

Impact of Generate® In-Furrow at Planting on Soybean Yield

Study ID: 0709047201802

County: Dawson

Soil Type: Cozad silt loam 0-1% slope; Cozad silty

clay loam 0-1% slope
Planting Date: 5/17/18
Harvest Date: 10/10/18
Population: 140,000
Row Spacing (in): 30

Variety: Pioneer® P31A22X

Reps: 5

Previous Crop: Corn **Tillage:** Ridge-Till

Herbicides: *Post:* 24 oz/ac Buccaneer® 5 Xtra, 12.8 oz/ac Engenia®, and 2.5 oz/ac Valor® XLT on 5/23/18; 24 oz/ac Buccaneer® 5 Xtra, 12.8 oz/ac Engenia®, and 10 oz/ac Charger Basic® on 6/28/18;

8 oz/ac Atlas® on 7/3/18

Seed Treatment: None Foliar Insecticides: None Foliar Fungicides: None

Fertilizer: None

Irrigation: Gravity, Total: 0"

Rainfall (in):



Soil Test (January 2018) - 4 samples were taken in the study area:

| Sample | рΗ | Soluble | ОМ | KCI N | litrate | Mehlich | CaPO ₄ | K | Ca | Mg | Na | Sum of | Zn |
|--------|-----|---------|-----|-------|---------|---------|--------------------|-----|------|-----|-----|----------|-----|
| | | Salts | | | | P-III | SO ₄ -S | | | | | Cations | |
| | | mS/cm | (%) | ppm | lb/ac | ppm | ppm | ppm | ppm | ppm | ppm | meq/100g | ppm |
| 1 | 7.2 | 0.6 | 2.4 | 12 | 29 | 111 | 27 | 550 | 2858 | 575 | 134 | 21 | 4.0 |
| 2 | 7.4 | 0.7 | 2.5 | 12 | 29 | 100 | 42 | 648 | 2370 | 594 | 271 | 20 | 3.0 |
| 3 | 7.3 | 0.7 | 2.1 | 8 | 19 | 46 | 55 | 591 | 2471 | 502 | 192 | 19 | 1.7 |
| 4 | 7.2 | 1.0 | 2.1 | 22 | 53 | 111 | 66 | 664 | 2184 | 484 | 201 | 18 | 3.8 |

Introduction: This study was looking at Generate® applied in-furrow at soybean planting. The product was applied at a rate of 1 pt/ac and was compared to an untreated check. Product information is at right. Yield was recorded using a yield monitor and weigh wagon scale. Yield from the weigh wagon is reported here.

ADANTEED ANALVOIC

Generate®

| 1.04% |
|--------|
| 0.28% |
| 0.56% |
| 0.26% |
| 0.22% |
| Cobalt |
| Copper |
| Oxide, |
| Zinc |
| |
| |

Product information from: Ralco Nutrition, Inc.

Results:

| | Harvest Stand Count | Moisture | Yield† | Marginal Net Return‡ (\$/ac) | | |
|--------------------|----------------------------|----------|---------|------------------------------|--|--|
| | (plants/ac) | (%) | (bu/ac) | | | |
| Check | 59,914 A* | 12.8 A | 66 A | 489.00 A | | |
| Generate In-Furrow | 59,333 A | 12.9 A | 66 A | 476.04 B | | |
| P-Value | 0.859 | 0.648 | 0.453 | 0.029 | | |

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

Summary:

- The addition of Generate® resulted in no difference in stand counts, moisture, or yield.
- Due to the additional cost of the Generate® product and no yield increase, the untreated check had a \$12.96/ac higher marginal net return.

Sponsored by:











[†]Bushels per acre adjusted to 13% moisture.

 $[\]pm Marginal$ net return based on \$7.40/bu soybean and \$9.75/ac Generate.