

Impact of Commence® Seed Treatment on Corn

Study ID: 0085141201801

County: Platte

Soil Type: Boel fine sandy loam occasionally flooded

Planting Date: 4/27/18

Harvest Date: 10/4/18

Population: 35,000

Row Spacing (in): 30

Hybrid: Dekalb® DKC 60-87

Reps: 29 (only 4 reps for stand counts)

Previous Crop: Corn

Tillage: Ridge-Tilled Twice

Herbicides: Pre: 2 qt/ac Degree Extra®, 40 oz/ac Roundup®, and 6 oz/ac Sterling Blue® on 5/16/18

Post: 56 oz/ac Halex®, 1 pt/ac Atrazine, and 16 oz/ac Roundup® on 6/12/18

Seed Treatment: Acceleron® Basic 500

Foliar Insecticides: None

Foliar Fungicides: Trivapro® on 7/16/18

Fertilizer: 100 lb/ac Urea, 50 lb/ac K-Mag® and 25 lb/ac Potash on 4/10/18; 5 gal/ac Kugler 6-24-6-1S with 1 pt/ac Micro Max® in-furrow and 5 gal/ac ATS and 5 gal/ac 32% UAN on 4/27/18; 160 lb/ac N from NH₃ sidedress on 6/4/18

Irrigation: Gravity, Total: 4"

Rainfall (in):



Introduction: The purpose of this study was to evaluate Commence® seed treatment. Commence® was applied at a rate of 6 oz/100 lb of seed. Product information is at right.

GUARANTEED ANALYSIS

Cobalt (Co)..... 1.58%
Copper (Cu) 0.33%
Iron (Fe) 0.85%
Manganese (Mn)..... 0.49%
Zinc (Zn) 0.27%

DERIVED FROM: Cobalt Carbonate, Cobalt Sulfate, Copper (II) Carbonate, Iron (III) Oxide, Manganese (II) Oxide, Manganese (II) Sulfate, Zinc Carbonate, Zinc Sulfate

Results:

Product information from: *Agnition*

| | Early Season Stand Count (plants/ac) | Moisture (%) | Yield† (bu/ac) | Marginal Net Return‡ (\$/ac) |
|----------|---|-----------------|-------------------|---------------------------------|
| Check | 33,125 A* | 17.5 A | 257 A | 831.29 A |
| Commence | 32,875 A | 17.3 B | 258 A | 825.26 B |
| P-Value | 0.432 | 0.021 | 0.307 | 0.043 |

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

†Yield values are from cleaned yield monitor data. Bushels per acre adjusted to 15.5% moisture.

‡Marginal net return based on \$3.23/bu corn, \$7/ac Commence seed treatment, and \$2/ac seed treating.

Summary:

- There was no difference in stand counts or yield between the Commence® treated seed and the non-treated check.
- The Commence® treated seed was drier than the non-treated check.
- The Commence® treatment resulted in lower marginal net return.

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