

## Comparing Starter Fertilizers In-Furrow:

### CHS® Lumen™ vs. Aurora Cooperative AgPro vs 10-34-0

**Study ID:** 1120019202004

**County:** Buffalo

**Soil Type:** Coly silt loam 6-30% slopes

**Planting Date:** 4/27/20

**Harvest Date:** 10/8/20

**Seeding Rate:** 34,000

**Row Spacing (in):** 30

**Hybrid:** DEKALB® DKC64-35 VT2PRIB

**Reps:** 4

**Previous Crop:** Soybean

**Tillage:** Strip-Till

**Herbicides:** **Pre:** 1.5 qt/ac Degree Xtra®, 3 oz/ac mesotrione, 32 oz/ac Roundup PowerMAX®, 1% COC, 8.5 lb AMS per 100 gal water **Post:** 1.5 qt/qc Degree Xtra®, 1 pt/ac atrazine, 32 oz/ac Roundup PowerMAX®, 8.5 lb AMS per 100 gal water

**Foliar Insecticides:** None

**Foliar Fungicides:** Delaro® at VT

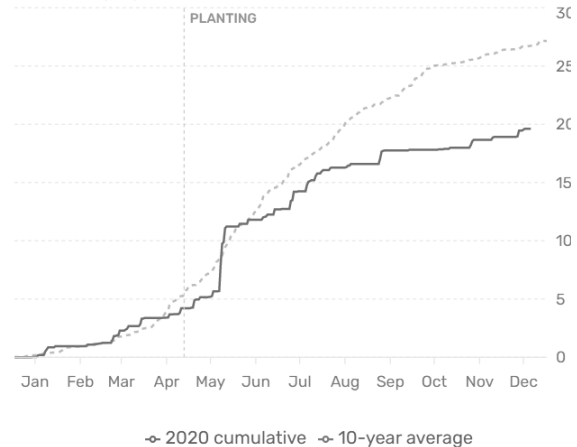
**Fertilizer:** 35-40-0-11 strip-till, 3 gal/ac in-furrow

starters (tested in this study), 12 gal/ac 32% UAN

dribbled starter at planting, and 41 gal/ac 32% UAN fertigated

**Irrigation:** Pivot

**Rainfall (in):**



#### Soil Tests (October 2019):

pH	Soluble Salts	Excess Lime	% OM	Nitrate (ppm)	Nitrate (lb/ac)	P (ppm)
7.8	0.12	Low	2.5	6	18	16
7.9	0.12	Low	2.2	4.3	13	14

**Introduction:** This study evaluated three different starter fertilizer products. CHS® Lumen™ has an analysis of 5-15-3-0S-0.8Zn-0.1Fe. Aurora Cooperative AgPro has an analysis of 9-24-3. The check was the grower's typical 10-34-0 starter. Stand counts, moisture, yield, and net return were evaluated. The field experienced green snap.

#### Results:

	Early Season Stand Count (plants/ac)	Harvest Stand Count (plants/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ (\$/ac)
3 gal/ac Aurora Cooperative AgPro	32,583 A*	24,083 A	18.7 A	216 A	744.41 A
3 gal/ac 10-34-0 (check)	30,750 A	25,000 A	18.2 A	218 A	756.08 A
3 gal/ac CHS® Lumen™	33,083 A	29,083 A	18.4 A	220 A	743.45 A
P-Value	0.577	0.102	0.127	0.724	0.723

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

†Bushels per acre corrected to 15.5% moisture.

‡Marginal net return based on \$3.51/bu corn, \$7.35/ac 10-34-0, \$27/ac CHS® Lumen™, and \$12/ac Aurora Cooperative AgPro

**Summary:** There were no statistically significant differences in stand counts, grain moisture, yield, or net return for the three starter products evaluated.

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