

TerraNu® blend (including K+) increased water extractable organic carbon compared to conventional fertilizer program

- TerraNu Blend applied 38.3 pounds per acre concentrated carbon digested (i.e.) TerraNu technology
- Mid-season water extractable soil organic carbon increased 2.5X.
 - o Average pounds carbon per acre
 - GSP 1,529
 - TerraNu 1,624
 - o 94 pounds per acre carbon uplift with TerraNu.

TerraNu increased stand counts 20% across all winter wheat trials

- Four experimental sites in WI and MI.
- TerraNu HiP was applied as the treatment fertility program and compared to the following grower standard fertilizer programs (control):
 - o 90 Lbs/A MAP
 - o 197 Lbs/A 7-13-37
 - o 3350 Lbs/A 14-0-14 with TerraNu MicroCaSH

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.

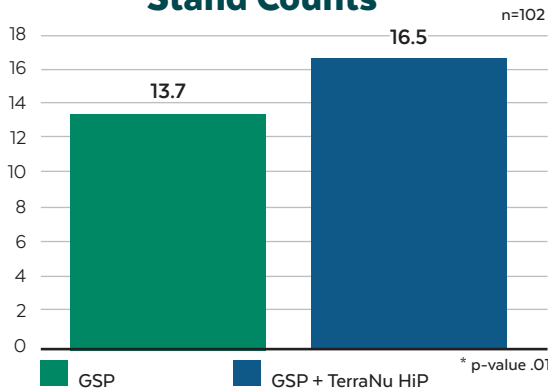
Maximize Your Soil Potential.

TERRANU®

TerraNu, a carbon-based fertilizer that yields results.



2024 Michigan Winter Wheat Stand Counts



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Blue Mounds, WI 53517



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Discover How TerraNu Works
in Wisconsin and Michigan

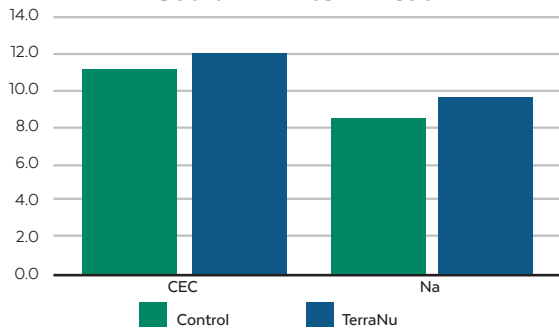


TerraNu HiP increased mid-season CEC, suggesting nutrients exchange more easily due to TerraNu technology increasing nutrient availability.

Soil organic carbon is widely accepted as a charged complex which aids in the retention and availability of soil nutrients.

TerraNu applications reported increases in mid-season CEC across all winter wheat trials (132 samples).

Impact of TerraNu on CEC and Sodium Winter Wheat

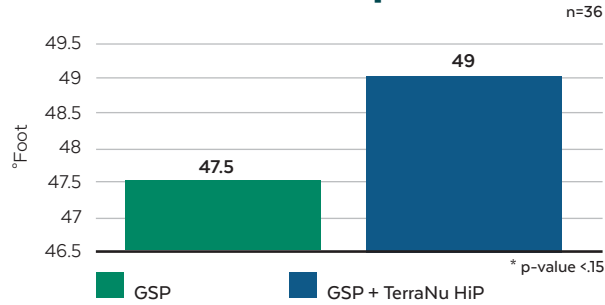


	CEC	K ₂ O	NA
Control	10.7	302.4	8.6
TerraNu	11.7	336.6	9.5
% Change	9%	11%	11%



TerraNu HiP treatments reported a 2% increase in spring soil temperatures.

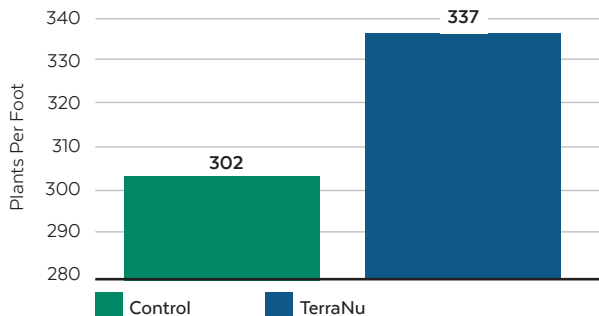
2024 Michigan Soft Red Winter Wheat Soil Temperatures



TerraNu increased soil potassium 11% for a 35 pound per acre increase in soil K2O

Potassium “tie-ups” with clay complexes present a current nutrient loss pathway observed in many cropping systems. The use of TerraNu increased soil CEC and potassium suggesting carbon functions as a buffer mechanism improving the mobility and availability of potassium.

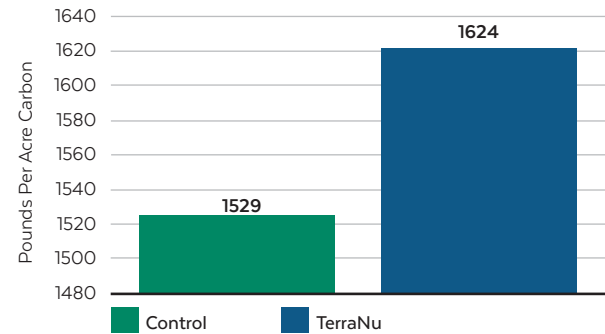
Impact of TerraNu on Available Soil Potassium Winter Wheat



TerraNu blends increased soil organic carbon 6% in soybean trials. 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.
- Soil organic carbon uplift was observed in the water extractable organic carbon fraction of the soil.

Impact of TerraNu on Soil Organic Carbon Soybeans



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



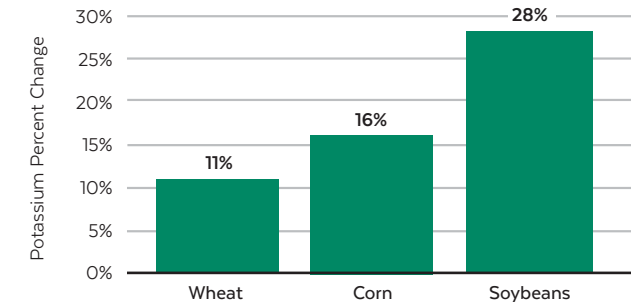
TerraNu technology plays a crucial role by enhancing fertilizer availability through its unique method of complexing fertilizers with carbon.

Improving the mobility of fertilizers, particularly phosphorus and potassium. Phosphorus and Potassium are typically bound to soil clay complexes, limiting their effectiveness for plant uptake.

Carbon acts as a buffer or intermediary, increasing the amount of fertilizer available in soil clay complexes. TerraNu, serving as an organic exchange site, minimizes the risk of fertilizer loss due to leaching or tie-up.

Adding TerraNu technology to fertilizer programs increases efficiency by providing better nutrient availability and improved mobility for plant absorption.

Impact of TerraNu on Soil Potassium



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