

## Impact of Commence® Seed Treatment on Soybean

**Study ID:** 0718185201804

**County:** York

**Soil Type:** Hastings silt loam 0-1% slope; Hastings silt loam 1-3% slope; Crete silt loam 0-1% slope

**Planting Date:** 5/7/18

**Harvest Date:** 9/23/18

**Population:** 140,000

**Row Spacing (in):** 30

**Variety:** Pioneer® P31A22X

**Reps:** 5

**Previous Crop:** Seed Corn

**Tillage:** Ridge-Till

**Herbicides:** **Pre:** 1 qt/ac Brash® on 4/19/18, 5 oz/ac Authority® First and 22 oz/ac Roundup® on 5/7/18 with planting **Post:** 24 oz/ac Durango® and 1 pt/ac Brawl™ on 6/8/18

**Seed Treatment:** Lumisena™, EverGol® Energy, and PPST 2030

**Foliar Insecticides:** 5 oz/ac Hero® on 7/28/18

**Foliar Fungicides:** 5 oz/ac Preemptor™ on 7/28/18

**Fertilizer:** 125 lb/ac 11-52-0 in Nov. 2017

**Irrigation:** Pivot, Total: 1.5"

**Rainfall (in):**



**Soil Test (Oct. 2017) – 2 samples were taken in the study area:**

Soil pH	Soluble Salts 1:1 mmho/cm	Excess Lime Rating	Organic Matter LOI %	Nitrate – N ppm	Nitrate lb N/A 0-10"	Mehlich P-III ppm	Ca-P Sulfate ppm S	Zn (ppm)	Ammonium Acetate (ppm)				CEC me/100g	% Base Saturation				
1:1									K	Ca	Mg	Na		H	K	Ca	Mg	Na
6.8	0.15	NONE	3.5	0.5	2	24	10	1.08	359	2580	368	49	17.1	0	5	75	18	1
7.0	0.16	NONE	3.6	1.0	3	39	9	1.69	391	2544	293	42	16.3	0	6	78	15	1

**Introduction:** The purpose of this study was to evaluate the impact of Commence® seed treatment on soybeans. The product was applied at 4 oz/100 lb of seed. Product information is at right. Yield, grain moisture, stand counts, and marginal net return were determined for this study. Stand counts were collected post-harvest on 9/28/18.

### GUARANTEED ANALYSIS

Cobalt (Co)..... 1.43%  
Copper (Cu) ..... 0.34%  
Iron (Fe)..... 0.71%  
Manganese (Mn)..... 0.46%  
Zinc (Zn) ..... 0.29%

**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®, Ralco Nutrition, Inc.

	Harvest Stand Count (plants/ac)	Moisture (%)	Yield† (bu/ac)	Marginal Net Return‡ (\$/ac)
Check	99,400 A*	12.0 A	76.5 A	566.18 A
Commence	99,300 A	12.0 A	77.1 A	561.77 A
P-Value	0.975	<0.0001	0.583	0.592

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

†Bushels per acre adjusted to 13% moisture.

‡Marginal net return based on \$7.40/bu soybean, \$7/ac Commence seed treatment, and \$2/ac seed treating.

**Summary:** There were no differences in grain moisture, harvest stand counts, yield, or marginal net return between the Commence® treated seed and the check.

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