

FIELD EXPERIMENT HISTORY

Title: Monsanto Yield Guard Silage Trial.
Experiment: 01 Monsanto Yield Guard Silage Trial. **Trial ID:** 2933 **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: Outlook @ 20.0 oz/A **Insecticide:** See Factors
Hornet @ 4.0 oz/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: The ISU 0 to 3 node-injury root rating scale was used. A rating of 0.50 or below is considered acceptable economic root protection. 5 roots per replicate were evaluated.
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:** 0.29 Acre
Harvest Plot Size: 2.5' x 22' **Harvest Plant Density:** 32000

Factors/Treatments:

<u>Hybrids:</u>	<u>Seed Insecticide:</u>	<u>Soil Insecticide:</u>
A115RRBTCRW	Poncho 250	Force 3G @ 4.4 lbs/A
A115RRBT	Poncho 1250	UTC
A115RR		
B115RRBTCRW		
B115RRBT		
B115RR		
C115RRBTCRW		
C115RRBT		
C115RR		

Results: Table C-17.

Table C-17. Monsanto Yield Guard Silage Trial.
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Treatment	Hybrid	Seed	Soil	Yield	Moist	Dry	Crude	ADF	NDF	NDFD			In Vitro Digest			Digestible		Milk per		
		Insecticide	Insecticide							24 hrs	30 hrs	48 hrs	24 hrs	30 hrs	48 hrs	Starch	starch	Ton	Acre	
				tons/A	%	%	%	%	%	%	%	%	%	%	%	%	%	lbs/T	lbs/A	
1	A115RRBTCRW	Poncho 250	None	8.9	59.4	40.6	8.1	22.0	39.5	39.0	45.3	55.7	76.0	78.0	82.7	35.0	77.0	2930	26105	
2	A115RRBT	Poncho 250	Force 3G	9.2	60.3	39.7	7.8	21.0	36.6	44.0	46.7	59.3	79.0	80.3	84.7	40.5	79.1	3150	28925	
3	A115RRBT	Poncho 1250	None	10.3	59.7	40.3	7.4	22.2	39.8	39.7	45.7	58.3	76.3	78.3	83.7	37.9	77.5	3021	30889	
4	A115RRBT	Poncho 250	None	9.7	56.5	43.5	7.2	20.4	36.9	40.0	45.7	58.7	78.0	79.7	84.7	42.0	74.0	3033	29449	
5	A115RR	Poncho 250	None	8.8	57.1	42.9	7.4	20.2	36.9	41.0	44.7	58.0	78.3	79.7	84.3	42.0	73.7	3002	26494	
6	B115RRBTCRW	Poncho 250	None	9.8	64.3	35.7	7.5	20.9	37.5	46.7	50.0	57.7	80.0	81.3	84.0	36.2	85.2	3431	33761	
7	B115RRBT	Poncho 250	Force 3G	9.6	65.6	34.4	7.4	20.8	37.3	46.0	50.7	60.7	80.0	81.3	85.3	36.1	87.4	3452	32911	
8	B115RRBT	Poncho 1250	None	10.8	64.7	35.3	7.3	20.1	35.7	48.0	50.7	59.0	81.7	82.7	85.3	38.4	85.8	3488	37512	
9	B115RRBT	Poncho 250	None	10.7	66.5	33.5	7.3	22.0	38.9	47.0	51.0	59.3	79.3	81.3	84.3	35.3	88.9	3462	37167	
10	B115RR	Poncho 250	None	11.1	65.2	34.8	7.0	20.1	36.3	44.3	47.3	60.0	79.7	80.7	85.7	39.0	86.7	3530	39327	
11	C115RRBTCRW	Poncho 250	None	12.6	61.2	38.8	7.6	21.7	38.2	40.3	45.0	56.3	77.3	79.0	83.0	36.3	79.9	3165	39676	
12	C115RRBT	Poncho 250	Force 3G	11.0	61.2	38.8	8.0	20.0	36.9	40.0	43.3	54.0	78.0	79.0	83.0	38.8	79.9	3190	34926	
13	C115RRBT	Poncho 1250	None	9.7	63.5	36.5	7.6	23.5	41.2	35.7	40.0	51.0	73.7	75.3	79.7	34.1	83.9	3079	29887	
14	C115RRBT	Poncho 250	None	10.4	62.0	38.0	8.0	22.8	41.0	40.0	43.3	54.3	75.3	77.0	81.3	33.7	81.4	3112	32398	
15	C115RR	Poncho 250	None	10.2	62.1	37.9	7.7	21.3	38.9	39.7	44.0	53.3	76.3	78.3	82.0	36.6	81.6	3187	32428	
Mean				10.2	62.0	38.0	7.6	21.3	38.1	42.1	46.2	57.0	77.9	79.5	83.6	37.5	81.4	3215	32790	
Probability(%)																				
Treatment (T)				3.6	0.0	0.0	2.5	93.9	91.7	0.2	0.2	0.0	12.4	11.3	7.8	81.3	0.0	0.0	0.2	
LSD (0.10)																				
Treatment (T)				1.6	3.4	3.4	0.5	NS	NS	4.6	4.0	2.2	NS	NS	2.9	NS	5.2	191	5401	
CV(%)																				
				11	4	6	5	13	11	8	6	3	4	3	3	15	5	4	12	

continued.

Table C-17. Monsanto Yield Guard Silage Trial.(continued) **Arlington, WI - 2006.**

Treatment	Hybrid	Seed Insecticide	Soil Insecticide	Crude Non Fiber							NEL	NEG	Root Injury rating	ECB Tunneling			ECB Tunnels			Live ECB Larvae		
				Ash	fat	Carbo	Sugar	Lignin	TDN	Below ear				Above ear	Shank	Below ear	Above ear	Shank	Below ear	Above ear	Shank	
				%	%	%	%	%	%	Mcal/lb	Mcal/lb	0 to 3	inches	inches	inches	#	#	#	#	#	#	
1	A115RRBTCRW	Poncho 250	None	4.0	2.8	47.0	12.1	3.6	72.3	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
2	A115RRBT	Poncho 250	Force 3G	3.8	3.1	50.1	9.5	3.2	75.3	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
3	A115RRBT	Poncho 1250	None	3.3	2.8	48.3	10.3	3.5	74.0	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
4	A115RRBT	Poncho 250	None	2.8	3.1	51.3	9.3	3.3	76.0	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
5	A115RR	Poncho 250	None	3.0	3.3	50.7	8.7	3.1	75.7	0.7	0.5	1.0	1.0	0.0	1.3	1.0	0.0	1.3	0.3	0.0	0.7	
6	B115RRBTCRW	Poncho 250	None	3.5	3.0	49.8	13.6	3.5	75.0	0.8	0.5	-	-	-	-	-	-	-	-	-	-	
7	B115RRBT	Poncho 250	Force 3G	3.6	3.0	50.1	14.0	3.4	76.0	0.8	0.5	-	-	-	-	-	-	-	-	-	-	
8	B115RRBT	Poncho 1250	None	3.7	3.1	51.5	13.1	3.2	76.3	0.8	0.5	-	-	-	-	-	-	-	-	-	-	
9	B115RRBT	Poncho 250	None	3.6	3.0	48.6	13.4	3.6	75.0	0.8	0.5	-	-	-	-	-	-	-	-	-	-	
10	B115RR	Poncho 250	None	3.4	3.2	51.3	12.2	3.3	76.7	0.8	0.5	0.3	3.3	0.3	2.2	2.0	0.3	1.3	1.0	0.3	0.3	
11	C115RRBTCRW	Poncho 250	None	3.4	3.2	49.0	12.7	4.1	74.7	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
12	C115RRBT	Poncho 250	Force 3G	3.4	3.3	49.9	11.1	3.4	74.3	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
13	C115RRBT	Poncho 1250	None	3.5	3.1	46.3	12.1	4.0	71.0	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
14	C115RRBT	Poncho 250	None	3.6	3.4	45.7	12.0	4.0	72.7	0.7	0.5	-	-	-	-	-	-	-	-	-	-	
15	C115RR	Poncho 250	None	3.2	3.2	48.4	11.8	3.9	73.0	0.7	0.5	0.5	3.0	0.2	2.0	2.3	0.3	1.3	0.7	0.3	1.0	
Mean				3.4	3.1	49.2	11.7	3.6	74.5	0.7	0.5	0.6	2.4	0.2	1.8	1.8	0.2	1.3	0.7	0.2	0.7	
Probability(%)																						
Treatment (T)				55.1	79.2	86.2	2.8	46.9	32.2	0.2	47.6	19.8	43.9	62.0	89.8	66.0	64.7	100.0	57.2	64.7	36.3	
LSD (0.10)																						
Treatment (T)				NS	NS	NS	2.6	NS	NS	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CV(%)				16	11	8	16	15	3	4	8	60	91	239	125	100	217	91	110	217	77	