RhizoSorb®

Performance Report

Solving the Phosphorus Agronomic Challenge

Agronomic Challenge

A majority of phosphorus fertilizer is bound to the soil in a form not easily accessed by plants

As little as 10% of **conventional phosphorus fertilizer** is used by the crop

Plant - Available Phosphorus Plant - Unavailable Phosphorus

The Solution

Improved Phosphorus Uptake

Phosphorus is **pre-bound to RhizoSorb during manufacturing** and prior to application

Far less is bound to the soil, leading to improved availability and uptake

RhizoSorb enables **twice the applied phosphorus** to be used by the crop

RhizoSorb®

*Not Actual Granule Size

Better Efficiency. Improved ROI. Proven Technology.

Replaces Conventional Fertilizers

RhizoSorb is a patented technology integrated into dry-granule phosphate production to improve nutrient use efficiency.

Novel Active Ingredient

RhizoSorb is composed of a blend of metal oxides with phosphorus adhered to the surface during production to increase phosphorus availability and uptake throughout the growing season.

Soil Chemistry Approach

Surface interactions between RhizoSorb and phosphorus ensure plant availability by preventing soil tie-up and loss to the environment.

Optimal Nutrient Delivery

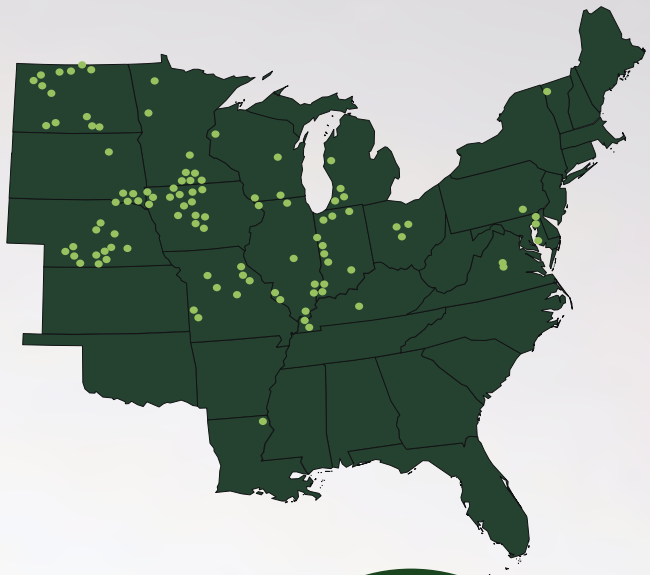
RhizoSorb's plant-driven release controls the delivery of nutrients based on a chemical gradient established between the product surface and the soil-water solution where plant available nutrients are absorbed by the roots.

On-Farm Trials

RhizoSorb has been tested across 18 states over 4 years that demonstrates consistent yield results and cost savings to row crop producers across North America.

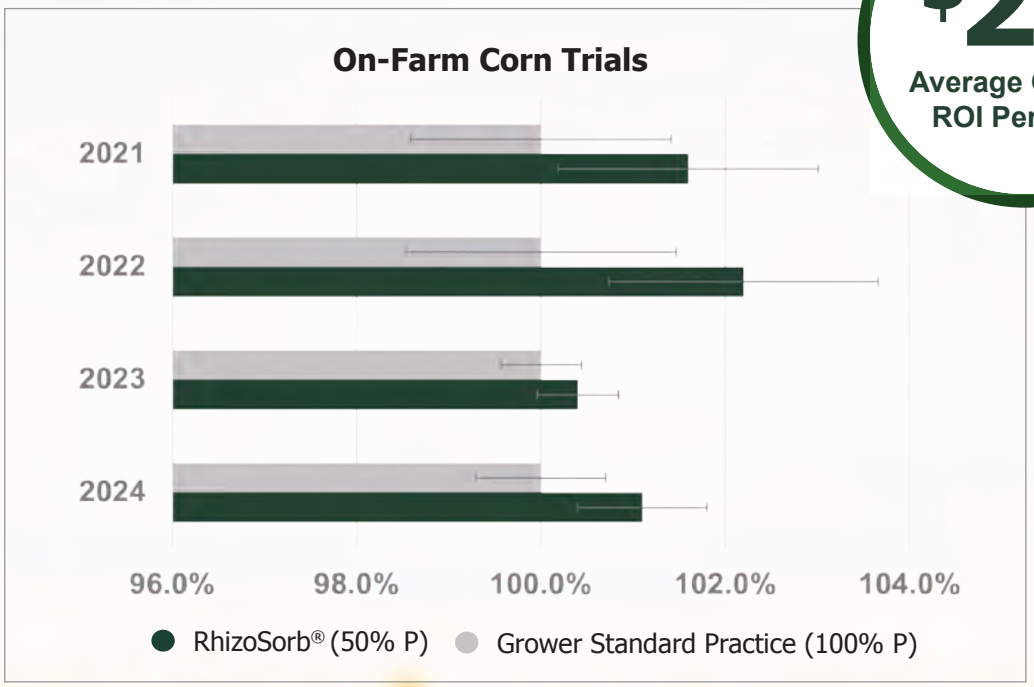
On-farm trials were conducted in plots of at least 20 acres treated with RhizoSorb at 50% less phosphate fertilizer than grower standard practice as determined by soil tests.

In 2024, RhizoSorb was tested across 30 on-farm, independent trial locations. The on-farm trial program validates the efficacy of RhizoSorb to preserve yield and increase phosphorus uptake with reduced application rates. Data was collected in collaboration with growers from Total Acre®.



TotalAcre

$20
Average Grower ROI Per Acre

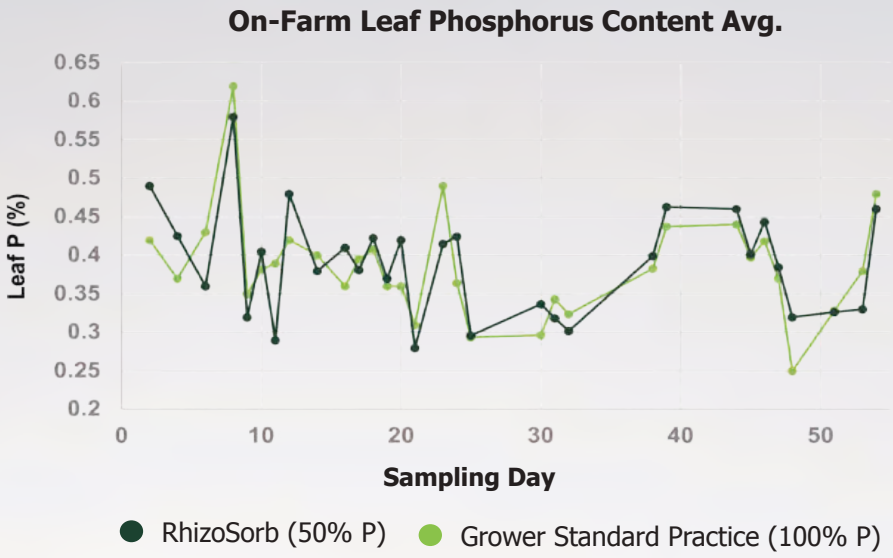


Calculate Your Savings with RhizoSorb®

Equivalent Uptake

RhizoSorb 8-39-0 applied at 50% less phosphate maintained leaf tissue tests comparable to grower standard practice of 100% phosphate from conventional fertilizers in on-farm trials.

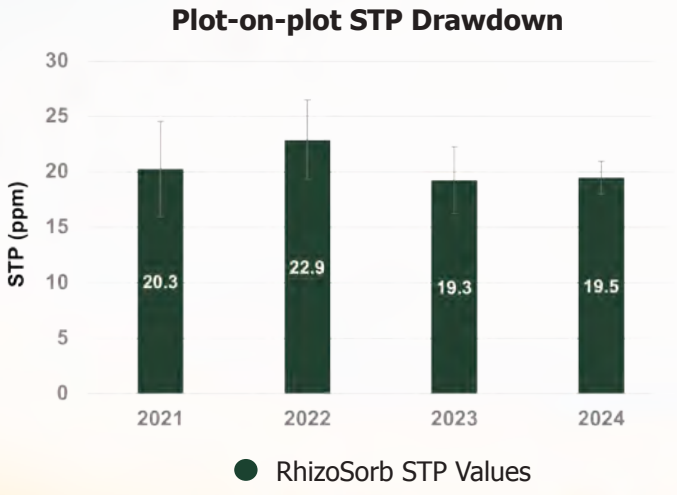
Aggregated data across all 2024 trials demonstrates that RhizoSorb provides sufficient phosphorus to meet crop needs throughout the growing season.

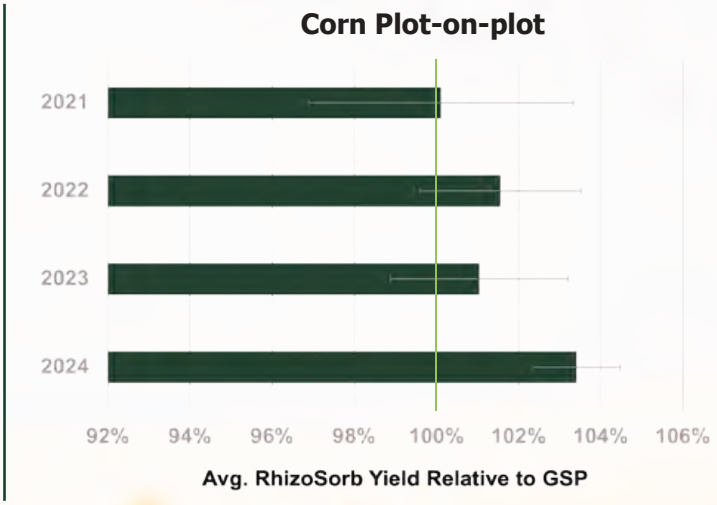


Maintained Soil Test Phosphorus (STP) and Yields

At reduced P rates, RhizoSorb does not decrease soil test phosphate (STP) levels in year over year trials. The long-term study shown occurred over four years at 8 independent trial locations showing no statistical drop in STP levels while using 50% less phosphate.

In the same four-year plot-on-plot trials, RhizoSorb maintained or improved yields with half the phosphorus of standard practices. These trials demonstrate when using RhizoSorb, long-term phosphate reductions don't compromise yields or decrease soil test phosphorus (STP).





Trusted by Growers. Backed by Science.

"Trying RhizoSorb in strip-till applications has been stable and we have not had any issues with compatibility. We have seen better phosphorus levels and yield."
Brian Herbek, Nebraska

"We have been using RhizoSorb on our farm for three years to save time on application, enhance phosphorus uptake, and achieve the same or better results with less fertilizer."
Austin Blair, Iowa

"RhizoSorb makes phosphorus more readily available and you can see it in the phosphorus tissue levels with more visual root mass. It's an easy switch from MAP."
Kyle Grotelueschen, Nebraska

"We've used RhizoSorb on over 1,000 acres to enhance phosphorus availability and uptake, helping us get the most value from our fertilizer investment."
Andy DeVries, Iowa

Watch Our Grower Testimonials

Sustainability Achievements

RhizoSorb was designed for cost-effectiveness and environmental sustainability. With a 45% lower verified carbon intensity than conventional products like MAP, it benefits both the bottom line and the environment.

RhizoSorb has also been proven to reduce phosphorus loss from runoff by 78% compared to MAP. This ensures more of the applied phosphorus is absorbed by the plant rather than being lost to the environment.

45%
Industry Leading Carbon Reductions

78%
Runoff Reduction

*Carbon Reduction Based on Third Party Life Cycle Assessment

RhizoSorb Grower Guarantee

Phospholutions Inc. offers yield warranty backed program that reduces risk for first time users who adopt RhizoSorb on 200+ acres. The RhizoSorb Grower Guarantee offers participating farmers income support in the event yields do not meet 100% of APH. In these cases, the grower registered in the program would be eligible for a payment of up to $40/acre. Our confidence in RhizoSorb allows growers can to experience the benefits of our cost-effective and sustainable phosphate solution-risk free.

Qualifications

- Enroll and apply to a minimum of 200 acres of corn, soybeans, or combination
- Provide as applied maps
- First time RhizoSorb user
- Maintain an active multi-peril crop insurance policy

Per Acre Payment

If yields do not meet 100% of your 10-year actual production history (APH), you'll receive a warranty payment.

$40/acre when 80-89% APH is achieved
$20/acre when 90-99% APH is achieved

To Enroll

Register at **www.phospholutions.com/growerguarantee,** scan the QR code, or contact your regional territory manager.

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