Technical Report TR13-7

Agricultural Experiment Station

Colorado State University

College of Agricultural Sciences | Department of Soil & Crop Sciences | Extension

Crops Testing

Making Better Decisions

2013 Colorado Corn Variety Performance Trials

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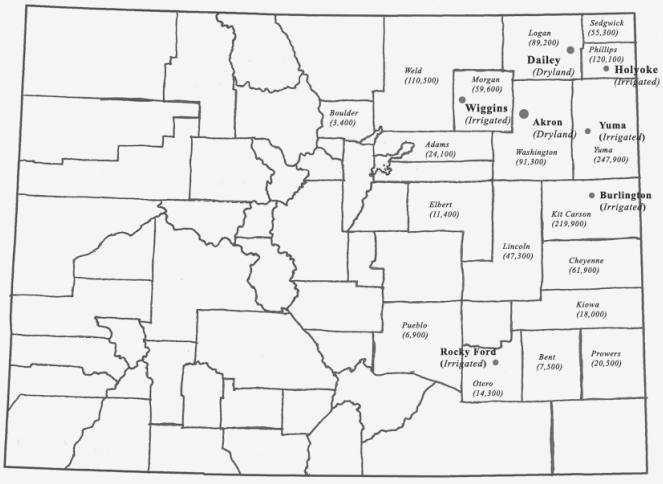
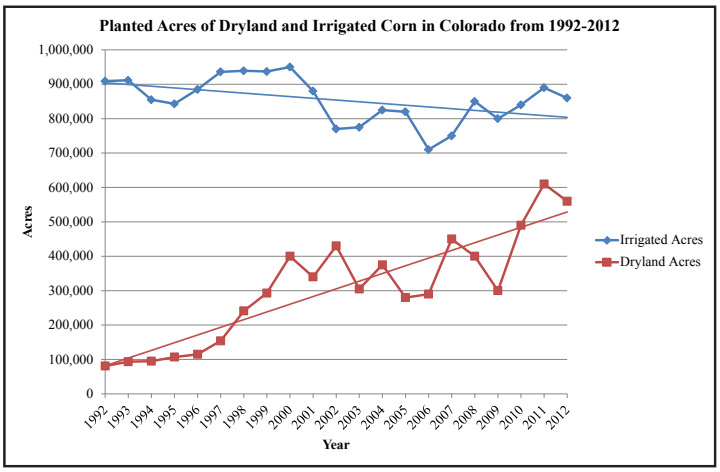
Eastern Colorado Corn Trial Locations in 2013



Area Harvested (in Acres) for some Eastern Colorado counties in 2011

2013 Colorado Corn Hybrid Performance Trials

We conduct corn trials to provide unbiased and reliable information to corn producers to select the best hybrids for their farms. The corn hybrid performance trials are possible by funding received from company entry fees and the CSU Agricultural Experiment Station.



Colorado produced approximately 134.3 million bushels of corn on 1 million harvested acres in 2012 according to the USDA National Ag. Statistics Service. The total value of production was over 947 million dollars. Figure 1 shows the dryland and irrigated corn acres planted in Colorado from 1992 through 2012. There has been a spectacular increase in dryland acreage over the last 20 years, starting from 81,000 acres in 1992 and increasing to a high of 610,000 dryland acres in 2011. The increase in dryland acreage is due to introduction of herbicide tolerant hybrids that are grown in no-till or medium- till cropping systems, and the cropping systems are newly diversified from 2-crop to 3 crop systems. In some years, higher corn prices have also led to increased corn acreage.

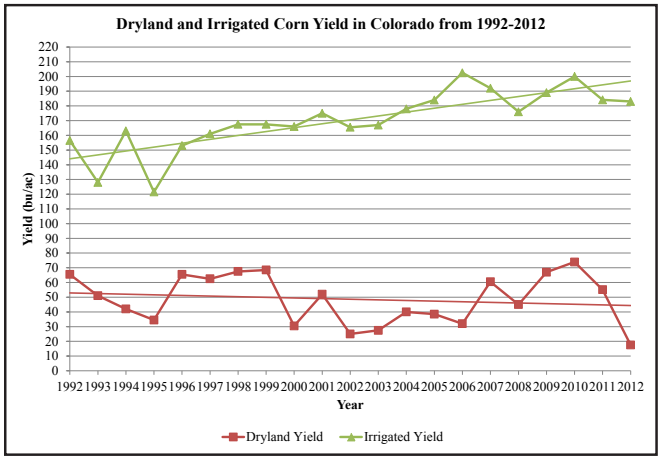


Figure 2 shows the yearly average yield for irrigated and dryland corn in Colorado from 1992 through 2012. There is a steady linear increase in irrigated yield from 157 bu/ac in 1992 to 183 bu/ac in 2012, however in 2006 and 2010 average yields were 200 bu/ac or better. Although improved genetics and more precise farming practices may account for the increasing general trend in average irrigated yield, the high average yields in 2006 and 2010 were most likely due to higher than average growing season heat units (longer growing season).

The average dryland yields are highly dependent on weather conditions during the growing season. The amount and timing of rainfall received can make-or-break dryland corn yields. This was true in the drought years from 2002 through 2006, and again in 2012 when there was not enough rainfall during the growing season and the dryland yield fell below 50 bu/ac.

Five irrigated and two dryland trials were planted across eastern Colorado in 2013. Irrigated locations included Burlington, Holyoke, Rocky Ford, Wiggins, and Yuma. The two dryland trials were located at Akron and Dailey. Sixty-seven hybrids with diverse origins, maturities, and value added traits were tested across different irrigated and dryland trial locations. Results tables for the trials are presented in the following pages. Plot sizes were approximately 150 ft2. All irrigated trials were planted at 35,000 seeds per acre and both dryland trials were planted at 15,000 seeds per acre. Seed yields for all trial varieties are reported in the tables. Yields are adjusted to 15.5% seed moisture content.

2013 Limited-Irrigated Corn Hybrid Performance Trial at Burlington

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	2-Year Avg. Yield	Relative Maturity[c]	Moisture	Test Weight	Plant Height	Population	Lodging
			bu/ac	bu/ac		percent	lb/bu	in	plants/ac	percent
Dekalb	DKC62-97RIB	GENVT3PRIB, RR2	210.8	198.9	112	16.2	57.6	105	28,649	11.3
NuTech/G2 Genetics	5Z-709	INT, RR2, LL	208.8	-	109	16.6	57.8	107	31,654	17.0
LG Seeds	LG5550	VT3PRIB, RR2	207.1	-	106	14.2	53.3	103	30,478	6.8
NuTech/G2 Genetics	5H-610	HX, RR2, LL	206.7	-	110	16.1	58.0	114	31,145	14.0
Triumph	6754S	SSX, RR2, LL	201.3	-	107	16.9	56.1	110	33,067	5.9
Triumph	1217S	SSX, RR2, LL	200.1	175.7	112	15.9	56.8	108	33,024	14.4
Dekalb	DKC52-04	GENVT3PRIB, RR2	192.9	191.7	102	15.5	57.9	102	30,359	5.9
Dekalb	DKC53-56RIB	GENSSRIB, RR2, LL	192.5	-	103	15.0	57.7	101	31,363	3.9
Producers Hybrids	6318	STXRIB, RR2, LL	192.2	-	103	15.5	57.7	101	30,584	6.7
Mycogen	2G685	3000GT, GT, LL	191.4	-	109	14.9	55.6	103	30,071	22.0
Triumph	3465S	SSX, RR2, LL	187.8	-	104	16.5	56.8	105	29,881	2.5
Producers Hybrids	6424	VT3PRIB, RR2	186.3	162.3	104	13.4	53.7	103	31,145	19.1
Mycogen	2V709	RASS, RR2, LL	184.2	-	110	16.4	57.7	107	31,808	12.1
Dekalb	DKC49-29RIB	GENSSRIB, RR2, LL	181.7	-	99	14.9	57.7	101	30,788	7.0
Producers Hybrids	6394	VT3Pro, RR2	180.3	-	103	15.7	57.7	102	29,113	20.2
Producers Hybrids	6624	VT3PRIB, RR2	177.4	171.9	106	14.0	53.6	106	31,145	14.0
Producers Hybrids	6108	STXRIB, RR2, LL	177.1	-	101	15.7	57.4	101	30,419	20.6
Mycogen	2V676	SSX, RR2, LL	171.5	170.1	108	16.6	57.2	106	30,774	23.3
LG Seeds	LG2549	VT3PRIB, RR2	171.4	-	109	14.1	53.9	105	28,532	12.7
NuTech/G2 Genetics	5H-806	HX, RR2, LL	171.2	159.8	106	16.3	58.6	107	27,975	38.2
Producers Hybrids	6878	STXRIB, RR2, LL	170.2	-	108	16.2	57.6	108	30,434	25.3
Dekalb	DKC61-16RIB	GENSSRIB, RR2, LL	166.6	-	111	16.6	57.6	107	29,258	9.4
LG Seeds	LG5533	VT3Pro, RR2	166.5	-	107	14.5	56.1	104	29,462	50.5
NuTech/G2 Genetics	5H-707	HX, RR2, LL	166.3	-	107	15.9	57.7	107	30,347	17.8
LG Seeds	LG2602	VT3PRIB, RR2	165.0	-	112	15.7	54.8	108	30,002	22.3
Triumph	1366S	SSX, RR2, LL	159.2	-	114	17.8	54.8	103	30,347	48.2
Mycogen	2K757	HXT, RR2, LL	145.2	-	113	14.3	54.2	104	30,056	21.7
Average			**182.6**	**175.8**	**107**	**15.6**	**56.5**	**105**	**30,440**	**17.5**
[d]LSD (P<0.30)			14.9							

[a]Technology trait designations: 3000GT=Agrisure 3000GT; GENSSRIB=Genuity SmartStax Refuge in the Bag Complete; GENVT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; GT=Glyphosate tolerant; HX=Herculex 1; HXT=Herculex XTRA; INT=Optimum Intrasect; LL=LibertyLink; RASS=Refuge Advanced by SmartStax (Refuge in the Bag); RR2=Roundup Ready 2; SSX=SmartStax; STXRIB=Genuity SmartStax Refuge in the Bag Complete; VT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; VT3Pro=Genuity VecTran Triple Protection.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 5' x 30'

Site Information

Collaborator:	Tim Stahlecker
Planting Date:	5/8/2013
Harvest Date:	10/30/2013
Previous Crop:	Corn
Fertilizer:	Nitrogen at 200, phosphorus at 60, sulfur at 10, and zinc at 1 lb/ac
Herbicide:	Halex GT
Insecticide:	Brigade and methylate

2013 Irrigated Corn Hybrid Performance Trial at Holyoke

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	2-Year Avg. Yield	Relative Maturity[c]	Moisture	Test Weight	Plant Height	Population	Lodging
			bu/ac	bu/ac		percent	lb/bu	in	plants/ac	percent
Producers Hybrids	7268	STXRIB, RR2, LL	255.2	-	112	16.8	59.3	104	30,855	0.9
NuTech/G2 Genetics	5H-805	HX, RR2, LL	253.6	-	105	16.3	60.2	112	31,821	0.0
NuTech/G2 Genetics	5H-399	HX, RR2, LL	253.3	-	99	13.7	57.4	108	32,730	1.4
NuTech/G2 Genetics	5H-202	HX, RR2, LL	248.6	196.2	102	13.9	61.3	110	32,302	2.8
Mycogen	2V709	RASS, RR2, LL	243.6	-	110	15.9	59.3	106	31,652	0.5
NuTech/G2 Genetics	5H-905	HX, RR2, LL	241.1	-	105	14.0	58.2	110	32,345	0.9
Dekalb	DKC61-16RIB	GENSSRIB, RR2, LL	239.9	-	111	15.0	59.1	110	31,932	1.2
Dekalb	DKC63-07RIB	GENVT3PRIB, RR2	238.0	208.3	113	15.4	60.2	103	31,486	2.3
NuTech/G2 Genetics	3F-198	AM, RR2, LL	237.5	-	98	13.0	56.1	105	30,432	1.2
Triumph	6754S	SSX, RR2, LL	237.2	-	107	16.2	57.5	112	31,744	0.7
Dekalb	DKC52-04	GENVT3PRIB, RR2	237.1	220.5	102	13.5	59.0	103	31,654	0.2
Dekalb	DKC62-97RIB	GENVT3PRIB, RR2	235.3	219.5	112	13.8	59.2	103	30,056	0.2
Triumph	5423S	SSX, RR2, LL	234.6	-	104	15.1	58.6	109	32,136	0.0
Triumph	9946S	SSX, RR2, LL	232.8	211.5	100	13.8	58.2	111	31,467	0.2
NuTech/G2 Genetics	5H-502	HX, RR2, LL	228.3	203.7	102	14.6	59.9	107	28,851	0.8
Mycogen	2G685	3000GT, GT, LL	225.1	-	109	13.6	57.3	107	32,878	3.3
Mycogen	2R549	RASS, RR2, LL	224.7	-	104	15.2	58.0	110	31,347	0.4
Producers Hybrids	7224	VT3PRIB, RR2	224.6	-	112	13.6	56.4	110	30,459	2.0
Producers Hybrids	6108	STXRIB, RR2, LL	220.5	-	101	13.4	59.2	104	31,070	2.9
NuTech/G2 Genetics	5Z-200	INT, RR2, LL	217.9	-	100	13.4	58.5	103	31,245	1.7
Dekalb	DKC53-56RIB	GENSSRIB, RR2, LL	215.7	-	103	13.6	59.0	106	31,258	0.4
LG Seeds	LG5579	VT3Pro, RR2	215.6	-	109	12.7	56.3	112	31,518	2.1
LG Seeds	LG2602	VT3PRIB, RR2	208.1	-	112	13.0	55.1	112	30,703	1.0
Triumph	9865S	SSX, RR2, LL	202.6	-	98	13.8	57.5	104	32,597	1.2
LG Seeds	LG5524	VT3Pro, RR2	200.0	-	105	13.1	56.9	112	30,950	0.7
Mycogen	2K757	HXT, RR2, LL	198.8	172.9	113	12.7	55.4	105	31,594	2.2
Triumph	3465S	SSX, RR2, LL	196.3	-	104	14.7	57.3	105	29,984	0.7
LG Seeds	LG2549	VT3PRIB, RR2	196.2	-	109	14.1	56.6	105	28,192	0.8
Triumph	9331S	SSX, RR2, LL	186.7	-	92	12.9	57.2	103	30,868	0.8
Average			**225.8**	**204.7**	**105**	**14.2**	**58.1**	**107**	**31,246**	**1.2**
[d]LSD (P<0.30)			12.3							

[a]Technology trait designations: 3000GT=Agrisure 3000GT; AM=Optimum AcreMax; GENSSRIB=Genuity SmartStax Refuge in the Bag Complete; GENVT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; GT=Glyphosate tolerant; HX=Herculex 1; HXT=Herculex XTRA; INT=Optimum Intrasect; LL=LibertyLink; RASS=Refuge Advanced by SmartStax (Refuge in the Bag); RR2=Roundup Ready 2; SSX=SmartStax; STXRIB=Genuity SmartStax Refuge in the Bag Complete; VT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; VT3Pro=Genuity VecTran Triple Protection.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 5' x 30'

Site Information

Collaborator:	Brent Adler
Planting Date:	5/5/2013
Harvest Date:	11/2/2013
Fertilizer:	Nitrogen at 240, phosphorus at 75, potassium at 80, sulfur at 40, and zinc at 1.5 lb/ac
Herbicide:	Roundup PowerMax, Status, and Parallel
Insecticide:	Lorsban, Brigade, and dimethoate
Fungicide:	Quilt

2013 Irrigated Corn Hybrid Performance Trial at Rocky Ford

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	2-Year Avg. Yield	Relative Maturity[c]	Moisture	Test Weight	Plant Height	Silk Date	Population
			bu/ac	bu/ac		percent	lb/bu	in	days after planting	plants/ac
LG Seeds	LG5618	STX, RR2, LL	224.3	-	112	15.3	58.8	96	71	30,539
Dekalb	DKC64-69RIB	GENVT3PRIB, RR2	220.0	236.1	114	14.7	59.4	98	70	30,820
Triumph	1366S	SSX, RR2, LL	212.8	236.8	114	17.0	57.4	98	75	30,445
Triumph	1375S	SSX, RR2, LL	212.1	-	114	15.0	57.8	100	72	31,757
Dekalb	DKC63-07RIB	GENVT3PRIB, RR2	208.2	235.9	113	13.9	58.4	98	69	29,696
Triumph	1329S	SSX, RR2, LL	207.6	231.6	113	15.0	57.2	100	71	29,696
Producers Hybrids	7268	STXRIB, RR2, LL	207.0	-	112	15.2	58.1	96	71	29,977
LG Seeds	LG2642	VT3PRIB, RR2	202.1	232.0	115	14.7	57.6	96	69	30,070
Producers Hybrids	7574	VT3PRIB, RR2	194.6	-	115	13.8	57.1	98	70	30,445
LG Seeds	LG2636	VT3PRIB, RR2	191.1	227.4	114	14.3	57.6	97	70	29,977
LG Seeds	LG2602	VT3PRIB, RR2	186.6	213.5	112	13.7	56.2	102	71	31,101
Dekalb	DKC61-88RIB	GENVT3PRIB, RR2	180.8	-	111	13.2	57.1	103	71	32,038
Producers Hybrids	7224	VT3PRIB, RR2	167.6	-	112	13.7	56.8	101	71	30,539
Dekalb	DKC63-33RIB	GENSSRIB, RR2, LL	162.1	-	113	13.2	57.1	100	71	30,726
Dekalb	DKC61-16RIB	GENSSRIB, RR2, LL	161.3	-	111	12.3	56.4	97	70	29,602
Average			**195.9**	**230.5**	**113**	**14.3**	**57.5**	**99**	**71**	**30,495**
[d]LSD (P<0.30)			12.5							

[a]Technology trait designations: GENSSRIB=Genuity SmartStax Refuge in the Bag Complete; GENVT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; LL=LibertyLink; RR2=Roundup Ready 2; SSX=SmartStax; STX=Genuity SmartStax Refuge in the Bag Complete; STXRIB=Genuity SmartStax Refuge in the Bag Complete; VT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 5' x 31'

Site Information

Collaborators:	Arkansas Valley Research Center
Planting Date:	5/6/2013
Harvest Date:	10/13/2013
Previous Crop:	Winter canola (failed) and winter wheat in 2012
Fertilizer:	130 lb/ac of nitrogen (applied as 82-0-0) on 6/26/13 and an additional 100 lb/ac (applied as 46-0-0) in February
Herbicide:	4 oz/ac of Status on 50/30/13 and 32 oz/ac of Buccaneer Plus on 5/30/13
Insecticide:	54 oz/ac of Comite II applied on 7/5/13 and 6.4 oz/ac of Brigade 2EC applied on 8/10/13
Irrigation:	Furrow
Soil Type:	Rocky Ford silty clay loam

2013 Irrigated Corn Hybrid Performance Trial at Wiggins

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	Relative Maturity[c]	Moisture	Test Weight	Plant Height	Population
			bu/ac		percent	lb/bu	in	plants/ac
NuTech/G2 Genetics	5H-805	HX, RR2, LL	210.4	105	15.7	60.2	96	32,750
Producers Hybrids	6394	VT3Pro, RR2	207.6	103	13.2	57.7	88	34,052
NuTech/G2 Genetics	5H-905	HX, RR2, LL	207.4	105	13.8	57.3	92	36,227
NuTech/G2 Genetics	5Z-200	INT, RR2, LL	201.0	100	13.5	58.0	86	32,189
Producers Hybrids	6108	STXRIB, RR2, LL	198.3	101	13.3	58.9	89	32,808
Dekalb	DKC52-04	GENVT3PRIB, RR2	196.5	102	13.3	58.4	88	32,524
NuTech/G2 Genetics	5H-502	HX, RR2, LL	195.1	102	13.8	59.7	93	31,548
LG Seeds	LG5499	STXRIB, RR2, LL	193.4	100	13.3	58.3	88	32,691
NuTech/G2 Genetics	5H-202	HX, RR2, LL	192.5	102	13.5	59.5	89	33,541
Triumph	5425S	SSX, RR2, LL	192.3	106	14.8	57.4	99	35,574
Mycogen	2Y479	RASS, RR2, LL	189.3	98	14.0	57.5	93	37,360
Triumph	9865S	SSX, RR2, LL	184.9	98	13.7	57.2	93	35,524
LG Seeds	LG5524	VT3Pro, RR2	183.8	105	12.8	54.8	90	31,243
Triumph	5423S	SSX, RR2, LL	182.9	104	13.4	57.7	92	30,971
Mycogen	2R549	RASS, RR2, LL	182.8	104	13.5	57.5	91	30,793
Triumph	3465S	SSX, RR2, LL	181.4	104	14.2	57.7	88	31,667
LG Seeds	LG5522	VT3Pro, RR2	178.3	103	12.8	54.2	94	32,367
Dekalb	DKC53-56RIB	GENSSRIB, RR2, LL	174.2	103	13.1	57.8	88	31,585
Dekalb	DKC49-29RIB	GENSSRIB, RR2, LL	172.7	99	13.1	57.2	87	31,635
LG Seeds	LG5470	STXRIB, RR2, LL	172.0	98	13.0	57.0	87	32,431
NuTech/G2 Genetics	5H-399	HX, RR2, LL	171.3	99	12.7	54.6	87	33,496
Mycogen	2A557	RASS, RR2, LL	171.1	103	12.6	57.8	92	32,379
NuTech/G2 Genetics	3F-198	AM, RR2, LL	167.6	98	12.7	54.9	89	32,555
Producers Hybrids	5898	STXRIB, RR2, LL	167.4	98	12.9	56.7	88	31,754
Mycogen	2T498	RASS, RR2, LL	167.0	100	12.7	56.4	85	31,787
Dekalb	DKC46-20RIB	GENVT3PRIB, RR2	165.3	96	12.9	57.9	83	32,723
Triumph	9946S	SSX, RR2, LL	162.5	100	12.9	57.1	88	31,335
Average			**184.0**	**101**	**13.4**	**57.4**	**90**	**32,797**
[d]LSD (P<0.30)			11.5					

[a]Technology trait designations: AM=Optimum AcreMax; GENSSRIB=Genuity SmartStax Refuge in the Bag Complete; GENVT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; HX=Herculex 1; INT=Optimum Intrasect; LL=LibertyLink; RASS=Refuge Advanced by SmartStax (Refuge in the Bag); RR2=Roundup Ready 2; SSX=SmartStax; STXRIB=Genuity SmartStax Refuge in the Bag Complete; VT3Pro=Genuity VecTran Triple Protection.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 5' x 30'

Site Information

Collaborator:	Cooksey Farms
Planting Date:	5/7/2013
Harvest Date:	11/1/2013
Previous Crop:	Corn
Fertilizer:	Pre-plant: Nitrogen and phosphorus at 100 and 24 lb/ac; Starter fert.(planting): nitrogen at 20, phosphorus at 18, potassium at 4.5, sulfur at 4.5, and Zinc at 1 lb/ac; Mid-season: nitrogen at 90, potassium at 10, and sulfur at 10 lb/ac
Herbicide:	Makaze and Widematch

2013 Irrigated Corn Hybrid Performance Trial at Yuma

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	Relative Maturity[c]	Moisture	Test Weight	Plant Height	Population	Lodging
			bu/ac		percent	lb/bu	in	plants/ac	percent
NuTech/G2 Genetics	5H-905	HX, RR2, LL	248.5	105	16.1	56.3	111	33,221	1.1
Dekalb	DKC62-97RIB	GENVT3PRIB, RR2	245.9	112	18.7	58.3	107	30,242	7.8
NuTech/G2 Genetics	5H-805	HX, RR2, LL	245.0	105	17.8	58.3	110	31,563	3.0
Producers Hybrids	7268	STXRIB, RR2, LL	241.8	112	22.7	56.4	103	31,145	0.5
Dekalb	DKC63-07RIB	GENVT3PRIB, RR2	241.0	113	19.9	58.5	105	31,291	5.4
Triumph	6754S	SSX, RR2, LL	239.8	107	19.4	55.3	111	31,137	5.3
Mycogen	2R549	RASS, RR2, LL	238.7	104	18.8	56.4	110	32,575	3.2
NuTech/G2 Genetics	5H-502	HX, RR2, LL	236.4	102	17.4	58.7	108	31,121	1.4
Producers Hybrids	6108	STXRIB, RR2, LL	234.2	101	17.2	57.8	103	31,348	14.4
Mycogen	2V709	RASS, RR2, LL	231.4	110	20.2	56.3	112	31,847	18.5
Producers Hybrids	6734	VT3Pro, RR2	230.3	107	16.7	57.9	110	31,987	15.1
NuTech/G2 Genetics	5H-399	HX, RR2, LL	230.0	99	16.4	56.8	105	31,145	29.7
Mycogen	2V676	SSX, RR2, LL	226.8	108	18.3	56.9	111	31,654	11.6
Triumph	1217S	SSX, RR2, LL	226.6	112	20.7	56.4	111	32,234	14.8
NuTech/G2 Genetics	5H-202	HX, RR2, LL	224.3	102	17.4	60.4	112	31,073	12.3
Dekalb	DKC61-16RIB	GENSSRIB, RR2, LL	222.2	111	18.5	56.6	107	32,591	1.3
NuTech/G2 Genetics	3F-198	AM, RR2, LL	221.6	98	14.7	55.7	109	30,668	2.9
Producers Hybrids	6394	VT3Pro, RR2	220.9	103	17.5	58.9	103	30,699	19.9
Mycogen	2G685	3000GT, GT, LL	220.7	109	17.7	56.2	107	31,920	28.6
LG Seeds	LG5524	VT3Pro, RR2	220.0	105	16.9	54.9	111	31,705	1.2
Dekalb	DKC52-04	GENVT3PRIB, RR2	219.2	102	16.8	58.5	102	30,419	19.2
LG Seeds	LG5579	VT3Pro, RR2	215.5	109	16.0	55.6	110	31,920	20.5
NuTech/G2 Genetics	5Z-200	INT, RR2, LL	214.1	100	16.2	58.2	104	31,696	1.2
LG Seeds	LG2602	VT3PRIB, RR2	213.6	112	15.9	54.2	113	31,436	16.2
Triumph	3465S	SSX, RR2, LL	211.9	104	18.5	55.7	105	30,755	1.7
Triumph	1157S	SSX, RR2, LL	211.5	111	17.7	56.7	111	31,987	19.1
LG Seeds	LG2549	VT3PRIB, RR2	210.0	109	17.1	54.1	107	29,702	13.1
Dekalb	DKC53-56RIB	GENSSRIB, RR2, LL	208.5	103	17.6	57.3	103	31,062	18.2
Average			**226.8**	**106**	**17.8**	**56.9**	**108**	**31,434**	**11.0**
[d]LSD (P<0.30)			11.6						

[a]Technology trait designations: 3000GT=Agrisure 3000GT; AM=Optimum AcreMax; GENSSRIB=Genuity SmartStax Refuge in the Bag Complete; GENVT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; GT=Glyphosate tolerant; HX=Herculex 1; INT=Optimum Intrasect; LL=LibertyLink; RASS=Refuge Advanced by SmartStax (Refuge in the Bag); RR2=Roundup Ready 2; SSX=SmartStax; STXRIB=Genuity SmartStax Refuge in the Bag Complete; VT3PRIB=Genuity VecTran Triple Protection Refuge in the Bag Complete; VT3Pro=Genuity VecTran Triple Protection.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 5' x 30'

Site Information

Collaborator: Larry Gardner
Planting Date: 5/6/2013
Harvest Date: 10/25/2013
Previous Crop: Corn
Fertilizer: Nitrogen at 65, sulfur at 7.5, and zinc at 7.5 lb/ac
Herbicide: Roundup
Fungicide: Quilt

2013 Dryland Corn Hybrid Performance Trial at Akron

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	Relative Maturity[c]	Moisture	Test Weight	Ear Height	Population	Lodging
			bu/ac		percent	lb/bu	in	plants/ac	percent
Dekalb	DKC43-10RIB	GENVT2PRIB, RR2	53.3	93	11.9	56.8	27	13,319	3.6
NuTech/G2 Genetics	5H-707	HX, RR2, LL	42.2	107	12.2	55.9	27	12,774	0.6
Dekalb	DKC46-17RIB	GENVT2PRIB, RR2	39.7	96	12.3	59.4	29	13,993	1.3
NuTech/G2 Genetics	5Z-200	INT, RR2, LL	39.5	100	12.1	56.4	30	13,004	0.8
Triumph	9331S	SSX, RR2, LL	39.1	92	11.8	57.7	25	13,354	0.5
NuTech/G2 Genetics	5X-698	HXT, RR2, LL	36.2	98	12.1	56.7	26	12,596	0.9
NuTech/G2 Genetics	5H-905	HX, RR2, LL	33.4	105	11.8	53.3	31	13,411	0.3
NuTech/G2 Genetics	5F-008	AM, RR2, LL	26.4	108	12.5	54.7	29	13,120	1.6
Triumph	9865S	SSX, RR2, LL	23.3	98	13.1	57.8	27	12,940	0.3
Average			**37.0**	**100**	**12.2**	**56.5**	**28**	**13,168**	**1.1**
[d]LSD (P<0.30)			4.7						

[a]Technology trait designations: AM=Optimum AcreMax; GENVT2PRIB=Genuity VecTran Double Protection Refuge in the Bag Complete; HX=Herculex 1; HXT=Herculex XTRA; INT=Optimum Intrasect; LL=LibertyLink; RR2=Roundup Ready 2; SSX=SmartStax.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.
Plot size: 10' x 31'

Site Information

Collaborators:	USDA-ARS Central Great Plains Research Station
Planting Date:	5/14/2013
Harvest Date:	11/7/2013
Fertilizer:	Nitrogen applied at 50 lb/ac on 5/16/13
Herbicide:	Lumax applied at 2 qt/ac on 5/16/13
Tillage:	No-till
Soil Type:	Weld silt loam

2013 Dryland Corn Hybrid Performance Trial at Dailey

Brand	Hybrid	Insect and Herbicide Technology Traits[a]	Yield[b]	Relative Maturity[c]	Moisture	Test Weight	Ear Height	Population
			bu/ac		percent	lb/bu	in	plants/ac
NuTech/G2 Genetics	5Z-200	INT, RR2, LL	47.4	100	10.3	51.1	29	17,173
NuTech/G2 Genetics	5H-707	HX, RR2, LL	45.9	107	11.1	51.9	28	16,819
Dekalb	DKC46-17RIB	GENVT2PRIB, RR2	45.2	96	10.8	53.9	33	16,929
Dekalb	DKC43-10RIB	GENVT2PRIB, RR2	43.2	93	10.4	52.9	30	16,886
NuTech/G2 Genetics	5X-698	HXT, RR2, LL	42.0	98	10.4	52.6	34	16,405
Triumph Seed	9331S	SSX, RR2, LL	38.9	92	10.4	51.6	28	17,457
NuTech/G2 Genetics	5H-905	HX, RR2, LL	35.3	105	11.8	50.8	32	17,176
Triumph Seed	9865S	SSX, RR2, LL	34.5	98	13.3	51.5	32	17,354
NuTech/G2 Genetics	5F-008	AM, RR2, LL	27.5	108	13.2	52.2	29	16,931
Average			**40.0**	**100**	**11.3**	**52.1**	**30**	**17,014**
[d]LSD (P<0.30)			4.7					

[a]Technology trait designations: AM=Optimum AcreMax; GENVT2PRIB=Genuity VecTran Double Protection Refuge in the Bag Complete; HX=Herculex 1; HXT=Herculex XTRA; INT=Optimum Intrasect; LL=LibertyLink; RR2=Roundup Ready 2; SSX=SmartStax.

[b]Yields corrected to 15.5% moisture.

[c]Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

[d]If the difference between two hybrid yields equals or exceeds the LSD value, there is a 70% chance the difference is significant.

Plot size: 10' x 31'

Site Information

Collaborators:	Mark & Neal Lambert
Planting Date:	5/15/2013
Harvest Date:	10/8/2013
Tillage:	No-till
Fertilizer:	Pre-plant: Composted manure applied at 1.5 tons/ac; Planting: Nitrogen at 18 and phosphorus at 48 lb/ac
Herbicide:	Roundup PowerMax and atrazine
Soil Type:	Haxtun sandy loam

Colorado State University

Crops Testing

Colorado State University
Extension

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