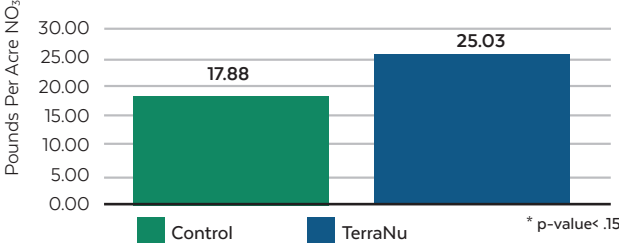


# Spring Wheat in Central South Dakota reported a 40% increase in soil nitrate nitrogen

Increases in soil nitrate nitrogen were observed with confidence from the samples collected.

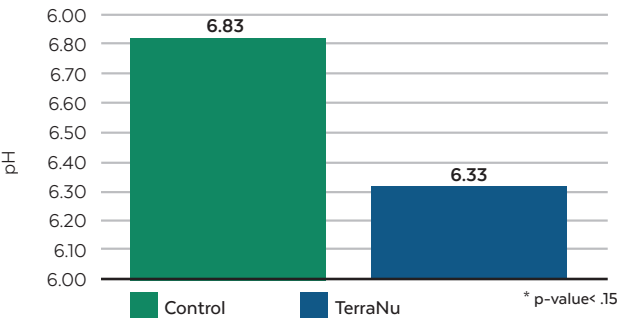
## Impact of TerraNu on Spring Wheat Soil Nitrate Nitrogen - Central South Dakota



# Spring Wheat trials in central North Dakota reported reductions in mid-season soil pH

- A reduction in mid-season soil pH was observed in central ND when TerraNu HiP was applied at planting with spring wheat.
- Reductions in pH are favorable for certain cropping systems and alkaline soils.
- Neutral to acidic soil systems, may require adjustments to fertilizer blends de-risk over acidification of the rhizosphere.

## Impact of TerraNu on mid-Season Soil pH Spring Wheat



# TerraNu Product Formulations + Product Info

### TerraNu K+

- 0-0-40-2s (15% Carbon)
- Potassium, carbon and salt buffering delivery mechanism for a soil and seed safe solution.

### TerraNu MicroCaSH

- 0-0-0-7s-9(Ca)-2(Zn)-1(Fe)-1.5(B)-1.5(Mn) (5% Humic Acid, 17% Carbon).
- 250 bu worth of micronutrients in 1 homogeneous package.
- Tremendous for forage crops (silage, alfalfa).
- Industry leading micropack with economical and efficiency benefits.
- MicroCaSH directly enhances soil function and yield potential by applying a balanced blend of micronutrients.
- Compatible with other fertilizers for blending.

### TerraNu P-Base

- 6-23-5 + full micronutrient package (20% Carbon).
- Stand-alone started & phosphorus replacement.
- Blends with other fertilizers.
- Digested manure with high mineral content.



# TerraNu® is more than just a fertilizer—it's a microbial food source that enhances soil health over time.

TerraNu® improves fertilizer use efficiency and increases the mobility of phosphorus and potassium in the soil. Its unique formulation also supports nutrient cycling, reduces soil compaction, increases soil organic carbon, and enhances water retention.

TerraNu® protects against drought and ultimately boosts long-term soil health and crop productivity, setting it apart from traditional fertilizers.

# Maximize Your Soil Potential.



## TerraNu, a carbon-based fertilizer that yields results.



**Discover How TerraNu Works in North Dakota and South Dakota**



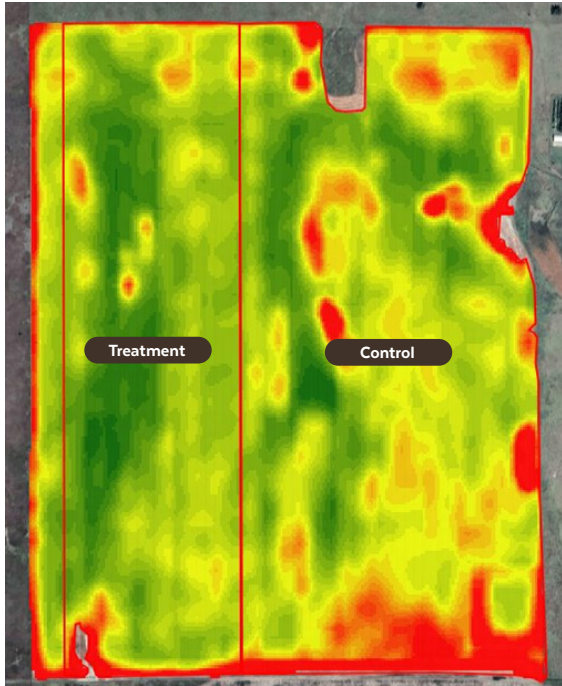
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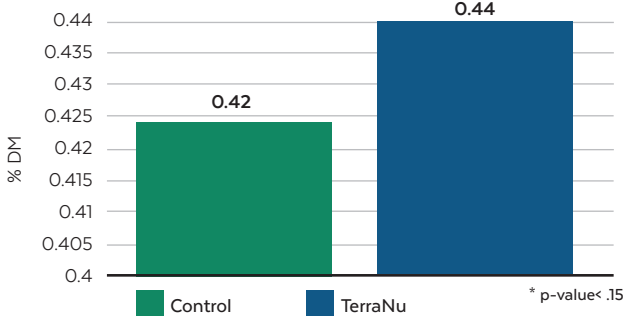
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## TerraNu increased nitrate nitrogen and phosphorus in plant tissue and plant health in Spring Wheat.



NDVI image June 25th, 2024

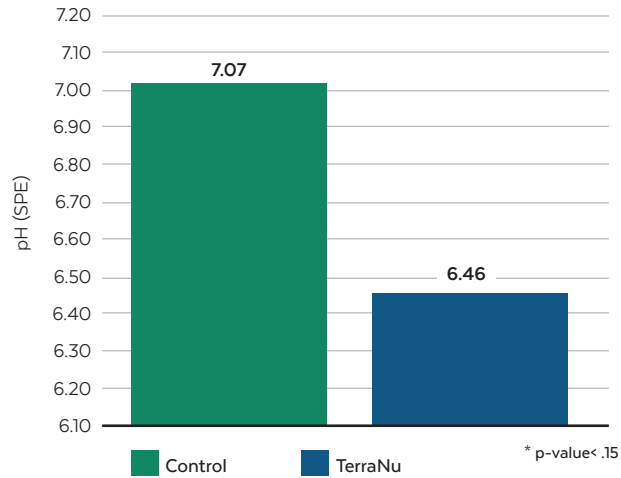
### Impact of TerraNu on Spring Wheat Plant Tissue Phosphorus



TerraNu increased phosphorus in plant tissue and plant health boosting crop resiliency and performance throughout the season.

## TerraNu on Soybeans in North Dakota and South Dakota

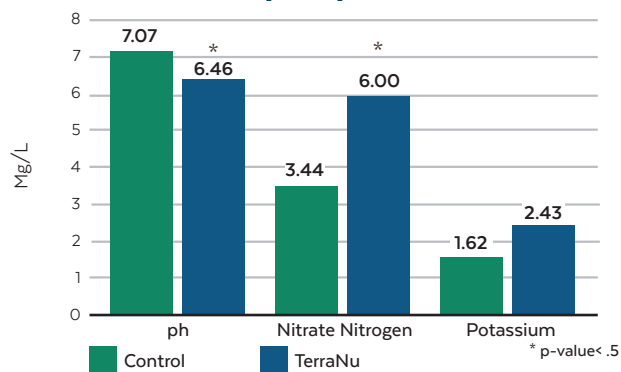
### Impact of TerraNu on Spring Wheat Plant Tissue pH



### North Dakota soybean trials reported increased nitrate nitrogen and potassium with TerraNu

- TerraNu blends reported a 9% reduction in soil pH and a 74% increase in nitrate nitrogen in the samples collected mid-season.
- Uplifts in nitrogen, potassium availability improved 18%.

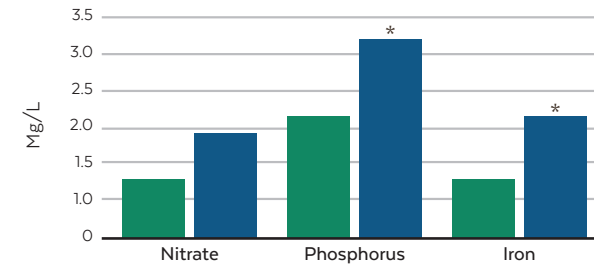
### Impact of TerraNu on Mid-Season Soil pH and Nutrient Availability - Soybeans North Dakota



## Soybean trials in South Dakota reported increases in soil nitrate nitrogen, phosphorus, and iron.

- Phosphorus and Iron reported increases of 47% and 72% in 95% of the samples collected.
- TerraNu reported no observed change in soil pH in the South Dakota trials.
- Nitrate nitrogen increased 50% under treatment with TerraNu.

### Impact of TerraNu on Soybean Soil Soluble Nitrate, Phosphorus, and Iron

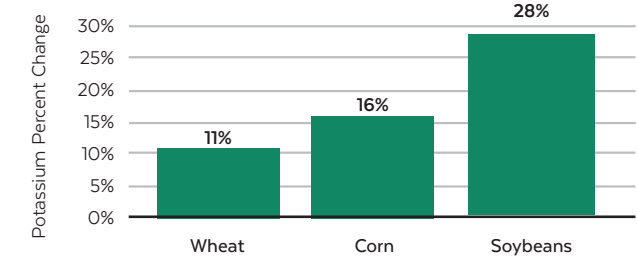


## Revolutionize your crop from the soil up

TerraNu reported mid-season increases in nutrient availability and carbon across all crops.

Uplifts in potassium availability increased as more carbon was applied as part of the trials fertilizer program.

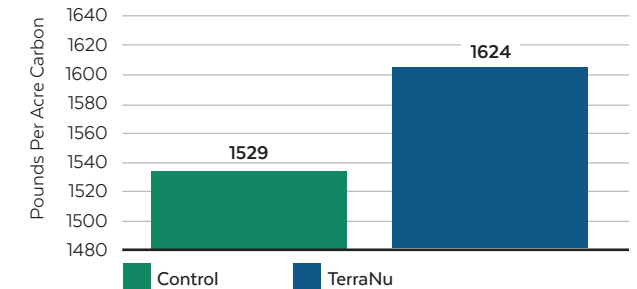
### Impact of TerraNu on Soil Potassium



### TerraNu blends increased soil organic carbon 6% in soybean trials.

- Soil organic carbon uplift was observed in the water extractable organic carbon fraction of the soil.
- Carbon uplift was 2.5X ROI compared to applied carbon from TerraNu.
- Mid-season water extractable soil organic carbon increased 2.5X with TerraNu.
- TerraNu blends on soybeans applied 38.3 pounds per acre carbon.

### Impact of TerraNu on Soil Organic Carbon Soybeans



Data is reflective of 2024 Midwestern BioAg research sites in ND, SD, WI, MI.