

## FIELD EXPERIMENT HISTORY

**Title:** Date of Planting and Hybrid Influence on Corn Forage and Corn Grain Yield  
**Experiment:** 03DOP **Trial ID:** 3059 **Year:** 2007  
**Personnel:** J.G. Lauer and K.D. Kohn, Greg Roth (Penn State), Mark Zarnstorff (NCIS)  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** NCIS

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### Site Information

**Field:** ARS358 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 10/1 /07 **pH** 6.7 **OM (%)** 2.5 **P (ppm)** 19 **K (ppm)** 105

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### Plot Management

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

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
<b>Fertilizer:</b>			
<b>Preplant :</b>	46-0-0	325	4 /14/07
<b>Starter :</b>	9-23-30	150	Each DOP
<b>Post plant :</b>	N/A	N/A	N/A
<b>Manure:</b>	N/A	N/A	N/A
<b>Herbicide:</b>	Outlook 20 oz/A Hornet 4.0 oz/A	<b>Insecticide:</b> None	
		<b>Hybrid:</b> See Factors	
<b>Irrigation:</b>	none		
<b>Planting Date:</b>	See Factors	<b>Planting Depth:</b> 1.5"	<b>Row Width:</b> 30"
<b>Target Plant Density:</b> 30000 plants per acre		<b>Planting Method:</b> Kinze Plot Planter	
<b>Harvest Date:</b> S: 8/28, 9/6, 9/14, & 10/15 G: 10/18		<b>Harvest Method:</b> S:New Holland 707 G:Massey Ferguson 8XP	

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### Experimental Design

**Design:** RCB split plot **Replications:** 4  
**Plot Size Seeded:** 25' x 20' **Experiment Size:** 1.3 Acre  
**Harvest Plot Size:** S: 22' x 2.5'  
G: 22' x 5' **Harvest Plant Density:** S: 30591 plants per acre  
G: 31086

### Factors/Treatments:

<u>Date of Planting:</u>	<u>Hybrids:</u>	<u>Silage Harvest Timing:</u>
April 19, April 30, May 14, June 01 & June 15	NK Brand N58-D1 Pioneer 37R71	25% Milk 50% Milk 75% Milk

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**Results: Tables C-23, 24 and 25.**

**Table C-23. Planting Date And Hybrid Influence On Corn Grain And Silage Performance  
Arlington, WI - 2007.**

Planting Date	Hybrid	Grain										Silage																
		Yield bu/A	Moisture %	Test lbs/bu	Total %	Lodged %	Stalk %	Root %	Grower \$/A	Harvest plants/A	Plants emerged	Seeds planted	Silking date	Plant height	Early dent	Kernel Milk 75% do	Kernel Milk 50% do	Kernel Milk 25% do	Black layer	Oil %	Starch %	Protein %	Ethanol per bu	gallons/gal	per A	yield bu/A	Moisture %	MPCI
	NK Brand N58-D1	170	26.5	48.2	9	6	3	561	30928	40610	44352	205	105	242	250	258	265	272	3.0	60.8	6.9	2.93	608	180	24.9			
	Pioneer 37R71	185	22.2	48.6	19	4	16	616	31244	41461	44352	201	101	236	244	250	257	265	3.5	59.7	7.8	2.86	530	182	22.6			
April 19		212	16.8	53.1	9	3	5	725	31383	41852	44352	189	99	224	231	237	243	252	3.4	60.4	7.2	2.91	617					
April 30		210	17.5	50.8	7	4	3	716	31482	40615	44352	193	106	229	235	241	248	256	3.3	60.2	7.3	2.90	609	192	18.9			
May 14		190	19.7	48.7	34	13	21	640	30690	38981	44352	201	105	238	246	253	259	265	3.3	60.3	7.3	2.90	552					
June 01		182	28.8	46.1	16	4	12	581	30690	41456	44352	212	103	249	256	265	273	281	3.3	60.1	7.7	2.87	537	171	28.6			
June 15		93	38.9	43.3	5	0	5	281	31185	42273	44352	220	103	255	266	276	282	287	3.3	59.3	8.2	2.82	398					
April 19	NK Brand N58-D1	216	17.5	53.2	7	6	2	735	31482	41036	44352	191	102	228	237	242	248	257	3.1	60.6	6.9	2.94	633					
April 19	Pioneer 37R71	208	16.2	53.0	10	1	8	715	31284	42669	44352	187	95	220	225	231	238	248	3.6	60.1	7.5	2.88	600					
April 30	NK Brand N58-D1	216	18.4	51.3	3	3	0	733	30888	41135	44352	196	112	234	240	245	252	258	3.0	60.8	6.9	2.93	633	188	19.3			
April 30	Pioneer 37R71	204	16.5	50.4	11	5	6	699	32076	40095	44352	191	99	224	230	238	244	254	3.6	59.7	7.7	2.87	585	196	18.5			
May 14	NK Brand N58-D1	198	21.5	47.7	20	13	7	658	30690	38808	44352	203	105	242	250	257	262	268	3.0	60.9	6.8	2.93	578					
May 14	Pioneer 37R71	183	17.8	49.7	48	12	36	622	30690	39155	44352	200	105	235	242	248	256	262	3.6	59.6	7.8	2.87	525					
June 01	NK Brand N58-D1	176	31.5	47.3	11	7	4	550	30690	40739	44352	214	105	251	259	270	277	285	2.6	60.9	7.0	2.91	521	172	30.6			
June 01	Pioneer 37R71	189	26.1	45.0	20	1	20	612	30690	42174	44352	210	101	246	253	261	268	277	3.4	59.9	7.8	2.86	541	169	26.7			
June 15	NK Brand N58-D1	45	43.6	41.4	2	0	2	128	30888	41333	44352	223	102	257	264	278	285	290	-	-	-	-	-	-	-	-	-	-
June 15	Pioneer 37R71	141	34.3	45.2	8	1	8	433	31482	43214	44352	218	103	254	268	274	279	284	3.3	59.3	8.2	2.82	398					
Mean		177	24.3	48.4	14	5	9	589	31086	41036	44352	203	103	239	247	254	261	268	3.3	60.2	7.5	2.89	560	181	23.8			
<b>Probability(%)</b>																												
Date of Planting (D)		0.0	0.0	0.0	0.8	24.6	3.3	0.0	51.3	0.1	-	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.4	24.6	23.8	0.4	0.0	11.2	0.1			
Hybrid (H)		0.0	0.0	4.8	0.1	11.5	0.1	0.0	37.1	0.8	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	83.6	0.3			
D x H		0.0	0.0	0.0	7.4	18.8	14.2	0.0	70.1	2.7	-	0.1	0.3	0.2	0.3	2.8	23.8	40.9	8.4	2.1	33.5	91.5	8.7	58.5	1.8			
<b>LSD (0.10)</b>																												
Date of Planting (D)		13	0.9	0.9	12	NS	10	44	NS	1022	-	1	NS	2	4	2	4	4	0.1	NS	NS	0.02	3	NS	1.8			
Hybrid (H)		4	0.6	0.4	5	NS	5	14	NS	490	-	0	2	1	2	1	1	1	0.0	0.1	0.1	0.01	12	NS	0.6			
D x H		10	1.4	0.9	10	NS	NS	31	NS	1096	-	1	4	2	4	2	NS	NS	0.1	0.3	NS	NS	27	NS	1.3			
<b>CV(%)</b>		4	5	1	60	75	107	4	3	2	-	3	0	1	1	1	1	1	2	0	2	1	4	10	4			

continued

**Table C-23. Planting Date And Hybrid Influence On Corn Grain And Silage Performance**  
(continued) **Arlington, WI - 2007.**

Planting Date	Hybrid	Whole Plant															
		Dry Matter		Kernel moisture %	Kernel milk %	KMR 0-5	SMR 0-5	VMR 0-10	Harvest		Crude protein %	ADF %	NDF %	In Vitro		Milk per	
		yield tons/A	Moisture %						plants/A	ears/A				Digest %	Starch %	lbs/T	Acre
	NK Brand N58-D1	8.5	66.1	54.0	2.7	2.3	5.0	30571	30967	6.8	26.5	49.3	76.8	53.0	26.5	2876	24728
	Pioneer 37R71	8.4	60.7	39.8	2.0	1.7	3.7	30611	31838	6.9	22.8	44.2	79.2	52.9	33.1	3097	26053
April 19		9.0	54.4	13.1	0.7	0.9	1.5	30294	31284	6.1	21.9	43.4	79.2	52.0	34.2	3106	27842
April 30		9.8	60.2	45.6	2.3	2.0	4.2	30789	31581	7.1	22.6	44.1	79.0	52.5	33.6	3085	30227
May 14		9.6	65.1	56.3	2.8	2.1	4.9	31086	32175	6.4	24.6	46.4	78.1	52.8	31.2	3013	28858
June 01		7.2	72.3	93.8	4.7	3.4	8.1	30393	30987	7.1	27.0	49.5	77.3	54.2	28.0	2935	21073
June 15		6.7	64.9	25.6	1.3	1.8	3.1	30393	30987	7.5	27.1	50.3	76.5	53.2	21.8	2791	18952
April 19	NK Brand N58-D1	9.5	56.5	23.8	1.2	1.1	2.3	30888	31680	6.0	23.1	44.8	78.4	51.7	32.8	3047	28917
April 19	Pioneer 37R71	8.5	52.3	2.5	0.1	0.6	0.7	29700	30888	6.2	20.8	42.0	80.0	52.4	35.6	3165	26766
April 30	NK Brand N58-D1	10.0	63.9	56.3	2.8	2.3	5.1	30492	30888	7.1	24.6	47.1	77.6	52.5	30.7	2979	29859
April 30	Pioneer 37R71	9.6	56.5	35.0	1.8	1.6	3.4	31086	32274	7.1	20.5	41.2	80.4	52.5	36.5	3192	30595
May 14	NK Brand N58-D1	9.5	68.0	61.3	3.1	2.3	5.3	31284	31680	6.0	26.3	48.3	77.1	52.7	29.4	2942	28096
May 14	Pioneer 37R71	9.6	62.3	51.3	2.6	1.8	4.4	30888	32670	6.8	22.9	44.4	79.0	52.8	33.0	3085	29619
June 01	NK Brand N58-D1	7.3	73.7	100.0	5.0	3.4	8.4	29502	29502	7.2	27.5	50.1	77.0	54.1	26.6	2911	21124
June 01	Pioneer 37R71	7.1	70.9	87.5	4.4	3.4	7.8	31284	32472	6.9	26.5	48.9	77.7	54.3	29.4	2959	21023
June 15	NK Brand N58-D1	6.2	68.4	28.8	1.4	2.5	3.9	30690	31086	7.5	31.0	56.4	74.0	53.8	12.7	2500	15645
June 15	Pioneer 37R71	7.2	61.5	22.5	1.1	1.2	2.3	30096	30888	7.5	23.3	44.3	79.0	52.6	30.9	3082	22259
Mean		8.4	63.4	46.9	2.3	2.0	4.4	30591	31403	6.8	24.6	46.7	78.0	52.9	29.8	2986	25390
<b>Probability(%)</b>																	
Date of Planting (D)		0.0	0.0	0.0	0.0	0.0	0.0	93.1	86.7	0.8	0.0	0.0	1.0	23.6	0.0	0.0	0.0
Hybrid (H)		45.1	0.0	0.3	0.3	0.0	0.0	92.0	5.7	30.6	0.0	0.0	0.0	94.2	0.0	0.0	5.3
D x H		0.6	4.1	69.7	69.7	5.1	21.4	18.1	9.4	19.7	2.0	1.1	7.9	86.6	0.1	0.7	0.7
<b>LSD (0.10)</b>																	
Date of Planting (D)		0.6	3.3	15.0	0.7	0.6	1.0	NS	NS	0.6	1.7	2.3	1.2	NS	2.5	87	1916
Hybrid (H)		NS	0.8	7.1	0.4	0.2	0.3	NS	739	NS	1.0	1.5	0.8	NS	1.9	71	1106
D x H		0.6	1.9	NS	NS	0.5	NS	NS	1653	NS	2.2	3.4	1.8	NS	4.2	160	2473
<b>CV(%)</b>		5	2	27	28	19	12	4	4	6	7	6	2	3	11	4	8

**Table C-24. Planting Date And Hybrid Influence On Corn Grain And Silage Performance  
Arlington, WI - 2007.**

Planting Date	Hybrid	Harvest Timing	MPCI		Whole Plant												Milk per Acre		
			Grain yield bu/A	Dry Matter yield tons/A	Kernel moisture %	KMR 0-5	SMR 0-5	VMR 0-10	Harvest plants/A	Harvest ears/A	Crude protein %	ADF %	NDF %	In Vitro Digest %	NDFD %	Starch %	Ton	lbs/T	
	NK Brand N58-D1	75% Milk	127	8.3	69.6	68	3.4	2.7	6.1	30327	30657	7.2	26.1	48.9	77.7	54.2	27.1	2976	25002
	Pioneer 37R71	50% Milk	141	8.2	64.2	59	3.0	2.5	5.4	31086	31977	7.4	23.1	44.8	79.6	54.5	32.0	3126	25959
	NK Brand N58-D1	75% Milk	82	7.5	74.4	84	4.2	3.2	7.4	29997	30195	7.7	27.9	51.6	77.0	55.1	23.7	2905	22069
	NK Brand N58-D1	50% Milk	128	8.6	68.8	78	3.9	2.9	6.8	29997	30195	7.2	26.1	48.6	77.3	53.3	28.7	2962	25635
	NK Brand N58-D1	25% Milk	171	8.8	65.6	42	2.1	2.1	4.1	30987	31581	6.7	24.4	46.5	78.7	54.1	28.9	3061	27303
	Pioneer 37R71	75% Milk	131	7.7	69.5	78	3.9	3.3	7.2	31086	31878	8.0	24.8	47.4	78.7	55.1	29.3	3047	23788
	Pioneer 37R71	50% Milk	129	8.3	63.7	61	3.1	2.5	5.6	31185	32373	7.0	23.5	45.0	79.0	53.4	32.9	3090	25930
	Pioneer 37R71	25% Milk	163	8.7	59.4	38	1.9	1.6	3.5	30987	31680	7.2	21.0	41.9	81.2	55.0	33.8	3241	28160
April 30			170	9.6	60.6	36	1.8	1.8	3.6	31053	31845	7.1	22.0	43.0	79.8	53.1	34.1	3154	30160
June 01			98	7.0	73.1	91	4.6	3.4	7.9	30360	30789	7.5	27.2	50.6	77.5	55.6	25.0	2948	20802
April 30			157	9.3	65.6	62	3.1	2.7	5.8	30987	31779	7.4	23.0	44.3	79.5	53.9	33.2	3125	29009
April 30			156	9.8	60.2	46	2.3	2.0	4.2	30789	31581	7.1	22.6	44.1	79.0	52.5	33.6	3099	30368
April 30			197	9.6	56.1	0	0.0	0.8	0.8	31383	32175	6.7	20.4	40.6	80.8	52.9	35.6	3237	31102
June 01			56	6.0	78.2	100	5.0	3.8	8.8	30096	30294	8.2	29.7	54.7	76.1	56.3	19.8	2826	16847
June 01			101	7.2	72.3	94	4.7	3.4	8.1	30393	30987	7.1	27.0	49.5	77.3	54.2	28.0	2953	21197
June 01			137	7.9	68.9	80	4.0	2.9	6.9	30591	31086	7.3	25.0	47.7	79.1	56.2	27.1	3065	24360
April 30	NK Brand N58-D1	75% Milk	174	9.9	64.4	41	2.1	1.8	3.9	31152	31680	6.9	23.7	45.2	78.6	52.6	32.2	3065	30350
April 30	Pioneer 37R71	50% Milk	166	9.2	56.9	30	1.5	1.8	3.3	30954	32010	7.3	20.3	40.9	81.0	53.6	36.0	3242	29969
June 01	NK Brand N58-D1	25% Milk	80	6.8	74.8	95	4.7	3.6	8.3	29502	29634	7.5	28.6	52.5	76.8	55.7	22.0	2886	19654
June 01	Pioneer 37R71	75% Milk	116	7.3	71.5	88	4.4	3.1	7.5	31218	31944	7.5	25.9	48.7	78.3	55.4	28.0	3009	21950
April 30	NK Brand N58-D1	75% Milk	165	9.5	69.3	68	3.4	2.4	5.7	31086	31482	7.2	24.4	46.1	78.4	53.2	31.9	3047	28854
April 30	NK Brand N58-D1	50% Milk	158	10.0	63.9	56	2.8	2.3	5.1	30492	30888	7.1	24.6	47.1	77.6	52.5	30.7	2995	30018
April 30	NK Brand N58-D1	25% Milk	199	10.2	60.0	0	0.0	0.8	0.8	31878	32670	6.3	21.9	42.5	79.7	52.2	34.1	3155	32179
April 30	Pioneer 37R71	75% Milk	149	9.1	62.0	56	2.8	3.1	5.9	30888	32076	7.7	21.6	42.6	80.7	54.6	34.5	3204	29164
April 30	Pioneer 37R71	50% Milk	154	9.6	56.5	35	1.8	1.6	3.4	31086	32274	7.1	20.5	41.2	80.4	52.5	36.5	3204	30717
April 30	Pioneer 37R71	25% Milk	194	9.1	52.2	0	0.0	0.8	0.8	30888	31680	7.0	18.9	38.8	82.0	53.6	37.1	3319	30026
June 01	NK Brand N58-D1	75% Milk	0	5.5	79.5	100	5.0	4.1	9.1	28908	28908	8.2	31.3	57.1	75.5	57.1	15.5	2763	15283
June 01	NK Brand N58-D1	50% Milk	97	7.3	73.7	100	5.0	3.4	8.4	29502	29502	7.2	27.5	50.1	77.0	54.1	26.6	2929	21251
June 01	NK Brand N58-D1	25% Milk	142	7.5	71.2	84	4.2	3.3	7.5	30096	30492	7.1	26.9	50.5	77.8	56.1	23.8	2967	22427
June 01	Pioneer 37R71	75% Milk	112	6.4	77.0	100	5.0	3.6	8.6	31284	31680	8.3	28.0	52.2	76.8	55.6	24.2	2889	18412
June 01	Pioneer 37R71	50% Milk	105	7.1	70.9	88	4.4	3.4	7.8	31284	32472	6.9	26.5	48.9	77.7	54.3	29.4	2976	21143
June 01	Pioneer 37R71	25% Milk	131	8.3	66.7	76	3.8	2.4	6.2	31086	31680	7.4	23.2	45.0	80.3	56.4	30.5	3162	26294
Mean			134	8.3	66.9	64	3.2	2.6	5.8	30707	31317	7.3	24.6	46.8	78.7	54.3	29.6	3051	25481
<b>Probability(%)</b>			0.0	0.5	0.3	0.1	0.1	1.6	0.2	19.9	7.3	5.5	1.1	0.9	3.0	1.0	0.9	2.0	0.7
Date of Planting (D)			0.2	71.8	0.0	2.5	2.5	13.0	0.5	3.3	0.4	27.4	0.0	0.0	0.0	57.6	0.0	0.0	25.3
Hybrid (H)			0.0	1.8	0.0	57.8	57.8	16.0	62.7	0.9	2.5	30.3	56.8	72.6	30.9	22.9	20.2	40.2	11.4
D x H			0.0	0.1	0.0	0.0	0.0	0.0	0.0	51.0	0.2	0.2	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Harvest Timing (T)			0.0	2.6	81.7	0.0	0.0	3.7	0.0	82.1	68.7	22.2	16.4	2.4	24.2	42.5	0.3	12.7	3.9
D x T			0.0	61.1	52.1	30.9	30.9	24.1	17.6	30.0	12.3	41.1	80.9	82.3	75.4	79.7	79.4	77.8	25.3
H x T			0.0	36.5	79.3	54.0	54.0	3.5	9.8	70.8	94.6	99.1	27.0	13.2	60.7	46.0	9.4	45.8	25.3
D x H x T			0.0	0.8	3.4	11	0.6	0.7	0.9	NS	NS	0.4	0.7	3.0	1.4	1.0	3.6	106	3363
<b>LSD (0.10)</b>			7	NS	0.8	6	0.3	NS	0.4	577	710	NS	NS	0.9	1.2	NS	1.4	54	NS
Date of Planting (D)			7	NS	0.8	6	0.3	NS	0.4	577	710	NS	NS	0.9	1.2	NS	1.4	54	NS
Hybrid (H)			10	0.5	0.7	NS	NS	NS	NS	816	1004	NS	NS	NS	NS	NS	NS	NS	NS
D x H			8	0.5	1.0	8	0.4	0.3	0.5	NS	NS	0.4	1.1	1.5	1.0	0.7	1.8	66	1708
Harvest Timing (T)			12	0.7	NS	NS	NS	0.4	0.6	NS	NS	NS	NS	2.1	NS	NS	2.5	NS	2416
D x T			12	NS	NS	NS	NS	0.4	0.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x T			12	NS	NS	NS	NS	0.6	0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
D x H x T			17	NS	NS	NS	NS	0.6	0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>CV(%)</b>			10	10	2	20	20	20	13	4	5	9	7	5	2	3	10	4	11

**Table C-25. Planting Date And Hybrid Influence On Corn Leaf Development  
Arlington, WI - 2007.**

Date of Planting	Hybrid	Observation Date day of year	Leaf Development			Plant height inches
			Leaf collars no./plant	Hail adjusters method no./plant	Total leaves no./plant	
		149	3.0	5.2	5.9	6.4
		162	5.6	8.1	9.1	17.3
		177	7.0	9.6	11.0	33.2
		191	12.0	13.7	14.8	68.4
		204	15.1	16.1	16.9	87.0
		220	17.8	17.9	18.2	102.9
	NK Brand N58-D1		11.0	12.7	13.6	58.5
	Pioneer 37R71		11.0	12.4	13.3	59.1
	NK Brand N58-D1	149	2.9	5.3	5.8	5.7
	NK Brand N58-D1	162	5.5	8.0	9.0	16.6
	NK Brand N58-D1	177	7.0	9.8	11.0	30.8
	NK Brand N58-D1	191	11.8	13.8	14.9	66.7
	NK Brand N58-D1	204	15.3	16.4	17.3	87.8
	NK Brand N58-D1	220	18.0	18.2	18.8	105.4
	Pioneer 37R71	149	3.0	5.2	6.0	7.2
	Pioneer 37R71	162	5.6	8.3	9.3	17.9
	Pioneer 37R71	177	7.1	9.4	11.0	35.5
	Pioneer 37R71	191	12.3	13.7	14.8	70.2
	Pioneer 37R71	204	15.0	15.8	16.5	86.2
	Pioneer 37R71	220	17.6	17.6	17.6	100.5
April 19			13.0	14.4	15.2	65.2
April 30			12.0	13.4	14.1	63.7
May 14			9.7	11.3	12.3	55.9
June 01			10.7	12.6	13.5	58.3
June 15			8.6	10.3	11.4	46.5
April 19		149	4.5	7.3	8.1	10.1
April 19		162	6.9	10.0	11.1	23.5
April 19		177	11.5	14.2	16.1	60.2
April 19		191	17.6	17.7	18.3	100.4
April 19		204	18.8	18.8	18.8	98.6
April 19		220	18.8	18.8	18.8	98.6
April 30		149	3.1	5.2	5.9	5.6
April 30		162	5.9	8.6	9.6	18.2
April 30		177	10.3	13.6	15.2	50.9
April 30		191	16.0	16.6	17.6	97.1
April 30		204	18.3	18.3	18.3	105.3
April 30		220	18.3	18.3	18.3	105.3

continued

**Table C-25. Planting Date And Hybrid Influence On Corn Leaf Development**(continued) **Arlington, WI - 2007.**

Date of Planting	Hybrid	Observation Date	Leaf Development			Plant height
			Leaf collars	Hail adjusters method	Total leaves	
		day of year	no./plant	no./plant	no./plant	inches
May 14		149	1.3	3.2	3.7	3.7
May 14		162	3.9	5.8	6.8	10.1
May 14		177	6.9	10.1	11.8	34.9
May 14		191	12.3	14.6	15.8	78.0
May 14		204	16.9	17.1	17.8	104.4
May 14		220	16.9	17.1	17.8	104.4
June 01		149	-	-	-	-
June 01		162	-	-	-	-
June 01		177	4.2	6.4	7.5	13.8
June 01		191	7.8	11.1	12.5	41.1
June 01		204	12.7	14.5	15.9	75.1
June 01		220	18.3	18.3	18.3	103.3
June 15		149	-	-	-	-
June 15		162	-	-	-	-
June 15		177	2.3	3.6	4.3	6.1
June 15		191	6.4	8.7	9.9	25.4
June 15		204	8.9	11.8	13.6	51.6
June 15		220	16.9	17.2	17.9	103.1
April 19	NK Brand N58-D1		13.2	14.7	15.5	66.6
April 19	Pioneer 37R71		12.8	14.2	14.9	63.8
April 30	NK Brand N58-D1		12.2	13.7	14.4	64.8
April 30	Pioneer 37R71		11.7	13.1	13.8	62.7
May 14	NK Brand N58-D1		9.4	11.2	12.4	54.0
May 14	Pioneer 37R71		10.0	11.4	12.2	57.8
June 01	NK Brand N58-D1		11.0	13.1	13.9	57.3
June 01	Pioneer 37R71		10.5	12.0	13.1	59.4
June 15	NK Brand N58-D1		8.3	10.0	11.1	44.7
June 15	Pioneer 37R71		9.0	10.6	11.8	48.4
April 19	NK Brand N58-D1	149	4.3	7.1	7.9	8.6
April 19	NK Brand N58-D1	162	6.9	9.8	10.8	22.0
April 19	NK Brand N58-D1	177	11.8	14.8	16.8	57.6
April 19	NK Brand N58-D1	191	17.4	17.6	18.8	103.3
April 19	NK Brand N58-D1	204	19.4	19.4	19.4	104.0
April 19	NK Brand N58-D1	220	19.4	19.4	19.4	104.0
April 19	Pioneer 37R71	149	4.8	7.5	8.4	11.5
April 19	Pioneer 37R71	162	7.0	10.3	11.4	25.0
April 19	Pioneer 37R71	177	11.3	13.6	15.5	62.8
April 19	Pioneer 37R71	191	17.8	17.8	17.8	97.5
April 19	Pioneer 37R71	204	18.1	18.1	18.1	93.1
April 19	Pioneer 37R71	220	18.1	18.1	18.1	93.1

continued

**Table C-25. Planting Date And Hybrid Influence On Corn Leaf Development**(continued) **Arlington, WI - 2007.**

Date of Planting	Hybrid	Observation Date	Leaf Development			Plant height
			Leaf collars	Hail adjusters method	Total leaves	
		day of year	no./plant	no./plant	no./plant	inches
April 30	NK Brand N58-D1	149	2.9	5.0	5.5	4.9
April 30	NK Brand N58-D1	162	6.0	8.6	9.5	18.8
April 30	NK Brand N58-D1	177	10.3	13.9	15.5	47.1
April 30	NK Brand N58-D1	191	15.8	16.6	17.9	97.3
April 30	NK Brand N58-D1	204	19.1	19.1	19.1	110.4
April 30	NK Brand N58-D1	220	19.1	19.1	19.1	110.4
April 30	Pioneer 37R71	149	3.4	5.4	6.3	6.4
April 30	Pioneer 37R71	162	5.8	8.6	9.6	17.6
April 30	Pioneer 37R71	177	10.3	13.3	14.9	54.6
April 30	Pioneer 37R71	191	16.3	16.6	17.4	97.0
April 30	Pioneer 37R71	204	17.4	17.4	17.4	100.1
April 30	Pioneer 37R71	220	17.4	17.4	17.4	100.1
May 14	NK Brand N58-D1	149	1.5	3.6	4.0	3.5
May 14	NK Brand N58-D1	162	3.8	5.6	6.6	9.0
May 14	NK Brand N58-D1	177	6.8	9.9	11.3	32.3
May 14	NK Brand N58-D1	191	11.4	14.8	16.0	71.4
May 14	NK Brand N58-D1	204	16.4	16.8	18.1	103.9
May 14	NK Brand N58-D1	220	16.4	16.8	18.1	103.9
May 14	Pioneer 37R71	149	1.0	2.8	3.4	3.8
May 14	Pioneer 37R71	162	4.0	5.9	7.0	11.1
May 14	Pioneer 37R71	177	7.1	10.3	12.3	37.6
May 14	Pioneer 37R71	191	13.1	14.4	15.6	84.6
May 14	Pioneer 37R71	204	17.5	17.5	17.5	104.9
May 14	Pioneer 37R71	220	17.5	17.5	17.5	104.9
June 01	NK Brand N58-D1	149	-	-	-	-
June 01	NK Brand N58-D1	162	-	-	-	-
June 01	NK Brand N58-D1	177	4.4	6.9	7.8	12.9
June 01	NK Brand N58-D1	191	8.0	11.5	12.6	39.1
June 01	NK Brand N58-D1	204	12.5	14.9	16.3	71.5
June 01	NK Brand N58-D1	220	19.1	19.1	19.1	105.5
June 01	Pioneer 37R71	149	-	-	-	-
June 01	Pioneer 37R71	162	-	-	-	-
June 01	Pioneer 37R71	177	4.0	6.0	7.3	14.6
June 01	Pioneer 37R71	191	7.6	10.6	12.4	43.1
June 01	Pioneer 37R71	204	12.9	14.1	15.5	78.6
June 01	Pioneer 37R71	220	17.4	17.4	17.4	101.1

continued

**Table C-25. Planting Date And Hybrid Influence On Corn Leaf Development**  
(continued) **Arlington, WI - 2007.**

Date of Planting	Hybrid	Observation Date day of year	Leaf Development			Plant height inches
			Leaf collars no./plant	Hail adjusters method no./plant	Total leaves no./plant	
June 15	NK Brand N58-D1	149	-	-	-	-
June 15	NK Brand N58-D1	162	-	-	-	-
June 15	NK Brand N58-D1	177	1.9	3.4	3.8	4.3
June 15	NK Brand N58-D1	191	6.3	8.4	9.1	22.3
June 15	NK Brand N58-D1	204	8.9	11.8	13.5	49.0
June 15	NK Brand N58-D1	220	16.0	16.6	18.0	103.1
June 15	Pioneer 37R71	149	-	-	-	-
June 15	Pioneer 37R71	162	-	-	-	-
June 15	Pioneer 37R71	177	2.6	3.9	4.9	8.0
June 15	Pioneer 37R71	191	6.5	9.0	10.6	28.5
June 15	Pioneer 37R71	204	9.0	11.9	13.8	54.1
June 15	Pioneer 37R71	220	17.8	17.8	17.8	103.0
<b>Mean</b>			11.0	12.6	13.4	58.8
<b><u>Probability(%)</u></b>						
Date of Planting (D)			0.0	0.0	0.0	0.0
Hybrid (H)			73.8	4.8	6.2	4.9
D x H			0.0	0.0	0.0	0.0
Sample DOY (S)			0.0	0.0	0.0	0.0
D x S			0.0	0.0	0.0	0.0
H x S			6.3	15.5	0.0	0.0
D x H x S			0.0	2.8	33.3	0.0
<b><u>LSD(0.10)</u></b>						
Date of Planting (D)			0.5	0.6	0.6	3.6
Hybrid (H)			NS	0.2	0.2	0.8
D x H			0.3	0.4	0.4	1.9
Sample DOY (S)			0.3	0.3	0.3	1.5
D x S			0.6	0.6	0.6	3.3
H x S			0.4	NS	0.4	2.1
D x H x S			0.8	0.9	NS	4.6
<b><u>CV(%)</u></b>						
			6	6	6	7