

FIELD EXPERIMENT HISTORY

Title: Date of Planting and Hybrid Influence on Corn Forage
Experiment: 03 DOP-Silage **Trial ID:** 2685 **Year:** 2005
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: HATCH

Site Information

Field: ARS 368 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 11/1 /05 **pH** 6.4 **OM (%)** 3.1 **P (ppm)** 22 **K (ppm)** 131

Plot Management

Tillage Operations: Fall Chisel Plow Field Cultivator Soil Finisher prior to each DOP

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Fertilizer: Preplant :	46-0-0	325	4 /14/05
Starter :	9-24-24	150	Each DOP
Post plant :	N/A	N/A	N/A
Manure:	N/A	N/A	N/A

Herbicide: Outlook 20 oz/A **Insecticide:** None
 Hornet 4 oz/A **Hybrid:** See Factors

Irrigation: None

Planting Date: See Factors **Planting Depth:** 1.5" **Row Width:** 30"

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

Harvest Date: 9/9, 9/21 &11/1 **Harvest Method:** New Holland 707 Plot Chopper

Experimental Design

Design: RCB Split Plot **Replications:** 3
Plot Size Seeded: 10' x 25' **Experiment Size:** 0.26 Acres
Harvest Plot Size: 2.5' x 22' **Harvest Plant Density:** 29885 plants per acre

Factors/Treatments:

Date of Planting:

April 29
 June 1
 June 30
 July 15
 August 1

Hybrids:

Dekalb DKC 58-78 (YGCB)
 NK Brand N32-L9
 Mycogen F697

Results: Tables C-42.

**Table C-42. Planting Date And Hybrid Influence On Corn Silage Performance
Arlington, WI - 2005.**

Planting Date	Hybrid	Whole Plant																
		Dry Matter		Kernel	KMR	SMR	VMR	Silking	Harvest		Crude			In Vitro			Milk per	
		yield	Moisture	milk	0-5	0-5	0-10	Date	plants	ears	protein	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
tons/A	%	%	#	#	#	doy	plants/A	ears/A	%	%	%	%	%	%	lbs/T	lbs/A		
April 29		9.5	57.0	54.4	2.7	2.1	4.8	201	30096	33088	7.4	20.2	42.5	82.9	59.7	34.2	3420	32434
June 1		10.0	51.7	39.4	2.0	1.7	3.6	210	29920	32912	7.0	21.8	45.5	81.6	59.4	31.9	3276	32831
June 30		7.7	58.0	45.0	2.3	1.6	3.9	237	29832	32472	7.7	25.4	50.8	80.5	61.5	19.8	3238	24835
July 15		5.6	68.5	100.0	5.0	2.5	7.5	255	29920	30976	8.2	27.3	54.2	81.7	66.2	11.9	3210	18106
August 1		2.8	76.5	-	-	1.7	-	273	29656	0	9.6	29.7	59.2	84.2	73.3	0.9	3109	8706
	Dekalb DKC58-78	7.9	62.3	73.3	3.7	2.0	5.7	236	30254	25872	7.8	25.2	51.2	81.0	62.5	19.9	3198	25546
	Mycogen F697	6.2	67.0	63.3	3.2	2.0	5.4	238	29304	24235	8.0	25.9	52.0	83.8	68.4	15.8	3378	21342
	NK Brand N32-L9	7.3	57.6	42.5	2.1	1.8	3.8	231	30096	27562	8.1	23.6	48.1	81.7	61.2	23.5	3175	23260
April 29	Dekalb DKC58-78	9.8	57.3	63.3	3.2	1.9	5.0	201	30888	32208	7.1	20.5	43.2	82.0	58.4	33.8	3356	33016
April 29	Mycogen F697	9.0	62.5	65.0	3.3	2.6	5.9	204	30096	31152	7.6	21.7	45.0	83.7	63.7	29.5	3599	32327
April 29	NK Brand N32-L9	9.7	51.1	35.0	1.8	1.8	3.6	197	29304	35904	7.3	18.4	39.2	83.1	57.0	39.3	3304	31957
June 1	Dekalb DKC58-78	10.8	50.4	51.7	2.6	1.6	4.2	210	29832	32736	6.7	22.1	46.3	80.8	58.7	32.5	3173	34726
June 1	Mycogen F697	9.1	59.1	46.7	2.3	2.3	4.6	213	30096	30624	7.1	23.8	48.6	82.3	63.6	25.9	3485	31910
June 1	NK Brand N32-L9	10.0	45.4	20.0	1.0	1.1	2.1	206	29832	35376	7.2	19.5	41.7	81.7	56.0	37.5	3169	31857
June 30	Dekalb DKC58-78	8.6	57.9	78.3	3.9	1.9	5.8	238	30360	32736	7.4	26.3	53.4	79.7	61.9	17.5	3218	27594
June 30	Mycogen F697	6.5	63.1	41.7	2.1	1.6	3.7	241	29040	30624	7.5	25.7	50.5	82.4	65.1	18.2	3380	22096
June 30	NK Brand N32-L9	8.0	53.0	15.0	0.8	1.5	2.2	232	30096	34056	8.1	24.0	48.5	79.5	57.6	23.8	3115	24814
July 15	Dekalb DKC58-78	6.8	68.2	100.0	5.0	2.8	7.8	255	30096	31680	8.2	26.9	53.8	79.9	62.7	14.8	3224	22018
July 15	Mycogen F697	4.3	72.5	100.0	5.0	2.4	7.4	257	28512	28776	8.0	28.3	56.4	84.5	72.6	5.6	3154	13440
July 15	NK Brand N32-L9	5.8	64.8	100.0	5.0	2.3	7.3	252	31152	32472	8.5	26.7	52.6	80.7	63.3	15.2	3250	18862
August 1	Dekalb DKC58-78	3.4	77.8	-	-	1.7	-	274	30096	0	9.5	29.9	59.5	82.7	70.9	1.2	3017	10376
August 1	Mycogen F697	2.1	78.0	-	-	1.4	-	276	28776	0	9.8	29.8	59.5	86.4	77.2	0.0	3270	6935
August 1	NK Brand N32-L9	2.9	73.7	-	-	2.1	-	269	30096	0	9.5	29.3	58.5	83.6	72.0	1.5	3038	8808
Mean		7.1	62.3	59.7	3.0	1.9	5.0	235	29885	25890	8.0	24.9	50.4	82.2	64.0	19.7	3250	23382
Probability(%)																		
Date of Planting (D)		0.0	0.0	0.0	0.0	38.2	0.3	0.0	99.4	63.4	0.0	0.0	0.0	7.5	0.0	0.0	7.2	0.5
Hybrid (H)		0.0	0.0	0.0	0.0	11.4	0.0	0.0	24	0.3	3.9	0.2	0.1	0.0	0.0	0.0	0.0	0.1
D x H		0.3	0.6	0.0	0.0	0.5	0.0	0.0	73.3	96.2	22.2	49.8	30.3	25.6	3.1	12.4	7.4	41.2
LSD (0.10)																		
Date of Planting (D)		2.4	4.0	6.7	0.3	NS	1.2	1	NS	NS	0.5	2.1	2.9	2.1	2.3	2.7	164.5	2833.9
Hybrid (H)		0.4	2.3	17.3	0.9	NS	1.1	1	NS	835.0	0.3	1.0	1.9	1.0	1.8	3.1	111.9	1876.6
D x H		1.1	2.5	8.5	0.4	0.5	0.6	1	NS	NS	NS	NS	NS	NS	2.2	NS	156.8	NS
CV(%)																		
		11	3	10	10	18	9	0	5	8	4	6	5	1	2	17	3	11