EXP 5 CASSELTON (THIS IS ONLY ONE LOCATION, CHECK FOR COMBINED DATA OF THE SAME HYBRIDS IN CENTRAL EAST ND)
SENT FOR WEB POSTING ON OCTOBER 9, 2012

The NDSU corn breeding program planted 36 experiments across >20 state locations in 2012. Of those experiments 25 were for breeding purposes and 9, specifically, to aid North Dakota farmers select their hybrids for planting in 2013. These are the Eastern ND Hybrid Corn Performance Trials and evaluate commercial hybrids available in the market. Colfax, Milnor, and Barney were used for the South Eastern ND trials, Casselton, Prosper and Fargo for the Central East ND trials, and Larimore, Thompson, and Lakota for the northern ND trials.

While extreme weather can be a disadvantage for production it is a breeding advantage to screen and discard unstable, weak corn varieties. Breeding for adaptation to climate changes is best done under target challenging but uniform environmental conditions where hybrid strengths and weaknesses are quickly identified and most stable ones succeed.

COMPANY	HYBRID NAME	Grain Yield	Grain Moisture	Test Weight	Stalk Lodging	Root Lodging	Dropped Ears
		bu/A	%	lb/bu	%	%	%
Seeds2000	2903 GTCBLL	95.31	18.15	49.20	0.00	1.39	0
NuTech	5B-290™	86.35	19.55	49.81	0.00	1.25	0
G2 Genetics	5H-890™	86.27	16.22	53.32	0.00	0.00	0
Integra	9390VT2 Pro	86.15	18.81	53.39	0.00	0.00	0
Wensman	W 7110VT3PRO	85.22	21.23	50.99	0.00	0.00	0
Peterson Farms	PFS 98L90	82.39	20.19	49.98	2.63	0.00	0
Dyna-Gro	CX23VP35	82.02	15.71	54.43	0.00	0.00	0
Gold Country	85-39VT3P	78.36	16.07	54.38	0.00	0.00	0
Proseed	1189 3000GT	77.47	20.25	52.91	0.00	0.00	0
Syngenta	N29T-3000GT Brand	76.88	20.34	50.22	0.00	0.00	0
Pioneer Hi-Bred	P8640HR	75.57	15.04	54.25	0.00	0.00	0
Seeds2000	8801 VT2P	75.36	13.55	55.83	0.00	1.19	0
Stine Seeds	Ex87A 3111GT	74.97	19.14	48.67	0.00	0.00	0
Monsanto	DKC38-03	74.28	18.82	54.36	0.00	0.00	0
Seeds2000	2852 GTCBLL	72.79	17.87	53.88	0.00	0.00	0
Hyland	8234	72.66	14.08	53.70	0.00	0.00	0
Hyland	8180	72.31	16.04	54.10	0.00	0.00	0
Dahlman	Dahlman R43-20VT2P	71.53	17.63	55.86	0.00	0.00	0
G2 Genetics	5H-587™	71.26	16.11	54.59	0.00	1.25	0
Renk Seed	RK302GTCBLLRW	71.00	19.42	49.23	0.00	1.32	0
Northstar Genetics	90-590	70.28	20.21	52.33	0.00	0.00	0

Syngenta	N21J-3000GT Brand	69.89	17.34	55.46	0.00	0.00	0
Dyna-Gro	D31VP31	69.64	20.15	53.17	0.00	0.00	0
Northstar Genetics	90-101	68.93	18.36	51.73	0.00	1.19	0
Proseed	1191 VT3P	68.45	20.99	53.79	0.00	0.00	0
G2 Genetics	5X-795™	68.40	20.45	49.74	0.00	0.00	0
Dyna-Gro	D26VP56	67.04	19.31	56.06	1.32	0.00	0
Seeds2000	9202 VT2P	66.77	17.82	52.38	0.00	0.00	0
Proseed	990 3000GT	66.40	19.13	50.86	0.00	0.00	0
Dahlman	Dahlman R44-66	64.67	19.52	52.17	0.00	0.00	0
CHECK 6		64.58	17.63	55.91	0.00	0.00	0
Dyna-Gro	52V01	64.28	16.05	54.17	0.00	1.19	0
NuTech	5N-186™	63.73	18.42	54.02	1.92	1.92	0
NuTech	5B-9102	62.69	17.75	53.59	0.00	0.00	0
Pioneer Hi-Bred	39N99	62.43	19.85	53.35	0.00	0.00	0
G2 Genetics	5X-193™	60.11	18.97	52.93	0.00	1.19	0
CHECK 3		60.08	18.03	55.89	0.00	0.00	0
Peterson Farms	PFS 74K89	59.63	18.79	55.40	0.00	0.00	0
Dairyland	DS9487SSX	59.07	21.44	50.50	0.00	0.00	0
Wensman	W 8120VT2RIB	55.61	20.33	51.36	1.19	1.19	0
Hyland	8166	55.26	18.18	54.21	0.00	0.00	0
CHECK 7		53.91	16.63	54.07	0.00	0.00	0
G2 Genetics	5X-9402™	52.96	16.42	35.02	0.00	0.00	0
Pioneer Hi-Bred	P8906HR	52.24	19.57	53.70	0.00	0.00	0
Integra	9361VT3	51.06	15.18	50.34	0.00	5.13	0
G2 Genetics	5H-289™	50.43	18.42	44.78	0.00	0.00	0
NuTech	3A-8801™	49.59	20.43	52.67	0.00	0.00	0
Proseed	1288 3111GT	49.28	18.49	49.19	0.00	0.00	0
Peterson Farms	PFS 57H87	46.11	18.26	54.78	0.00	0.00	0
Dairyland	DS9291SSX	44.92	19.74	52.90	0.00	0.00	0
Dairyland	DS9992	44.79	19.31	52.06	0.00	0.00	0
Hyland	8295	43.73	17.40	49.84	0.00	0.00	0
CHECK 4		42.82	20.66	49.43	0.00	1.56	0
CHECK 5		42.31	19.48	47.22	0.00	1.52	0
CHECK 2		42.02	17.24	51.48	0.00	0.00	0

CHECK 1		30.06	16.55	47.84	0.00	0.00	0

	EXPERIMENT MEAN	**64.51**	**18.33**	**52.10**	**0.13**	**0.38**	**0**
	LSD (0.05)	**26.41**	**3.18**	**4.31**	**1.41**	**2.51**	**0**
	CV	**19.15**	**6.99**	**4.39**	**553.23**	**341.90**	**0**
	EFFICIENCY OF LATTICE RELATIVE TO						
	RCBD DESIGN	**YES**	**YES**	**YES**	**YES**	**YES**	
EXP 5 OF THE NDSU CORN BREEDING PROGRAM (CASSELTON)							
A LATTICE EXPERIMENTAL DESIGN SHOWED MORE EFFICIENCY THAN USING A RCBD FOR ALL TRAITS							
THE EFFICIENCY FOR YIELD WITH LATTICE WAS 128 % OVER RCBD							
Yield losses and barrenness due to extreme drought were present.							