

Nature's Formula Bio-Sure Grow at Planting vs Nature's Formula Bio-Sure Grow at Planting and Sidedress vs Check on Corn

Study ID: 011035201602

County: Clay

Soil Type: Crete silt loam 1-3% slope; Hastings silty clay loam 3-7% slopes, eroded; Fillmore silt loam frequently ponded

Planting Date: 4/25/16

Harvest Date: 10/28/16

Population: 34,000

Row Spacing (in): 30

Hybrid: Dekalb 61-79RIB

Reps: 8

Previous Crop: Soybean

Tillage: No-Till

Herbicides: Acuron™, AATrex®, and Touchdown Total®

Foliar Insecticides: None

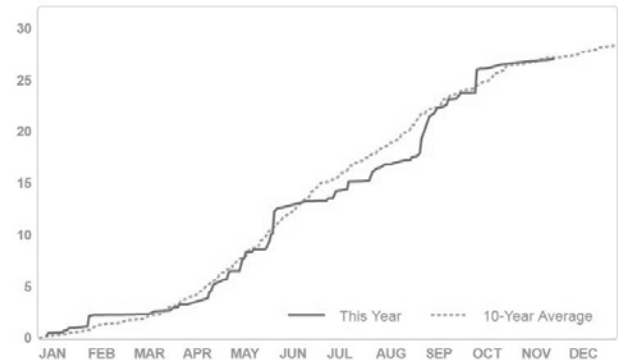
Soil Sample (0-10 inches):

Foliar Fungicides: None

Fertilizer: 5 gal/ac starter with 1 qt/ac zinc; 225 lb N/ac and 1 pt/ac Agrotain® Ultra

Irrigation: Pivot, Total: Unknown

Rainfall (in):



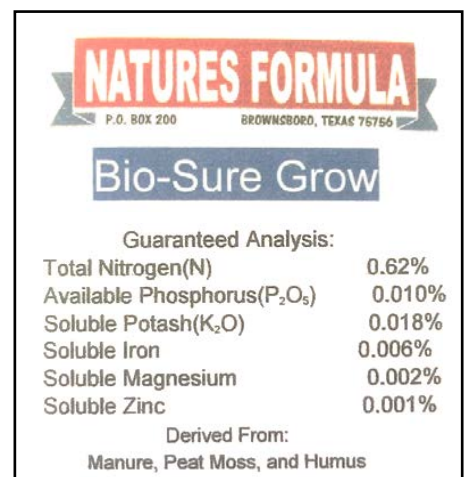
Soil pH 1:1	Buffer pH	Soluble Salts 1:1		Excess Lime Rating	OM LOI-%	Nitrate-N ppm N	Nitrate-N Lbs N/A	M3 Phos ppm	Ammonium Acetate -----ppm-----					DTPA -----ppm-----			
		mmho/cm	CEC						K	Ca	Mg	Na	S	Zn	Fe	Mn	Cu
6.2	6.9	0.24	13	NO	2.8	6	18	19	335	1730	216	71	10	1.3	150	59.6	1.1

Introduction: This study is looking at using Nature's Formula Bio-Sure Grow as a starter and as a sidedress in addition to the grower's normal starter fertilizer of 10-34-0 with zinc. A product label is at right. Nature's Formula Bio-Sure Grow is advertised as an all-natural organic humus and manure extract that is put through a proprietary process to suspend the micro nutrients within the solution. The product claims to be a natural quick response formulation of Nitrogen, Phosphorus, and Potassium. The three treatments being tested are:

A: 10-34-0 + Zinc (check)

B: 10-34-0 + Zinc + Bio-Sure Grow at planting in furrow

C: 10-34-0 + Zinc + Bio-Sure Grow at planting in furrow + Bio-Sure Grow at sidedress (V5).



Product information from:

<http://www.agenviromgmt.com/shop/natures-fluid>

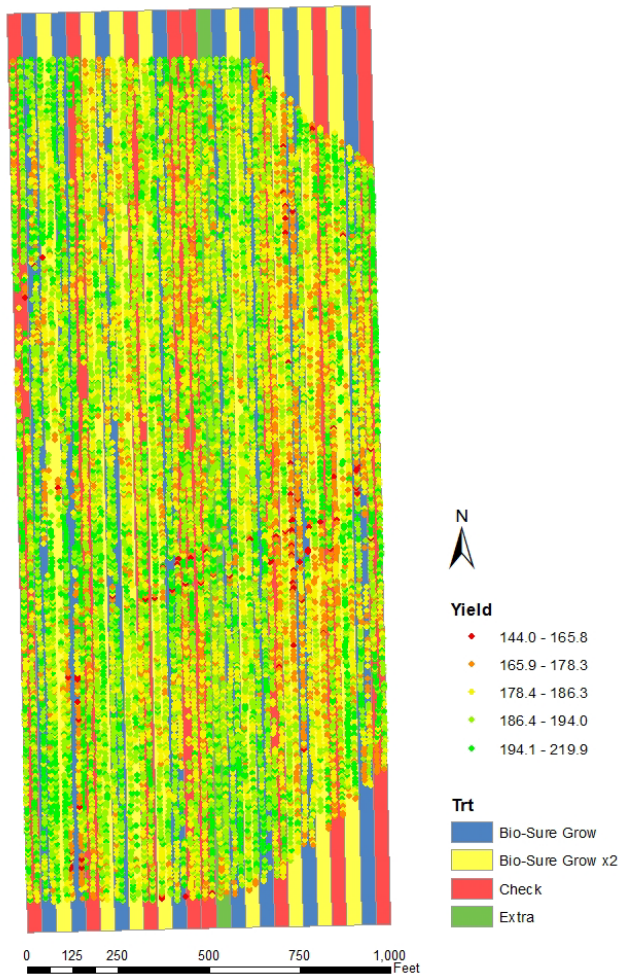
Results:

	Harvest Stand Count (4 reps)	Stalk Rot (%) (4 reps)	Moisture (%)	Yield (bu/acre) [†]	Marginal Net Return [‡] (\$/ac)
Check	33,750 A	11 A	15.1 A	188 A	573.40
Bio-Sure Grow at Planting	31,375 A	11 A	15.1 A	187 A	555.35
Bio-Sure Grow at Planting and Sidedress	33,000 A	6 A	15.1 A	187 A	532.22
P-Value	0.179	0.697	0.609	0.610	-

[†]Bushels per acre corrected to 15.5% moisture.

*Values with the same letter are not significantly different at a 90% confidence level.

[‡]Marginal net return based on \$3.05/bu corn price, \$15/ac product cost, and \$8.13/ac sidedress application cost. No additional cost for product application at planting as this is the standard practice for this grower.



Summary: Using Bio-Sure Grow at planting, or at both planting and sidedress, did not result in increased yield compared to using the starter fertilizer alone. Due to additional product and application costs, the grower's standard management of starter fertilizer resulted in the highest marginal net return.

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