

FIELD EXPERIMENT HISTORY

Title: Monsanto Corn Roundup Ready 2 System Trial.
Experiment: Monsanto Corn Roundup Ready 2 System Trial. **Trial ID:** 2934 **Year:** 2006
Personnel: J. G. Lauer, K.D. Kohn, P.J. Flannery
Location: Arlington, WI **County:** Columbia
Supported By: Monsanto

Site Information

Field: ARS413 **Previous Crop:** Corn **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 11/01/06 **pH** 7.1 **OM (%)** 3.8 **P (ppm)** 44 **K (ppm)** 120

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Soil Finisher Cultivated 6/26/06

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Fertilizer: Preplant :	46-0-0	325 lbs/A	4 /20/06
Starter :	9-23-30	150	5 /22/06
Post plant :	N/A	N/A	N/A
Manure:	N/A	N/A	N/A

Herbicide: See Factors: **Insecticide:** N/A
Irrigation: None **Hybrid:** See Factors

Planting Date: 5/22/06 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 **Planting Method:** Kinze Plot Planter

Harvest Date: 10/2/06 **Harvest Method:** New Holland 707

Notes: All seed treated with Poncho 250.
 Sample analysis compiled by Dairy One Forge Laboratory, Ithaca, NY.

Experimental Design

Design: RCB Factorial **Replications:** 3
Plot Size Seeded: 10' x 25' **Experiment Size:** 0.15 Acre
Harvest Plot Size: 2.5' x 22' **Harvest Plant Density:** 32000

Factors/Treatments:

Hybrids:

A115RRBTCRW
 B115RRBTCRW
 C115RRBTCRW

Herbicide System:

Conventional Post-emerge:
 Bicep II Mag @ 2.0 qt/A fb Steadfast 75 DF @ 0.75 oz/A & Clarity @ 4.0 oz/A.
 Roundup Ready:
 Degree Xtra 2.0 qt/A fb Roundup Original Max @ 22.0oz/A.

Results: Table C-16.

**Table C-16. Monsanto Corn Roundup Ready 2 System Trial.
Arlington, WI - 2006.**

Hybrid	Herbicide System	Yield tons/A	Moist %	Dry matter %	Crude protein %	ADF %	NDF %	NDFD			In Vitro Digest			Digestible		Milk per	
								24 hrs %	30 hrs %	48 hrs %	24 hrs %	30 hrs %	48 hrs %	Starch %	starch %	Ton lbs/T	Acre lbs/A
	Post-Emerge	11.4	61.7	38.3	7.6	20.9	37.4	45.9	50.3	60.0	79.8	81.4	84.9	38.4	80.9	3282	37276
	RR2 System	11.2	62.1	37.9	7.7	22.0	39.2	45.1	50.3	59.4	78.4	80.6	84.2	35.7	81.5	3236	36318
A115RRBTCRW		10.8	58.9	41.1	7.5	22.0	39.2	42.3	47.7	58.8	77.3	79.3	83.8	37.6	76.1	3036	32728
B115RRBTCRW		10.9	64.9	35.2	7.4	20.0	35.4	49.2	52.3	61.7	82.0	83.2	86.5	38.5	86.1	3518	38276
C115RRBTCRW		12.2	62.0	38.0	8.0	22.3	40.2	45.0	51.0	58.7	78.0	80.5	83.3	35.1	81.4	3225	39386
A115RRBTCRW	Post-Emerge	10.7	59.2	40.8	7.6	21.2	37.8	43.0	51.0	60.3	78.3	81.3	85.0	38.9	76.7	3124	33468
A115RRBTCRW	RR2 System	10.8	58.6	41.4	7.4	22.8	40.6	41.7	44.3	57.3	76.3	77.3	82.7	36.3	75.6	2947	31988
B115RRBTCRW	Post-Emerge	10.8	64.6	35.4	7.1	20.1	35.6	48.7	51.0	62.0	81.7	82.7	86.3	38.7	85.6	3505	37824
B115RRBTCRW	RR2 System	11.0	65.1	34.9	7.6	19.9	35.2	49.7	53.7	61.3	82.3	83.7	86.7	38.2	86.5	3531	38727
C115RRBTCRW	Post-Emerge	12.6	61.4	38.6	8.0	21.4	38.7	46.0	49.0	57.7	79.3	80.3	83.3	37.5	80.3	3218	40535
C115RRBTCRW	RR2 System	11.8	62.7	37.3	8.1	23.3	41.7	44.0	53.0	59.7	76.7	80.7	83.3	32.7	82.4	3231	38238
Mean		11.3	61.9	38.1	7.6	21.4	38.3	45.5	50.3	59.7	79.1	81.0	84.6	37.1	81.2	3259	36797
Probability(%)																	
Hybrid (H)		21.3	0.5	0.5	2.1	45.3	28.1	1.5	52.7	42.2	3.7	21.3	18.5	63.4	0.5	0.0	13.6
Herbicide (B)		82.5	73.2	73.2	43.8	50.6	48.4	63.4	100.0	78.8	35.2	61.1	64.3	39.1	74.4	38.2	72.5
H x B		83.3	78.1	78.1	35.1	83.7	81.4	72.7	40.1	61.2	59.1	45.3	70.6	84.3	77.9	22.9	87.9
LSD (0.10)																	
Hybrid (H)		NS	2.5	2.5	0.4	NS	NS	3.5	NS	NS	3.0	NS	NS	NS	4.2	111	NS
Herbicide (B)		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x B		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CV(%)		13	4	6	5	15	14	7	14	7	4	4	4	17	5	3	15

continued.

Table C-16. Monsanto Corn Roundup Ready 2 System Trial.

(continued)

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Hybrid	Herbicide System									Herbicide Injury Rating (14 DAT)		
		Ash	Crude fat	Non Fiber Carbo	Sugar	Lignin	TDN	NEL	NEG	Growth reduction	Chlorosis	Epinasty
		%	%	%	%	%	%	Mcal/lb	Mcal/lb	%	%	%
	Post-Emerge	3.6	3.0	49.8	11.4	3.1	75.6	0.7	0.5	0.0	0.0	0.8
	RR2 System	3.8	3.0	47.9	12.2	3.3	74.7	0.7	0.5	0.0	0.0	0.0
A115RRBTCRW		3.5	2.8	48.4	10.8	3.3	74.2	0.7	0.5	0.0	0.0	0.7
B115RRBTCRW		3.6	3.0	52.0	13.5	3.1	76.8	0.8	0.5	0.0	0.0	0.0
C115RRBTCRW		4.0	3.2	46.2	11.1	3.1	74.3	0.7	0.5	0.0	0.0	0.5
A115RRBTCRW	Post-Emerge	3.6	2.9	49.4	10.5	2.9	75.3	0.7	0.5	0.0	0.0	1.3
A115RRBTCRW	RR2 System	3.4	2.8	47.4	11.1	3.7	73.0	0.7	0.5	0.0	0.0	0.0
B115RRBTCRW	Post-Emerge	3.4	3.1	52.1	13.3	3.1	77.0	0.8	0.5	0.0	0.0	0.0
B115RRBTCRW	RR2 System	3.7	3.0	51.9	13.7	3.1	76.7	0.8	0.5	0.0	0.0	0.0
C115RRBTCRW	Post-Emerge	3.9	3.1	47.9	10.5	3.2	74.3	0.7	0.5	0.0	0.0	1.0
C115RRBTCRW	RR2 System	4.2	3.2	44.5	11.7	3.1	74.3	0.7	0.5	0.0	0.0	0.0
Mean		3.7	3.0	48.9	11.8	3.2	75.1	0.7	0.5	0.0	0.0	0.4
Probability(%)												
Hybrid (H)		40.2	29.2	21.4	4.5	85.6	37.1	0.2	39.0	-	-	47.3
Herbicide (B)		70.7	84.3	47.6	39.2	40.4	60.2	55.7	62.2	-	-	11.0
H x B		81.2	77.5	86.9	91.1	36.6	82.6	52.1	87.5	-	-	47.3
LSD (0.10)												
Hybrid (H)		NS	NS	NS	1.8	NS	NS	0.0	NS	-	-	NS
Herbicide (B)		NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS
H x B		NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS
CV(%)												
		20	12	11	15	20	5	4	10	-	-	244