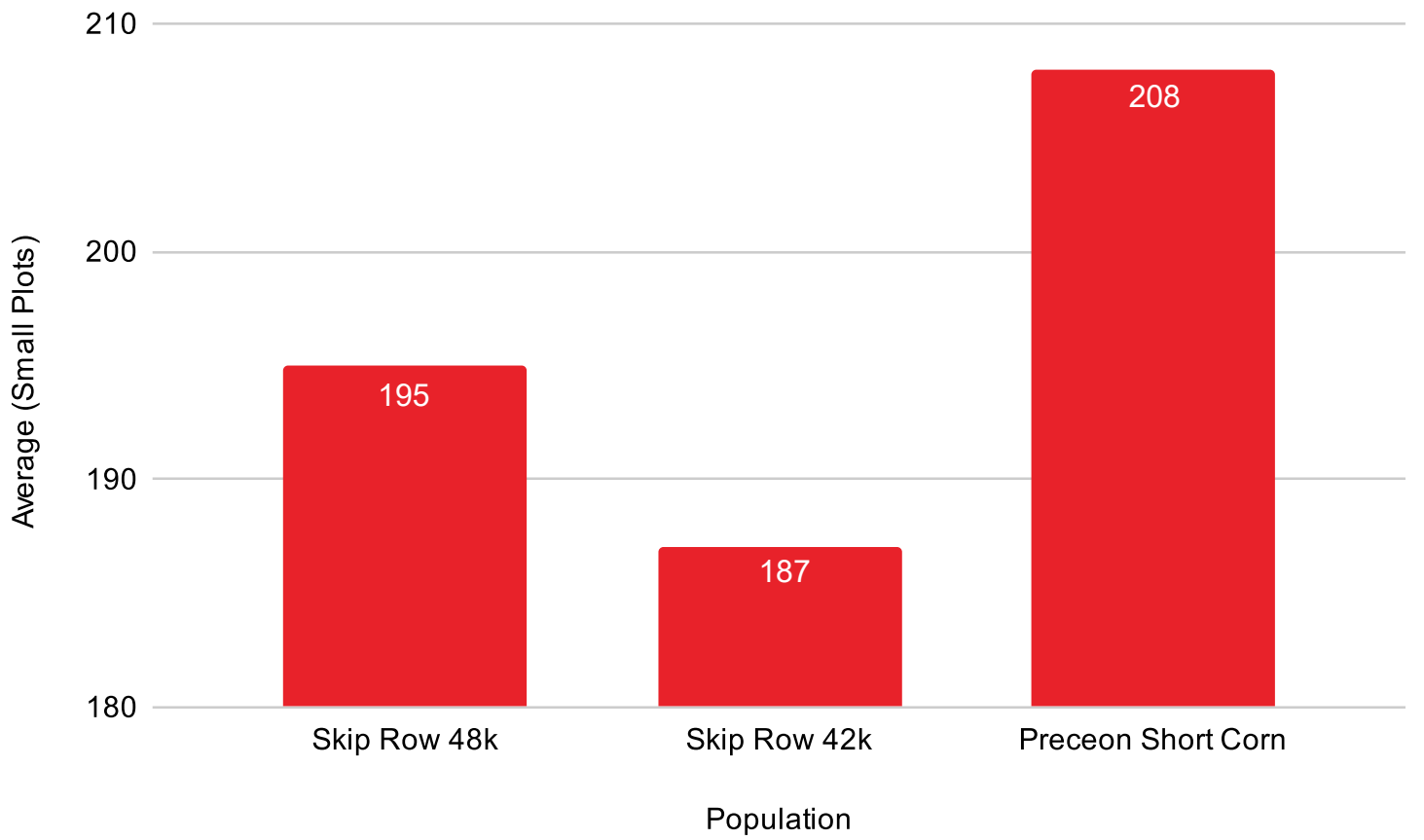
· NOVASTAR is a blend of naturally occurring plant-based amino acids and peptides, and RECESS is a concentrated version of REDSHIELD. In reality, this is a different ratio and blend compared to REDSHIELD, confirming for us that these technologies hold promise to positively affect increased yield in short corn hybrids.



2022 - 2023 - 2024 - 2025 PLOTS

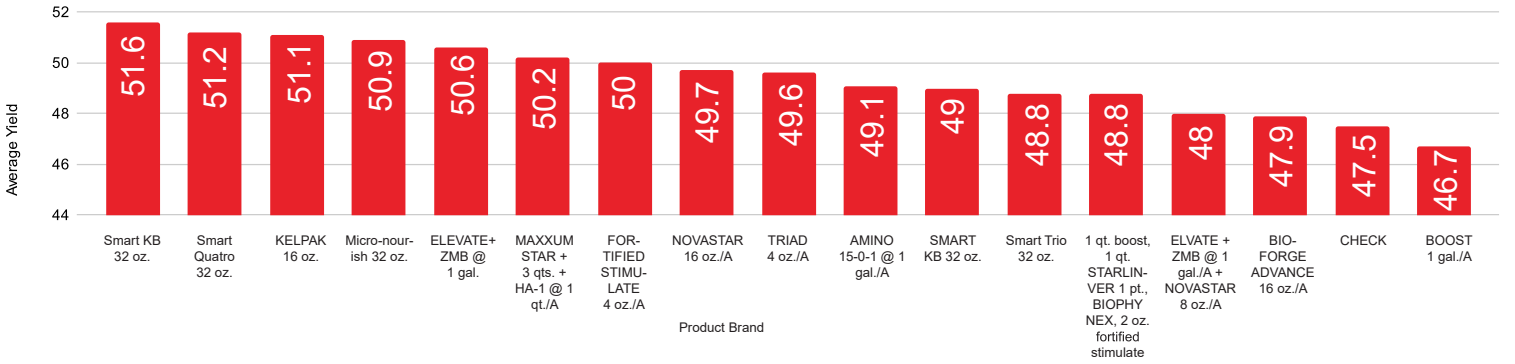
2023 SKIP ROW CORN

6 REPLICATIONS

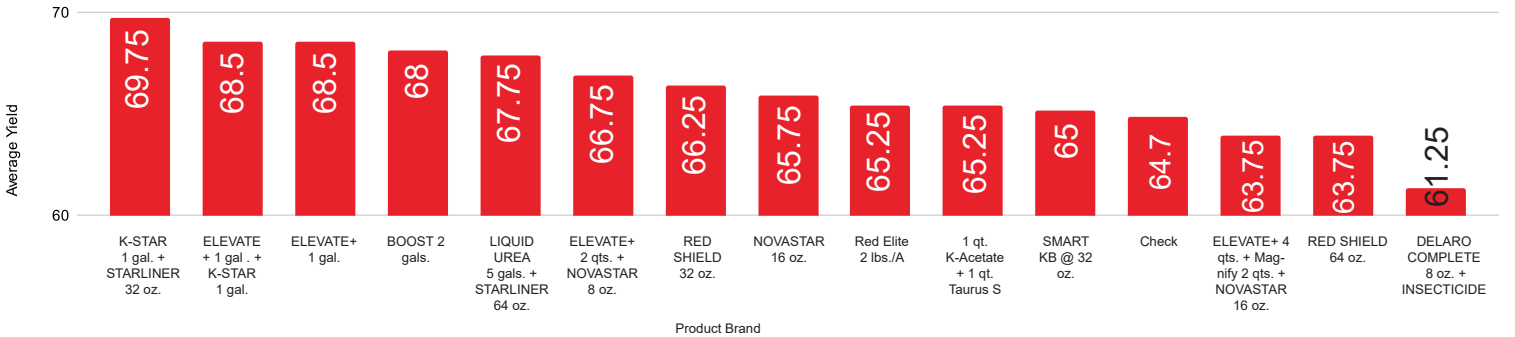


2022 - 2023 - 2024 - 2025 PLOTS

2022 POST SOYBEANS



2023 POST SOYBEANS



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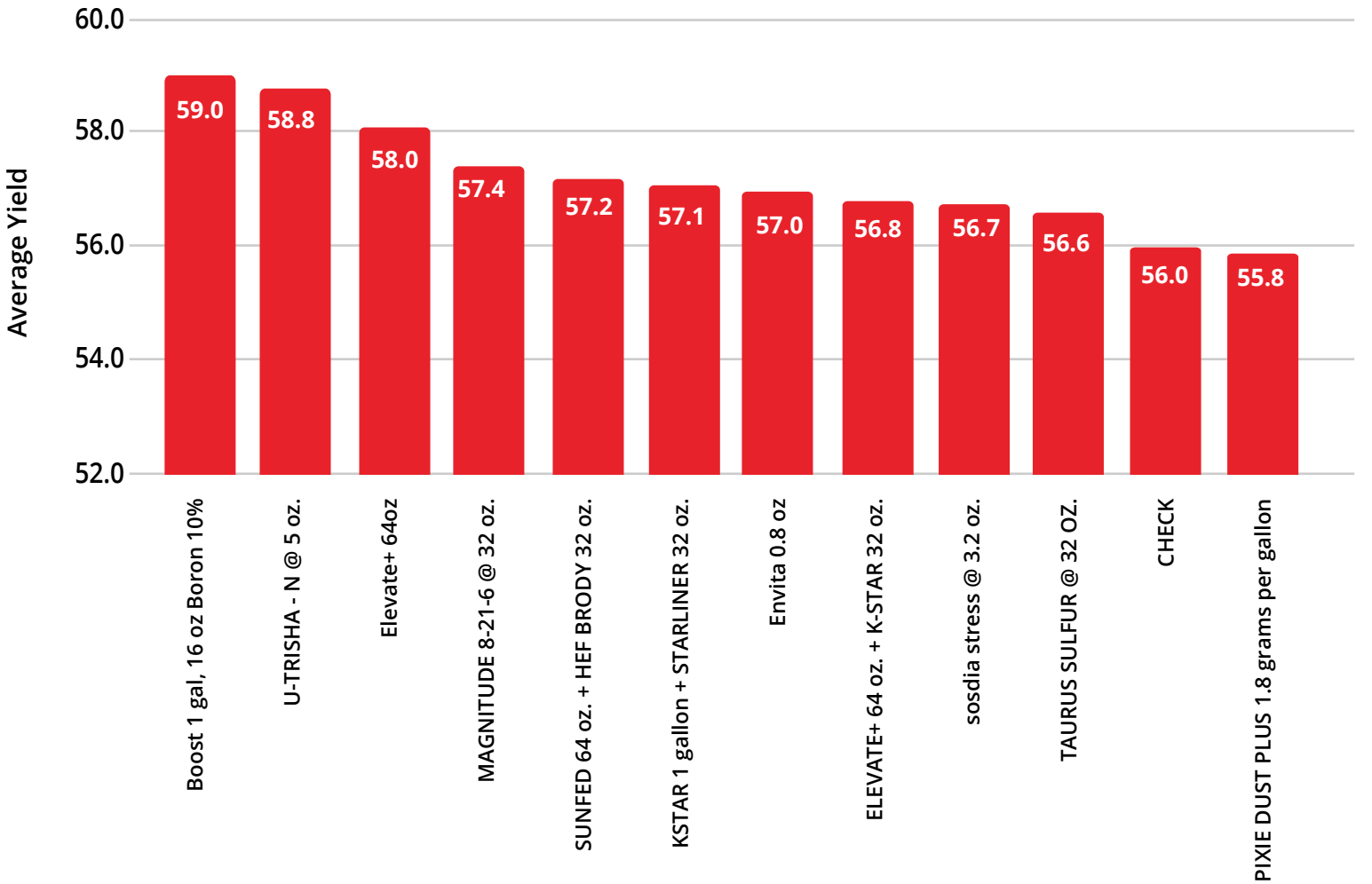
2022 - 2023 - 2024 - 2025 PLOTS

2024 POST SOYBEANS



THOUGHTS FROM THE TURN ROW

- Again, rain makes grain. No rain in July, August and September didn't fill pods
- Several products showed an increase with Nitrogen, potassium and Boron products showing up in top 7 products.
- Diving into top products in the plot, N,K,B,Zn, Mn and sulfur where keys to success which follows Soybean nutrient demand curves.
- Also, it appears early planted soybeans with In-furrow treatments pick up more yield than treating foliage. Compare yields to In-furrow plots.

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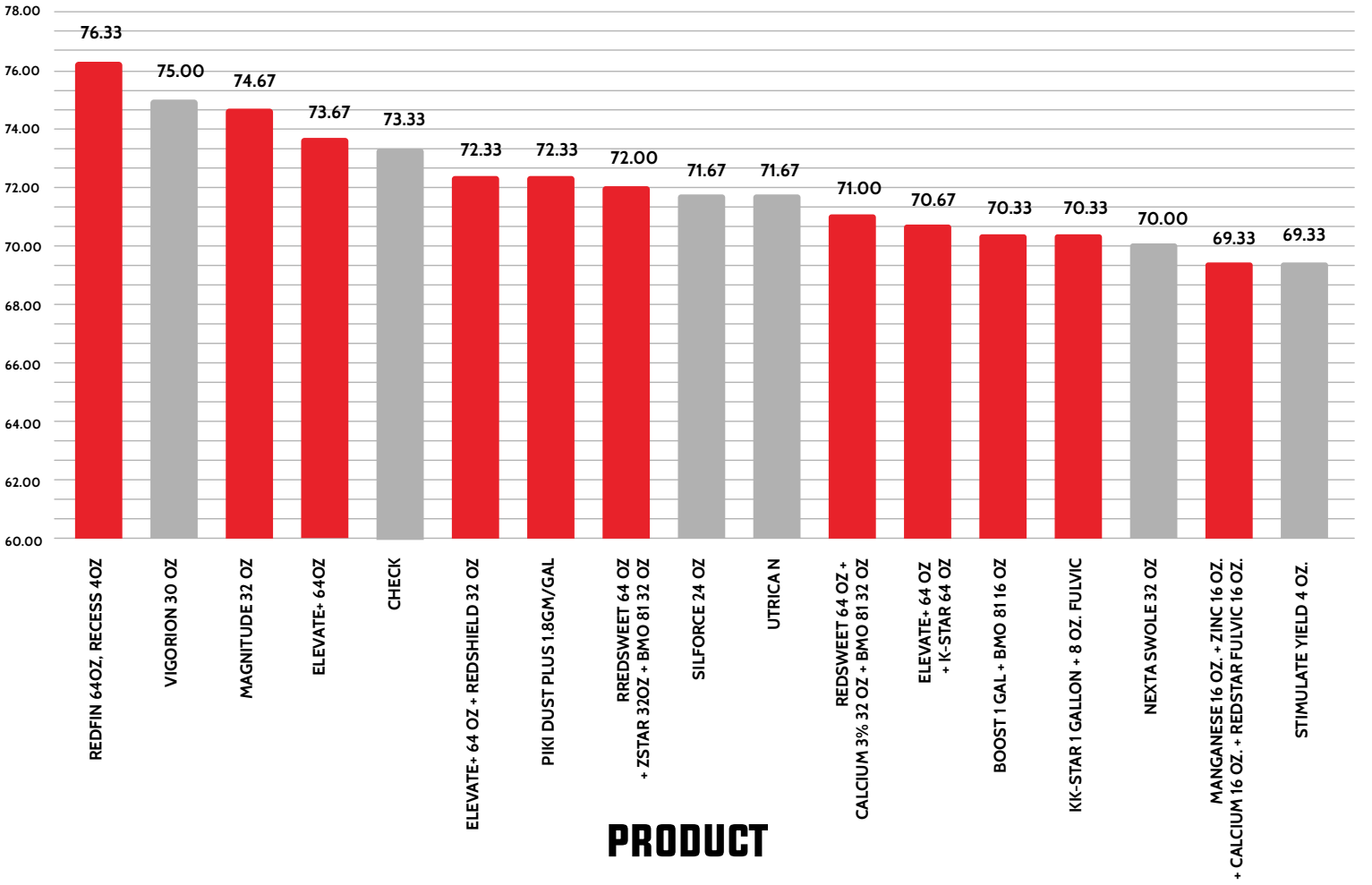
2022 - 2023 - 2024 - 2025 PLOTS

SOYBEAN R3 FEED **2025**



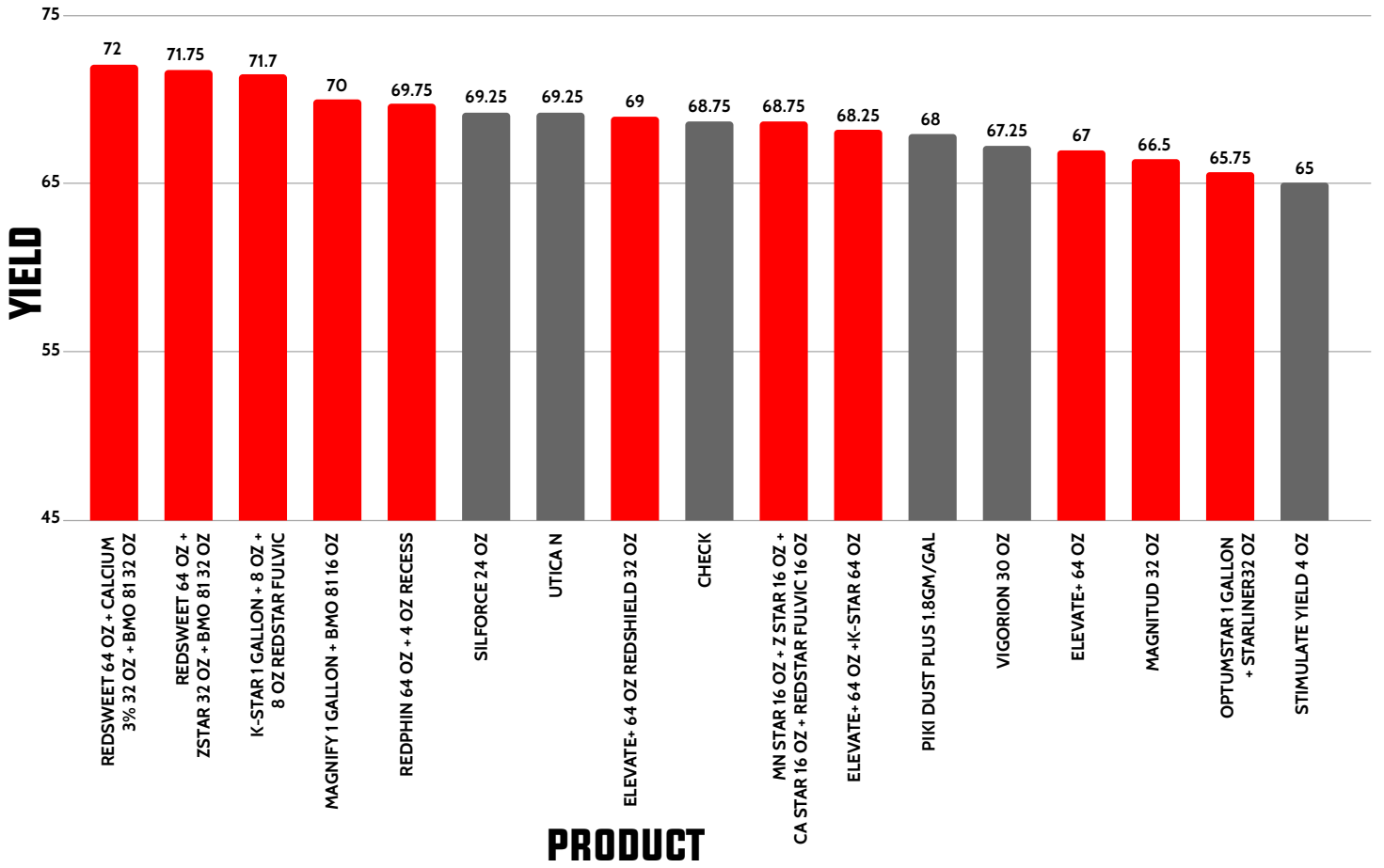
THOUGHTS FROM THE TURNROW

- This field had a base rate of 1gal of Elevate+ applied with fungicide and insecticide at R3. This means that all of these trials are above and beyond that product.

- Bio-Stimulant based products like RECESS, REDFIN, and MAGNITUDE that have stress-reducing properties seemed to provide some additional yield enhancement with the addition of ELEVATE+ with Fungicide & Insecticide.

2022 - 2023 - 2024 - 2025 PLOTS

SOYBEAN V4-R1 FEED



2025 POST SOYBEAN (V4-R1) PLOT:

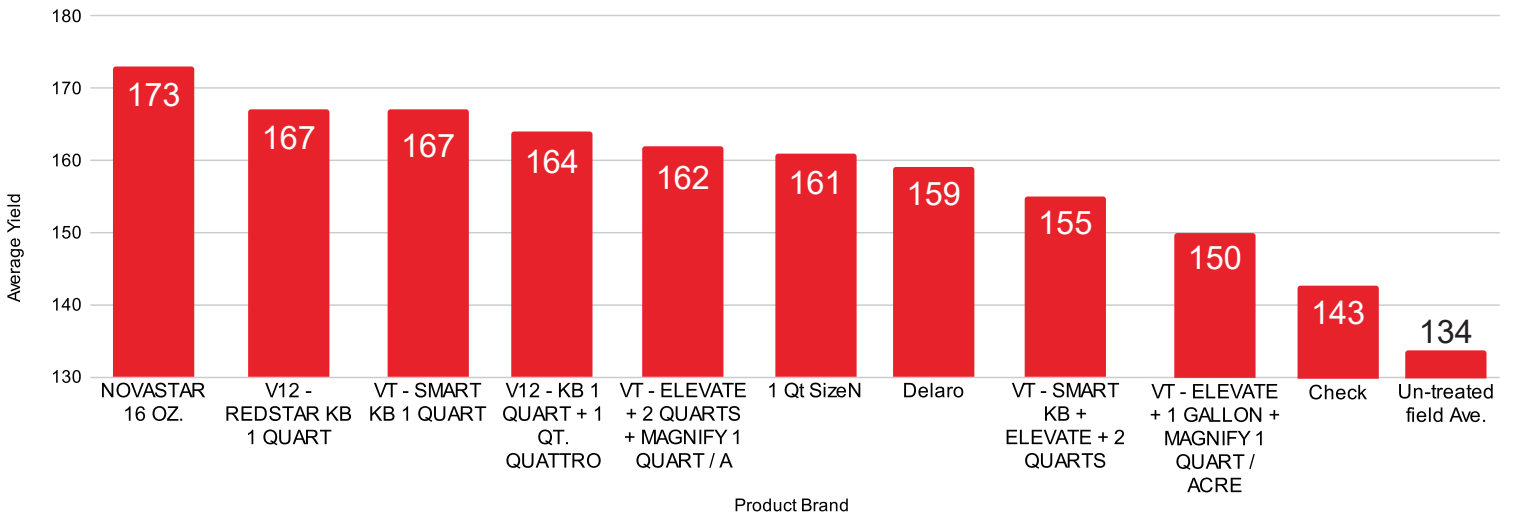
THOUGHTS FROM THE TURN ROW

· Calcium, Sugar, Boron, and Molly show a very strong symbiotic relationship.
· Sugar and Boron with Moly show a very strong and affordable yield response
· Soybeans are a crop that the yield is made late in the season.
· Calcium continues to show excellent results throughout RED ACRES PLOTS on both Corn And Soybean yields in 2024 and 2025. To learn more about Calcium, visit www.redstarne.com

This field was sprayed with 1 gallon of elevate+ plus fungicide and insecticide at R3. This could have lowered the difference between these treatments with late season fertility.

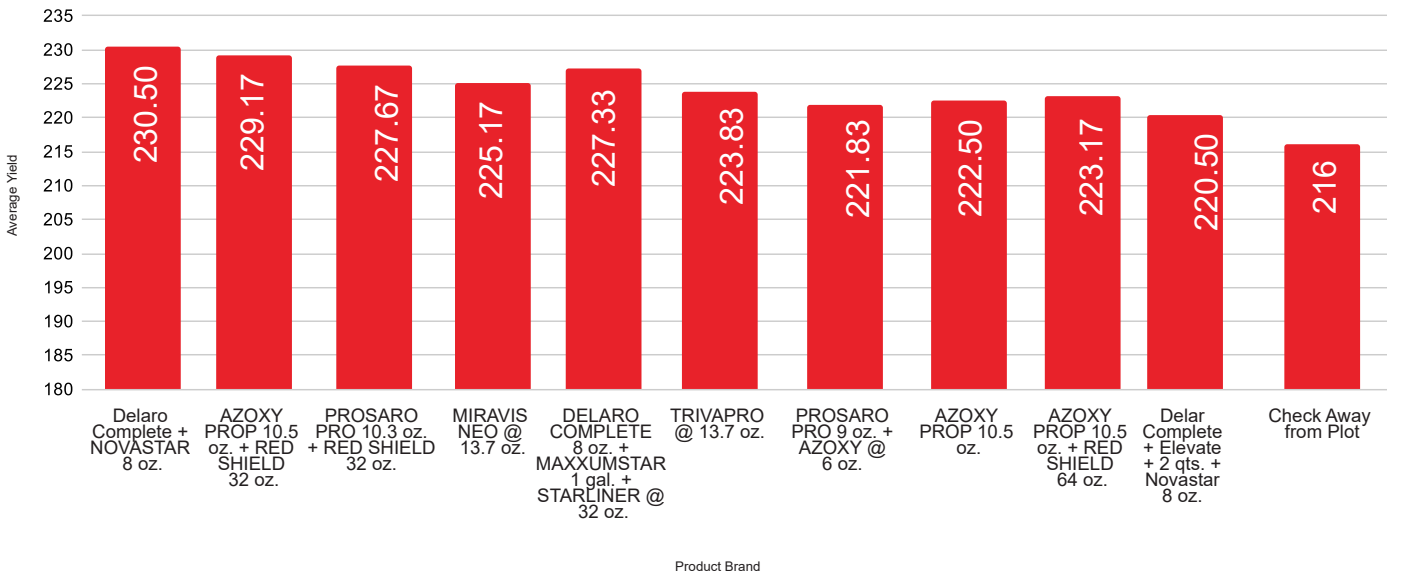
2022 - 2023 - 2024 - 2025 PLOTS

2022 CORN DRONE TRIALS



2023 CORN DRONE TRIALS

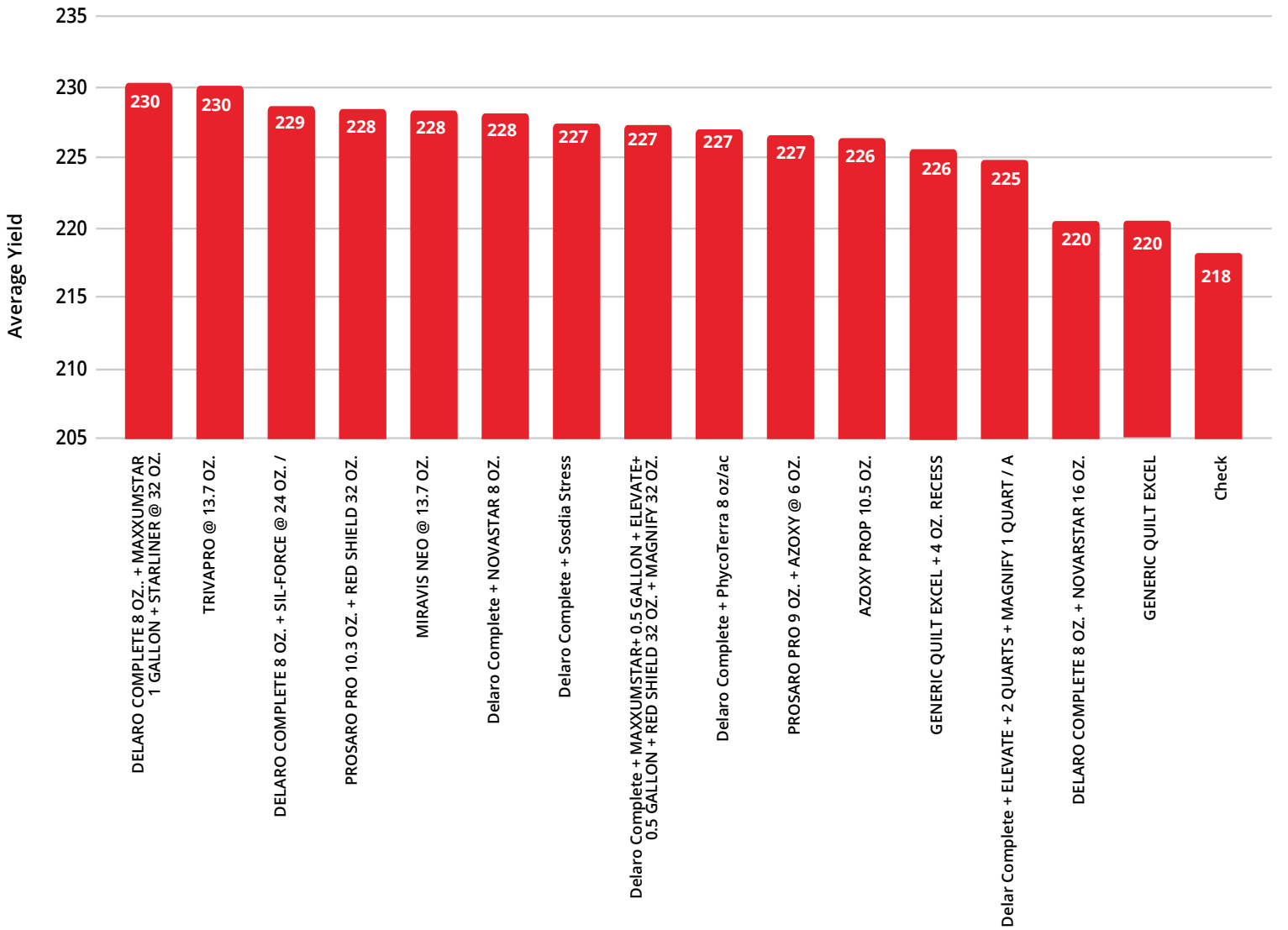
5 REPLICATIONS



WHAT WE LEARNED - DRONE TASSEL APPLICATION

- AZOXY PROP + REDSHIELD looked strong compared to branded products.
- We didn't have tar spot in 2023, but it's getting closer every year. Fungicides offer the best protection against this future disease.

2024 DRONE TRIALS



THOUGHTS FROM THE TURN ROW

· Again, rain makes grain. No rain in July, August and September didn't fill pods

· Several products showed an increase with Nitrogen, potassium and Boron products showing up in top 7 products.

· Diving into top products in the plot, N,K,B,Zn, Mn and sulfur where keys to success which follows Soybean nutrient demand curves.

· Also, it appears early planted soybeans with In-furrow treatments pick up more yield than treating foliage. Compare yields to In-furrow plots.

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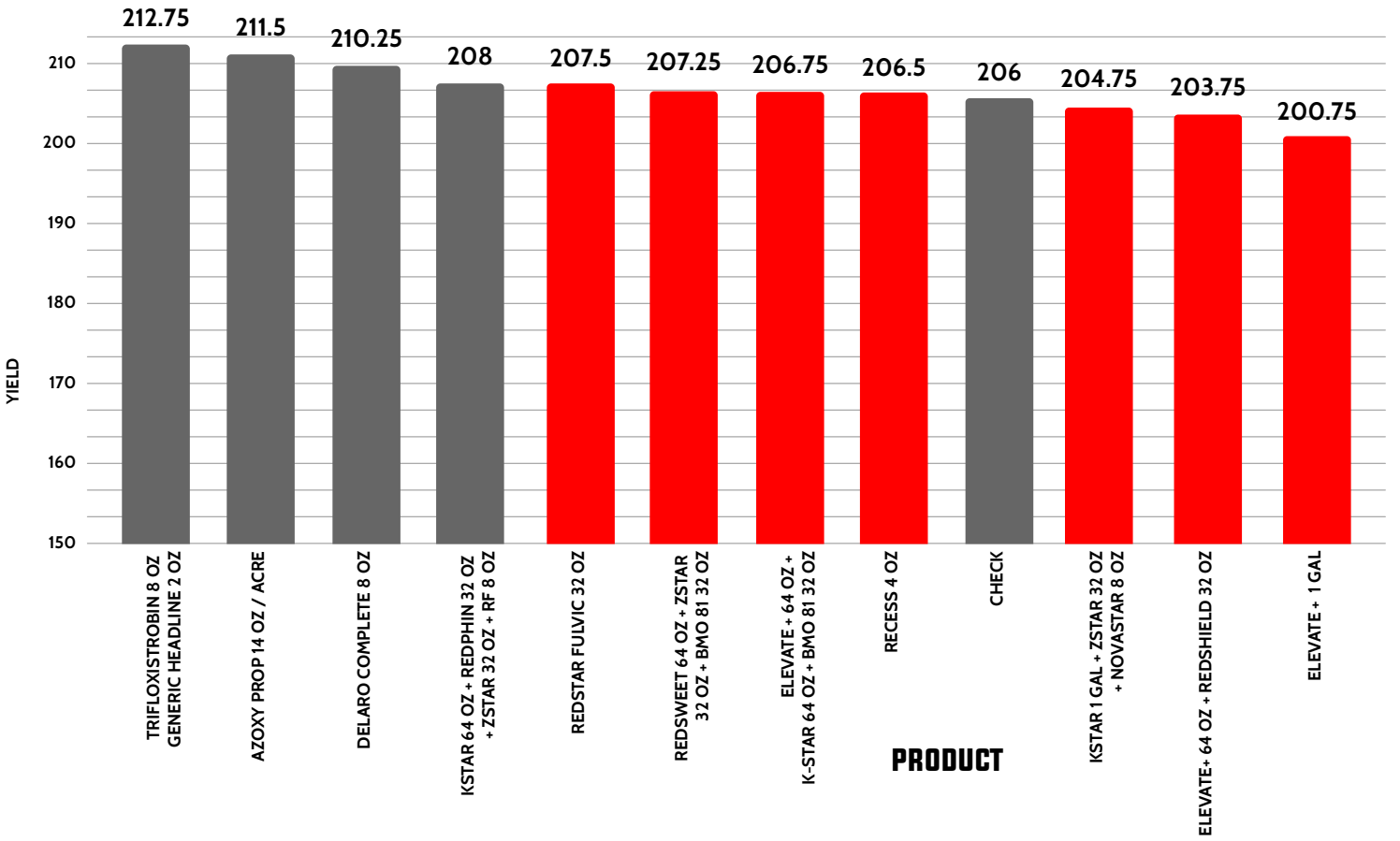
2022 - 2023 - 2024 - 2025 PLOTS

CORN R3 FEED



THOUGHTS FROM THE TURN ROW

· With diseases such as Southern Rust and Tarspot moving in late, fungicides showed a big responce with a late application.

· Genreric Quilt Excle and Protheconazole with Genreric headline prefromed well.

· Starliner shows to be a good addition to most biologicals for the secound year in a row.

· This year our corn crop stalled out around half milk line. This could have lead to the reduced impact of these products.

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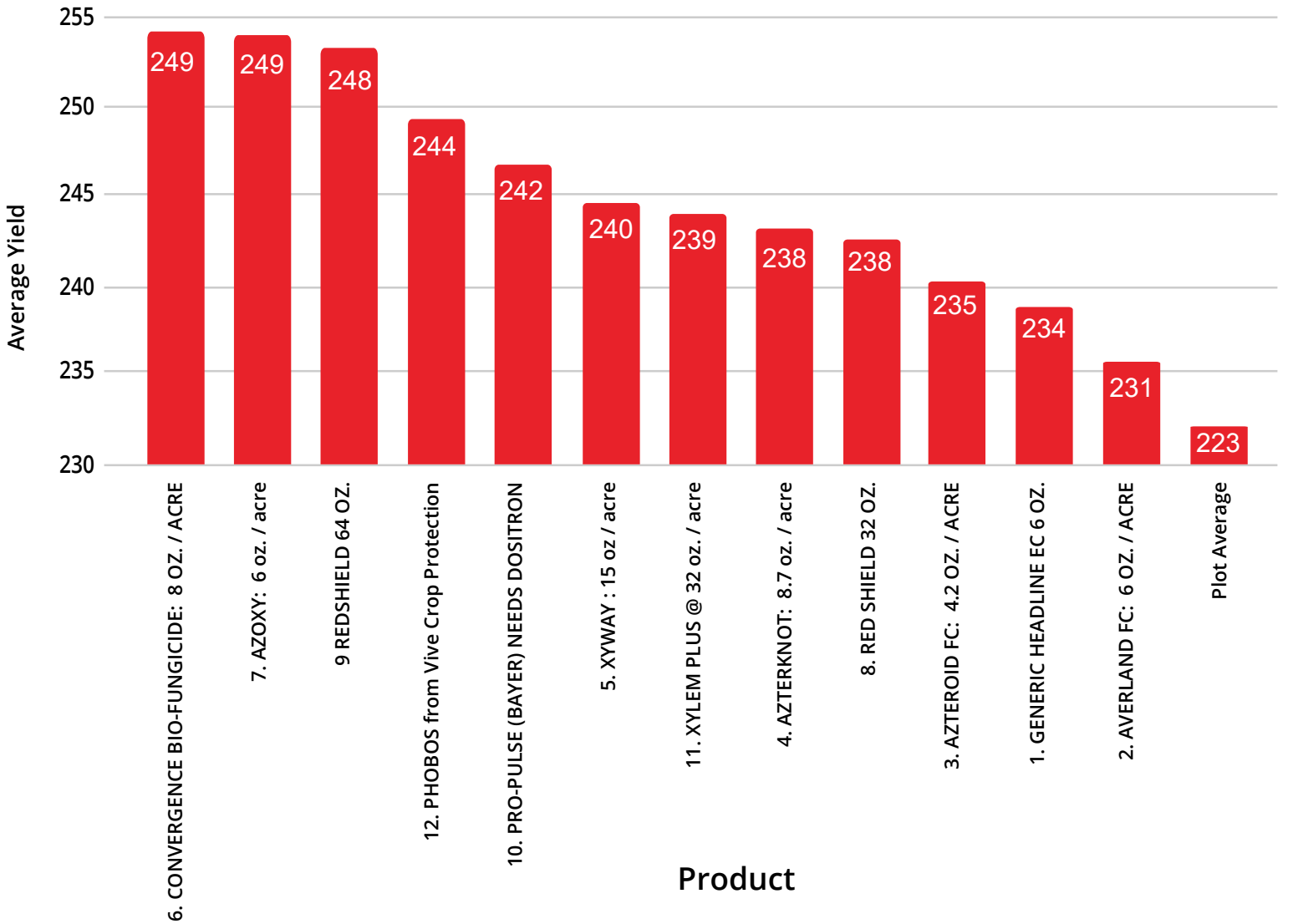
2022 - 2023 - 2024 - 2025 PLOTS

2024 IN - FURROW FUNGICIDE



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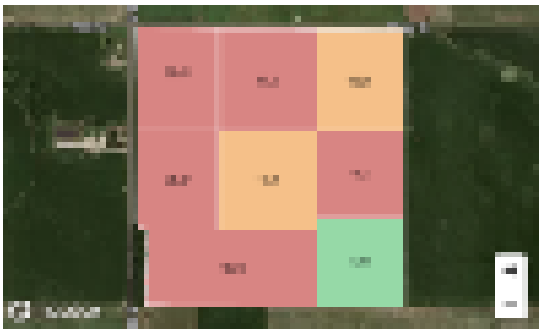
2022 - 2023 - 2024 - 2025 PLOTS

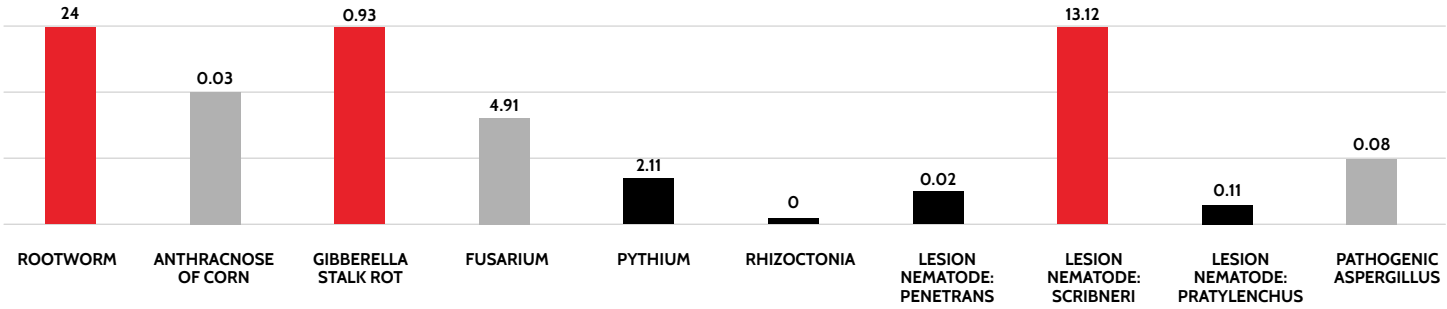
THOUGHTS FROM THE TURN ROW

- DNA analysis shows we have high disease presssure in the soil where our Fungicide in-furrow plot was located.
- Results show very good results with plot average of 18.36 bushel yield increase using an in-furrow fungicide versus not using one.
- ALL PRODUCTS showed a positive Yield and ROI by using an in-furrow Fungicide. All treatments were in-furrow without any starter fertilizer.
- Over the last 2 years we have seen lower stalk rot issues affecting many fields and impacting yield. By using a fungicide in-furrow we can help hybrids overcome pre-mature death and help protect yield by keeping the plant alive and transporting nutrients to the ear for maximum yield.

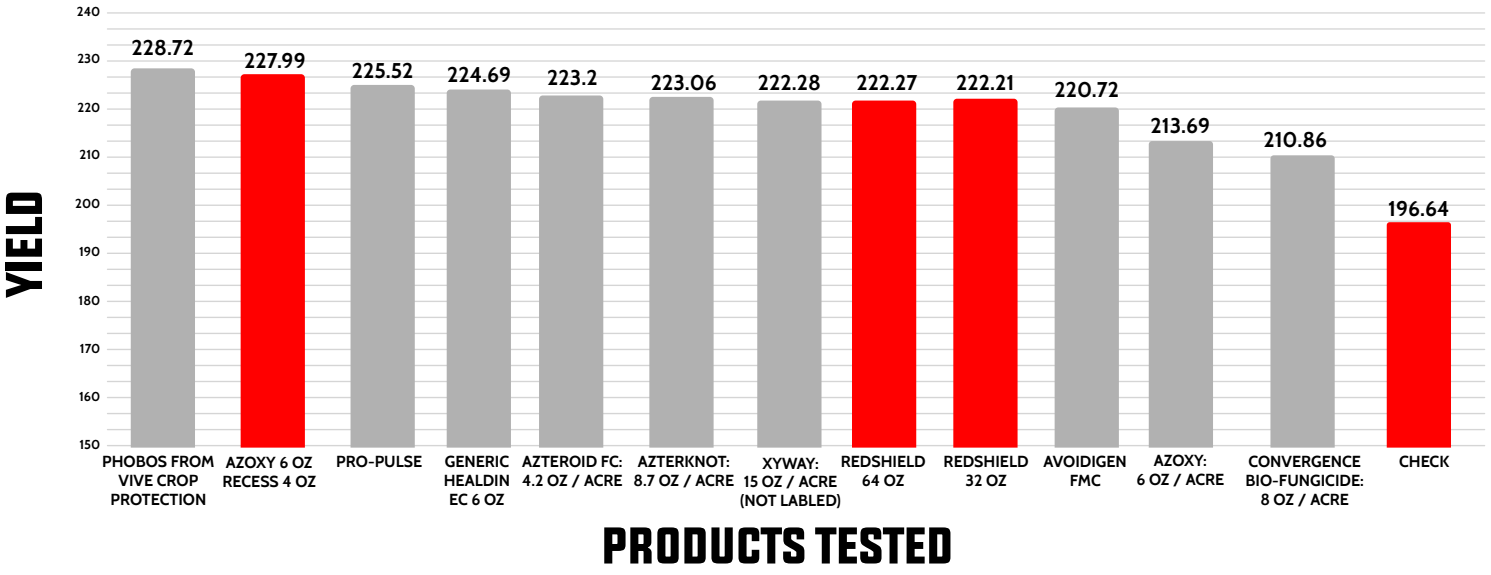


2025 CORN IN-FURROW FUNGICIDE PLOT TRIALS

RX 360 Tru-Bio™ soil test through Earth Optics reveals higher levels of soil-borne diseases that threaten early corn development. These pathogens—often present long before symptoms appear—can reduce root vigor, limit nutrient uptake, and create hidden yield drag that is impossible to correct later in the season. By placing fungicide directly in the furrow, growers deliver protection exactly where young roots need it most, helping seedlings establish faster, healthier root systems that can better withstand early-season stress. As Tru-Bio testing continues to uncover elevated pathogen pressure across more acres, in-furrow fungicide becomes a proactive, cost-effective strategy for safeguarding stand establishment, preserving genetic yield potential, and building a stronger foundation for the entire crop.



2025 IN-FURROW FUNGICIDE TRIAL

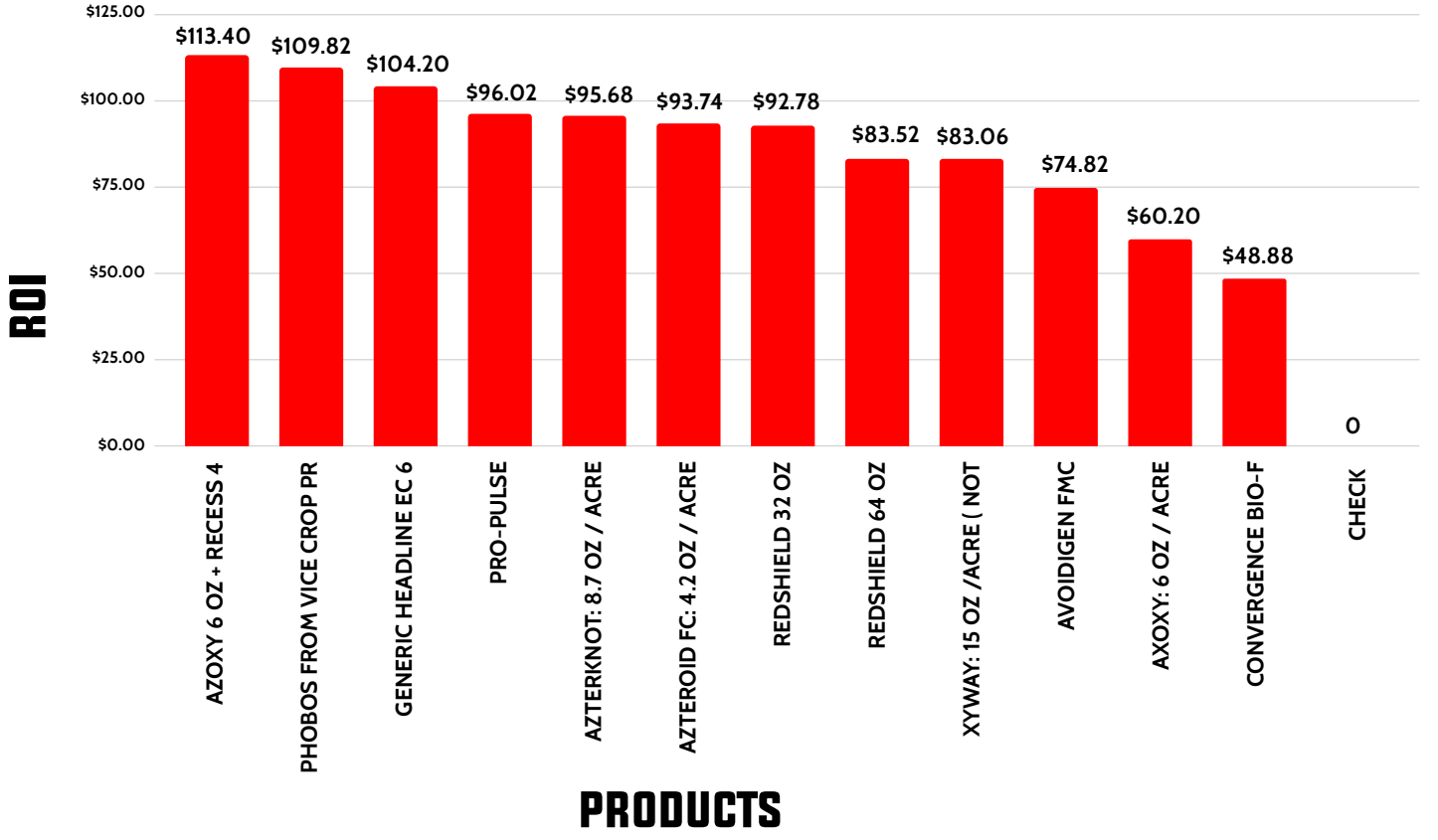


THOUGHTS FROM THE TURN-ROW

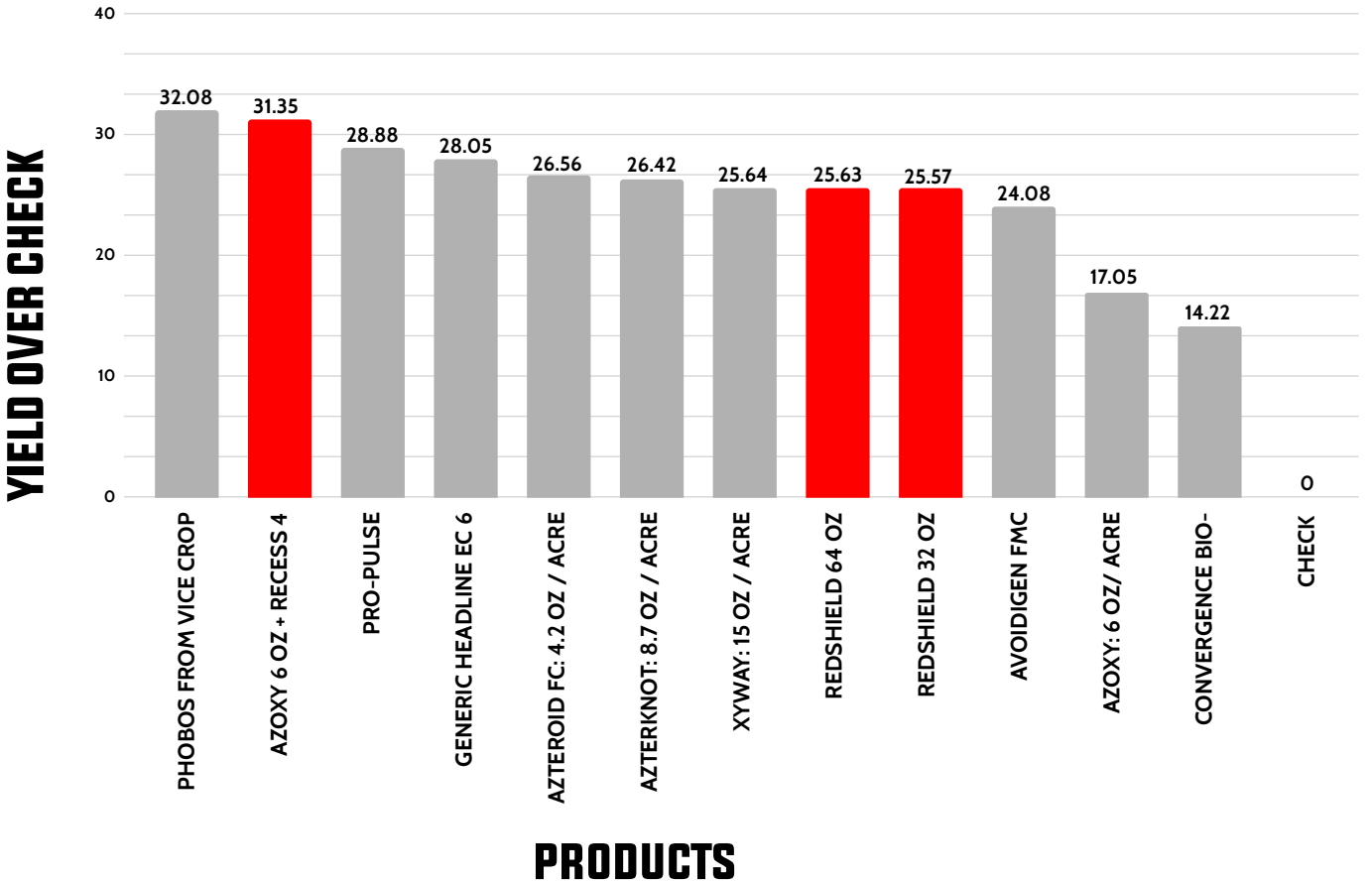
- RX 360 DNA analysis shows we have a high disease pressure in the soil where our In-Furrow Fungicide plot is located. (See Graph #1).
- 2024 In-Furrow Fungicide Plot averaged 18.36 bushels per acre increase over the CHECK, 2025 results we saw 25.46 bushels per acre increase over the check.
- All products in the 2-year data points work effectively to reduce Fusarium and Gibberella, which cause Crown Rot.
- RX 360 continues to take the “Guess Work Out of Agronomy”.
- XYWAY FUNGICIDE is NOT LABELED in-furrow application to corn.

- CORN IN-FURROW FUNGICIDE HAS PROVIDED THE BEST 2 YEAR RETURN ON INVESTMENT OF ANY TREATMENTS WE HAVE SEEN. IT HAS BECOME OBVIOUS TO REDSTAR, THE MOST IMPORTANT FUNGICIDE APPLICATION A GROWER CAN MAKE IS THE IN-FURROW FUNGICIDE APPLICATION.

ROI OF IN-FURROW FUNGICIDE PRODUCTS 2025



YIELD OVER CHECK IN-FURROW FUNGICIDE 2025



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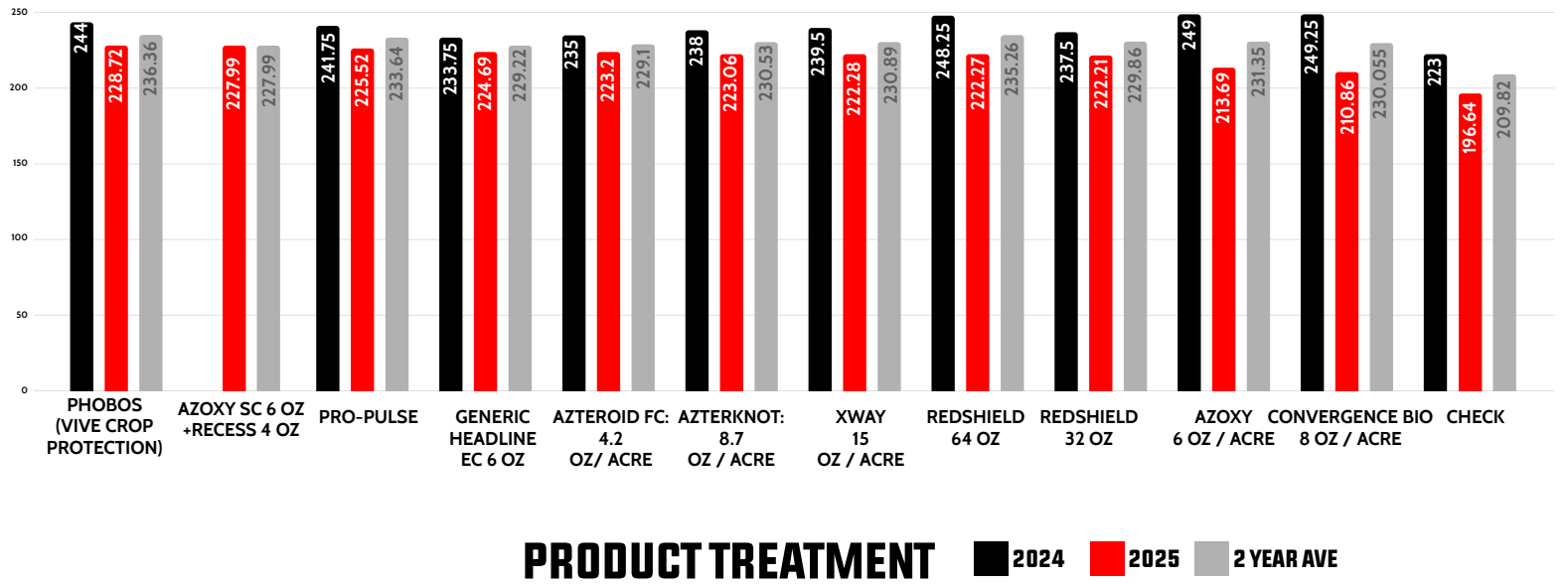
2022 - 2023 - 2024 - 2025 PLOTS

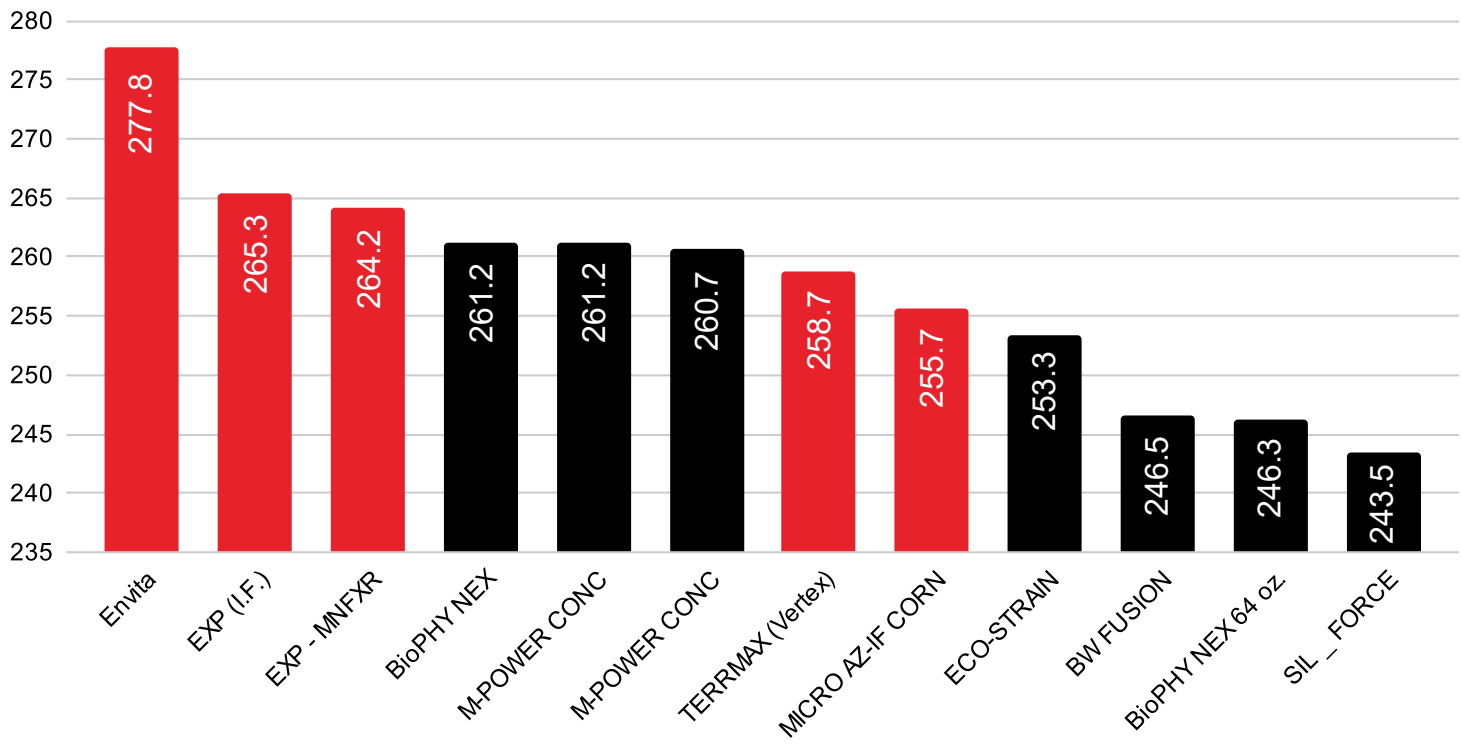
2 YEAR SUMMER IN-FURROW FUNGICIDE PLOT

2024 AVERAGE, 2025 AVERAGE AND 2 YEAR AVERAGE



2022 - 2023 - 2024 - 2025 PLOTS

2023 IN-FURROW BIOLOGICAL



*The five products highlighted in red claim to fix atmospheric nitrogen to replace soil applied. The other products are biologicals but do not claim to add nitrogen to the plant.

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2022 - 2023 - 2024 - 2025 PLOTS

2023 EXPERIMENTAL (I.F.) NITRIFICATION TRIAL

- Purpose: To determine if EXP and other products claiming to fix atmospheric nitrogen to corn and soybean plants work in our Nebraska field crop environment. In total we had five products who make claims to fix atmospheric nitrogen to help supplement nitrogen required for corn and soybeans.

- The remaining products used where products that have demonstrated improved nitrogen utilization but have limited diazatropes for fixing actual nitrogen to plants.

- We reduced nitrogen applied by 46 units per acre. This also correlated to 8.5 units less sulfur as well due to the cut in ATS (12-0-0-26S) mixed with 32% UAN Solution.

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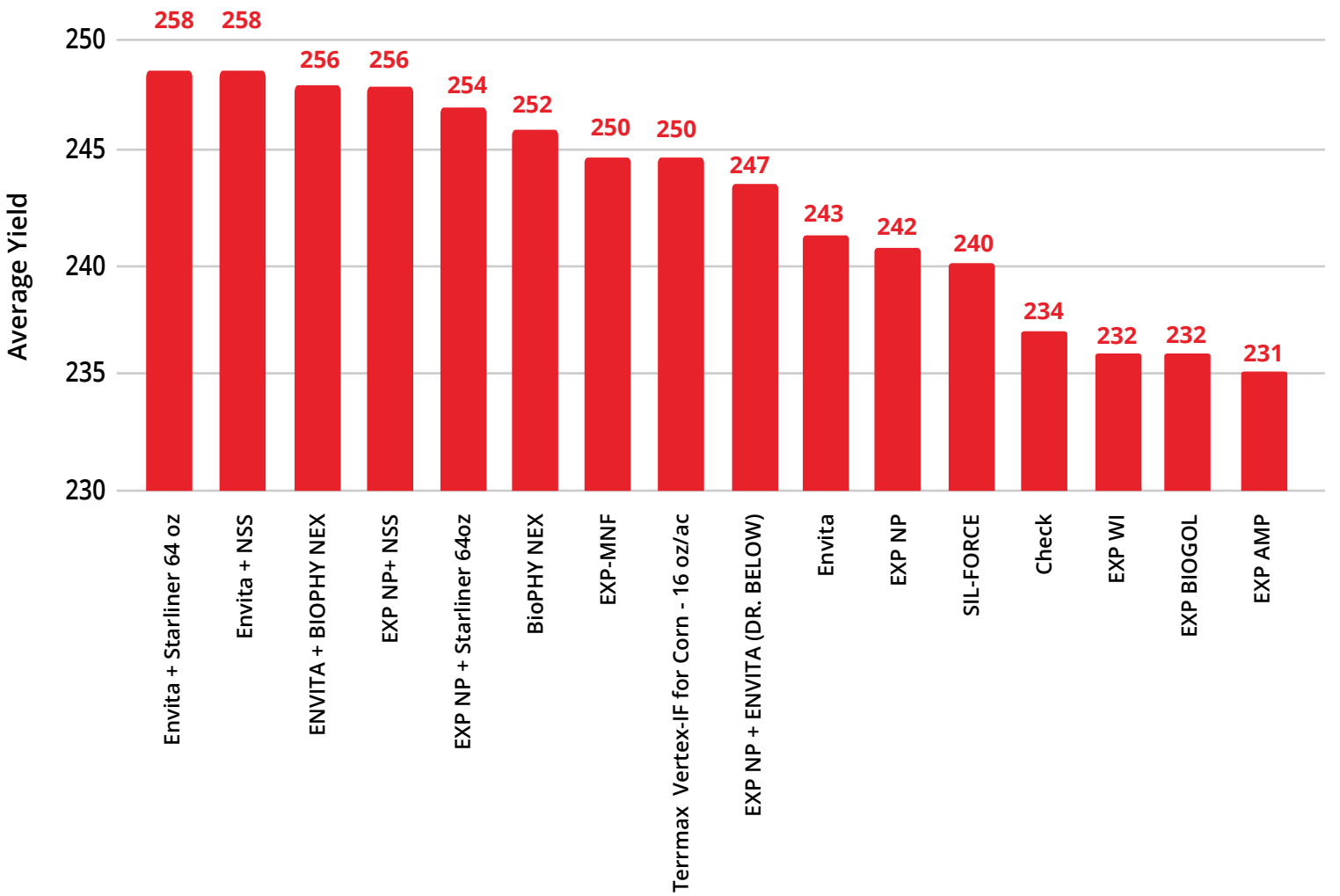
2022 - 2023 - 2024 - 2025 PLOTS

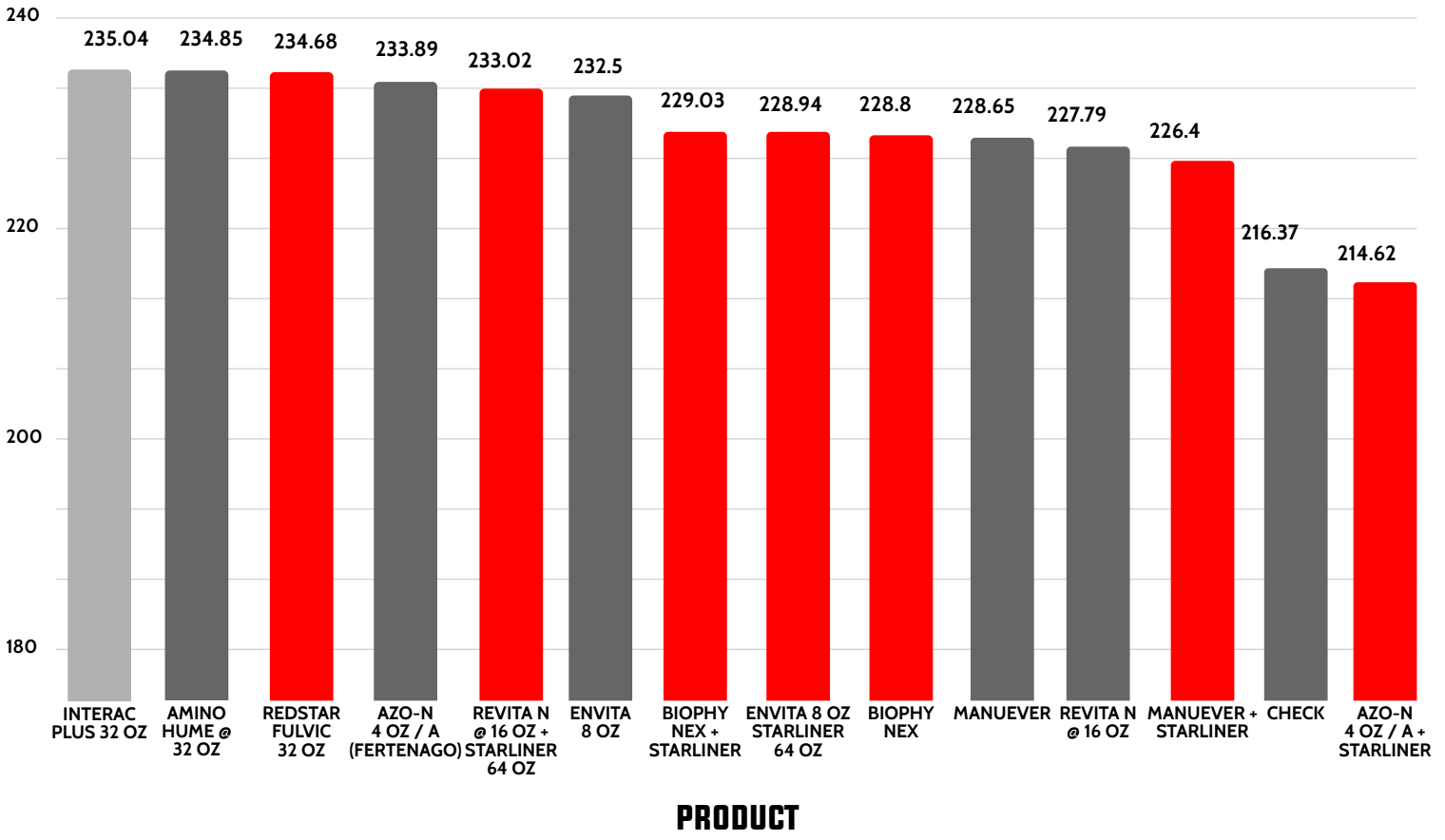
2024 IN - FURROW BIOLOGICAL TRIAL



THOUGHTS FROM THE TURN ROW

- Using liquid carbon products with Nitrogen fixing bacteria products improves yield 10-15 bu. per acre
- Nitrogen producing bacteria prodocts do work to improve nitrogen supply to the plant
- Combination of Nitrogen + phosphorus enhancing products have performed at the top of the plot for 2 years in a row.
- Nitrogen fixing bacteria products haven't been positioned properly in the past, adding key products can improve performance.

IN FURROW BIOLOGICAL TRIAL **2025**



2025 BIOLOGICAL CARBON IN-FURROW PLOT TRIALS:

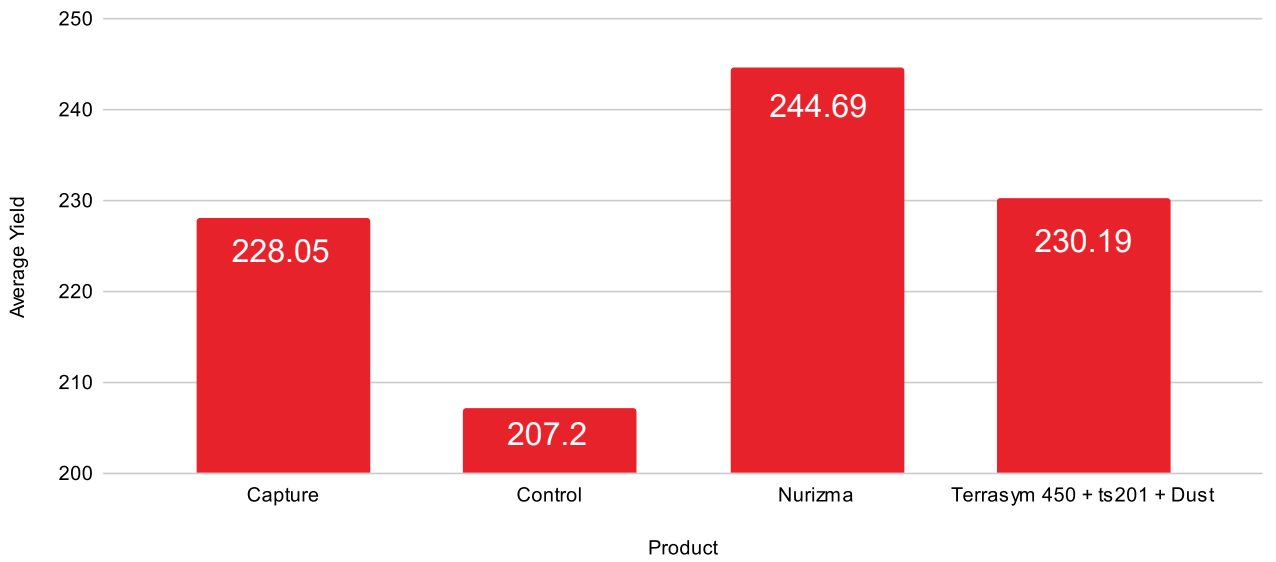
GOAL: Our goal is to evaluate biological and carbon products that impact all NPK, Micro's and secondary nutrients. This allows REDSTAR the ability to show many different technologies and how they perform to help customers make better informed decisions on our high fertility plots.

THOUGHTS FROM THE TURN-ROW

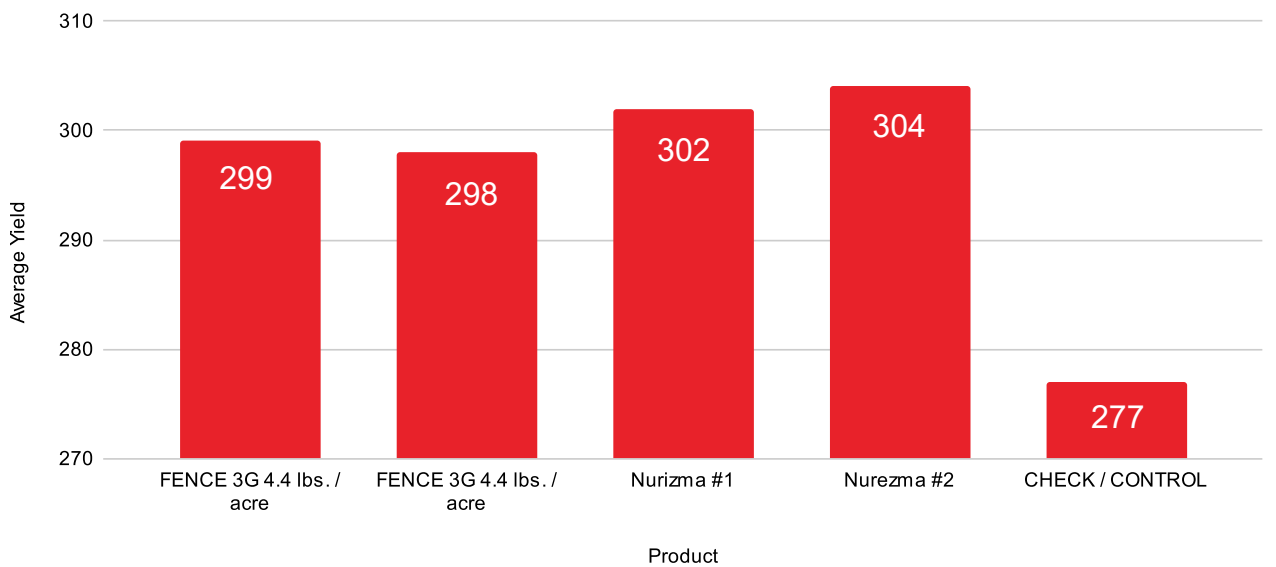
- 2025 was the year where Fulvic/Humic acid products finished 1,2,3 at the top of the plot, meaning their ability to hold nutrients in the available root zone was well noted.
- Nitrogen fixing Bacteria products did perform well, providing 11.17 bushel average yield increase or $44.68 / acre Revenue increase.
- Starliner continues to be an excellent addition to most biologicals, demonstrating the power of Humic / Fulvic acids to drive increased yield consistently year after year.
- Due to the process of diazotrophs (Nitrogen fixing bacteria), Starliner has once again showed success when paired with N fixers. Starliner helps these bacteria products to more efficiently colonize the plants root system.

2022 - 2023 - 2024 - 2025 PLOTS

2023 MALENA INSECTICIDE PLOT



2023 FOLKEN INSECTICIDE PLOT



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2022 - 2023 - 2024 - 2025 PLOTS

FIELD TESTED

MAGNATRIO

POWERED BY BioPHY NEX

On the right is dry fertilizer with just water. This indicates dry fertilizer sits on top of your soil, providing only a 30% efficiency rate. On the left is dry fertilizer, MAGNATRIO and water. As you can see when adding MAGNATRIO to dry fertilizer, the fertilizer is breaking down into the soil much faster than straight fertilizer. MAGNATRIO increases nutrient release to your soil compared to fertilizer alone. MAGNATRIO maximizes your fertilizer availability to your crop so it can maximize its yield potential.

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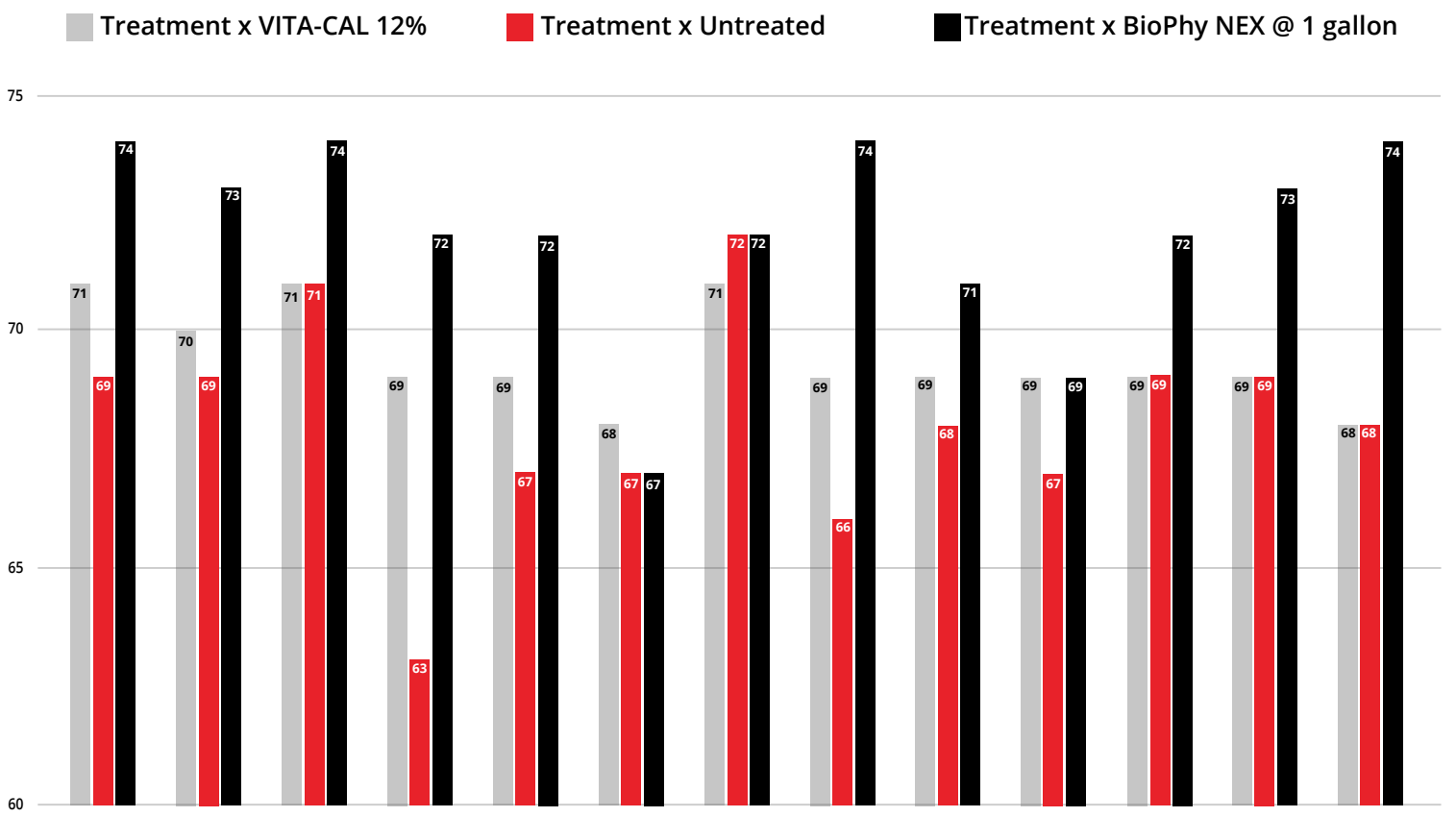
2022 - 2023 - 2024 - 2025 PLOTS

2024 IOWA DRONE TRIAL



THOUGHTS FROM THE TURN ROW

- Carbon sequestration and CO2 is a major driver for yield in C3 plants (soybeans). BioPhy NEX and Breakdown are providing fungal communities to sequester carbon
- SunFED provides a nutritional boost to creates sugar to drive yield. The Mg, Mn, Ca, and Zn are driving this sugar production.
- VITA-CAL 12% and BIOPHY NEX soil applied showed a 3.5 and 6.5 bushel yield increase from soil applications.

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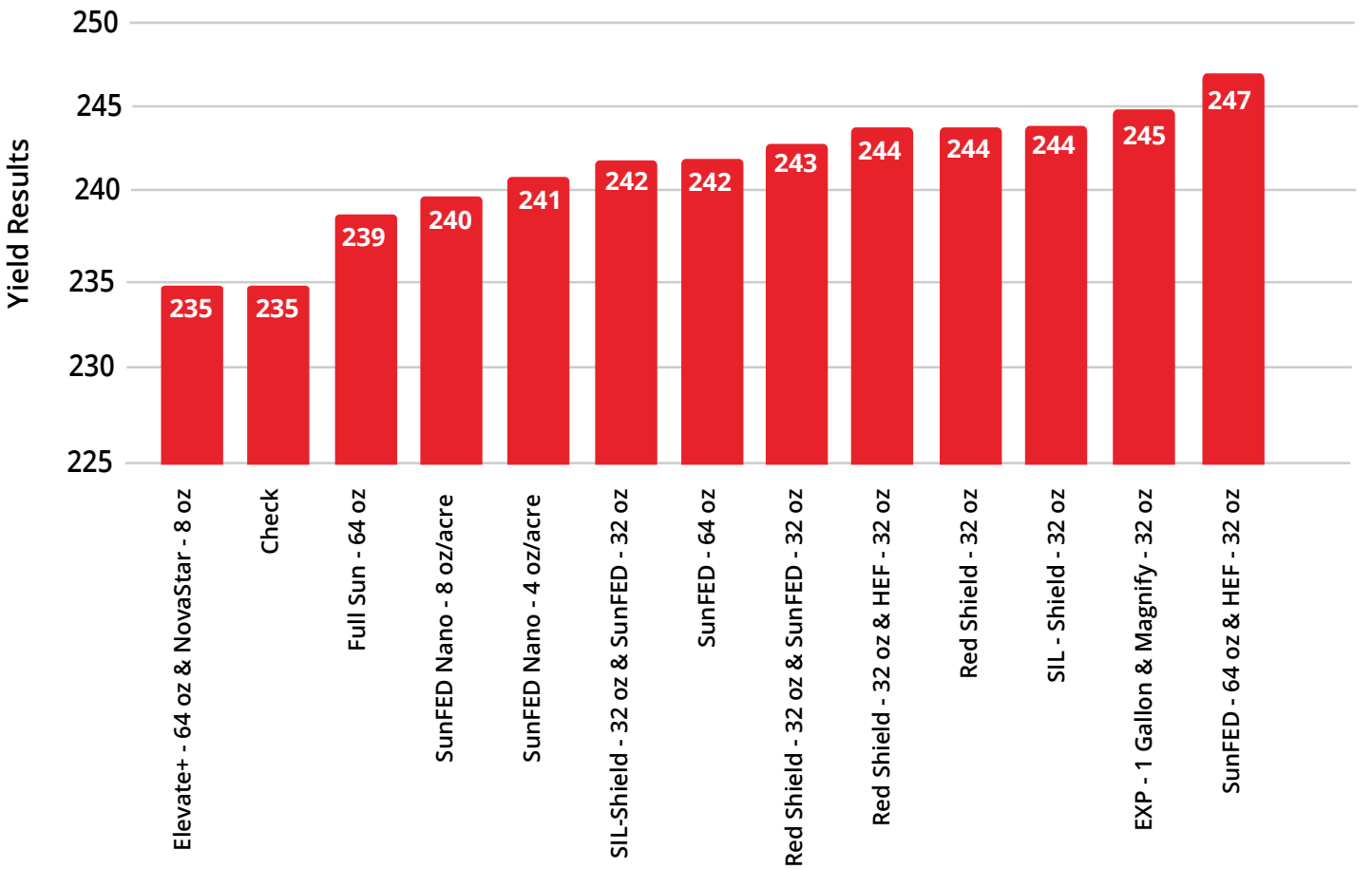
2022 - 2023 - 2024 - 2025 PLOTS

2024 IOWA V5 APPLICATION DRONE



THOUGHTS FROM THE TURN ROW

· RED SHIELD @ 32 oz. / A should the best Return on Investment (ROI) with a 9 bushel yield increase.

· Abiotic Stress relief during nodal root transition (V4-V8) helps plant improve yield potential

· Average of 7.8 bushel yield increase at with V5 nutrient application to better manage stress during vegetative growth.

· SunFED showed the value of increasing photosythesis to maximize sugar production and grain fill.

· Zinc, Manganese and Boron are keys to helping the plant during rapid growth and critical developmental processes like ear formation and reproductive preparation.

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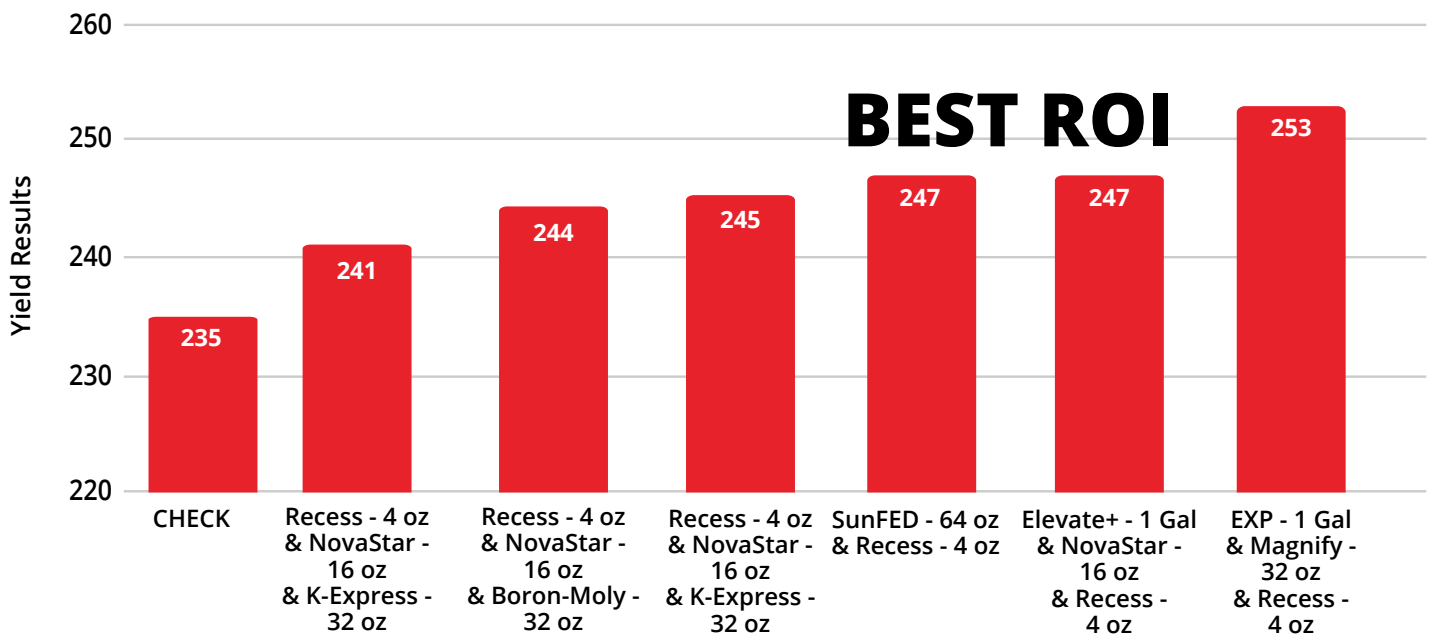
2022 - 2023 - 2024 - 2025 PLOTS

2024 IOWA TASSEL DRONE



THOUGHTS FROM THE TURN ROW

· Plot averaged 11.16 bushel yield increase over un-treated check

· SunFED, NOVASTAR and ReCess plots showed strong Return on Investment.

· All products help elevate late season abiotic stress and allow for maximum respiration and transpiration to increase kernel fill.

· Absent of Fungicides, these strong nutritional bio-stimulants help relieve late season stress do to excess heat or moisture to help maximize kernel fill.

· All REDSTAR BRANDED foliar corn products showed excellent results in the plot with both programs with a yield of 247 bushels / A had the best overall Return On Investment (ROI).


REDSTAR