



# Huma's Micro Carbon Technology Performance on Nebraska Corn

FIELD REPORT

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## BACKGROUND

Huma's Micro Carbon Technology<sup>®</sup>(MCT) based products: FERTIL SOIL<sup>®</sup>, SUPER PHOS<sup>®</sup>, and VITOL<sup>®</sup> have been shown to improve germination, plant health and vigor, increase phosphorus availability, and improve farming sustainability and regeneratively.

## OBJECTIVE

The aim of this study was to assess the effect of feeding the soil, roots, and the plant itself with FERTIL SOIL, SUPER PHOS, and VITOL to see if growers can increase yield and improve their ROI.

## MATERIALS & METHODS

A250 and Vibrance treated Syngenta NK0760-GT corn seed was planted in a non-irrigated field that has been in continuous corn for many years near Grant, Nebraska on deep, well drained silt loam soil. The fields were planted at 32,000 seeds/ac on 30-inch rows. All treatments included 200# of N from Urea. Control treatment did not have any application outside the 200# of N and seed treatment.

- **TREATMENT A** added FERTIL SOIL in furrow, a soil activator which aids to stimulate the diversity and numbers of beneficial bacteria in the soil profile.
- **TREATMENT B** was a combination of FERTIL SOIL, SUPER PHOS, and VITOL in furrow, and applied SUPER PHOS and VITOL foliarly at V4. SUPER PHOS is a 0-50-0 high efficiency phosphorous fertilizer whereas VITOL is a growth manager which gives the plant the energy to produce its own hormones for increased growth, improved photosynthetic capabilities, and strength to overcome abiotic stress.
- Yields were measured at 15.5% moisture levels. ROI was calculated as follows: Net profit/Cost \* 100%.

## RESULTS

All treatments improved yield over the control assuming \$4.50/bu market price and 15.5% moisture levels for yield calculations.

- **TREATMENT A** improved yield 4 bushels over the control with a 238% ROI (\$20.30/\$8.55\*100%) whereas
- **TREATMENT B** improved yields 31 bushels with a 357% ROI (\$140.25/\$39.25\*100%).

## CONCLUSION

Huma liquid products show promise in increasing yield and improving farmers' ROI. Further tests should look at each individual product and application timings to determine what makes the best ROI.

| TREATMENT      | PRICE     | PRODUCTS                           | RATE               | TIMING    | COST       | YIELD       | RETURN   | ROI  |
|----------------|-----------|------------------------------------|--------------------|-----------|------------|-------------|----------|------|
| <b>CONTROL</b> |           |                                    |                    |           |            | \$197.73/Ac |          |      |
| <b>A</b>       | \$4.50/bu | FERTIL SOIL                        | 1qt/Ac             | In Furrow | \$8.55/Ac  | \$197.24/Ac | \$20.30  | 238% |
| <b>B</b>       | \$4.50/bu | FERTIL SOIL<br>SUPER PHOS<br>VITOL | 1qt of each<br>/Ac | In Furrow | \$39.25/Ac | \$223.90/Ac | \$140.27 | 357% |
|                |           | SUPER PHOS<br>VITOL                | 1qt of each<br>/Ac | Foliar@V4 |            |             |          |      |