

# FIELD EXPERIMENT HISTORY

Year: 2022

**Expt. No.:** 2022-190  
**Expt. Title:** PURPLE COW: CX-1 Pro with UAN Corn fertility trial  
**Personnel:** T.S. Maloney, T.M. Maloney and S. Stumbras  
**Location:** Pester Lane Farm, Whitewater, WI  
**Supported by:** Agri-Tech Consulting and Purple Cow Organics

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## FIELD INFORMATION

**Field:** PLF-9A **N42.885958 W-88.744304**

**Soil type:** Milford silty clay loam

**Soil Test Results:** 05/02/2022 pH: 7.1, P: 36 ppm K: 144 ppm, O.M. 4.6% CEC = 25.1  
**Rock River Labs Watertown, WI** Ca = 4033 ppm, Mg = 715 ppm, S = 3.6 ppm, B = 0.5 ppm, Mn = 26 ppm, Zn = 3.5 ppm  
Sand % = 10, Silt % = 65, Clay % = 25%, Fertility = excellent, Drainage = excellent

**Fertilizer Applied:** See report for other fertilizer by treatment

**Tillage Operations:** Fall chisel plowed, spring field cultivate to incorporate fertilizer and level field for planting

**Previous Crop:** Soybean

**Previous Herbicide:** Boundary fb FlexStar/Select Maxx

**Irrigation:** None

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## EXPERIMENTAL PROCEDURE

**Exp. Design:** RCB 1 factor study

**Replicates:** 4

**Variables:** Factor A: Corn LIF/Side dress/Foliar fertility treatment (5 treatments)

**Plot Size:** 10' x 50' plots = 0.0011 acres Four 30" rows

**Row Spacing:** 30"

**Cultivar:** DKC 107-33

**Planting:** Date: 18-May-22  
Equipment: SRES 4-row precision vacuum planter  
Rate: 35,000 seeds per acre  
Depth: 2.5"

**Other data obtained:** Stand, vigor, emergence, lodging, yield and moisture

**Harvesting:** Date: 11-Nov-22  
Equipment: 2144 plot combine with HarvestMaster HCGG components

<b>Pesticides</b>	<u>Material</u>	<u>Rate</u>	<u>Method</u>	<u>Date</u>
	Accuron	6.0 pt	pre emergence	19-May-22
	Atrazine	1.0 lb	pre emergence	19-May-22
	Roundup PMX	32.0 oz	post emergence	26-Jun-22

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**Results: Table 190**

CORN		Harvest complete			*	*	*
CX-1 + Pro		P and K application December 01, 2021			11-Nov-22	11-Nov-22	11-Nov-22
2 DAP applications		2 DAP applications - May 20, 2022 - broadcast			Harvest	Harvest	Harvest
2022-190		Seed: Standard ST F&I			grain	plot	actual
replication	treatment	description		plot	moisture	weight	test wt
					%	lbs	lbs
1	1	Control		102	20.7	136.95	56.7
2	1	45 gal/acre UAN, 2 DAP		203	20.6	143.65	56.4
3	1	90 lbs/acre 11-52-0 + 200 lbs/acre 0-0-62 all treatments		304	20.4	140.89	56.7
4	1	5.0 gal/acre 6-24-6 all treatments		405	20.7	135.06	56.4
					<b>20.6</b>	<b>139.14</b>	<b>56.6</b>
1	2	30 gal/acre UAN, 2 DAP		101	20.3	130.12	56.2
2	2	1.5 gal/acre CX-1 Pro, 2 DAP		204	20.9	134.15	56.8
3	2	3.0 gal/acre Boost, 2 DAP		302	20.1	136.78	56.6
4	2			503	20.5	139.06	56.5
					<b>20.5</b>	<b>135.03</b>	<b>56.5</b>
1	3	30 gal/acre UAN, 2 DAP		105	20.8	136.24	56.3
2	3	1.5 gal/acre CX-1 Pro, 2 DAP		205	20.8	140.15	56.8
3	3	3.0 gal/acre Crystal Carbon, 2 DAP		301	20.2	144.72	56.4
4	3			502	20.6	133.75	56.7
					<b>20.6</b>	<b>138.72</b>	<b>56.6</b>
1	4	22.5 gal/acre UAN, 2 DAP		104	20.1	120.04	56.3
2	4	1.5 gal/acre CX-1 Pro, 2 DAP		201	20.7	123.69	56.7
3	4	3.0 gal/acre Boost, 2 DAP		303	20.8	119.06	56.0
4	4			404	20.6	124.50	56.2
					<b>20.6</b>	<b>121.82</b>	<b>56.3</b>
1	5	22.5 gal/acre UAN, 2 DAP		103	20.4	118.06	56.3
2	5	1.5 gal/acre CX-1 Pro, 2 DAP		202	20.3	127.62	56.6
3	5	3.0 gal/acre Crystal Carbon, 2 DAP		305	20.6	121.43	56.4
4	5			401	20.8	129.06	56.1
					<b>20.5</b>	<b>124.04</b>	<b>56.4</b>

*	*	*	*	*	*	*	*	*	*	*
						V4	22-Jun-22	24-Jul-22	Preharvest	
11-Nov-22	18-May-22	18-May-22	11-Nov-22	11-Nov-22	18-May-22	22-Jun-22	5 = best	5 = best	11-Nov-22	Preharvest
Grain yield	Planted	Planted	Harvest	Harvest	Seeding	Plant	V4	VT	Plant	11-Nov-22
adjusted to	plot	plot	plot	plot	density	density	Plant	Plant	density	Plant
@15%	width	length	width	length	per acre	per acre	vigor	vigor	per acre	lodging
bu/acre	ft	ft	ft	ft	x1000	x1000	1-5	1-5	x1000	%
220.85	10.0	50.0	10.0	45.0	35.0	33.7	3	4	33.8	5
231.95	10.0	50.0	10.0	45.0	35.0	33.8	4	4	33.8	5
228.07	10.0	50.0	10.0	45.0	35.0	33.6	4	4	33.6	10
217.81	10.0	50.0	10.0	45.0	35.0	33.8	4	4	33.8	5
<b>224.67</b>	<b>10.0</b>	<b>50.0</b>	<b>10.0</b>	<b>45.0</b>	<b>35.0</b>	<b>33.7</b>	<b>3.8</b>	<b>4.0</b>	<b>33.8</b>	<b>6.3</b>
210.90	10.0	50.0	10.0	45.0	35.0	33.6	3	3	33.6	5
215.79	10.0	50.0	10.0	45.0	35.0	33.9	4	4	33.6	5
222.25	10.0	50.0	10.0	45.0	35.0	33.8	4	3	33.8	10
224.82	10.0	50.0	10.0	45.0	35.0	33.9	4	4	33.9	5
<b>218.44</b>	<b>10.0</b>	<b>50.0</b>	<b>10.0</b>	<b>45.0</b>	<b>35.0</b>	<b>33.8</b>	<b>3.8</b>	<b>3.5</b>	<b>33.7</b>	<b>6.3</b>
219.43	10.0	50.0	10.0	45.0	35.0	33.7	4	4	33.7	10
225.73	10.0	50.0	10.0	45.0	35.0	33.8	4	4	33.8	5
234.86	10.0	50.0	10.0	45.0	35.0	33.6	4	4	33.7	5
215.96	10.0	50.0	10.0	45.0	35.0	33.8	4	4	33.8	10
<b>223.99</b>	<b>10.0</b>	<b>50.0</b>	<b>10.0</b>	<b>45.0</b>	<b>35.0</b>	<b>33.7</b>	<b>4.0</b>	<b>4.0</b>	<b>33.8</b>	<b>7.5</b>
195.05	10.0	50.0	10.0	45.0	35.0	33.6	3	3	33.6	10
199.47	10.0	50.0	10.0	45.0	35.0	33.9	3	4	33.6	5
191.76	10.0	50.0	10.0	45.0	35.0	33.8	3	3	33.6	5
201.03	10.0	50.0	10.0	45.0	35.0	33.7	3	4	33.7	5
<b>196.83</b>	<b>10.0</b>	<b>50.0</b>	<b>10.0</b>	<b>45.0</b>	<b>35.0</b>	<b>33.8</b>	<b>3.0</b>	<b>3.5</b>	<b>33.6</b>	<b>6.3</b>
191.11	10.0	50.0	10.0	45.0	35.0	33.7	3	4	33.6	5
206.85	10.0	50.0	10.0	45.0	35.0	33.8	3	3	33.8	10
196.07	10.0	50.0	10.0	45.0	35.0	33.8	3	3	33.7	10
207.87	10.0	50.0	10.0	45.0	35.0	33.9	4	4	33.6	5
<b>200.47</b>	<b>10.0</b>	<b>50.0</b>	<b>10.0</b>	<b>45.0</b>	<b>35.0</b>	<b>33.8</b>	<b>3.3</b>	<b>3.5</b>	<b>33.7</b>	<b>7.5</b>