FIELD EXPERIMENT HISTORY

Title: **Corn response to RyzUp™ plant growth regulator**

Experiment: 14PGR **Trial ID:** 6135 **Year:** 2016

Personnel: Joe Lauer, Thierno Diallo, Kent Kohn,

Location: Arlington, WI **County:** Columbia

Supported By: HATCH

Site Information

Field: ARS406 **Previous Crop:** Alfalfa **Soil Type** Plano Silt Loam

Soil Test: **Date:** 10/31/16 **pH:** 6.2 **OM (%)** 3.3 **P (ppm)** 26 **K (ppm)** 79

Plot Management

Tillage Operations: Disk Chisel Field Cultivator

Fertilizer:

	Analysis	Rate	Date
Preplant	N/A	N/A	N/A
Starter	N/A	N/A	N/A
Post plant	N/A	N/A	N/A
Manure:	Dairy	10500 gal	01/06/16

Herbicide: Medal II EC 24 oz/A 5/23/16
Hornet 4 oz/A 5/28/16

Insecticide: Force 4.4 lb/A

Irrigation: None

Hybrid: 1) Mycogen F2F627
2) Dekalb DKC58-06RIB

Planting Date: 5/16/16 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 33000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 09/26/16 **Harvest Method:** NH 707 Chopper

Notes:

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' X 25' **Experiment Size:** 0.5 A

Harvest Plot Size: 2.5' x 23' **Harvest Plant Density:** 36000 **plants per acre**

Factors/Treatments:

Hybrid	Treatment
1) Mycogen F2F627	1)UTC
2) Dekalb DKC58-06RIB	2)RyzUp @ 0.5 oz/A
	3)WBC-30396 @ 0.5 oz/A
	4)RyzUp @ 0.5 oz/A + Smart Trio @ 1 qt/A
	5)VBC-30396 @ 0.5 oz/A + Smart Trio @ 1 qt/A

Results: Table 1614-01

Table: 1614-12. Corn response to RyzUp Plant Growth Regulator - Silage
Arlington, WI - 2016.

		Whole Plant											
		Dry Matter		Kernel	Crude			*In Vitro*			Milk per		Plant
Hybrid	Treatment	Yield	Moisture	milk	protein	ADF	NDF	Digest	NDFD	Starch	Ton	Acre	population
		tons/A	%	%	%	%	%	%	%	%	lbs/T	lbs/T	plants/A
Mycogen F2F627		9.7	64.5	3.6	6.9	21.3	39.8	85.3	63.0	28.4	3239	31577	37386
Dekalb DKC58-06RIB		11.8	59.9	4.6	6.7	17.5	33.9	84.8	55.2	35.1	3305	39026	36103
	UTC	10.0	62.9	3.8	6.9	19.2	36.4	85.5	59.8	32.1	3304	33074	37109
	RyzUp @ 0.5 oz/A	10.8	61.7	3.5	6.7	19.0	36.4	85.3	59.2	32.4	3304	35797	37714
	WBC-30396 @ 0.5 oz/A	11.4	61.5	7.3	6.8	19.2	36.6	85.1	59.0	31.9	3273	37595	35606
	RyzUp @ 0.5 oz/A + Smart Trio @ 1 qt/A	10.4	62.3	3.8	6.7	19.6	37.2	84.8	58.8	31.5	3264	34181	35321
	VBC-30396 @ 0.5 oz/A + Smart Trio @ 1 qt/A	11.1	62.6	2.1	6.8	19.9	37.5	84.6	58.5	30.8	3215	35860	37973
Mycogen F2F627	UTC	9.3	64.1	2.8	7.1	20.3	38.4	86.4	64.4	29.8	3328	30970	38068
Mycogen F2F627	RyzUp @ 0.5 oz/A	9.7	64.9	0.8	6.9	20.4	38.6	86.0	63.7	29.7	3300	31955	37689
Mycogen F2F627	WBC-30396 @ 0.5 oz/A	10.0	63.8	10.0	6.9	21.8	40.3	84.6	61.7	27.6	3174	31718	36363
Mycogen F2F627	RyzUp @ 0.5 oz/A + Smart Trio @ 1 qt/A	9.5	64.8	3.0	6.8	21.7	40.6	85.1	63.4	27.4	3199	30682	35795
Mycogen F2F627	VBC-30396 @ 0.5 oz/A + Smart Trio @ 1 qt/A	10.2	65.0	1.5	6.8	22.2	41.0	84.3	61.6	27.6	3196	32560	39015
Dekalb DKC58-06RIB	UTC	10.7	61.7	4.8	6.8	18.0	34.5	84.6	55.2	34.3	3280	35177	36150
Dekalb DKC58-06RIB	RyzUp @ 0.5 oz/A	12.0	58.5	6.3	6.6	17.6	34.2	84.5	54.7	35.2	3309	39638	37739
Dekalb DKC58-06RIB	WBC-30396 @ 0.5 oz/A	12.9	59.3	4.5	6.7	16.7	33.0	85.5	56.3	36.2	3373	43472	34848
Dekalb DKC58-06RIB	RyzUp @ 0.5 oz/A + Smart Trio @ 1 qt/A	11.3	59.8	4.5	6.7	17.5	33.8	84.5	54.2	35.7	3329	37681	34848
Dekalb DKC58-06RIB	VBC-30396 @ 0.5 oz/A + Smart Trio @ 1 qt/A	12.1	60.2	2.8	6.8	17.6	33.9	84.9	55.5	34.0	3235	39161	36931
Mean		10.8	62.2	4.1	6.8	19.4	36.8	85.0	59.1	31.8	3272	35301	36745
Probability(%)													
Hybrid (H)		2.2	0.5	55.1	5.8	0.3	0.2	31.4	0.1	0.4	23	2	24
Treatment (T)		8.1	61.8	25.4	38.3	66.1	73.4	57.7	57.3	78.5	69	31	23
H x T		67.9	42.1	21.1	51.1	21.6	26.6	10.4	7.1	49.5	42	54	94
LSD(0.10)													
Hybrid (H)		1.1	1.5	NS	NS	1.0	1.5	NS	1.2	2.0	NS	3852	NS
Treatment (T)		0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x T		NS	NS	NS	NS	NS	NS	NS	2.0	NS	NS	NS	NS