

FIELD EXPERIMENT HISTORY

Title: RyzUp Plant Growth Regulator
Experiment: 11Misc **Trial ID:** 3649 **Year:** 2012
Personnel: J.G. Lauer, K.D. Kohn, and T. Diallo
Location: Arlington, WI **County:** Dane
Supported By: Valent BioSciences

Site Information

Field: ARS406 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/01/12 **pH:** 6.5 **OM (%)** 4.1 **P (ppm)** 72 **K (ppm)** 219

Plot Management

Tillage Operations: Disk Chisel Field Cultivator Cultivated 6/11/12
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	138 lbs/A	N/A
Starter	N/A	N/A	N/A
Post plant	N/A	N/A	N/A
Manure:	N/A	N/A	

Herbicide: Hornet 4 oz/A
 Dual II Magnum 24 oz/A
 Accent Q 0.9 oz/A
 Callisto 3 oz/A

Insecticide:

Irrigation: None **Hybrid:** DeKalb DKC53-78

Planting Date: 5/14/12 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 34000 plants per acre **Planting Method:** Kinze Inter-Row Planter

Harvest Date: S: 9/17/12 **Harvest Method:** S:NH707
 G: 10/4/12 G:Massey 8XP

Notes: V2 Application: 5/30 2:00 pm -60F-55%humidity-winds NNW 6MPH cloudy
 V5 Application: 6/12 2:10 pm -67F-45%humidity-winds NW 10MPH sunny

Experimental Design

Design: RCB **Replications:** 4
Plot Size Seeded: 10' x 25' **Experiment Size:** 0.125 A
Harvest Plot Size: S:2.5' x 8.5' **Harvest Plant Density:** 35484 plants per acre
 G:5' x 13.5'

Factors/Treatments:

RyzUp Treatment:

- 1) UTC
- 2) 0.3 oz/A @ V2
- 3) 0.6 oz/A @ V2
- 4) 0.3 oz/A @ V5
- 5) 0.6 oz/A @ V5

Results: Table C-57.

**Table C- 57. Corn grain response to RyzUp Smartgrass plant growth regulator
Arlington, WI - 2012.**

Treatment	Grain												
	Vigor		Plant height			Harvest density	Yield	Moisture	Test weight	Return \$6.65	Lodged		
	V2	V5	V2	V5	Final						Total	Stalk	Root
0-9	0-9	--	inches	--	plants/A	bu/A	%	lbs/bu	\$/A	%	%	%	
UTC	4	4	4	15	74	34500	214	17.0	57	1369	5	5	0
V2 - @.300 OZPRWT/A	4	4	4	16	75	33500	207	17.7	57	1318	8	8	0
V2 - @.600 OZPRWT/A	4	4	4	17	75	36750	244	18.1	56	1554	0	0	0
V5 - @.300 OZPRWT/A	4	4	4	16	72	36671	213	16.5	57	1366	0	0	0
V5 - @.600 OZPRWT/A	4	4	4	16	77	36000	228	17.0	57	1458	3	0	3
Mean	4	4	4	16	74	35484	221	17.3	57	1413	3	3	1
Probability(%)													
Treatment	68.9	67.9	37.3	6.1	7.0	13.9	23.6	25.5	49.5	23.2	51.5	37.3	48.6
LSD (10%)													
Treatment	NS	NS	0	1	3	NS	NS	NS	NS	NS	NS	NS	NS

continued.

Table C-57. Corn silage response to RyzUp Smartgrass plant growth regulator
(continued) **Arlington, WI - 2012.**

Treatment	Whole Plant														
	Harvest density	Dry Matter yield	moisture	Kernel milk	KMR 0-5	SMR 0-5	VMR 0-10	Crude protein	ADF	NDF	<i>In Vitro</i>		Milk per		
	plants/A	tons/A	%	%				%	%	%	Digest %	NDFD %	Starch %	Ton lbs/T	Acre lbs/A
UTC	37410	10.3	49.0	28.8	1.4	1.4	2.8	7.4	17.0	33.2	88.4	65.1	43.3	3791	39003
V2 - @.300 OZPRWT/A	38179	9.8	52.4	21.3	1.1	1.5	2.5	7.5	19.8	37.4	86.8	64.7	38.0	3687	36239
V2 - @.600 OZPRWT/A	36898	10.0	53.7	26.3	1.3	1.8	3.1	7.3	19.4	36.8	86.8	64.2	39.8	3691	36911
V5 - @.300 OZPRWT/A	38606	9.9	48.3	20.3	1.0	1.4	2.4	7.0	17.8	33.7	88.0	64.9	44.1	3753	37135
V5 - @.600 OZPRWT/A	38179	10.0	51.2	23.8	1.2	1.4	2.6	7.3	17.7	34.4	88.4	66.2	42.4	3772	37901
Mean	37854	10.0	50.9	24.1	1.2	1.5	2.7	7.3	18.3	35.1	87.7	65.0	41.5	3739	37438
Probability(%)															
Treatment	76.9	86.2	14.8	63.5	63.5	82.9	82.4	32.0	19.2	15.7	28.2	57.4	7.4	23.6	72.4
LSD (10%)															
Treatment	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8	NS