

Technical Report TR08-13 December 2008



# *Agricultural Experiment Station*

College of  
Agricultural Sciences

Department of  
Soil and Crop Sciences

Western Colorado  
Research Center

Arkansas Valley  
Research Center

Extension



MAKING BETTER  
**DECISIONS**

2008 Colorado Corn  
Variety Performance Trials

## Acknowledgments

The authors express their gratitude to the Colorado farmers as well as Colorado and Nebraska researchers who generously contributed the use of their land, equipment, and time to conduct these trials for the good of all Colorado corn producers:

- Burlington - Don Sircy
- Dailey - Mark and Neil Lambert
- Julesburg – BLM LLC. Farms
- Rocky Ford – Arkansas Valley Research Center
- Wiggins – Fort Morgan Farms
- Yuma - Larry Gardner
- Akron - Central Great Plains Research Station
- North Platte - University of Nebraska West Central Research and Extension Center
- Scotts Bluff - University of Nebraska Panhandle Research and Extension Center

Research conducted by Colorado State University Crops Testing Program  
Department of Soil and Crop Sciences  
Colorado State University Extension  
Colorado Agricultural Experiment Station

### Disclaimer

\*\*Mention of a trademark proprietary product does not constitute endorsement by the Colorado Agricultural Experiment Station.\*\*

Colorado State University is an equal opportunity/affirmative action institution and complies with all Federal and Colorado State laws, regulations, and executive orders regarding affirmative action requirements in all programs. The Office of Equal Opportunity is located in 101 Student Services. In order to assist Colorado State University in meeting its affirmative action responsibilities, ethnic minorities, women, and other protected class members are encouraged to apply and to so identify themselves.

## Table of Contents

Acknowledgments.....	2
Table of Contents .....	3
Authors and Information Resources.....	4
2008 Colorado Corn Hybrid Performance Trials.....	5
2008 Colorado and Nebraska Skip Row vs. Full Row Dryland Corn Variety Trial Results.....	6
2008 Irrigated Corn Variety Performance Trial at Burlington.....	8
2008 Irrigated Corn Variety Performance Trial at Julesburg.....	9
2008 Irrigated Corn Variety Performance Trial at Rocky Ford.....	11
2008 Irrigated Corn Variety Performance Trial at Wiggins.....	12
2008 Irrigated Corn Variety Performance Trial at Yuma.....	13

## **Authors and Information Resources**

**Dr. Jerry Johnson – Associate Professor/Extension Specialist for Crop Production**, Colorado State University, Department of Soil and Crop Sciences, CO12 Plant Science Building, Fort Collins, CO 80523-1170; telephone 970-491-1454; fax 970-491-2758; e-mail [jerry.johnson@colostate.edu](mailto:jerry.johnson@colostate.edu).

**Jim Hain - Research Associate/Crops Testing Program**, Colorado State University, Department of Soil and Crop Sciences, Central Great Plains Research Station, 40335 County Road GG, Akron, CO 80720; telephone 970-554-0980; fax 970-345-2088.

**Dr. Hrvoje Rukavina-Assistant/Crops Testing Program**, Colorado State University, Department of Soil and Crop Sciences, C03 Plant Science Building, Fort Collins, CO 80523-1170; telephone 970-491-1914; fax 970-491-2758; e-mail [cas\\_csucroptesting@mail.colostate.edu](mailto:cas_csucroptesting@mail.colostate.edu)

**Dr. Michael Bartolo – Superintendent/Research Scientist**, Colorado State University, Arkansas Valley Research Center, 27901 Road 21, Rocky Ford, CO 81067; telephone 719-254-6312; fax 719-254-6312; e-mail [avrc@coop.ext.colostate.edu](mailto:avrc@coop.ext.colostate.edu).

**Dr. Abdel Berrada - Research Scientist**, Colorado State University, Arkansas Valley Research Center, 27901 Road 21, Rocky Ford, CO 81067; telephone 719-254-6312; fax 719-254-6312; e-mail [abdel.berrada@colostate.edu](mailto:abdel.berrada@colostate.edu).

**Kierra Jewell- Administrative Assistant III** - Colorado State University, Department of Soil and Crop Sciences, C03 Plant Science Building, Fort Collins, CO 80523-1170; telephone 970-491-6201; fax 970-491-2758; e-mail [kierra.jewell@colostate.edu](mailto:kierra.jewell@colostate.edu).

**Robert N. Klein - Western Nebraska Crops Specialist**- West Central Research & Extension Center, 402 West State Farm Road, North Platte, NE 69101-7756; telephone (308) 696-6705; fax (308) 696-6780; E-mail: [rklein1@unl.edu](mailto:rklein1@unl.edu)

**Dr. Alexander Pavlista- Professor/Crop Physiologist**, University of Nebraska, Panhandle REC, 4502 Avenue I, Scottsbluff, NE 69361; 308-632-1240; e-mail [apavlista@unl.edu](mailto:apavlista@unl.edu)

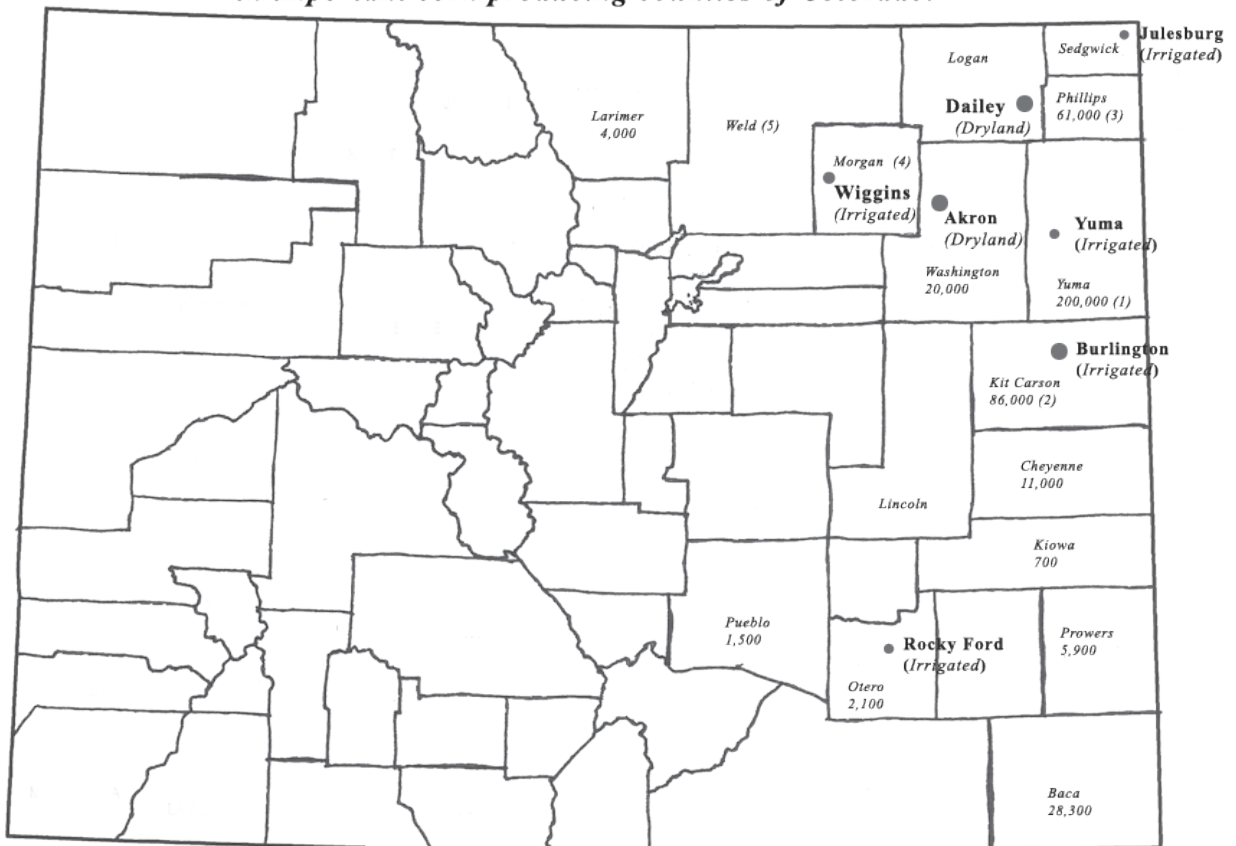
# 2008 Colorado Corn Hybrid Performance Trials

## Introduction

Colorado State University conducts hybrid performance trials to provide unbiased and reliable information to Colorado corn producers so they can select the best hybrids for their farming conditions. Variable climatic conditions, innovations from biotechnology, acquisitions and mergers of seed companies, and rapid development of new hybrid lines means that unbiased crop performance information is increasingly important to Colorado corn producers.

Colorado State University personnel evaluated commercial corn hybrids under irrigation at five Eastern Colorado locations. Colorado State University and University of Nebraska personnel conducted dryland corn hybrid performance trials at two locations in Colorado and two in Nebraska that compared hybrid performance under full row and skip row configurations. The results from these trials are presented in the following tables which are intended to be stand-alone and self explanatory. Personnel and operational costs for conducting these trials come from Colorado State University, the University of Nebraska, and seed company entry fees.

**Six eastern Colorado corn trial locations in 2008 with 2006 acreage harvested in important corn producing counties of Colorado.**



# 2008 Colorado and Nebraska Skip Row vs. Full Row Dryland Corn Variety Trial Results

Jerry Johnson<sup>1</sup>, Jim Hain<sup>1</sup>, Alex Pavlista<sup>2</sup>, Robert Klein<sup>2</sup>, and Jeffery Golus<sup>2</sup>

Dryland corn in NE Colorado and in the Nebraska panhandle is generally susceptible to drought stress and many farmers, since the invent of Round-up Ready (RR) corn hybrids, have adopted skip row corn planting systems. The theory is that, in years of drought (especially drought during the critical end of July and beginning of August time period), precipitation can be captured and stored in skipped rows for use by the corn plant during the critical period. Over the years this skip row trial has generally shown that at yield levels below approximately 50-70 bu/ac, higher skip row yields have been observed than in a full row planting system. The intent of this trial is to determine if there are some RR hybrids that are more tolerant to drought stress than others and to help farmers make better variety decisions for skip row planting systems. Since it is impossible to determine if a dryland corn trial will suffer from drought, this trial is conducted in four locations to improve the probability that one or more locations will allow us to determine if there is a benefit from skip row vs full row planting systems. Two seed products have been added to this trial to test their performance, under skip row and full row planting systems, by comparison to the check hybrid (Dyna-Gro Seed 55B31 RR2/YGPL).

In 2008, dryland corn yields in the trials, and in farmers fields, were generally too high to demonstrate of benefits of skip row over full row planting systems. No conclusions can be drawn from a single year of skip row trial results but there were some yield trends shown. Across the four locations the average difference between full row yield and skip row yield was 13 bu/ac. However, the average difference between full row and skip row yield of some hybrids was lower (smallest difference, 8 bu/ac) than other hybrids (largest difference, 18 bu/ac). Multiple years of results will allow us to fully describe the differences among planting systems and differences among hybrids in the two systems. In 2008, on the average over the four locations and two planting systems, both products showed beneficial yield trends (~1 bu/ac for Myconate) and (~4 bu/ac) for Micro-AZ.

<sup>1</sup>Colorado State University

<sup>2</sup>University of Nebraska

Hybrid (alphabetical)	Akron, CO <sup>1</sup>		Dailey, CO <sup>2</sup>		North Platte, NE <sup>3</sup>		Scottsbluff, NE <sup>4</sup>	
	<sup>5</sup> Yield bu/ac		<sup>5</sup> Yield bu/ac		<sup>5</sup> Yield bu/ac		<sup>5</sup> Yield bu/ac	
	Skip row	Full row	Skip row	Full row	Skip row	Full row	Skip row	Full row
DEKALB DKC49-32 (VT3)	67.7	78.2	91.1	109.5	108.9	129.0	58	65
DEKALB DKC52-59 (VT3)	82.0	77.7	100.1	116.4	116.3	138.0	52	75
DEKALB DKC55-24 (VT3)	63.1	61.3	97.7	118.8	108.7	124.0	48	69
Dyna-Gro Seed 55B31 RR2/YGPL	79.0	73.1	79.8	109.1	106.0	125.5	35	40
Dyna-Gro Seed 55B31 RR2/YGPL + Myconate <sup>6</sup>	79.1	68.6	77.9	102.7	116.9	140.3	32	41
Dyna-Gro Seed 55B31 RR2/YGPL + Micro-AZ <sup>7</sup>	83.5	84.1	84.8	101.8	104.3	130.1	34	58
Dyna-Gro Seed 55B49 RR2/YGPL	64.6	67.8	83.4	104.7	110.5	127.5	51	56
Dyna-Gro Seed 55P86 RR2/YGCB	74.6	68.1	81.0	109.2	111.7	132.2	37	47
Dyna-Gro Seed 57B94 RR2/YGPL	52.3	54.1	86.5	108.6	116.4	138.5	41	46
Dyna-Gro Seed 57R91 RR2/LL/HXX	65.4	57.7	91.3	112.5	106.5	130.9	28	50
Dyna-Gro Seed 57V07 VT3	59.9	41.5	94.2	112.5	107.4	133.6	41	47
Dyna-Gro Seed 57V77 VT3	80.0	88.9	94.8	110.4	113.3	130.5	55	71
Dyna-Gro Seed CXO8115 RR2/YGCB	65.9	81.1	76.0	86.3	112.3	133.0	42	56
LG Seeds LG2507VT3	63.3	62.2	90.9	112.0	120.6	137.2	29	34
LG Seeds LG2532VT3	71.8	80.9	74.3	117.4	114.8	124.7	34	43
<b>Average</b>	<b>70.1</b>	<b>69.7</b>	<b>86.9</b>	<b>108.8</b>	<b>111.6</b>	<b>131.7</b>	<b>41</b>	<b>53</b>
LSD <sub>0.05</sub>	18.8	19.3	14.2	16.9	13.4	14.5	12	15

<sup>1</sup>Trial conducted on the USDA Central Great Plains Research Station.

<sup>2</sup>Trial conducted on the Mark and Neal Lambert farm.

<sup>3</sup>Trial conducted at the University of Nebraska West Central Research and Extension Center.

<sup>4</sup>Trial conducted at University of Nebraska Panhandle Research and Extension Center.

<sup>5</sup>Yields corrected to 15.5% moisture.

Micro-AZ: TerraMax's Micro-AZ is a stabilized formulation of two beneficial micro-organisms, Azospirillum brasilense and lipoferum, in a nutrient blend that increases shelf life and bacteria survivability. This product, available in both liquid and dry formulations, is intended to stimulate root growth and enhance the germination process in grasses, for increased root mass, stand and yield. The organisms in Micro-AZ are naturally occurring and will not harm the environment.

TerraMax can be reached at 651-458-4401, or [www.terramaxag.com](http://www.terramaxag.com).

Myconate® is a signal compound put out by plant roots in times of stress that is intended to encourage beneficial fungi (mycorrhizae) to colonize them. This simple compound is non-toxic, is quickly broken down in the soil, and is effective in very small quantities. It is available in several formulations some of which are water soluble and is easy to apply to seeds or to soil. Myconate® is a trademark product of Plant Health Care, Inc., 440 William Pitt Way, Pittsburgh, PA 15238, telephone 412-826-5488 x152.

**Site Information**

	<u>Akron CO</u>	<u>Dailey CO</u>	<u>North Platte NE</u>	<u>Scottsbluff, NE</u>
Skip row configuration:	Plant 2 skip 2	Plant 2 skip 2	Plant 2 skip 2	Plant 2 skip 2
Full row configuration:	Plant all 4 rows	Plant all 4 rows	Plant all 4 rows	Plant all 4 rows
Date of Planting:	5/19/08	5/19/08	5/13/08	5/12/08
Date of Harvest:	11/18 and 11/19/08	11/10 and 11/13/08	11/5/08	11/3/08
Plot Size:	10'x31'	10'x31'	10'x17'	10'x31'
Experimental Design:	4 replications	4 replications	4 replications	4 replications
Seeding Rate:	15,000 seeds/ac	15,000 seeds/ac	15,000 seeds/ac	15,000 seeds/ac
Previous Crop:	wheat	wheat	wheat	wheat
Soil Type:	Rago silt loam	Haxton sandy loam	Holdrege silt loam	sandy loam
Fertilization:	35 lb N/ac	61 lb N/ac 33 lb P <sub>2</sub> O <sub>5</sub> /ac	80 lb N/ac	92 lb N/ac
Herbicide:	Round-up	Atrazine, Round-up	Lumax	Round-up
Insecticide:	none	none	Lorsban	none

**Two Nebraska Panhandle Dryland Locations**



## 2008 Irrigated Corn Variety Performance Trial at Burlington<sup>1</sup>

Hybrid	Grain	Test	Plant		
	Moisture	Weight	Plant Height	Population	Lodging
	%	lb/bu	in	plants/ac	%
Croplan Genetics 421 VT3	12.7	56.3	73	30726	64.2
Croplan Genetics 6150 VT3	17.7	55.3	84	28010	44.3
Croplan Genetics 6331 VT3	14.8	55.8	80	29883	74.6
Croplan Genetics 6831 TS	13.9	57.1	82	30351	56.1
DEKALB DKC49-32 (VT3)	13.2	55.9	77	32131	55.2
DEKALB DKC52-59 (VT3)	12.4	55.2	74	30820	30.4
DEKALB DKC54-16 (VT3)	13.8	56.1	85	34192	53.9
DEKALB DKC55-24 (VT3)	12.7	55.8	76	28291	43.6
DEKALB DKC60-18 (RR2/YGPL)	14.0	55.1	77	30164	73.9
DEKALB DKC61-69 (VT3)	15.5	56.1	80	34099	42.1
DEKALB DKC62-29 (VT3)	14.9	57.6	77	35223	42.5
DEKALB DKC63-42 (VT3)	14.4	56.6	81	31663	51.8
Dyna-Gro Seed 55B49 RR2/YGPL	12.7	57.0	81	31195	80.5
Dyna-Gro Seed 57B94 RR2/YGPL	15.5	56.3	81	30539	57.0
Dyna-Gro Seed 57R91 RR2/LL/HXX	14.6	56.6	80	30633	49.8
Dyna-Gro Seed 57T61 RR2/LL/HXI	16.0	54.8	85	29977	37.8
Dyna-Gro Seed 57V07 VT3	17.8	53.9	81	28853	23.3
Dyna-Gro Seed 57V30 VT3	14.6	58.4	80	31757	24.6
Dyna-Gro Seed 57V62 VT3	15.3	57.4	79	30070	35.7
Dyna-Gro Seed 57V77 VT3	15.0	55.9	87	33724	44.1
Dyna-Gro Seed CXO7110 VT3	13.7	53.6	81	28853	65.1
Dyna-Gro Seed CXO8216 VT3	17.6	53.2	85	29134	21.9
Dyna-Gro Seed CXO8808 RR2	14.5	55.8	83	32225	43.3
LG Seeds LG2619VT3	14.7	55.5	83	28384	34.2
LG Seeds LG2620VT3	14.9	54.6	80	32974	50.1
LG Seeds LG2641VT3	14.9	53.9	78	34005	25.8
LG Seeds LG2642VT3	18.3	54.8	77	34567	44.9
Mycogen Seeds 2K718	14.7	54.6	81	28103	87.3
Mycogen Seeds 2R577	14.4	56.0	81	34286	20.4
Mycogen Seeds 2T789	15.2	55.3	84	33911	36.4
Producers Hybrids 7134VT3	16.8	53.0	81	30351	44.1
Producers Hybrids 7325VT3	15.0	54.7	84	32131	50.9
Producers Hybrids 7374VT3	17.6	54.6	82	29602	36.4
Producers Hybrids 7414VT3	16.6	53.1	79	31007	38.6
Triumph 1109VT3	13.4	53.9	84	25480	77.8
Triumph 3203CbRR	13.2	56.7	73	31007	35.2
Triumph 8607CbRR	16.5	55.1	79	35223	32.7
Triumph TRX8591 HXRR	15.0	54.7	84	29227	67.8
<b>Average</b>	<b>15.0</b>	<b>55.4</b>	<b>80</b>	<b>31126</b>	<b>47.3</b>

\*This trial was severely compromised by an early August hail storm that stripped most of the leaves off of the plants that never recovered. Stalk rot led to excessive lodging. Pollination was poor and ears were small. Average yield was 70 bu/ac and could not be interpreted.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31'

### Site Information

Collaborator: Don Sirey

Soil Type: Weld silt loam

Previous Crop: corn

Planting Date: 4/29/08

Irrigation: sprinkler

Fertilization: N-P-K (200-45-0) lb/ac

Herbicide: Lumax, Round-up

Insecticide: none

Harvest Date: 11/06/08



## 2008 Irrigated Corn Variety Performance Trial at Julesburg<sup>1</sup>

Hybrid	Yield	Grain Moisture	Test weight	Plant Height	Plant Population	Lodging
	<u>bu/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>in</u>	<u>plants/ac</u>	<u>%</u>
Triumph 3203CbRR	220.6	13.2	57.2	85	34942	8.5
Dyna-Gro Seed 57V21 VT3	215.6	16.0	57.0	94	34661	29.9
Dyna-Gro Seed 57F37 YGCB	214.5	16.8	56.9	89	34754	38.9
DEKALB DKC62-29 (VT3)	213.8	16.1	58.6	89	35597	9.1
LG Seeds LG2552VT3	211.3	15.6	54.1	87	33068	53.1
DEKALB DKC54-16 (VT3)	208.0	14.6	58.0	88	32693	10.8
Producers Hybrids 7077VT3	206.9	15.5	54.3	86	34754	65.0
DEKALB DKC49-32 (VT3)	206.9	13.4	55.6	86	36066	23.5
Producers Hybrids 7134VT3	204.4	17.1	53.9	92	34473	73.0
DEKALB DKC63-42 (VT3)	202.8	15.2	57.7	88	34473	40.4
DEKALB DKC60-18 (RR2/YGPL)	202.3	15.0	57.2	84	33162	8.6
LG Seeds LG2545VT3	200.9	16.0	54.4	86	34380	50.8
Dyna-Gro Seed CXO8514 YGCB	200.5	16.5	55.8	87	32506	30.1
Trisler T-6A02VT3	200.5	15.3	56.2	89	33630	17.0
Mycogen Seeds 2C727	199.7	15.2	55.6	87	35129	37.3
Mycogen Seeds 2D675	199.5	15.5	56.2	96	33818	30.3
Dyna-Gro Seed 57V30 VT3	199.1	16.2	58.4	93	33443	51.3
LG Seeds LG2555VT3	198.3	16.5	54.8	92	32881	71.5
DEKALB DKC52-59 (VT3)	198.3	13.4	56.3	85	34192	26.1
Trisler T-3A81RR	198.3	13.6	57.3	88	35504	11.6
DEKALB DKC55-24 (VT3)	197.5	14.2	57.9	87	34661	40.0
Dyna-Gro Seed 55B49 RR2/YGPL	192.8	14.5	58.7	93	34661	34.8
Dyna-Gro Seed 57V62 VT3	191.2	16.3	58.8	94	33162	48.7
Dyna-Gro Seed 57V77 VT3	191.1	15.5	56.2	93	33818	33.8
Producers Hybrids 6944VT3	190.7	17.3	54.2	91	35035	32.0
Dyna-Gro Seed 57T61 RR2/LL/HXI	190.5	16.1	55.3	98	34005	77.2
Dyna-Gro Seed 57B94 RR2/YGPL	190.2	16.9	57.2	86	32225	21.0
Dyna-Gro Seed CXO7110 VT3	189.5	14.7	54.6	93	35504	23.2
Triumph 9958VT3	189.3	13.9	58.8	86	35223	22.6
Mycogen Seeds 2J529	188.8	14.4	57.9	90	35316	10.4
DEKALB DKC61-69 (VT3)	188.2	14.7	56.2	92	34286	30.7
Mycogen Seeds 2K718	187.0	15.6	56.0	90	35410	41.7
Dyna-Gro Seed 57P93 RR2/YGCB	186.5	16.3	56.8	90	32787	21.1
Dyna-Gro Seed CXO8808 RR2	185.6	14.5	57.2	92	36159	29.0
Dyna-Gro Seed 57R91 RR2/LL/HXX	184.9	14.5	58.4	88	34754	18.8
Trisler T-5N51VT3	184.6	15.6	57.6	85	29415	43.5
Trisler T-4A08VTRR2	183.6	15.4	57.8	94	34473	82.9
Trisler T-6N52PL	182.7	15.3	57.6	93	32881	36.1
Trisler T-4S61VT3	181.5	15.9	58.5	92	32412	28.7
Trisler T-7A14CB	181.3	15.1	58.5	84	35597	8.1
Trisler T-1J31VT3	178.2	13.6	56.5	82	34942	22.9
Dyna-Gro Seed 57V07 VT3	177.6	16.2	54.6	92	35597	44.8
Dyna-Gro Seed CXO8216 VT3	175.2	17.3	54.2	94	29602	27.6

<b>Average</b>	<b>195.1</b>	<b>15.4</b>	<b>56.6</b>	<b>89</b>	<b>34094</b>	<b>34.1</b>
LSD <sub>0.30</sub>	13.7					
LSD <sub>0.05</sub>	26.2					

LSD<sub>(0.30)</sub> is most useful for producers using these results to select a variety but some collaborators find LSD<sub>(0.05)</sub> useful.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31'

**Site Information**

Collaborator: BLM LLC. Farms

Soil Type: Richfield loam

Previous Crop: corn

Planting Date: 5/08/08

Irrigation: sprinkler

Fertilization: N-P-K (176-56-0) lb/ac

Herbicide: Lumax

Insecticide: Pencap, Invite

Harvest Date: 11/26/08

Yields corrected to 15.5 % moisture

## 2008 Irrigated Corn Variety Performance Trial at Rocky Ford<sup>1</sup>

Hybrid	Yield	Grain moisture	Test weight	Plant height (top of the tassel)	Population density
	<u>bu/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>in</u>	<u>plants/ac</u>
Croplan 6818 VT-3	272.0	21.3	56.3	110	34122
Croplan 7505 VT-3	253.3	20.3	57.7	106	37026
Triumph 1536VT3	247.3	19.3	56.8	106	35574
Dyna-Gro Seed 57V07 VT3	244.4	19.4	56.4	107	35574
Dyna-Gro Seed 57B94 RR2/YGPL	243.5	19.2	57.0	102	33396
Mycogen Seeds 2T789	238.3	19.9	56.4	110	32670
Mycogen Seeds 2T804	236.1	17.5	57.0	103	29040
LG Seeds LG2619VT3	232.3	18.9	56.2	103	34122
Mycogen Seeds 2C727	232.3	17.4	56.4	102	33396
Mycogen Seeds 2K718	231.9	17.6	56.9	105	33396
Dyna-Gro Seed 57V21 VT3	230.5	19.3	56.3	103	26862
Croplan 6831 TS	221.0	19.1	57.2	105	32670
Triumph 1608VT3	220.4	19.6	55.5	106	29040
Dyna-Gro Seed CXO8514 YGCB	219.8	18.5	56.5	104	29766
LG Seeds LG2641VT3	218.8	18.1	55.7	104	34122
Croplan 6150 VT-3	200.2	17.7	58.3	106	29040
<b>Average</b>	<b>233.9</b>	<b>18.9</b>	<b>56.7</b>	<b>105</b>	<b>32489</b>
LSD <sub>0.30</sub>	14.3				
LSD <sub>0.05</sub>	27.7				

LSD<sub>(0.30)</sub> is most useful for producers using these results to select a variety but some collaborators find LSD<sub>(0.05)</sub> useful.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31'

### Site Information

Collaborator: Arkansas Valley Research Center

Soil Type: Rocky Ford silty clay loam

Previous Crop: corn

Planting Date: 4/30/08

Irrigation: furrow

Fertilization: N-P-K (202-104-0) lb/ac

Herbicide: Clarity and Starane

Insecticide: Comite II

Harvest Date: 10/31/08

Yields corrected to 15.5 % moisture

## 2008 Irrigated Corn Variety Performance Trial at Wiggins<sup>1</sup>

Hybrid	Yield bu/ac	Grain	Test Weight lb/bu	Plant	Plant	Lodging %
		Moisture %		Height in	Population plants/ac	
DEKALB DKC61-69 (VT3)	236.7	25.3	53.0	98	33719	12.6
DEKALB DKC62-29 (VT3)	232.5	24.1	53.0	99	35129	0.4
Triumph 9958VT3	228.4	17.0	58.0	88	32974	1.7
DEKALB DKC54-16 (VT3)	223.4	20.3	57.1	100	30889	12.5
LG Seeds LG2507VT3	222.8	18.6	57.3	94	34658	1.2
Dyna-Gro Seed 54K35 RR2	220.3	17.4	57.4	94	34942	2.0
Dyna-Gro Seed 57K71 RR2	219.7	28.5	49.0	102	33255	6.2
Mycogen Seeds 2J529	219.7	19.4	54.5	98	34661	5.7
LG Seeds LG2514VT3	219.0	20.7	53.8	100	34099	24.4
Triumph 3203CbRR	217.9	18.6	55.5	92	34473	5.0
Dyna-Gro Seed 57V77 VT3	216.2	25.8	50.7	101	33988	0.8
Dyna-Gro Seed 57V30 VT3	214.9	25.9	50.4	97	34380	2.1
Dyna-Gro Seed 55B49 RR2/YGPL	213.8	18.6	55.7	89	34501	7.6
Dyna-Gro Seed CXO8808 RR2	213.5	19.6	53.8	95	33503	13.4
DEKALB DKC60-18 (RR2/YGPL)	213.5	22.4	53.3	92	36893	17.0
Dyna-Gro Seed CXO8514 YGCB	212.2	31.1	48.5	91	34848	3.9
Dyna-Gro Seed 57V98 VT3	211.7	25.0	41.5	103	33018	4.9
Dyna-Gro Seed 57V07 VT3	210.2	36.4	47.4	100	35271	0.5
DEKALB DKC63-42 (VT3)	210.0	28.9	49.8	90	33068	2.9
DEKALB DKC52-59 (VT3)	209.7	15.9	55.7	93	34099	9.4
Dyna-Gro Seed 54V78 VT3	209.2	13.9	55.2	93	34195	4.9
Dyna-Gro Seed 57V62 VT3	209.2	28.9	50.5	104	33911	3.9
Mycogen Seeds 2C727	207.2	27.2	48.3	99	33818	13.8
Dyna-Gro Seed 55B31 RR2/YGPL	206.2	17.8	55.6	94	34942	3.0
DEKALB DKC55-24 (VT3)	205.6	19.0	56.2	89	34473	0.9
DEKALB DKC49-32 (VT3)	200.9	14.7	56.2	92	34458	1.9
Dyna-Gro Seed 57P56 RR2/YGCB	197.1	31.6	47.6	101	33818	2.5
Dyna-Gro Seed 57R91 RR2/LL/HXX	196.3	25.0	50.8	98	34099	4.3
LG Seeds LG2524HX/LL	195.7	22.3	54.3	103	33194	3.8
Dyna-Gro Seed CXO8216 VT3	195.3	34.4	46.7	102	34567	2.6
Triumph 6512VT3	194.6	18.8	55.7	94	34099	1.7
Mycogen Seeds 2D675	192.0	20.8	52.4	97	32492	2.2
Dyna-Gro Seed 57B94 RR2/YGPL	190.6	31.6	49.4	94	33443	1.4
Dyna-Gro Seed CXO7110 VT3	189.6	22.4	50.0	100	31471	19.6
Mycogen Seeds 2K718	178.0	27.0	50.0	102	33406	5.9
Dyna-Gro Seed 57T61 RR2/LL/HXI	167.1	29.9	48.5	104	34380	4.7
<b>Average</b>	<b>208.3</b>	<b>23.5</b>	<b>52.3</b>	<b>97</b>	<b>33976</b>	<b>6.1</b>
LSD <sub>(0.30)</sub>	17					
LSD <sub>(0.05)</sub>	33					

LSD<sub>(0.30)</sub> is most useful for producers using these results to select a variety but some collaborators find LSD<sub>(0.05)</sub> useful.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31'

### Site Information

Collaborator: Fort Morgan Farms

Soil Type: Nunn sandy loam

Previous Crop: corn

Planting Date: 4/28/08

Irrigation: sprinkler

Fertilization: N-P-K (220-20-35) lbs/ac

Herbicide: Harness, Atrazine

Insecticide: none

Harvest Date: 10/28 and 10/29/08

Yields corrected to 15.5 % moisture

## 2008 Irrigated Corn Variety Performance Trial at Yuma<sup>1</sup>

Hybrid	Yield	Grain Moisture	Test Weight	Plant Height	Plant Population	Lodging
	<u>bu/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>in</u>	<u>plants/ac</u>	<u>%</u>
Trisler T-5N51VT3	242.5	17.0	55.9	87.3	35129	21.7
DEKALB DKC61-69 (VT3)	235.9	17.3	54.9	90.7	34005	7.4
LG Seeds LG2619BTRR	230.9	19.2	53.1	91.0	35035	9.5
Dyna-Gro Seed CXO8514 YGCB	228.1	19.7	53.8	86.0	34754	8.9
LG Seeds LG2552VT3	225.0	18.2	51.5	89.3	34286	16.3
DEKALB DKC52-59 (VT3)	223.8	14.4	56.2	80.0	35223	1.1
Producers Hybrids 7414VT3	221.5	18.9	51.6	91.3	36722	8.4
Mycogen Seeds 2C727	221.5	17.3	53.3	85.0	34473	17.9
DEKALB DKC55-24 (VT3)	221.4	15.2	57.7	86.7	34567	4.8
Producers Hybrids 7374VT3	218.5	19.3	52.8	89.7	33255	1.7
DEKALB DKC54-16 (VT3)	217.9	16.2	56.8	85.3	35972	5.5
DEKALB DKC63-42 (VT3)	217.8	15.9	57.1	82.0	36159	2.6
Dyna-Gro Seed 57P93 RR2/YGCB	217.3	19.0	53.5	93.3	35316	1.9
Mycogen Seeds 2D675	217.2	17.1	54.8	88.3	35223	18.3
DEKALB DKC62-29 (VT3)	216.8	17.6	57.4	89.0	35878	1.6
Dyna-Gro Seed 57V07 VT3	215.6	19.6	51.5	90.7	34473	4.0
Trisler T-7N57VT3	214.9	19.3	53.5	91.3	36159	10.3
Trisler T-5N52VT3	213.9	14.7	55.7	84.0	37096	3.3
Dyna-Gro Seed 57T61 RR2/LL/HXI	211.3	19.2	52.8	93.3	35691	61.9
LG Seeds LG2627VT3	211.1	18.8	53.3	90.7	35972	66.5
Dyna-Gro Seed 57V98 VT3	208.8	17.3	56.9	87.3	34192	7.5
Trisler T-7A14CB	207.4	16.3	58.1	89.7	35504	4.2
DEKALB DKC60-18 (RR2/YGPL)	206.6	17.3	55.5	85.0	35691	5.7
Dyna-Gro Seed 57V30 VT3	204.9	16.6	57.3	85.3	36159	0.6
Trisler T-6A02VT3	204.5	17.1	54.5	91.0	34942	4.0
Dyna-Gro Seed 57V77 VT3	204.4	17.2	54.7	89.7	35691	15.7
Triumph TRX8591 HXRR	204.4	17.4	55.4	91.0	35785	7.1
Dyna-Gro Seed 57V05 VT3	203.6	20.6	51.3	92.7	35878	27.5
Trisler T-4S61VT3	203.5	16.2	44.0	90.7	34567	10.4
Dyna-Gro Seed 57R91 RR2/LL/HXX	202.9	15.8	56.7	85.3	36534	10.5
Dyna-Gro Seed 57B94 RR2/YGPL	202.6	19.7	53.4	87.7	34567	3.3
Dyna-Gro Seed 55B49 RR2/YGPL	202.5	15.8	58.4	83.3	34661	8.4
Producers Hybrids 7325VT3	202.3	18.6	54.1	88.7	35785	68.6
Triumph 8607CbRR	201.4	16.5	56.5	88.3	36159	7.0
LG Seeds LG2641VT3	201.3	19.4	51.7	84.3	35410	19.0
Mycogen Seeds 2R577	200.2	16.3	55.1	89.7	34848	28.7
Mycogen Seeds 2K718	199.4	17.5	55.2	93.0	35878	8.8
Producers Hybrids 7134VT3	199.4	18.2	52.5	88.0	34942	12.2
Dyna-Gro Seed 57V21 VT3	198.6	19.6	53.2	87.3	35972	14.3
Dyna-Gro Seed CXO8216 VT3	197.8	22.1	49.8	93.3	35597	12.5
Dyna-Gro Seed CXO7110 VT3	197.5	16.1	54.9	88.7	35504	11.6
Dyna-Gro Seed CXO8808 RR2	192.7	16.0	57.3	87.3	36441	28.6
Trisler T-7N53VT3	189.0	18.7	54.9	94.3	34942	18.0
Dyna-Gro Seed 57V62 VT3	186.7	18.2	55.2	88.3	35878	38.7
DEKALB DKC49-32 (VT3)	186.2	14.0	56.8	82.3	34286	4.3
Trisler T-6N52PL	183.6	17.2	56.0	82.3	35129	4.6
Mycogen Seeds 2J529	176.7	15.2	57.8	85.7	35972	12.5
Triumph 1109VT3	174.5	15.9	55.3	93.7	34661	21.9
<b>Average</b>	<b>207.6</b>	<b>17.5</b>	<b>54.6</b>	<b>88.3</b>	<b>35353</b>	<b>14.4</b>
LSD <sub>0.30</sub>	12.6					
LSD <sub>0.05</sub>	23.9					

LSD<sub>(0.30)</sub> is most useful for producers using these results to select a variety but some collaborators find LSD<sub>(0.05)</sub> useful.

Experimental Design: randomized complete block, 3 replications

Plot Size: 5' x 31'

**Site Information**

Collaborator: Larry Gardener

Soil Type: Manter loamy sand

Previous Crop: corn

Planting Date: 5/14/08

Irrigation: sprinkler

Fertilization: N-P-K-S-Zn-Fe-Mg (240-59-32-32-0.1-0.1-0.1) lb/ac

Herbicide: Round-up

Insecticide: none

Harvest Date: 11/22/08

Yields corrected to 15.5 % moisture





Jerry Johnson, Extension Specialist Crop Production

**Colorado  
State**  
University

Department of Soil and Crop Sciences  
1170 Campus Delivery  
Fort Collins, Colorado 80523-1170

**Extension**