

Huma® Fertil Soil® Increases Corn Yield With 260% ROI

Research Report

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Huma® Product: Fertil Soil®

Background

Application of **Fertil Soil®** to soils in combination with other Huma® fertilizers at various locations previously resulted in crops with improved plant growth and higher yields. Applying **Fertil Soil®** with grower standard products or as a single product application to soil and leaves could also impact results.

Objective

The focus of this study was to observe if **Fertil Soil®** as a yield-enhancing product can improve corn yield under field condition.

Materials & Methods

Experimental plots for corn were established at the Agricenter International research facility in Memphis, Tenn. The experiment was a randomized complete block design with six replications. The corn was planted on June 29 in a field that did not have any humic products prior to this study. The crop was harvested on October 19.

The grower standard (GS) fertilizer program, including the source and application timings, are outlined in Table 1.

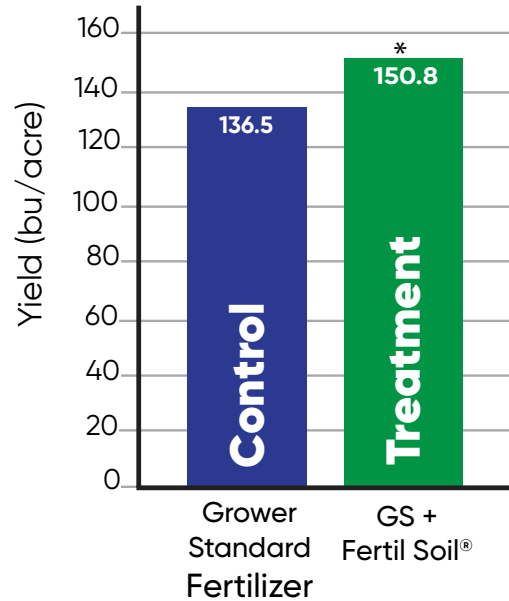
Fertil Soil® was applied at planting and again four weeks later during the growing season (Table 1). At planting, **Fertil Soil®**, tank-mixed with 10-34-0 fertilizer, was applied in-furrow. **Fertil Soil®** was then broadcast sprayed on the plants and the soil surface at 28 days.

Table 1. Grower Standard and Huma® Treatment Fertilizer Programs

| | Product | Amount | Method | Timing |
|------------------------|---------------------------------|-----------|------------|-------------|
| GS Control | 18-46-0 | 130 lb/a | Broadcast | Preplant |
| | 0-0-60 | 100 lb/a | Broadcast | Preplant |
| | 10-34-0 | 2.5 gal/a | In-furrow | At Planting |
| | 46-0-0 | 276 lb/a | Side-dress | V3 |
| Huma® Treatment | GS Control (all products above) | | | |
| | Fertil Soil® | 1 qt/a | In-furrow | At Planting |
| | Fertil Soil® | 1 qt/a | Spray | 28 days |

Results

The difference between the two treatments was statistically significant ($p \leq 0.05$), adding **Fertil Soil®** to corn by increasing 14.3 bu/acre yield over the GS program alone. This resulted in a return on investment of 260%.



* = statistically significance at $p \leq 0.05$.

Figure 1. Corn Yield Response to Fertil Soil® Treatment

Conclusions

This field study confirmed results from previous field trials (follow the QR code below) that including **Fertil Soil®** in crop production can increase yield. The yield bump of 10% resulted in over \$50 per acre net income gain.

Product

Huma® **Fertil Soil®**, carbon-complexed with Micro Carbon Technology®, improves soil structure and feeds the beneficial bacteria activity in the soil. This balances the carbon-oxygen ratio, creating a carbon-rich soil that allows the soil and rhizosphere interface to be more active. **Fertil Soil®** increases availability of nutrients blocked by mineralization in soils. **Fertil Soil®** indirectly helps to diminish the stress of saline soils and pH extremes.



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