

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2616 **Year:** 2005
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: AgReliant Genetics, LLC

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/1 /05 **pH** 6.4 **OM (%)** 3.7 **P (ppm)** 66 **K (ppm)** 131

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	N/A
	Starter	9-24-24	150	4 /28/05
	Post plant	N/A	N/A	N/A
	Manure:	N/A	N/A	N/A

Herbicide: Outlook 20 oz/A
 Hornet 4.0 oz/A
 Callisto 3.0 oz/A

Insecticide: None

Irrigation: None

Planting Date: 4/28/05 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 9/14/05 **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: 30730 plants per acre

Factors/Treatments:

Hybrid

S510	S514
S511	S516
S512	S517
S513	S525

Results: Table C-13.

**Table C-13. AgReliant Hybrid Corn Silage Evaluation Study - Late.
Arlington, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S510	9.3	54.6	52	6.6	19	38	82	54	40	3328	30828
S511	8.5	53.1	57	6.8	18	39	83	57	39	3412	28902
S512	9.1	54.4	57	6.4	19	40	83	56	39	3389	30740
S513	9.3	58.5	50	6.9	20	41	82	56	38	3439	32046
S514	6.9	58.1	50	6.5	23	45	80	55	32	3261	22653
S516	10.1	59.3	58	5.9	23	46	80	57	32	3334	33778
S517	8.7	57.9	47	6.4	20	42	81	54	36	3313	29079
S525	9.1	59.7	73	7.2	23	47	80	57	29	3327	30237
Mean	8.8	56.8	55	6.6	20	42	81	56	36	3351	29609
Probability (%)											
Genotype	33.5	16.8	0.6	0.4	7.0	5.3	5.9	28.8	9.2	22.6	32.0
LSD (0.10)											
Genotype	NS	NS	10	0.4	3.2	5.3	2.2	NS	6.7	NS	NS
CV (%)											
Genotype	16	6	12	4	10	8	2	3	12	2	17

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2617 **Year:** 2005
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:** Corn **Soil Type:** Fayette Silt Loam
Soil Test: **Date:** N/A **pH** 7.1 **OM (%)** **P (ppm)** 35 **K (ppm)** 62

Plot Management

Tillage Operations: Disk Soil Finisher Cultivate
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	392	N/A
Starter	9-24-24	150	4 /25/05
Post plant	N/A	N/A	N/A
Manure:	N/A	N/A	N/A

Herbicide: Aatrex 4L 1.0 qt/A **Insecticide:** Force 4.4 lb/A
 Harness 1.0 qt/A

Irrigation: None

Planting Date: 4/25/05 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 9/7/05 **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:** 31680 plants per acre

Factors/Treatments:

Hybrid

S510	S514
S511	S516
S512	S517
S513	S525

Results: Table C-14.

**Table C-14. AgReliant Hybrid Corn Silage Evaluation Study - Late.
Lancaster, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S510	9.1	65.3	52	7.5	25	47	77	52	30	3218	29263
S511	9.8	61.2	53	6.9	23	44	79	51	34	3248	31863
S512	9.5	64.0	57	6.5	25	47	78	52	32	3240	30899
S513	10.1	64.4	53	7.0	23	44	79	51	35	3310	33429
S514	10.4	63.6	58	6.9	24	46	78	52	33	3260	34017
S516	10.2	64.5	67	6.7	24	47	77	51	31	3202	32699
S517	10.7	66.7	53	6.9	25	47	77	50	30	3155	33970
S525	9.9	64.4	77	6.9	29	54	75	52	22	3018	29864
Mean	10.0	64.3	59	6.9	25	47	77	52	31	3207	32001
Probability (%)											
Genotype	18.9	2.1	0.1	1.3	0.8	1.0	3.1	14.0	0.7	4.7	29.5
LSD (0.10)											
Genotype	NS	2.2	9	0.4	2.3	3.8	1.9	NS	4.7	136	NS
CV (%)											
Genotype	7	2	10	4	6	5	2	2	10	3	9

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2618 **Year:** 2005
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:** **Soil Type:** Virgil Silt Loam
Soil Test: **Date:** 10/1 /04 **pH** 6.9 **OM (%)** 3.6 **P (ppm)** 38 **K (ppm)** 127

Plot Management

Tillage Operations: Field Cultivator Cultivate
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	9-24-24	150	4-29-05
Post plant	28-0-0	429	N/A
Manure:	N/A	N/A	N/A

Herbicide: Basis 0.33 oz/A
 Lumax 2.5 qt/A **Insecticide:** None

Irrigation: None

Planting Date: 4-29-05 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 9/8/05 **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:** 0.06 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 30492 plants per acre

Factors/Treatments:

<u>Hybrid</u>	
S504	S509
S505	S510
S507	S511
S508	

Results: Table C-15.

**Table C-15. AgReliant Hybrid Corn Silage Evaluation Study - Mid.
Fond du Lac, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S504	8.1	54.3	48	6.2	22	44	79	52	34	3115	25289
S505	7.9	57.9	48	6.6	22	43	80	54	37	3288	25881
S507	8.5	62.3	57	6.5	23	45	80	57	35	3429	29155
S508	8.6	58.9	63	6.4	20	40	82	56	39	3465	29800
S509	8.9	62.6	77	6.4	24	46	79	55	31	3325	29632
S510	8.3	64.0	70	6.3	25	49	79	57	29	3319	27469
S511	9.3	62.3	65	6.1	22	43	81	56	35	3457	32011
Mean	8.5	60.3	61	6.3	22	44	80	55	34	3343	28463
Probability (%)											
Genotype	27.9	0.6	2.5	96.0	4.6	4.1	11.0	7.6	0.9	1.9	11.8
LSD (0.10)											
Genotype	NS	3.9	15	NS	2.7	4.0	NS	2.6	4.2	161	NS
CV (%)											
	8	4	16	10	8	6	2	3	8	3	10

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID:** 2619 **Year:** 2005
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:** 10/1 /04 **pH** 6.1 **OM (%)** 3.8 **P (ppm)** 68 **K (ppm)** 229

Plot Management

Tillage Operations: Fall Zone Builder Cultivated 6 /16/05
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	218	N/A
	21-0-0	238	N/A
Starter	9-24-24	150	5 /2 /05
Post plant	N/A	N/A	N/A
Manure:	N/A	N/A	N/A

Herbicide: Cinch 2.0 pt/A
 Callisto 3.0 oz/A **Insecticide:** None

Irrigation: None

Planting Date: 5/2/05 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 9/12/05 **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:** 0.06 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 31680 plants per acre

Factors/Treatments:

<u>Hybrid</u>	
S504	S509
S505	S510
S507	S511
S508	

Results: Table C-16.

**Table C-16. AgReliant Hybrid Corn Silage Evaluation Study - Mid.
Galesville, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S504	7.4	57.1	43	7.9	23	46	78	53	31	3123	23229
S505	8.1	60.1	37	7.8	22	43	80	54	35	3326	27085
S507	10.0	62.3	43	7.3	21	43	82	57	35	3542	35286
S508	9.9	61.3	50	6.8	22	43	80	54	35	3387	33532
S509	9.8	66.8	50	7.8	22	43	79	52	35	3341	32770
S510	10.2	65.0	53	7.4	22	42	81	54	35	3424	35044
S511	9.6	63.2	52	6.7	23	45	80	55	33	3392	32468
Mean	9.3	62.3	47	7.4	22	44	80	54	34	3362	31345
Probability (%)											
Genotype	0.6	0.7	8.5	1.0	78.4	59.0	8.1	0.4	42.1	0.0	0.1
LSD (0.10)											
Genotype	1.2	3.7	10.0	0.6	NS	NS	1.9	1.7	NS	90	4252
CV (%)											
	8	4	14	5	8	6	2	2	8	2	9

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2620 **Year:** 2005
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 /04 **pH** 6.1 **OM (%)** 2.4 **P (ppm)** 47 **K (ppm)** 142

Plot Management

Tillage Operations: Field Cultivator Cultivate
Fertilizer: Analysis Rate Date
 Preplant 28-0-0 535 N/A
 Starter 9-24-24 150 5 /2 /05
 Post plant N/A N/A N/A
 Manure: N/A N/A N/A
Herbicide: Harness 1.6 pt/A **Insecticide:** None
 Hornet 3.0 oz/A
Irrigation: None
Planting Date: 5/2/05 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 8/30/05 **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:** 0.05 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 30413 plants per acre
Factors/Treatments:
 Hybrid
 S501 S504
 S502 S505
 S503 S506

Results: Table C-17.

**Table C-17. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Chippewa Falls, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S501	5.5	64.9	90	7.5	26	50	78	56	26	3225	17691
S502	7.0	65.6	73	7.5	28	53	77	57	25	3199	22386
S503	7.0	64.7	65	6.7	27	53	78	58	27	3297	23212
S504	6.1	63.8	85	6.9	31	58	73	53	19	2844	17378
S505	6.9	65.5	70	7.4	27	51	77	54	27	3152	21625
S507	6.6	67.6	87	6.8	29	55	76	56	24	3118	20700
Mean	6.5	65.3	78	7.1	28	53	76	56	25	3139	20499
Probability (%)											
Genotype	18.8	23.2	19.9	14.5	7.0	10.8	1.0	0.3	20.0	0.6	7.9
LSD (0.10)											
Genotype	NS	NS	NS	NS	3.1	NS	2.2	1.9	NS	164	3925
CV (%)											
	12	3	17	6	7	6	2	2	15	3	12

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2621 **Year:** 2005
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:** **Soil Type:** Loyal Silt Loam
Soil Test: **Date:** 10/1 /04 **pH** 6.7 **OM (%)** 3.4 **P (ppm)** 94 **K (ppm)** 212

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivate
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	9-24-24	150	5 /3 /05
Post plant	28-0-0	160	N/A
Manure:	Dairy	6832 gal/A	Fall

Herbicide: Lumax 2.25 qt/A **Insecticide:** None
Irrigation: None

Planting Date: 5/3/05 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 9/20/05 **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:** 0.05 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 31086 plants per acre
Factors/Treatments:

<u>Hybrid</u>	
S501	S504
S502	S505
S503	S506

Results: Table C-18.

**Table C-18. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Marshfield, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S501	7.5	60.7	53	8.6	21	46	82	61	28	3489	26076
S502	6.8	62.7	33	8.0	26	52	78	57	23	3208	21986
S503	7.5	61.8	45	7.7	23	47	79	56	33	3283	24716
S504	7.2	62.4	57	9.0	22	47	80	57	27	3316	23880
S505	7.3	63.7	53	9.0	23	47	80	57	27	3373	24794
S507	8.8	64.6	63	7.8	24	49	80	60	27	3434	30307
Mean	7.5	62.7	51	8.4	23	48	80	58	28	3350	25293
Probability (%)											
Genotype	12.3	75.8	0.9	0.2	36.0	50.9	28.3	2.0	34.9	14.1	12.2
LSD (0.10)											
Genotype	NS	NS	12	0.5	NS	NS	NS	2.4	NS	NS	NS
CV (%)											
	10	5	15	4	11	8	3	3	18	4	13

FIELD EXPERIMENT HISTORY

Title: AgReliant Hybrid Corn Silage Trial
Experiment: Private Silage Evaluation **Trial ID** 2622 **Year:** 2005
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:** **Soil Type:** Kewaunee Clay Loam
Soil Test: **Date:** N/A **pH** 7.3 **OM (%)** 3.3 **P (ppm)** 53 **K (ppm)** 305

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivate
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	9-24-24	150	5 /4 /05
Post plant	34-0-0	147	N/A
Manure:	Dairy	20 Ton/A	Fall

Herbicide: Steadfast 0.5 oz/A
 Distinct 2.0 oz/A
 Permit 0.2 oz/A

Insecticide: Force 4.4 lb/A

Irrigation: None

Planting Date: 5/4/05 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 9/16/05 **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:** 0.05 A
Harvest Plot Size: 22' x 2.5' **Harvest Plant Density:** 28776 plants per acre

Factors/Treatments:

<u>Hybrid</u>	
S501	S504
S502	S505
S503	S506

Results: Table C-19.

**Table C-19. AgReliant Hybrid Corn Silage Evaluation Study - Early.
Valders, WI 2005.**

Genotype	Dry Matter		Kernel							Milk Per	
	Yield	Moisture	Milk	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre
	T/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
S501	7.5	45.5	22	7.8	16	38	84	57	40	3378	25152
S502	5.5	50.0	20	7.5	18	39	83	56	40	3290	18745
S503	7.7	49.1	22	6.7	17	38	84	58	42	3368	26095
S504	7.2	46.3	37	7.8	16	37	84	56	41	3365	24271
S505	7.1	49.1	25	7.5	18	39	83	56	40	3326	23461
S507	8.1	54.4	53	7.2	20	44	83	60	33	3396	27454
Mean	7.2	49.0	30	7.4	17	39	83	57	39	3358	24517
Probability (%)											
Genotype	0.3	1.0	2.0	1.3	7.4	8.1	58.6	2.9	9.8	44.6	0.7
LSD (0.10)											
Genotype	0.8	3.5	16	0.5	2.2	3.8	NS	1.9	5.0	NS	2945
CV (%)											
	7	5	36	4	8	6	1	2	8	2	8