

FIELD EXPERIMENT HISTORY

Title: Corn yield response to Plant Growth Regulators from Valent
Experiment: 14PGR **Trial ID:** 6004 **Year:** 2015
Personnel: Joe Lauer, Thierno Diallo, Kent Kohn,
Location: Arlington, WI **County:** Columbia
Supported By: HATCH

Site Information

Field: ARS375 **Previous Crop:** Soybeans **Soil Type:** Plano Silt Loam
Soil Test: Date: 11/16/15 **pH:** 6.9 **OM (%) :** 2.7 **P (ppm) :** 30 **K (ppm) :** 133

Plot Management

Tillage Operations: Field Cultivator

Fertilizer:	Preplant Analysis: 46-0-0	Rate lbs/A: 300 lbs/A	Date: 4 /27/15
	Starter Analysis: N/A	Rate lbs/A: N/A	Date: N/A
	Post plant Analysis: N/A	Rate lbs/A: N/A	Date: N/A
	Manure: N/A	Rate lbs/A: N/A	Date: N/A

Herbicide: Dual II Magnum 24 oz/A 5/28/15 **Insecticide:** N/A
 Hornet 4 oz/A 5/28/15

Irrigation: None **Hybrid:** Pioneer 9910 AMX

Planting Date: 5/19/15 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 35000 plants per acre **Planting Method:** RTK, JD1700

Harvest Date: 10/23/15 **Harvest Method:** MF 8XP combine

Experimental Design

Design: RCB	Replications: 6
Plot Size Seeded: 10' X 25'	Experiment Size: 0.4 A
Harvest Plot Size: 5' x 21'	Harvest Plant Density: 32463 plants per acre

Factors/Treatments:

Treatment

- 1.) Untreated
- 2.) Smart Trio 1 qt/A in-furrow
- 3.) RyzUp SmartGrass 0.2 oz/A + Smart Trio 1 qt/A in-furrow
- 4.) RyzUp SmartGrass 0.5 oz/A + AMS 2.5 lb/A + NIS 0.25% v/v at V4-V5
- 5.) Smart Trio 1 qt/A at V4-V5
- 6.) RyzUp SmartGrass 0.5 oz/A + Smart Trio 1 qt/A + AMS 2.5 lb/A + NIS 0.25% v/v at V4-V5

Results: Table 1514-04

Table:1514-04. Demonstrate the effect of Growth regulators on the yield of Corn. Arlington,WI 2015

Treatment	Yield bu/A	Moisture %	Test weight lb/bu	Lodging			Harvest density plants/A	AGI \$3.44/bu \$/A	14 Day post Treatment			V12	R5		R6	
				Total %	Stalk %	Root %			Plant height cm	Root vigor 0-10	Root dry weight gr/plant	Stalk diameter inches	Root vigor 0-10	Root dry weight gr/plant	Ear length inches	Kernel per ear no.
UTC	192	19.0	55.3	3.8	3.8	0.0	32497	602	4.6	5.0	2.4	1.0	5.0	14.3	6.0	530
Smart Trio 1 qt/A in-furrow	189	18.7	54.9	8.3	8.1	0.2	32566	593	5.5	5.4	2.7	1.0	5.6	15.1	5.9	522
RyzUp SmartGrass 0.2 oz/A + Smart Trio 1 qt/A in-furrow	209	19.2	55.7	6.9	6.9	0.0	31806	655	5.2	5.0	2.8	1.0	5.8	15.8	6.2	560
RyzUp SmartGrass 0.5 oz/A at V4-V5 + adjuvants	197	19.5	55.2	7.2	7.2	0.0	33258	616	6.4	5.1	2.9	0.9	5.8	17.0	6.0	522
Smart Trio 1 qt/A at V4-V5	187	19.0	54.6	8.7	8.5	0.2	32635	587	4.2	4.5	1.8	1.0	5.5	14.8	6.0	528
RyzUp SmartGrass 0.5 oz/A+Smart Trio 1 qt/A+ adjuvants	214	20.2	55.8	5.8	5.8	0.0	32013	666	7.0	5.7	2.7	1.0	6.1	16.3	6.4	571
Mean	198	19.3	55.2	6.8	6.7	0.1	32463	620	5.5	5.1	2.6	1.0	5.6	15.6	6.1	539
Probability (%)																
Treatment (T)	8.3	0.6	12.1	45.6	49.8	56.0	79.8	9.9	0.3	16.3	4.6	0.0	5.7	68.5	67.3	36.6
LSD (0.10)																
Treatment (T)	18	0.6	NS	NS	NS	NS	NS	55	1.1	NS	0.6	0.0	0.5	NS	NS	NS

FIELD EXPERIMENT HISTORY

Title: Corn Yield Response to PGRs in NT Corn
Experiment: 14PGR **Trial ID:** 6016 **Year:** 2015
Personnel: Joe Lauer, Thierno Diallo, Kent Kohn,
Location: Arlington, WI **County:** Columbia
Supported By: Valent

Site Information

Field: 397 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/1 /14 **pH:** 6.0 **OM (%)** 2.9 **P (ppm)** 26 **K (ppm)** 84

Plot Management**Tillage Operations:** NT

Fertilizer:		<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Preplant :		Lime 80-89	1.5T/A	4/15/15
		0-0-60	200 lbs/A	4/17/15
		TSP 0-46-0	200 lbs/A	5/01/15
Starter :		N/A	N/A	N/A
Post plant :		UAN 28-0-0	50 gal	7 /8 /15
Manure:		N/A	N/A	N/A

Herbicide: Dual II Magnum 24 oz/A 5/28/15
Hornet 4 oz/A 5/28/15
Laudis 3 oz/A 6/10/15
Roundup PMax 24 oz/A 6/10/15

Insecticide: None

Hybrid/Variety: A: DKC48-12
B: P 0062 AMX
C: N 31H-3000GT

Irrigation: N/A**Row Width:** 30"**Planting Date:** 5/21/15**Planting Depth:** 1.5"**Planting Method:** RTK, JD1700**Target Plant Density:** 35000 **Plants/Acre****Harvest Method:** MF 8XP combine**Harvest Date:** 10/30/15**Experimental Design****Design:** RCB: 3 x 2 factorial**Replications:** 4**Notes:****Plot Size Seeded:** 10' x 25'**Experiment Size:** 0.5 A**Harvest Plot Size:** 5' x 21'**Factors/Treatments:****Tillage:****Hybrid:****Growth Regulator:**

1) C P (Chisel plow)
2) NT (No Till)

1) DKC48-12
2) P 0062AMX
3) N31H-3000GT

1) UTC
2) VBC30396

Results: Tables 1514-05.

**Table: 1514- 05. Corn Yield Response to Plant Growth Regulators in No-Till corn.
Arlington, WI - 2015.**

Tillage	Hybrid	Growth regulator	Yield bu/A	Moisture %	Test weight lb/bu	Lodged			Harvest density plants/A	*AGI \$3.44/bu \$/A
						Total %	Stalk %	Root %		
CP			258	22.0	54.9	1	1	0	31875	795
NT			257	22.3	54.5	2	1	0	32333	790
	DKC48-12		259	23.4	54.1	1	1	0	33125	790
	N31H-3000GT		256	20.2	54.9	2	1	1	30438	799
	P0062AMX		258	22.9	55.2	1	1	0	32750	789
		UTC	256	22.1	54.6	2	2	1	31583	788
		VBC30396	259	22.2	54.8	1	1	0	32625	797
CP	DKC48-12		253	23.3	54.2	0	0	0	32250	772
CP	N31H-3000GT		261	20.0	55.0	2	2	1	30375	814
CP	P0062AMX		261	22.7	55.3	2	2	0	33000	801
NT	DKC48-12		265	23.4	53.9	2	2	0	34000	809
NT	N31H-3000GT		252	20.4	54.7	2	1	0	30500	784
NT	P0062AMX		254	23.0	55.0	1	1	0	32500	777
CP		UTC	256	22.0	54.7	3	2	1	31167	788
CP		VBC30396	261	22.0	55.0	0	0	0	32583	803
NT		UTC	256	22.3	54.4	2	2	1	32000	788
NT		VBC30396	258	22.3	54.6	1	1	0	32667	792
	DKC48-12	UTC	258	23.4	53.9	2	1	1	32250	788
	DKC48-12	VBC30396	259	23.3	54.3	1	1	0	34000	792
	N31H-3000GT	UTC	251	20.2	54.8	4	3	1	30125	783
	N31H-3000GT	VBC30396	262	20.2	55.0	0	0	0	30750	815
	P0062AMX	UTC	259	22.8	55.1	2	2	0	32375	793
	P0062AMX	VBC30396	257	23.0	55.2	1	1	0	33125	785
CP	DKC48-12	UTC	247	23.2	54.0	1	0	1	31000	756
CP	DKC48-12	VBC30396	258	23.4	54.4	0	0	0	33500	787
CP	N31H-3000GT	UTC	260	20.1	55.1	5	3	2	30250	809
CP	N31H-3000GT	VBC30396	262	19.9	55.0	0	0	0	30500	818

continue

