

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2412 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: AgReliant Genetics, LLC

Site Information

Field: 412 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/01/03 **pH** 6.7 **OM (%)** 4.1 **P (ppm)** 70 **K (ppm)** 164

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Soil Finisher Cultivated

Fertilizer:	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	325	4 /22/03
Starter	6-24-24	150	5 /3 /03
Post plant	N/A	N/A	N/A
Manure:	None	N/A	N/A

Herbicide: Harness 2.5 pt/A
 Hornet 3.0 oz/A
 Callisto 3.0 oz/A

Insecticide: None

Irrigation: None

Planting Date: 5/3/03 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 9/11/03 **Harvest Method:** New Holland 707 Plot Chopper

Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB

Replications: 3

Plot Size Seeded: 25' x 5'

Experiment Size: 0.09 A

Harvest Plot Size: 22' x 2.5'

Harvest Plant Density: 31574 plants per acre

Factors/Treatments:

Hybrid

S61	S85
S65	S86
S66	S87
S70	S88
S84	S89

Results: Table C-10.

**Table C-10. AgReliant Hybrid Corn Silage Evaluation Study - Late.
Arlington, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S61	9.2	60.7	58	7.3	25	47	83	64	33	3579	32952
S65	9.0	64.2	63	8.0	25	47	83	63	33	3591	32382
S66	8.0	63.1	65	8.3	26	51	82	65	29	3512	28211
S70	9.2	64.4	60	7.7	27	51	81	62	29	3425	31474
S84	8.3	63.7	60	8.2	26	50	82	64	30	3515	29357
S85	9.5	62.4	60	7.7	25	47	83	64	33	3550	33731
S86	9.4	64.5	70	7.9	26	50	83	65	30	3591	33756
S87	8.8	66.2	77	8.6	27	51	81	64	25	3491	30904
S88	7.9	68.6	70	8.3	27	51	81	63	25	3449	27439
S89	8.5	62.5	68	7.8	27	52	81	63	29	3388	28786
Mean	8.7	64.0	65	8.0	26	50	82	64	30	3509	30542
<u>Probability (%)</u>											
Genotype	53.3	24.5	7.0	7.0	86.9	69.6	72.3	57.0	8.1	62.6	63.6
<u>LSD (0.10)</u>											
Genotype	NS	NS	10	0.6	NS	NS	NS	NS	4.8	NS	NS
<u>CV (%)</u>											
	11	5	11	6	10	7	2	3	11	4	14

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2413 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Lancaster, WI **County:** Grant
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Fayette Silt Loam
Soil Test: **Date:** 10/01/03 **pH** 7.1 **OM (%)** 2.1 **P (ppm)** 35 **K (ppm)** 62

Plot Management

Tillage Operations: Soil Finisher Cultivated

Fertilizer:		Analysis	Rate	Date
Preplant		46-0-0	300	4 /27/03
Starter		6-24-24	150	4 /28/03
Post plant		N/A	N/A	N/A
Manure:		None	N/A	N/A

Herbicide: Aatrex 4L 1.0 qt/A
 Harness 1.0 qt/A
 Accent 0.33 oz/A
 Northstar 4.0 oz/A

Insecticide: None

Irrigation: None

Planting Date: 4/28/03 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 9/9/03 **Harvest Method:** New Holland 707 Plot Chopper

Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3

Plot Size Seeded: 25' x 5' **Experiment Size:** 0.09 A

Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 29990 plants per acre

Factors/Treatments:

Hybrid	
S61	S85
S65	S86
S66	S87
S70	S88
S84	S89

Results: Table C-11.

**Table C-11. AgReliant Hybrid Corn Silage Evaluation Study - Late.
Lancaster, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S61	8.3	60.7	50	7.2	24	46	83	64	35	3592	29723
S65	8.7	57.9	57	6.6	25	47	83	64	34	3507	30661
S66	8.2	58.7	60	6.9	26	49	81	62	33	3402	27993
S70	8.0	63.3	63	7.2	28	52	80	61	30	3368	26902
S84	8.2	56.9	40	7.6	24	47	83	64	36	3501	28890
S85	8.4	60.1	58	6.9	26	49	82	63	31	3494	29188
S86	7.9	59.6	62	7.3	27	49	81	61	31	3354	26362
S87	9.0	60.7	72	7.5	25	48	83	65	30	3582	32188
S88	9.1	63.2	72	7.7	23	44	83	63	35	3641	33039
S89	8.3	62.5	70	7.3	27	50	80	60	30	3360	28004
Mean	8.4	60.4	60	7.2	25	48	82	63	33	3480	29295
<u>Probability (%)</u>											
Genotype	87.4	6.2	3.6	4.5	28.3	32.7	12.6	1.8	18.6	6.1	61.5
<u>LSD (0.10)</u>											
Genotype	NS	3.5	15	0.5	NS	NS	NS	2.1	NS	169	NS
<u>CV (%)</u>											
Genotype	12	4	18	5	9	7	2	2	9	3	14

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2414 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Fond du Lac, WI **County:** Fond du Lac
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Virgil Silt Loam
Soil Test: **Date:** 10/01/03 **pH** 6.7 **OM (%)** 2.8 **P (ppm)** 31 **K (ppm)** 77

Plot Management

Tillage Operations: Soil Finisher Cultivated
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	28-0-0	430	N/A
Starter	6-24-24	150	5 /3 /03
Post plant	N/A	N/A	N/A
Manure:	None	N/A	N/A

Herbicide: Basis 0.33 oz/A
Lumax 5.0 pt/A **Insecticide:** None
Irrigation: None

Planting Date: 5/3/03 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 9/16/03 **Harvest Method:** New Holland 707 Plot Chopper
Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 25' x 5' **Experiment Size:** 0.07 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 28842 plants per acre
Factors/Treatments:

<u>Hybrid</u>	
S56	S82
S61	S83
S65	S84
S81	S85

Results: Table C-12.

**Table C-12. AgReliant Hybrid Corn Silage Evaluation Study - Mid.
Fond du Lac, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S56	7.8	58.0	23	6.2	30	54	77	58	33	3068	23855
S61	8.4	63.3	47	6.3	25	46	83	64	39	3642	30493
S65	8.0	62.7	55	6.3	28	51	81	62	35	3463	27986
S81	8.0	58.3	45	7.3	27	48	82	62	37	3411	27383
S82	7.0	60.9	47	7.2	26	48	83	64	37	3554	24710
S83	6.9	61.2	48	7.1	29	52	80	61	33	3336	23102
S84	7.1	61.6	35	7.0	28	52	80	62	34	3368	23905
S85	7.8	63.6	57	6.4	27	49	82	65	33	3586	28016
Mean	7.6	61.2	45	6.7	27	50	81	62	35	3429	26181
<u>Probability (%)</u>											
Genotype	37.7	28.5	0.7	13.8	61.3	56.2	28.6	7.0	75.6	7.2	24.1
<u>LSD (0.10)</u>											
Genotype	NS	NS	13	NS	NS	NS	NS	3.2	NS	288	NS
<u>CV (%)</u>											
	12	5	20	8	12	10	3	4	15	6	14

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2415 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Galesville, WI **County:** Trempealeau
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Downs Silt Loam
Soil Test: **Date:** 10/01/03 **pH** 6.2 **OM (%)** 3.4 **P (ppm)** 36 **K (ppm)** 136

Plot Management

Tillage Operations: Zone Builder Field Cultivator Cultivated
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	350	N/A
Starter	6-24-24	150	4 /28/03
Post plant	N/A	N/A	N/A
Manure:	None	N/A	N/A

Herbicide: Dual II 2.25 pt/A
 Hornet 3.0 oz/A
 Clarity 4.0 oz/A

Insecticide: None

Irrigation: None

Planting Date: 4/28/03 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 9/10/03 **Harvest Method:** New Holland 707 Plot Chopper
Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 25' x 5' **Experiment Size:** 0.07 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 31802 plants per acre

Factors/Treatments:

Hybrid

S56	S82
S61	S83
S65	S84
S81	S85

Results: Table C-13.

Table C-13. AgReliant Hybrid Corn Silage Evaluation Study - Mid. Galesville, WI 2003.

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S56	8.5	64.6	52	7.3	29	53	79	61	29	3341	28362
S61	8.1	66.1	68	7.8	26	48	83	65	32	3611	29361
S65	9.1	67.5	57	8.8	26	49	82	64	32	3568	32614
S81	8.2	65.5	55	8.5	26	49	83	65	31	3589	29628
S82	7.7	66.9	58	8.7	26	49	82	63	32	3543	27279
S83	8.0	64.7	65	8.2	25	47	83	64	34	3608	28875
S84	9.6	65.1	58	7.9	24	46	84	64	37	3666	35231
S85	9.0	65.1	62	7.8	24	46	84	66	35	3723	33499
Mean	8.5	65.7	59	8.1	26	48	83	64	33	3581	30606
Probability (%)											
Genotype	27.9	85.0	2.0	1.3	28.4	30.2	21.5	16.0	37.9	18.8	30.6
LSD (0.10)											
Genotype	NS	NS	7	0.7	NS	NS	NS	NS	NS	NS	NS
CV (%)											
	11	4	8	6	9	8	2	3	12	4	14

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2416 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Chippewa Falls, WI **County:** Chippewa
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Sattre Silt Loam
Soil Test: **Date:** 10/1 /03 **pH** 6.8 **OM (%)** 2.1 **P (ppm)** 26 **K (ppm)** 88

Plot Management

Tillage Operations: Field Cultivator Cultivated
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	28-0-0	535	N/A
Starter	6-24-24	150	4 /29/03
Post plant	N/A	N/A	N/A
Manure:	None	N/A	N/A

Herbicide: Harness 1.6 pt/A
 Hornet 3.0 oz/A **Insecticide:** None

Irrigation: None

Planting Date: 4/29/03 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 9/3/03 **Harvest Method:** New Holland 707 Plot Chopper

Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 25' x 5' **Experiment Size:** 0.07 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 31906 plants per acre

Factors/Treatments:

<u>Hybrid</u>	
S56	S80
S77	S81
S78	S82
S79	S83

Results: Table C-14.

**Table C-14. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Chippewa Falls, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S56	6.8	52.9	47	7.1	29	56	79	62	27	3157	21430
S77	7.2	53.1	45	7.0	25	50	83	65	33	3387	24335
S78	7.5	54.8	58	7.3	27	52	80	62	31	3257	24452
S79	7.2	53.2	53	7.5	27	53	80	63	29	3234	23382
S80	7.9	59.0	68	7.2	27	51	82	65	30	3481	27681
S81	6.8	58.2	72	7.4	29	54	79	61	28	3236	22159
S82	7.0	57.4	62	7.5	26	51	81	63	30	3392	23902
S83	6.1	60.5	63	7.9	28	51	80	62	29	3368	20545
Mean	7.1	56.1	59	7.4	27	52	81	63	30	3314	23486
<u>Probability (%)</u>											
Genotype	0.8	0.2	1.8	15.5	43.8	40.3	11.0	1.5	31.0	3.8	1.8
<u>LSD (0.10)</u>											
Genotype	0.6	3.1	13	NS	NS	NS	NS	1.8	NS	156	2861
<u>CV (%)</u>											
	6	4	15	5	8	6	2	2	10	3	8

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2417 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Marshfield, WI **County:** Wood
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Alfalfa **Soil Type:** Withee Silt Loam
Soil Test: **Date:** 1 /22/03 **pH** 6.2 **OM (%)** 3.4 **P (ppm)** 70 **K (ppm)** 190

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	28-0-0	160	6 /19/03
Starter	6-24-24	150	5 /1 /03
Post plant	N/A	N/A	N/A
Manure:	Manure	12872 gal/A	N/A

Herbicide: Harness 1.8 pt/A
 Hornet 2.4 oz/A
 Atrazine 4L 1.1 qt/A
 Permit 1.07 oz/A

Insecticide: Force 4.4 lb/A

Irrigation: None

Planting Date: 5/1/03 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 9/8/03 **Harvest Method:** New Holland 707 Plot Chopper

Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 25' x 5' **Experiment Size:** 0.07 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 28476 plants per acre

Factors/Treatments:

<u>Hybrid</u>	
S56	S80
S77	S81
S78	S82
S79	S83

Results: Table C-15.

**Table C-15. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Marshfield, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S56	5.9	65.0	85	8.1	28	54	82	66	26	3542	20933
S77	5.5	56.1	48	7.7	29	56	81	67	23	3389	18716
S78	5.7	61.1	73	8.1	27	54	82	66	26	3483	19692
S79	6.1	59.1	75	7.8	27	54	82	67	26	3473	21347
S80	6.3	63.2	77	7.7	31	59	80	66	20	3397	21448
S81	5.5	65.9	88	8.0	28	54	82	67	24	3545	19393
S82	4.8	65.7	80	8.0	28	54	81	66	25	3502	16962
S83	5.2	68.9	85	8.4	27	52	83	67	25	3599	18544
Mean	5.6	63.1	76	8.0	28	55	82	66	24	3491	19629
<u>Probability (%)</u>											
Genotype	20.4	0.0	0.7	44.8	32.8	21.7	59.6	83.7	48.0	22.0	58.7
<u>LSD (0.10)</u>											
Genotype	NS	2.8	14	NS	NS	NS	NS	NS	NS	NS	NS
<u>CV (%)</u>											
	8	3	13	6	8	5	2	2	15	3	10

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2418 **Year:** 2003
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Valders, WI **County:** Manitowoc
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Kewaunee Silt Loam
Soil Test: **Date:** 10/1 /03 **pH** 6.9 **OM (%)** 4.1 **P (ppm)** 91 **K (ppm)** 186

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	6-24-24	150	5 /2 /03
Post plant	N/A	N/A	N/A
Manure:	Manure	7200 gal/A	Fall
	Manure	20 Ton/A	Spring

Herbicide: Dual II 1pt/A
 Accent Gold 2.0 oz/A
 Banvel 2.0 oz/A

Insecticide: Force 4.4 lb/A

Irrigation: None

Planting Date: 5/2/03 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 9/23/03 **Harvest Method:** New Holland 707 Plot Chopper

Notes: Planted adjacent to public silage trial

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 25' x 5' **Experiment Size:** 0.07 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 28556 plants per acre

Factors/Treatments:

Hybrid

S56	S80
S77	S81
S78	S82
S79	S83

Results: Table C-16.

**Table C-16. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Valders, WI 2003.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S56	8.2	62.8	48	8	22	43	86	68	37	3804	31380
S77	6.1	59.1	30	7	19	38	88	69	43	3873	23505
S78	6.6	54.8	32	8	21	43	86	67	39	3618	23957
S79	7.2	54.7	37	9	19	41	87	68	40	3677	26569
S80	9.3	59.8	50	7	19	39	89	72	42	3991	36967
S81	7.1	64.6	48	7	22	43	86	68	36	3833	27237
S82	8.0	64.5	67	8	21	42	86	68	37	3864	30974
S83	7.5	64.1	65	8	22	43	87	69	38	3904	29193
Mean	7.5	60.5	47	8	21	42	87	69	39	3821	28723
<u>Probability (%)</u>											
Genotype	0.2	0.2	1.0	0.2	1.5	6.6	0.9	2.1	2.2	0.1	0.0
<u>LSD (0.10)</u>											
Genotype	0.9	4.0	16	0.5	2.0	3.3	1.4	2.0	3.7	117	3522
<u>CV (%)</u>											
	9	5	24	5	7	5	1	2	7	2	8