

2011 Experiment Conducted by the NDSU Corn Breeding Program across Southern North Dakota Locations

Company	Hybrid	Grain Yield (bu/A)	Grain Moisture (%)	Test Weight (lb/bu)	Root Lodging (%)	Stalk Lodging (%)	Ear Drop (%)
Proseed	1191VT3P	145.4	15.5	56.3	2.5	0.6	0.4
Seeds2000	9202 VT2P	132.1	15.8	56.2	1.8	0.4	0.0
Monsanto	DKC45-51	131.0	18.0	55.2	1.7	0.5	0.5
Seeds2000	9503 VT2P	129.5	15.3	56.8	6.8	2.6	0.4
Gold Country	93-07VT3p	127.6	15.3	55.7	2.7	1.0	0.0
Kruger	K4-9599	124.9	19.1	54.6	2.4	5.7	0.8
Dairyland	ST-9992	124.8	15.9	57.5	4.9	7.8	0.5
Gold Country	96-20VT3p	123.4	17.5	56.5	6.5	0.0	0.0
Dairyland	ST-9291SSX	123.0	15.7	55.2	1.6	2.9	2.3
G2 Genetics	5H-501TM	122.4	19.5	55.5	3.2	0.6	0.0
Peterson	PFS 45Q93	120.3	17.0	55.0	6.3	1.9	0.0
Proseed	1193 VT3P	119.8	16.2	57.0	12.4	0.5	0.5
Kruger	K-7495	119.7	17.6	55.9	4.0	0.5	0.9
Gold Country	98-90SS	119.5	18.8	55.7	1.0	0.2	0.0
G2 Genetics	5H-797TM	119.1	15.5	54.5	4.1	0.0	0.4
Nu Tech	5N-592	117.2	16.2	57.4	8.5	3.2	0.5
Monsanto	DKC48-12	115.9	17.1	54.3	4.1	0.0	0.0
G2 Genetics	5X-500TM	113.6	18.7	55.3	0.9	0.5	2.4
Legend	9095GENSS	112.7	17.3	55.3	3.7	3.2	0.0
Integra	9453	112.6	17.4	54.3	4.4	0.6	2.2
Monsanto	DKC42-72	112.3	16.0	54.8	6.9	2.4	0.0
G2 Genetics	5H-492TM	111.7	14.4	56.6	7.2	1.8	1.4
Pioneer	P9630AM1	111.7	16.5	54.8	4.0	4.0	0.6
Hyland	8395	111.3	14.8	55.0	3.9	0.0	4.4
G2 Genetics	5X-795TM	111.0	16.1	55.0	3.0	0.3	7.9
Hyland	Hyland8386	110.9	15.6	58.0	3.1	1.2	2.8
Kruger	K-7194	108.7	15.2	56.3	4.5	2.5	0.4
Peterson	PFS 76L92	107.4	15.9	57.0	2.6	0.0	1.2
G2 Genetics	5X-895TM	107.4	17.6	53.2	10.0	0.1	2.4

Seeds2000	2903GTCBLL	106.9	16.1	54.5	18.5	1.0	2.4
Pioneer	38H08	106.8	15.8	53.7	2.6	0.0	1.7
Kruger	K-7593	106.3	16.0	56.8	10.5	0.6	0.0
Wensman	W7273VT3	104.8	18.0	53.2	0.6	0.3	0.0
G2 Genetics	5H-0101TM	103.2	20.5	52.3	3.9	1.7	0.5
Nu Tech	5N-197	100.9	18.5	53.5	6.3	3.6	2.9
Nu Tech	5N-001	100.8	20.3	50.7	19.3	0.0	1.0
Kruger	K-4292	100.7	16.8	54.8	8.8	0.3	0.6
Wensman	W7268VT3	100.2	16.7	55.7	16.2	3.2	0.0
Nu Tech	5B-0205	97.0	18.7	56.8	10.5	0.0	8.0
Kruger	K-6399VT3	96.9	19.7	53.7	6.6	3.9	0.4
Nu Tech	3A-9901	96.8	17.8	52.2	6.8	1.0	0.9
Peterson	PFS 98L90	96.1	15.2	55.0	31.8	1.2	1.6
G2 Genetics	5H-502TM	95.1	21.5	54.7	0.6	0.3	0.0
Seeds2000	9602 G3	92.4	16.7	53.9	11.7	2.7	3.3
Seeds2000	9902 VP	91.6	21.0	54.1	25.7	3.6	0.4
Kruger	K4-9100	89.4	19.1	53.9	6.5	0.3	0.4
G2 Genetics	5H-597TM	83.6	17.8	54.7	9.6	4.8	1.9
Proseed	1091 3000GT	82.3	15.7	54.0	18.1	0.0	2.8
Proseed	794 3000GT	79.8	16.7	54.6	12.4	0.0	4.0
	Means across Southeastern ND Locations	109.8	17.1	55.1	7.3	1.5	1.3
	LSD (0.05)	35.6	2.3	2.0	7.1	13.6	5.0
	CV (%)	25.8	8.3	2.2	60.7	562.7	230.6

The same hybrids were planted across three dryland locations within Southeastern ND region (Gwinner, Barney and Colfax)

Growing the same hybrids across locations expose the real advantages and weaknesses of hybrids for traits

Experiments conducted by the NDSU Corn Breeding Program

Relative maturity given by Industry may not correspond to moisture at harvest. Check both!

The Lattice experimental design was up to 167% more efficient than a Randomized Complete Block Design (RCBD) for most traits

No significant differences across hybrids for stand

CV Values for Yield were larger than normal due to low experiment means for this trait