

2009 LARIMORE EXPERIMENT CONDUCTED BY NDSU CORN BREEDING PROGRAM

Company	Hybrid	Grain Yield t/ha	Grain Yield bu/A	Grain Moisture %	Plant Density pl/A	Plant Density pl/ac	Stalk Ldg %	Test Weight lb/bu
Monsanto	DKC36-34 VT3	11.6	185.0	19.6	76423	30928	0.0	50.8
NuTech	1B-186 CB/LL	11.1	176.6	23.2	76423	30928	0.0	48.3
NuTech	1B-183 CB/LL	10.8	171.0	22.1	75812	30681	0.0	48.9
Hyland Seeds	Hyland HL R228	10.7	170.0	19.3	76270	30866	0.0	51.8
NuTech	3A-484 RR	10.5	167.2	22.2	76194	30835	0.0	47.5
Gold Country	89-09 VT3	10.3	164.2	21.5	77499	31364	2.8	47.7
Pioneer	Pioneer Brand 39D97	10.2	162.8	18.5	76117	30804	0.0	51.2
Monsanto	DKC33-54 RR2	9.9	157.6	20.1	75965	30742	2.9	51.6
G2 Genetics	5H-884 RR/HX	9.9	156.7	21.4	75812	30681	0.0	46.6
Gold Country	84-03 VT3	9.8	156.5	17.9	75736	30650	0.0	52.5
NuTech	3T-083 VT3	9.8	156.0	21.9	76958	31144	0.0	50.1
Wensman Seed	W 7089VT3	9.8	156.0	21.6	76117	30804	0.0	48.5
NuTech	3A-383+ RR	9.7	154.9	20.9	75201	30433	3.7	48.8
Monsanto	DKC30-23 RR2	9.7	154.8	18.5	76270	30866	1.4	52.8
Jung Seed	7236 VT3	9.7	154.7	18.6	76117	30804	1.6	51.0
Wensman Seed	W 7085VT3	9.7	154.6	20.4	76041	30773	1.6	49.7
Kruger	K-6385 VT3	9.7	153.8	17.3	76117	30804	0.0	52.3
Kruger	K-1286 RR	9.7	153.6	19.6	75659	30619	0.0	52.9
NuTech	3T-484 VT3	9.6	153.2	21.5	76117	30804	0.0	47.8
NuTech	1N-887 CB/LL/RW	9.6	152.9	24.6	76881	31113	9.8	45.8
Seeds 2000	2843 RR	9.6	152.6	21.0	75812	30681	0.0	48.1
Pioneer	Pioneer Brand 39N99	9.6	152.3	24.6	76194	30835	0.0	48.1
Seeds 2000	8201 VT3	9.4	149.8	21.4	76041	30773	0.0	48.2
Hyland Seeds	Hyland HL CVR34	9.4	149.6	22.6	75965	30742	0.0	49.0
Pioneer	Pioneer Brand 39V07	9.3	147.5	20.7	76423	30928	0.0	48.9
Gold Country	87-01 VT3	9.2	146.3	22.0	76423	30928	7.1	50.2
Peterson Farm Seeds	56J86	9.2	146.0	22.7	76270	30866	5.7	47.7

Peterson Farm Seeds	21A78	9.0	143.6	19.8	77499	31364	0.0	51.3
Kruger	K-2381 RR/YGCB	8.7	138.8	17.7	76194	30835	2.9	52.6
Proseed	581 VT3	8.7	138.6	22.2	76041	30773	0.0	48.3
Proseed	786 CB/LL/GT	8.7	138.4	25.8	75506	30557	8.2	47.7
Kruger	K-6388 VT3	8.7	138.3	21.4	75736	30650	14.9	49.6
Jung Seed	3296 RR	8.7	138.2	20.9	75583	30588	5.4	51.3
Hyland Seeds	Hyland HL B24R	8.7	138.1	23.2	75812	30681	0.0	49.1
Proseed	884 VT3	8.6	137.1	21.4	75659	30619	3.3	50.0
Wensman Seed	W 7083VT3	8.5	135.0	18.4	75736	30650	10.9	51.2
Jung Seed	7209 VT3	8.5	134.6	20.5	76576	30990	12.2	50.5
Kruger	K-6378 VT3	8.4	133.7	21.2	75736	30650	0.0	49.8
Proseed	781 RRBT	8.2	131.1	25.2	76041	30773	0.0	46.9
Hyland Seeds	Hyland 08403BR	8.2	130.5	20.8	76194	30835	11.9	49.9
Proseed	787 VT3	8.0	127.2	19.4	75812	30681	0.0	51.9
Peterson Farm Seeds	37L84	8.0	126.5	25.8	75125	30402	0.0	46.1
Jung Seed	7288 VT3	7.7	122.7	25.7	76117	30804	18.0	46.7
NuTech	3C-882 RR/YGCB	7.2	115.1	19.6	76041	30773	19.2	49.4
Peterson Farm Seeds	54M83	7.0	110.9	20.6	75888	30712	11.1	49.7
	MEAN	9.3	147.4	21.2	76092	30794	3.5	49.5
	CV	8.7	8.7	6.4	3	3	125.1	2.8
	LSD (0.05)	1.7	27.0	2.6	2945	1785	11.3	2.9
	LATTICE EFFICIENCY (%)	121.5	121.5	102.3	108	108	102.2	91.7

No Root Lodging Differences Among Entries

The Lattice Design was much more powerful than the Randomized Complete Block Design (RCBD) as shown by efficiencies in most traits.

For instance, the statistical analysis on grain yield was 21.5% more efficient than RCBD (if the experiment was conducted as RCBD)