FIELD EXPERIMENT HISTORY

Title: **Plant Density and Hybrid Influence on Corn Grain and Silage Performance**

Experiment: 02PD **Trial ID:** 6343 **Year:** 2019

Personnel: Joe Lauer, Kent Kohn, Thierno Diallo

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

Supported By: HATCH

Site Information

Field: ARS408 **Previous Crop:** Alfalfa **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 5 /13/19 **pH:** 5.7 **OM (%)** 3.3 **P (ppm)** 30 **K (ppm)** 136

Plot Management

Tillage Operations: Disk Chisel Field Cultivator

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	32-0-0	123	N/A
	Starter :	9-11-30-6S-1Zn	200 lbs/A	5 /13/19
	Post plant :	N/A	N/A	N/A
	Manure:	Dairy	9258 gal/A	N/A

Herbicide: Resicore 80.0 oz/A **Insecticide:** Force 3G 4.4 lbs/A

Irrigation: None **Hybrid:** See Factors

Planting Date: 5/13/19 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: See Factors **Planting Method:** Almaco Precision Planter

Harvest Date: S: 9/18/19 **Harvest Method:** S: New Holland 707
G: Massey 8XP

Notes: Populations were affected by poor emergence. Plot suffered severe lodging on July 19 and July 20.

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 20' x 25' **Experiment Size:** 1.0 A

Harvest Plot Size: S: 2.5' x 23'
G: 5' x 23' **Harvest Plant Density:** 29356

Factors/Treatments:

Target Plant Density:

1) 20000
2) 26000
3) 32000
4) 38000
5) 44000
6) 50000

Hybrid:

1) Pioneer P9998AMXT
2) Dekalb DKC58-06RIB

Results: Tables 1902-01 & 1902-02.

Table: 1902-01. Plant Density and Hybrid Influence on Corn Grain. Arlington, WI - 2019.

Hybrid	Target density	Density Harvest	Density Ears	Yield	Moisture	Test weight	Lodged Total	Lodged Stalk	Lodged Root	AGR $3.54
	plants/A	plants/A	ears/A	bu/A	%	lbs/bu	%	%	%	$/A
Dekalb DKC58-06RIB		30066	30361	234	28.2	56	16.9	0.3	16.6	716
Pioneer P9998AMXT		28645	29040	220	24.3	55	20.2	0.9	19.3	688
	20000	22396	23472	210	26.5	56	0.2	0.2	0.0	648
	26000	25805	26365	231	26.4	55	1.3	0.2	1.1	715
	32000	25994	28184	245	26.4	56	8.3	0.6	7.7	758
	38000	31912	33540	250	25.9	56	17.6	0.9	16.7	775
	44000	32765	31108	240	25.5	55	39.3	1.7	37.6	746
	50000	37263	35535	186	26.9	55	44.6	0.0	44.6	573
Dekalb DKC58-06RIB	20000	24905	26175	231	28.6	56	0.5	0.5	0.0	706
Dekalb DKC58-06RIB	26000	26894	27313	247	28.2	55	1.1	0.0	1.1	756
Dekalb DKC58-06RIB	32000	26420	27153	254	29.0	56	5.4	1.1	4.2	774
Dekalb DKC58-06RIB	38000	32197	30455	248	27.6	56	15.2	0.3	14.9	760
Dekalb DKC58-06RIB	44000	33333	31487	235	27.2	55	36.6	0.0	36.6	724
Dekalb DKC58-06RIB	50000	36647	39584	190	28.4	56	42.8	0.0	42.8	579
Pioneer P9998AMXT	20000	19886	20770	188	24.4	55	0.0	0.0	0.0	589
Pioneer P9998AMXT	26000	24716	25417	215	24.5	55	1.5	0.4	1.1	674
Pioneer P9998AMXT	32000	25568	29214	236	23.8	55	11.2	0.0	11.2	742
Pioneer P9998AMXT	38000	31628	36626	252	24.2	56	20.1	1.6	18.5	789
Pioneer P9998AMXT	44000	32197	30729	244	23.7	55	42.1	3.5	38.6	769
Pioneer P9998AMXT	50000	37878	31487	182	25.4	55	46.4	0.0	46.4	567
Mean		29356	29701	227	26.3	55	18.6	0.6	18.0	702
Probability(%)										
Hybrid (H)		14.3	41.3	19.3	0.0	26.8	31.5	31.3	41.5	42.4
Plant Density (D)		0.0	1.0	1.6	5.2	85.4	0.0	53.1	0.0	1.5
Plant Density x Hybrid		55.3	22.5	72.2	26.2	63.9	98.8	26.6	99.0	74.2
LSD (0.10)										
Hybrid (H)		NS	NS	NS	0.4	NS	NS	NS	NS	NS
Plant Density (D)		2775	4922	32	0.8	NS	9.5	NS	9.7	102
Plant Density x Hybrid		NS	NS	NS	NS	NS	NS	NS	NS	NS

Table: 1902-02. Cutting Height, Plant Density and Hybrid Influence on Silage Preformance. Arlington WI - 2019.

Hybrid	Target density	Density Harvest	Density Ears	Dry Matter Yield	Moist	Kernel milk	KMR 0-5	SMR 0-5	VMR 0-10	Crude protein	ADF	NDF	*In Vitro* Digest	NDFD	Starch	Milk per Ton	Milk per Acre
	plants/A	plants/A	ears/A	T/A	%	%				%	%	%	%	%	%	lbs/T	lbs/A
Dekalb DKC58-06RIB		31122	32218	8.9	69.0	58.5	2.9	1.8	4.7	7.4	20.1	37.4	84.6	58.9	27.3	2990	26669
Pioneer P9998AMXT		29955	31565	8.2	68.1	52.1	2.6	1.8	4.4	7.7	20.2	37.7	85.3	61.1	26.5	3007	24867
	20000	17708	20707	8.0	69.4	61.9	3.1	2.4	5.5	7.7	20.8	38.4	84.6	60.0	25.9	2968	23686
	26000	23674	24621	9.7	68.1	54.4	2.7	1.9	4.6	7.3	20.2	37.5	84.6	59.0	27.1	2976	28719
	32000	29261	29734	10.0	69.0	55.6	2.8	1.6	4.3	7.4	19.6	36.7	85.9	61.7	27.4	3020	30303
	38000	33143	35606	8.7	68.7	50.6	2.5	1.8	4.3	7.3	20.6	37.8	84.6	59.5	27.7	3046	26403
	44000	36645	38257	7.7	68.6	57.5	2.9	1.7	4.6	7.9	19.5	37.5	85.0	60.1	26.1	2956	22971
	50000	42802	42424	7.4	67.4	51.9	2.6	1.5	4.1	7.6	20.2	37.5	84.9	59.7	27.2	3023	22526
Dekalb DKC58-06RIB	20000	18750	21969	8.4	70.2	63.8	3.2	2.3	5.4	7.6	21.5	39.1	83.5	57.9	26.9	3035	25140
Dekalb DKC58-06RIB	26000	24431	25505	10.0	68.9	61.3	3.1	1.9	4.9	7.2	19.8	37.2	84.3	57.6	28.0	2990	29949
Dekalb DKC58-06RIB	32000	30492	28409	10.4	68.3	60.0	3.0	1.6	4.6	7.2	19.3	36.3	85.5	60.1	28.6	3044	31710
Dekalb DKC58-06RIB	38000	34090	34848	9.1	70.4	56.2	2.8	1.8	4.6	7.3	21.5	38.8	83.8	58.3	25.2	2866	26084
Dekalb DKC58-06RIB	44000	36358	40151	8.1	68.5	63.8	3.2	1.8	5.0	7.7	18.4	35.9	85.8	60.4	27.8	3010	24090
Dekalb DKC58-06RIB	50000	42613	42424	7.7	67.7	46.2	2.3	1.5	3.8	7.3	20.1	37.3	84.8	59.3	27.4	2993	23043
Pioneer P9998AMXT	20000	16666	19444	7.7	68.7	60.0	3.0	2.5	5.5	7.7	20.1	37.6	85.8	62.1	24.9	2901	22232
Pioneer P9998AMXT	26000	22916	23737	9.3	67.2	47.5	2.4	1.8	4.2	7.5	20.6	37.8	85.0	60.5	26.3	2961	27489
Pioneer P9998AMXT	32000	28030	31060	9.5	69.6	51.3	2.6	1.6	4.1	7.6	19.9	37.2	86.3	63.3	26.2	2997	28896
Pioneer P9998AMXT	38000	32197	36363	8.3	67.0	45.0	2.3	1.7	4.0	7.4	19.8	36.8	85.5	60.7	30.1	3226	26722
Pioneer P9998AMXT	44000	36931	36363	7.3	68.7	51.2	2.6	1.6	4.1	8.0	20.7	39.1	84.3	59.8	24.4	2902	21852
Pioneer P9998AMXT	50000	42992	42424	7.2	67.1	57.5	2.9	1.5	4.3	8.0	20.4	37.6	85.0	60.2	27.1	3053	22008
Mean		30539	31891	8.6	68.5	55.3	2.8	1.8	4.6	7.5	20.2	37.6	84.9	60.0	26.9	2998	25768
Probability(%)																	
Hybrid (H)		37.7	77.6	28.7	26.3	21.6	21.6	81.6	34.5	4.7	83.5	76.9	31.0	9.2	52.8	80.8	38.6
Plant Density (D)		0.0	1.5	0.7	58.6	30.3	30.3	2.2	2.5	1.3	81.5	90.3	79.9	63.5	92.2	95.5	2.8
Hybrid x Density (H x D)		95.2	93.0	100.0	41.1	16.9	16.9	93.8	44.5	45.0	46.3	46.5	53.1	68.5	36.4	28.5	98.4
LSD (0.10)																	
Hybrid (H)		NS	NS	NS	NS	NS	NS	NS	NS	0.2	NS	NS	NS	2.1	NS	NS	NS
Plant Density (D)		3322	7672	1.3	NS	NS	NS	0.4	0.7	0.3	NS	NS	NS	NS	NS	NS	4563
Hybrid x Density (H x D)		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

FIELD EXPERIMENT HISTORY

Title: **Plant Density and Hybrid Influence on Corn Grain and Silage Performance**

Experiment: 02PD **Trial ID:** 6425 **Year:** 2019

Personnel: Joe Lauer, Kent Kohn, Thierno Diallo

Location: Marshfield, WI **County:** Marathon

Supported By: HATCH

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 5 /15/19 **pH:** 6.1 **OM (%)** 2.8 **P (ppm)** 67 **K (ppm)** 147

Plot Management

Tillage Operations: Chisel Plow Field Cultivator

		Analysis:	Rate lbs/A:	Date:
Fertilizer:	**Preplant :**	N/A	N/A	N/A
	Starter :	9-11-30-6S-1Zn	200 lbs/A	5 /15/19
	Post plant :	46-0-0	46 lbs/A	N/A
	Manure:	N/A		N/A

Herbicide: Callisto Xtra 26.0 oz/A
Primero 0.5 oz/A
Charger Max 1.0 pt/A

Insecticide: Force 3G 4.4 lbs/A

Irrigation: None **Hybrid:** See Factors

Planting Date: 5/15/19 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: See Factors **Planting Method:** Almaco Precision Planter

Harvest Date: S: 10/7/19 **Harvest Method:** S: New Holland 707
G: Massey 8XP

Notes: Populations were effected by poor emergence.

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 20' x 25' **Experiment Size:** 1.0 A

Harvest Plot Size: S: 2.5' x 23'
G: 5' x 23' **Harvest Plant Density:** 29719

Factors/Treatments:

Target Plant Density:	Hybrid:	Cutting height
1) 20000	1) Jung 42DP419RIB	1) High-cut: 24-inches
2) 26000	2) Pioneer P9998AMXT	2) Low-cut: 6-inches
3) 32000		
4) 38000		
5) 44000		
6) 50000		

Results: Tables 1902-03 & 1902-04.

Table: 1902-03. Plant Density and Hybrid Influence on Corn Grain. Marshfield, WI - 2019.

Hybrid	Target density	Density V5	Density Harvest	Density Ears	Yield	Moisture	Test weight	Lodged Total	Lodged Stalk	Lodged Root	AGR $3.54
	plants/A	plants/A	plants/A	ears/A	bu/A	%	lbs/bu	%	%	%	$/A
Jung 42DP419		31455	26389	26594	161	28.4	51	4.7	4.6	0.1	491
Pioneer P9998AMXT		27983	26894	27288	158	29.9	52	0.3	0.3	0.0	479
	20000	17377	16430	17471	136	29.0	52	2.6	2.6	0.0	414
	26000	21354	21212	21543	149	29.4	51	0.7	0.7	0.0	453
	32000	27130	23627	23769	154	30.1	52	7.9	7.9	0.0	464
	38000	35321	31770	31912	166	29.6	52	1.1	1.1	0.0	504
	44000	38873	32717	32812	170	28.5	51	1.3	1.3	0.0	520
	50000	38257	34090	34138	182	28.6	51	1.7	1.2	0.4	555
Jung 42DP419	20000	18560	16856	17424	142	27.9	52	4.0	4.0	0.0	436
Jung 42DP419	26000	22348	20454	20738	152	28.6	51	1.4	1.4	0.0	462
Jung 42DP419	32000	27556	22253	22538	148	29.8	51	15.5	15.5	0.0	447
Jung 42DP419	38000	38636	33333	33333	170	28.5	52	2.1	2.1	0.0	518
Jung 42DP419	44000	41950	31534	31534	170	27.7	51	2.4	2.4	0.0	522
Jung 42DP419	50000	39677	33901	33996	183	28.2	51	3.1	2.2	0.8	561
Pioneer P9998AMXT	20000	16193	16004	17519	130	30.1	53	1.1	1.1	0.0	392
Pioneer P9998AMXT	26000	20360	21969	22348	147	30.1	51	0.0	0.0	0.0	444
Pioneer P9998AMXT	32000	26704	25000	25000	160	30.4	52	0.4	0.4	0.0	480
Pioneer P9998AMXT	38000	32007	30208	30492	163	30.6	52	0.0	0.0	0.0	491
Pioneer P9998AMXT	44000	35795	33901	34090	170	29.3	51	0.3	0.3	0.0	518
Pioneer P9998AMXT	50000	36837	34280	34280	181	29.1	52	0.3	0.3	0.0	550
Mean		29719	26641	26941	160	29.2	52	2.5	2.5	0.1	485
Probability(%)											
Hybrid (H)		0.3	62.9	50.0	77.8	0.2	16.0	10.6	11.4	32.5	63.4
Plant Density (D)		0.0	0.0	0.0	2.4	34.8	45.5	63.0	60.9	43.3	2.9
Plant Density x Hybrid		57.3	58.4	65.7	96.8	89.8	90.8	66.0	63.9	43.3	96.5
LSD (0.10)											
Hybrid (H)		1850	NS	NS	NS	0.8	NS	NS	NS	NS	NS
Plant Density (D)		3204	3038	2982	23	NS	NS	NS	NS	NS	72
Plant Density x Hybrid		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table: 1902-04. Cutting Height, Plant Density and Hybrid Influence on Silage Preformance.

Marshfield, WI - 2019. (page 1 of 2)

			Whole Plant															
	Target	Cutting	Density		Dry Matter		Kernel	KMR	SMR	VMR	Crude			*In Vitro*			Milk per	
Hybrid	density	height	V5	Harvest	Yield	Moist	milk	0-5	0-5	0-10	protein	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
	plants/A	inches	plants/A	plants/A	T/A	%	%				%	%	%	%	%	%	lbs/T	lbs/A
Jung 42DP419			31846	27886	7.3	63.6	37.7	1.9	0.5	2.4	5.4	20.9	39.0	83.5	58.0	29.8	3039	22147
Pioneer P9998AMXT			29387	25694	6.8	67.4	45.7	2.3	1.3	3.6	5.6	20.3	38.3	85.3	61.8	28.6	3056	20878
	20000		17789	17122	5.9	66.7	44.1	2.2	1.4	3.6	6.2	19.8	37.8	85.1	60.9	29.0	3072	18122
	26000		23769	21022	6.4	66.6	39.4	2.0	0.9	2.9	5.9	20.9	39.0	84.3	59.8	27.9	3013	19142
	32000		28030	24668	6.6	65.1	42.5	2.1	0.8	2.9	5.1	20.5	38.7	84.4	60.0	29.5	3039	20247
	38000		33714	29036	7.5	64.3	46.3	2.3	0.8	3.1	5.2	20.3	38.2	84.8	60.4	30.4	3089	23032
	44000		37499	32954	8.0	64.6	43.0	2.1	0.7	2.8	5.2	20.0	37.8	84.8	60.0	30.8	3106	25002
	50000		42897	35937	7.9	65.6	35.0	1.7	1.0	2.8	5.2	22.1	40.2	83.1	58.1	27.9	2967	23530
		6	30461	25477	7.0	67.3	41.6	2.1	0.9	3.0	5.0	22.1	40.4	83.0	58.1	27.4	2937	20523
		24	30772	28103	7.1	63.6	41.7	2.1	0.9	3.0	6.0	19.1	36.8	85.8	61.6	31.1	3158	22502
Jung 42DP419	20000		18344	17483	5.9	64.5	42.5	2.1	0.5	2.7	5.9	20.5	38.7	83.5	57.7	28.9	2985	17701
Jung 42DP419	26000		25189	23106	6.9	64.6	38.8	1.9	0.6	2.5	6.0	21.3	39.3	83.4	57.7	28.7	3034	20772
Jung 42DP419	32000		29261	25094	6.8	63.3	35.0	1.8	0.5	2.3	5.2	21.0	39.2	83.5	58.1	29.8	3037	20848
Jung 42DP419	38000		33717	30042	8.0	61.8	41.3	2.1	0.5	2.6	4.9	19.7	37.5	84.6	59.4	32.7	3141	24969
Jung 42DP419	44000		40909	35037	8.0	63.2	38.5	1.9	0.3	2.3	5.1	20.5	38.3	83.9	58.1	31.0	3070	24841
Jung 42DP419	50000		43655	36553	8.0	64.0	30.0	1.5	0.8	2.3	5.3	22.4	40.8	82.4	57.0	28.0	2967	23753
Pioneer P9998AMXT	20000		17235	16761	5.9	68.9	45.6	2.3	2.2	4.5	6.5	19.0	36.9	86.8	64.2	29.1	3158	18544
Pioneer P9998AMXT	26000		22348	18939	5.8	68.6	40.0	2.0	1.3	3.3	5.9	20.6	38.7	85.3	62.0	27.1	2992	17512
Pioneer P9998AMXT	32000		26799	24242	6.4	66.8	50.0	2.5	1.2	3.6	5.1	20.0	38.2	85.4	61.9	29.2	3042	19647
Pioneer P9998AMXT	38000		33712	28030	7.0	66.8	51.2	2.6	1.1	3.6	5.5	20.8	38.8	85.0	61.5	28.2	3037	21095
Pioneer P9998AMXT	44000		34090	30871	7.9	66.0	47.5	2.4	1.0	3.3	5.4	19.6	37.3	85.8	61.9	30.5	3143	25164
Pioneer P9998AMXT	50000		42140	35321	7.8	67.3	40.0	2.0	1.3	3.3	5.1	21.7	39.7	83.7	59.2	27.8	2967	23307
Jung 42DP419		6	31472	26680	7.1	66.2	37.7	1.9	0.5	2.4	4.9	22.8	41.3	81.8	56.0	27.4	2922	20924
Jung 42DP419		24	32219	29091	7.4	61.0	37.7	1.9	0.5	2.4	5.8	19.0	36.6	85.3	60.0	32.3	3156	23371
Pioneer P9998AMXT		6	29450	24274	6.8	68.5	45.6	2.3	1.3	3.6	5.1	21.5	39.6	84.3	60.3	27.3	2953	20123
Pioneer P9998AMXT		24	29324	27115	6.8	66.3	45.8	2.3	1.4	3.6	6.1	19.1	36.9	86.4	63.2	29.9	3160	21633
	20000	6	17235	16098	5.9	68.4	43.7	2.2	1.4	3.5	5.7	21.2	39.5	83.6	58.8	27.4	2963	17510
	20000	24	18344	18145	5.9	64.9	44.4	2.2	1.4	3.6	6.7	18.3	36.2	86.6	63.0	30.5	3180	18734
	26000	6	23674	20360	6.7	67.3	39.4	2.0	0.9	2.9	5.4	21.7	39.7	83.6	58.8	27.3	2948	19882
	26000	24	23863	21685	6.0	65.9	39.4	2.0	0.9	2.9	6.4	20.2	38.3	85.0	60.8	28.5	3079	18401
	32000	6	28030	22822	6.1	67.6	42.5	2.1	0.8	2.9	4.6	22.5	41.1	82.8	58.2	26.9	2902	17718
	32000	24	28030	26515	7.2	62.5	42.5	2.1	0.9	3.0	5.7	18.6	36.2	86.1	61.8	32.1	3176	22777
	38000	6	33527	28716	7.4	66.5	46.3	2.3	0.7	3.1	4.7	22.7	41.3	82.5	57.6	27.4	2943	21594
	38000	24	33901	29356	7.5	62.2	46.2	2.3	0.8	3.2	5.7	17.8	35.0	87.1	63.2	33.5	3235	24471
	44000	6	37310	30681	7.5	67.1	43.0	2.1	0.6	2.8	4.7	22.0	40.2	83.4	58.7	27.9	2964	22480
	44000	24	37689	35227	8.5	62.2	43.0	2.1	0.7	2.8	5.7	18.1	35.4	86.3	61.2	33.6	3249	27525
	50000	6	42992	34185	8.2	67.1	35.0	1.7	1.0	2.8	4.9	22.8	40.9	82.3	56.7	27.2	2905	23955
	50000	24	42802	37689	7.6	64.1	35.0	1.7	1.0	2.8	5.4	21.3	39.6	83.9	59.5	28.6	3029	23104

continued

Table: 1902-04. Cutting Height, Plant Density and Hybrid Influence on Silage Preformance.

(continued) **Marshfield, WI - 2019. (page 2 of 2)**

			Whole Plant															
	Target	Cutting	Density		Dry Matter		Kernel	KMR	SMR	VMR	Crude			*In Vitro*			Milk per	
Hybrid	density	height	V3	Harvest	Yield	Moist	milk	0-5	0-5	0-10	protein	ADF	NDF	Digest	NDFD	Starch	Ton	Acre
	plants/A	inches	plants/A	plants/A	T/A	%	%				%	%	%	%	%	%	lbs/T	lbs/A
Jung 42DP419	20000	6	17803	16477	5.6	67.7	42.5	2.1	0.5	2.7	5.2	23.1	42.1	81.0	54.8	25.3	2788	15862
Jung 42DP419	20000	24	18885	18488	6.2	61.2	42.5	2.1	0.5	2.7	6.6	17.9	35.4	86.0	60.5	32.4	3182	19540
Jung 42DP419	26000	6	25000	21969	7.3	65.7	38.8	1.9	0.6	2.5	5.6	22.2	40.3	82.5	56.6	27.3	2935	21399
Jung 42DP419	26000	24	25378	24242	6.4	63.5	38.8	1.9	0.6	2.5	6.3	20.4	38.2	84.3	58.8	30.1	3133	20144
Jung 42DP419	32000	6	28598	22348	6.4	66.2	35.0	1.8	0.5	2.3	4.8	23.0	41.7	81.5	55.7	27.2	2917	18823
Jung 42DP419	32000	24	29924	27841	7.3	60.5	35.0	1.8	0.5	2.3	5.6	19.0	36.7	85.5	60.5	32.5	3156	22873
Jung 42DP419	38000	6	33722	29781	7.6	65.2	41.3	2.1	0.5	2.5	4.4	22.9	41.8	81.7	56.3	28.3	2983	22381
Jung 42DP419	38000	24	33712	30303	8.3	58.5	41.2	2.1	0.5	2.6	5.4	16.6	33.3	87.5	62.5	37.0	3298	27557
Jung 42DP419	44000	6	40340	34280	7.2	66.8	38.5	1.9	0.3	2.3	4.6	22.9	41.0	82.3	56.8	27.8	2942	21310
Jung 42DP419	44000	24	41477	35795	8.9	59.7	38.5	1.9	0.3	2.3	5.5	18.2	35.7	85.5	59.4	34.3	3198	28372
Jung 42DP419	50000	6	43371	35227	8.7	65.3	30.0	1.5	0.8	2.3	5.0	22.6	41.0	81.8	55.6	28.3	2964	25765
Jung 42DP419	50000	24	43939	37878	7.3	62.7	30.0	1.5	0.7	2.3	5.5	22.2	40.7	83.0	58.3	27.7	2969	21740
Pioneer P9998AMXT	20000	6	16666	15719	6.1	69.1	45.0	2.3	2.2	4.4	6.2	19.3	36.9	86.3	62.8	29.6	3138	19158
Pioneer P9998AMXT	20000	24	17803	17803	5.6	68.7	46.3	2.3	2.2	4.5	6.9	18.8	37.0	87.3	65.6	28.6	3178	17929
Pioneer P9998AMXT	26000	6	22348	18750	6.2	68.8	40.0	2.0	1.3	3.3	5.3	21.2	39.1	84.8	61.1	27.4	2961	18364
Pioneer P9998AMXT	26000	24	22348	19129	5.5	68.4	40.0	2.0	1.3	3.3	6.5	20.0	38.3	85.8	62.8	26.9	3024	16659
Pioneer P9998AMXT	32000	6	27462	23295	5.8	69.0	50.0	2.5	1.1	3.6	4.3	21.9	40.5	84.0	60.7	26.6	2887	16613
Pioneer P9998AMXT	32000	24	26136	25189	7.1	64.5	50.0	2.5	1.2	3.7	5.8	18.2	35.8	86.8	63.2	31.8	3197	22680
Pioneer P9998AMXT	38000	6	33333	27651	7.2	67.8	51.2	2.6	1.0	3.6	4.9	22.5	40.8	83.3	59.0	26.5	2902	20806
Pioneer P9998AMXT	38000	24	34090	28409	6.7	65.9	51.2	2.6	1.2	3.7	6.0	19.1	36.8	86.8	64.0	29.9	3171	21385
Pioneer P9998AMXT	44000	6	34280	27083	7.8	67.4	47.5	2.4	0.9	3.3	4.8	21.2	39.4	84.5	60.6	28.0	2985	23649
Pioneer P9998AMXT	44000	24	33901	34659	8.1	64.6	47.5	2.4	1.0	3.3	6.0	17.9	35.2	87.0	63.1	33.0	3300	26678
Pioneer P9998AMXT	50000	6	42613	33143	7.7	69.0	40.0	2.0	1.2	3.2	4.8	22.9	40.9	82.8	57.8	26.1	2845	22145
Pioneer P9998AMXT	50000	24	41666	37499	7.9	65.5	40.0	2.0	1.3	3.3	5.4	20.5	38.5	84.7	60.6	29.4	3089	24468
Mean			30616	26790	7.0	65.5	41.7	2.1	0.9	3.0	5.5	20.6	38.6	84.4	59.9	29.2	3048	21513
Probability(%)																		
Hybrid (H)			3.5	11.6	25.3	0.6	8.4	8.4	2.7	2.8	30.0	19.7	25.3	1.3	0.5	18.8	65.9	33.1
Plant Density (D)			0.0	0.0	0.0	0.5	40.6	40.6	6.3	36.5	0.2	1.7	8.1	2.2	1.2	10.6	25.3	0.0
Hybrid x Density (H x D)			9.6	79.9	76.9	61.7	82.8	82.8	13.5	80.5	51.8	49.0	66.4	33.1	6.0	47.5	34.5	53.1
Cutting Height (C)			60.7	0.1	52.5	0.0	62.3	62.3	11.4	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
H x C			99.2	55.8	13.7	7.6	92.8	92.8	47.7	64.7	40.6	5.4	5.0	9.2	18.0	17.6	58.2	10.5
D x C			47.0	75.7	63.8	0.1	60.6	60.6	10.1	7.1	31.4	8.6	5.8	4.7	17.2	10.2	70.5	57.5
D x H x C			96.9	44.0	39.5	11.8	93.1	93.1	90.3	94.1	31.9	18.6	18.6	45.1	87.8	21.7	26.5	31.4
LSD (0.10)																		
Hybrid (H)			1572	NS	NS	1.3	7.4	0.4	0.4	0.7	NS	NS	NS	0.8	1.2	NS	NS	NS
Plant Density (D)			1964	2817	0.7	1.2	NS	NS	0.4	NS	0.5	1.1	1.5	1.0	1.2	NS	NS	2491
Hybrid x Density (H x D)			2777	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.8	NS	NS	NS
Cutting Height (C)			NS	1164	NS	0.7	NS	NS	NS	0.0	0.1	0.6	0.9	0.6	0.7	1.2	61	1397
H x C			NS	NS	NS	1.6	NS	NS	NS	NS	NS	1.5	2.1	1.4	NS	NS	NS	NS
D x C			NS	NS	NS	1.1	NS	NS	NS	0.3	NS	0.9	1.2	0.8	NS	NS	NS	NS
D x H x C			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS