FIELD EXPERIMENT HISTORY

Title: **Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.**

Experiment: 01 Silage vs Grain **Trial ID:** 2585 **Year:** 2004

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn

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

Supported By: HATCH

Site Information

Field: ARS407 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/1 /04 **pH** 7.0 **OM (%)** 3.9 **P (ppm)** 69 **K (ppm)** 258

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Soil Finisher Cultivated 6/14/04

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	46-0-0	325 lbs/A	4 /15/04
	Starter :	9-24-24	150 lbs/A	4 /29/04
	Post plant :	34-0-0	150 lbs/A	6 /14/04
	Manure:	N/A	N/A	N/A

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

Insecticide: None

Hybrid: See Factors

Irrigation: None

Planting Date: 4/29/04 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 30000 **plants per acre** **Planting Method:** Kinze Plot Planter

Harvest Date: S: 9/21/04
G: 10/18/04

Harvest Method: G: Kincaid 8XP
S: NH 707 Plot Chopper

Experimental Design

Design: RCB **Replications:** 3

Plot Size Seeded: 25' x 5' **Experiment Size:** 0.21 A

Harvest Plot Size: G: 22' x 5'
S: 22' x 2.5'

Harvest Plant Density: 31284 **plants per acre**

Factors/Treatments:

Hybrids:

Garst 8578IT
Mycogen F697
NK N48V8
NorthGro 5939YGRW
Pioneer 35R57
Pioneer 35R58

Results: Tables C-10.

Table C-10. Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.
Arlington, WI - 2004

		Grain					Whole Plant										
				Test	Broken	Grower			Kernel	Crude			In Vitro			Milk per	
Hybrid	Traits	Yield	Moist	weight	stalks	return	Yield	Moist	milk	protien	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
		bu/A	%	lbs/bu	%	$/A	tons/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
Garst 8578IT	IMI	229	24.2	51	1	386	10.1	64.6	63.3	7.4	23.1	45.0	81.5	59.0	33.2	3451	34676
Mycogen F697	BMR	167	31.4	51	23	258	8.1	73.7	63.3	8.6	25.3	51.8	84.6	70.2	25.2	3796	30795
NK Brand N48V8	Leafy	176	26.9	50	36	287	9.5	63.2	68.3	7.5	26.1	50.8	79.4	59.4	26.7	3295	31221
NorthGro 5939YGRW	CRW	218	25.4	51	0	363	9.6	65.6	63.3	7.8	22.7	44.8	82.0	59.8	33.2	3521	33945
Pioneer 35R57		220	24.6	51	11	369	9.4	66.0	70.0	7.9	23.9	48.0	81.1	60.7	29.3	3472	32744
Pioneer 35R58	Bt	215	22.8	51	0	369	9.1	63.3	66.7	7.9	22.4	46.1	82.1	61.2	31.3	3521	32110
Mean		204	25.9	51	12	339	9.3	66.1	65.8	7.9	23.9	47.8	81.8	61.7	29.8	3509	32582
Probability(%)																	
Hybrid (H)		0.0	0.0	8.7	0.2	0.0	2.5	0.8	35.9	0.6	13.0	1.8	0.2	0.0	0.7	0.0	28.5
LSD(0.10)																	
Hybrid (H)		11	1.1	0	13	20	0.8	4.2	NS	0.4	NS	3.6	1.5	1.4	3.5	98	NS
CV(%)		4	4	1	77	4	6	4	7	4	7	5	1	2	8	2	7

FIELD EXPERIMENT HISTORY

Title: **Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.**

Experiment: 01 Silage vs Grain **Trial ID:** 2586 **Year:** 2004

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn

Location: Galesville, WI **County:** Trempealeau

Supported By: HATCH

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)** 22 **K (ppm)** 150

Plot Management

Tillage Operations: V-Ripper Field Cultivator Cultivated 6/25/04

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	46-0-0	348 lbs/A	N/A
	Starter :	6-24-24	150 lbs/A	4 /28/04
	Post plant :	34-0-0	150 lbs/A	6 /25/04
	Manure:	N/A	N/A	N/A

Herbicide: Dual II 2.25 pt/A
Callisto 3.0 oz/A

Insecticide: None

Hybrid: See Factors

Irrigation: None

Planting Date: 4/28/04 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 30000 **plants per acre** **Planting Method:** Kinze Plot Planter

Harvest Date: S: 9/22/04
G: 10/25/04

Harvest Method: G: Kincaid 8XP
S: NH 707 Plot Chopper

Experimental Design

Design: RCB **Replications:** 3

Plot Size Seeded: 25' x 5' **Experiment Size:** 0.21 A

Harvest Plot Size: G: 22' x 5'
S: 22' x 2.5'

Harvest Plant Density: 28512 **plants per acre**

Factors/Treatments:

Hybrids:

Dekalb DKC 4623
Garst 8590IT
Mycogen F2F581
NK N48V8
Pioneer 35R57
Pioneer 35R58

Results: Tables C-11.

Table C-11. Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.
Galesville, WI - 2004

		Grain					Whole Plant										
				Test	Broken	Grower			Kernel	Crude		In Vitro				Milk per	
Hybrid	Traits	Yield	Moist	weight	stalks	return	Yield	Moist	milk	protien	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
		bu/A	%	lbs/bu	%	$/A	tons/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
Dekalb DKC4623	CRW	184	21.1	52	6	321	8.6	63.0	41.7	6.6	19.3	40.5	84.2	61.0	40.4	3705	31955
Garst 8590IT	IMI	210	25.5	50	2	348	9.8	70.1	60.0	7.1	24.5	47.8	80.1	58.3	31.4	3382	32997
Mycogen F2F581	BMR	162	28.6	51	0	258	8.6	69.0	56.7	7.7	21.0	45.4	85.5	68.1	32.7	3858	33252
NK Brand N48V8	Leafy	160	32.6	49	4	243	9.7	68.3	71.7	7.2	25.7	50.8	80.0	60.7	25.9	3397	32947
Pioneer 35R57		209	24.5	51	1	352	8.9	66.3	61.7	7.4	24.2	48.8	80.7	60.4	29.8	3444	30624
Pioneer 35R58	Bt	193	25.1	51	2	323	9.1	67.9	71.7	7.9	23.4	47.2	81.1	60.0	30.3	3468	31705
Mean		186	26.2	51	3	308	9.1	67.4	60.6	7.3	23.0	46.7	81.9	61.4	31.8	3542	32247
Probability(%)																	
Hybrid (H)		0.3	0.0	0.1	7.1	0.1	12.1	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	79.2
LSD(0.10)																	
Hybrid (H)		20	0.9	1	3	35	NS	1.3	15.0	0.3	2.0	3.1	1.7	2.4	3.5	143	NS
CV(%)		7	2	1	86	8	6	1	10	3	6	4	1	3	7	3	8

FIELD EXPERIMENT HISTORY

Title: **Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.**

Experiment: 01 Silage vs Grain **Trial ID:** 2587 **Year:** 2004

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn

Location: Marshfield, WI **County:** Wood

Supported By: HATCH

Site Information

Field: W5-04C50 **Previous Crop:** Soybean **Soil Type:** Withee Silt Loam

Soil Test: **Date:** 10/15/04 **pH** 6.5 **OM (%)** 2.9 **P (ppm)** 38 **K (ppm)** 103

Plot Management

Tillage Operations: Chisel Plow Soil Finisher (2x) Cultivated 6/22/04

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	N/A	N/A	N/A
	Starter :	9-24-24	150	4 /29/04
	Post plant :	28-0-0	27 gal/A	6 /22/04
	Manure:	N/A	N/A	N/A

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

Irrigation: None **Hybrid:** See Factors

Planting Date: 4/29/04 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 30000 **plants per acre** **Planting Method:** Kinze Plot Planter

Harvest Date: S: 9/29/04
G: 11/3/04

Harvest Method: G: Kincaid 8XP
S: NH 707 Plot Chopper

Experimental Design

Design: RCB **Replications:** 3

Plot Size Seeded: 25' x 5' **Experiment Size:** 0.21 A

Harvest Plot Size: G: 22' x 5'
S: 22' x 2.5'

Harvest Plant Density: 30888 **plants per acre**

Factors/Treatments:

Hybrids:

Dairyland Stealth 1497
Garst 8986YG1RR
Golden Harvest H6565RR
Johnson Seeds 4881
Mycogen F227
Pioneer 38P04

Results: Tables C-12.

Table C-12. Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.
Marshfield, WI - 2004

		Grain					Whole Plant										
				Test	Broken	Grower			Kernel	Crude			In Vitro			Milk per	
Hybrid	Traits	Yield	Moist	weight	stalks	return	Yield	Moist	milk	protien	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
		bu/A	%	lbs/bu	%	$/A	tons/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
Dairyland Stealth 1497		158	23.5	49	0	268	7.6	59.7	55.0	6.7	22.0	47.1	83.8	65.5	32.9	3596	27305
Garst 8986YG1RR	RRBt	154	21.6	51	6	268	7.0	57.4	26.7	6.8	20.2	44.4	83.5	62.9	35.8	3490	24478
Golden Harvest H6565F	RR	153	22.1	52	0	265	7.3	56.7	41.7	6.7	21.7	46.9	83.8	65.4	32.9	3528	25895
Johnson Seeds 4881	CRW	157	23.7	49	0	267	7.8	56.6	46.7	6.4	20.5	44.5	85.2	66.7	35.9	3626	28391
Mycogen F227	BMR	96	27.5	49	12	156	6.1	63.5	55.0	7.2	21.5	47.9	86.6	72.0	31.3	3931	23863
Pioneer 38P04	LL	154	21.9	52	0	267	7.3	54.0	33.3	7.0	20.1	43.7	83.5	62.2	37.1	3388	24734
Mean		146	23.4	50	3	248	7.2	58.0	43.1	6.8	21.0	45.8	84.4	65.8	34.3	3593	25778
Probability(%)																	
Hybrid (H)		0.0	0.0	0.0	2.5	0.0	0.1	0.0	2.5	0.8	55.7	26.1	4.5	0.0	9.9	0.0	1.3
LSD(0.10)																	
Hybrid (H)		7	1.2	1	6	13	0.5	2.1	14.6	0.3	NS	NS	1.7	2.0	3.6	136	2013
CV(%)		3	4	1	135	4	5	2	23	3	8	5	1	2	7	3	5

FIELD EXPERIMENT HISTORY

Title: **Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.**

Experiment: 01 Silage vs Grain **Trial ID:** 2588 **Year:** 2004

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn

Location: Valders, WI **County:** Manitowoc

Supported By: HATCH

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Kewaunee Clay 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 6/23/04

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	N/A	N/A	N/A
	Starter :	6-24-24	150	5 /4 /04
	Post plant :	34-0-0	150	6 /30/04
	Manure:	Manure	11000 gal/A	Manure

Herbicide: Dual II 1.0 pt/A
Accent Gold WDG 2.5 oz/A
Banvel 2.0 oz/A

Insecticide: Force 4.4 lb/A

Hybrid: See Factors

Irrigation: None

Planting Date: 5/4/04 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 30000 **plants per acre** **Planting Method:** Kinze Plot Planter

Harvest Date: S: 10/5/04
G: 10/27/04

Harvest Method: G: Kincaid 8XP
S: NH 707 Plot Chopper

Experimental Design

Design: RCB **Replications:** 3

Plot Size Seeded: 25' x 5' **Experiment Size:** 0.21 A

Harvest Plot Size: G: 22' x 5'
S: 22' x 2.5'

Harvest Plant Density: 28512 **plants per acre**

Factors/Treatments:

Hybrids:

Dairyland Stealth 1497
Garst 8986YG1RR
Golden Harvest H6565RR
Johnson Seeds 4881
Mycogen F227
Pioneer 38P04

Results: Tables C-13.

Table C-13. Corn Silage and Grain Evaluation of Hybrids Grown in the Same Plot.
Valders, WI - 2004

		Grain					Whole Plant										
				Test	Broken	Grower			Kernel	Crude			In Vitro			Milk per	
Hybrid	Traits	Yield	Moist	weight	stalks	return	Yield	Moist	milk	protien	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
		bu/A	%	lbs/bu	%	$/A	tons/A	%	%	%	%	%	%	%	%	lbs/T	lbs/A
Dairyland Stealth 1497		180	24.8	47	0	302	7.9	60.7	55.0	7.0	18.6	41.5	86.5	67.5	35.6	3810	30158
Garst 8986YG1RR	RRBt	169	23.6	49	0	287	7.3	54.9	41.7	7.0	17.5	40.6	85.9	65.3	36.6	3591	26053
Golden Harvest H6565F	RR	172	24.3	49	0	290	7.9	58.5	43.3	7.2	18.3	41.5	86.3	67.0	34.9	3729	29432
Johnson Seeds 4881	CRW	188	25.5	46	2	313	8.4	57.8	55.0	6.8	18.7	42.5	86.5	68.2	35.3	3742	31281
Mycogen F227	BMR	124	28.2	49	15	199	6.2	54.6	38.3	7.2	17.3	42.4	89.2	74.6	35.1	3938	24492
Pioneer 38P04	LL	188	24.3	49	0	317	8.1	57.7	35.0	7.1	20.8	45.4	84.1	64.9	32.0	3543	28596
Mean		170	25.1	48	3	285	7.6	57.3	44.7	7.1	18.5	42.3	86.4	67.9	34.9	3726	28335
Probability(%)																	
Hybrid (H)		0.0	11.6	7.4	0.0	0.1	0.4	10.7	40.2	65.0	6.1	13.4	0.0	0.0	40.3	0.0	0.8
LSD(0.10)																	
Hybrid (H)		17	NS	2	3	33	0.8	NS	NS	NS	1.9	NS	1.1	1.6	NS	81	2756
CV(%)		7	7	2	83	8	7	5	31	5	7	5	1	2	7	1	7