

## FIELD EXPERIMENT HISTORY

**Title:** RyzUp plant growth regulator effect on corn  
**Experiment:** 11RyzUp **Trial ID:** 3533 **Year:** 2013  
**Personnel:** J.G. Lauer, K.D. Kohn, and T. Diallo  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** Valent

### Site Information

**Field:** ARS358 **Previous Crop:** Soybean **Soil Type:** Plano silt loam  
**Soil Test:** **Date:** 10/1 /13 **pH:** 6.1 **OM (%)** 2.9 **P (ppm)** 27 **K (ppm)** 161

### Plot Management

**Tillage Operations:** Disk Field Cultivator

**Fertilizer:** **Preplant Analysis:** 46-0-0 **Rate lbs/A:** 150 lbs/A **Date:** N/A  
**Starter Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A  
**Post plant Analysis:** N/A **Rate lbs/A:** N/A **Date:**  
**Manure:** N/A

**Herbicide:** Dual II Mag 28 oz/A  
Hornet 4.0 oz/A **Hybrid:** G2 NewTech 5H-399

**Irrigation:** None **Insecticide:** None

**Planting Date:** 5/13/13 **Planting Depth:** 1.5" **Row Width** 30"

**Target Plant Density:** 32000 plants per acre **Planting Method:** Kinze Inter-Row Planter

**Harvest Date:** S:9/18/13 **Harvest Method:** S:NH707  
 G:10/30/13 G:Massey 8XP

**Notes:** Application: 6/24 10:00am -74F-68%humidity-winds SSW 10MPH overcast  
 Method of Application: CO2 Backpack sprayer, 10' boom, 15" spacing, TeeJet 8002VS nozzles, 30 lb pressure, 3.5 mph, 14.4 gal H2O/Acre.

### Experimental Design

**Design:** RCB **Replications:** 4  
**Plot Size Seeded:** 10 x 25 **Experiment Size:** 0.4 Acre  
**Harvest Plot Size:** S: 2.5' x 23' **Harvest Plant Density:** 33618 plants per acre  
 G: 5' x 23'

### Treatment:

- 1) UNTREATED CHECK
- 2) PRIAXOR 4.17 SC @ 6.000 FLOZ/AC + NIS
- 3) DOMARK 230 ME 1.90 ME @ 4.000 FLOZ/AC +NIS
- 4) RYZUP SMARTGRASS 40.00 SG @ 0.500 OZPRWT/A + NIS
- 5) DOMARK 230 ME 1.90 ME @ 4.000 FLOZ/AC + NIS + RYZUP SMARTGRASS 40.00 SG @ 0.500 OZPRWT/A
- 6) V 10345 .97 SC @ 8.000 FLOZ/AC + NIS
- 7) V 10345 .97 SC @ 10.000 FLOZ/AC + NIS

**Results: Table 1311-11.**

**Table: 1311-11. RyzUp Plant Growth Regulator Effect on Corn.  
Arlington, WI - 2013.**

Treatment	Grain												
	Harvest			Test weight	Lodged			Return \$4.04	Plant Ht (DOY)			Vigor (DOY)	
	density	Yield	Moisture		Total	Stalk	Root		177	183	233	177	183
plants/A	bu/A	%	lbs/bu	%	%	%	\$/A	----- inches -----			Scale 0-5		
UTC	33660	195	19.2	51	0	0	0	730	15	28	103	4.1	4.2
PRIAXOR 4.17 SC + NIS	33561	185	19.0	51	0	0	0	691	17	27	103	4.1	4.3
DOMARK 230 ME+NIS	32571	185	19.5	51	0	0	0	690	15	26	97	4.2	4.4
RYZUP SMARTGRASS 40.00 SG + NIS	32670	187	18.8	52	0	0	0	699	16	28	99	4.3	4.3
DOMARK 230 ME + NIS + RYZUP SMARTGRASS	34155	190	18.2	53	0	0	0	713	17	30	104	4.1	4.3
V 10345 .97 SC @ 8.000 FLOZ/AC + NIS	34749	182	18.4	52	0	0	0	684	17	28	101	4.0	4.2
V 10345 .97 SC @ 10.000 FLOZ/AC + NIS	33957	184	19.6	52	0	0	0	684	16	28	100	4.1	4.4
Mean	33618	187	18.9	52	0	0	0	699	16	28	101	4.1	4.3
<b><u>Probability(%)</u></b>													
Treatment	68.7	93.8	9.2	12.6	90.3	79.8	45.5	93.0	23.7	52.9	44.0	44.8	77.9
<b><u>LSD (0.10)</u></b>													
Treatment	NS	NS	0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

continued

**Table: 1311-11. RyzUp Plant Growth Regulator Effect on Corn.**

(continued)

**Arlington, WI - 2013.**

Treatment	Harvest density plants/A	Whole Plant													
		Dry Matter		Moisture %	Kernel milk %	KMR 0-5	SMR 0-5	VMR 0-10	Crude protein %	<i>In Vitro</i>				Milk per	
		yield tons/A	ADF %							NDF %	Digest %	NDFD %	Starch %	Ton lbs/T	Acre lbs/A
UTC	32969	7.2	62.3	45.0	2.3	1.4	3.6	6.2	24.7	44.4	84.9	65.9	36.3	3539	25411
PRIAXOR 4.17 SC + NIS	32398	6.3	64.3	40.0	2.0	1.2	3.2	6.6	25.8	46.0	83.9	64.9	34.8	3472	22023
DOMARK 230 ME+NIS	32588	7.0	62.4	41.3	2.1	1.3	3.4	6.5	24.4	43.7	85.5	66.9	37.0	3579	25013
RYZUP SMARTGRASS 40.00 SG + NIS	33351	7.2	61.6	31.3	1.6	1.2	2.7	6.4	26.3	45.7	83.2	63.4	35.4	3439	24805
DOMARK 230 ME + NIS + RYZUP SMARTGRASS	33351	6.0	66.5	35.0	1.8	1.2	2.9	6.4	24.2	43.3	85.2	65.9	38.5	3566	21268
V 10345 .97 SC @ 8.000 FLOZ/AC + NIS	33351	6.3	63.4	40.0	2.0	1.2	3.2	6.6	25.6	45.9	84.6	66.5	35.2	3514	21977
V 10345 .97 SC @ 10.000 FLOZ/AC + NIS	33922	6.3	64.1	37.5	1.9	1.0	2.9	6.4	26.6	46.7	83.6	65.0	33.7	3453	21678
Mean	33133	6.6	63.5	38.6	1.9	1.2	3.1	6.4	25.4	45.1	84.4	65.5	35.8	3509	23168
<b><u>Probability(%)</u></b>															
Treatment	88.8	41.4	74.0	6.7	6.7	66.6	12.0	72.6	13.3	30.1	8.9	10.0	22.8	9.7	40.2
<b><u>LSD (0.10)</u></b>															
Treatment	NS	NS	NS	7.0	0.4	NS	NS	NS	NS	NS	1.4	2.0	NS	93	NS