

2009 Colorado Spring Crop Variety Performance Trial Results

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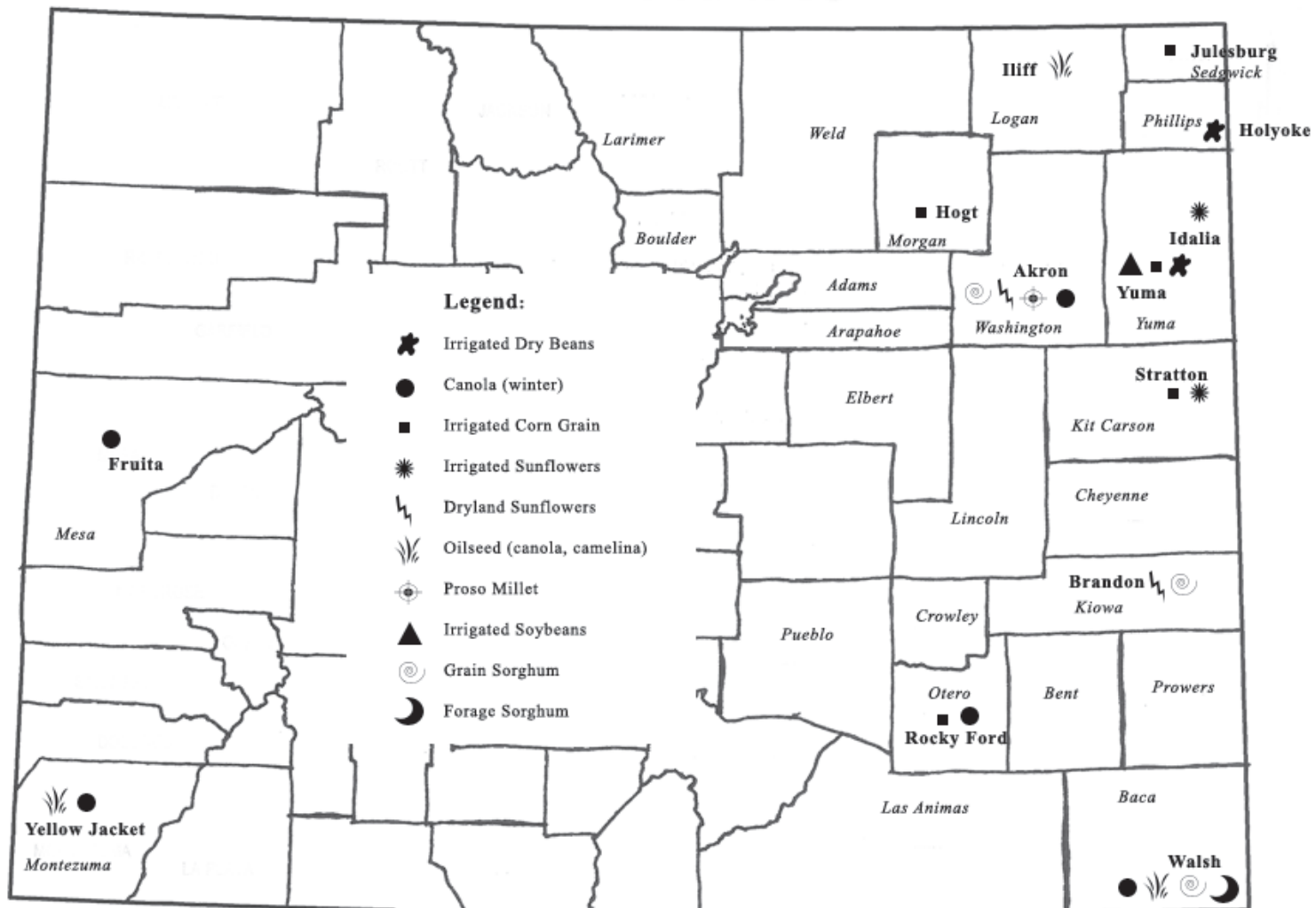
Colorado State University Crops Testing program annually collaborates with university breeding programs and seed companies to conduct variety trials to provide unbiased and reliable performance results to help Colorado crop producers make better variety decisions. These variety trials allow universities and seed companies an opportunity to screen elite experimental lines for adaptability to diverse and variable Colorado cropping environments and to determine which experimental lines to advance toward official release. Seed companies can use results to make variety marketing decisions. Some trials are also part of CSU's formal education efforts- graduate thesis research and undergraduate training- as universities train the next generation of the world's plant breeders. CSU extension agents and CSU Agriculture Experiment Station personnel participate in conducting these trials and use trial results to make agronomic and variety recommendations to Colorado crop producers.

This publication marks the third time CSU spring crop performance trial results have been published by the High Plains Journal and we are thankful for their collaboration. Selected dryland and irrigated pinto

bean, corn, sunflower, soybean, oilseed-for-biofuel (camelina and canola), and sorghum (grain and forage) trial results are featured in the following tables. Please note that these tables are intended to be stand alone and self-explanatory. The complete set of 2009 crop performance trial results for each crop is available on the Crops Testing website: www.csucrops.com. Crop performance trial results for previous years are also available at the same site.

The map below provides the approximate location of these trials within eastern Colorado. Some of the trials are conducted on CSU Agricultural Experiment Stations and others in superior farmer fields. We are especially thankful to the collaborating farmers, whose names are provided at the bottom of each trial results table, who donate their land, time, and equipment so that all Colorado crop producers can benefit from these trial results. These trials are made possible with funding from seed company entry fees; funding from the Colorado Dry Bean Administrative Committee, the Colorado Sorghum Producers, and the Colorado Sunflower Administrative Committee; as well as a grant from the Colorado Water Institute.

2009 Colorado Crop Variety Performance Trial Locations



2009 Pinto Bean Variety Performance Trial at Yuma

Variety	Source	Yield lb/ac	Moisture %	Test Wt lb/bu	Seeds/lb number
Montrose	Colorado State University	3818	8.2	62.1	1213
Windbreaker	Seminis	3573	6.1	58.0	1300
Grand Mesa	Colorado State University	3449	7.7	59.6	1320
Medicine Hat	Seminis	3447	7.8	60.4	1220
Shoshone	University of Idaho	3409	5.2	59.1	1360
Bill Z	Colorado State University	3409	7.4	60.5	1330
6187	AmeriSeed	3345	6.7	59.6	1250
P239222	ADM Seedwest	3323	8.5	60.6	1217
99217	AmeriSeed	3296	6.7	59.2	1263
Durango	AmeriSeed	3250	6.3	59.7	1250
6203	AmeriSeed	3228	9.2	60.2	1253
CO 55646	Colorado State University	3198	7.1	58.5	1157
Lariat	North Dakota State University	3156	4.5	57.8	1290
P35161	ADM Seedwest	3146	6.7	59.7	1533
Croissant	Colorado State University	3070	5.7	57.8	1260
Mariah	Seminis	3055	6.9	60.9	1353
Stampede	North Dakota State University	3047	6.2	58.2	1443
CO 29258	Colorado State University	2994	5.3	58.2	1193
CO 55119	Colorado State University	2968	7.2	56.2	1170
CO 34142	Colorado State University	2887	4.2	56.4	1300
7221	AmeriSeed	2866	7.4	55.4	1247
5200	AmeriSeed	2827	5.9	57.3	1310
CO 24972	Colorado State University	2810	6.7	58.4	1240
Kimberley	University of Idaho	2721	6.6	59.2	1283
6189	AmeriSeed	2646	4.4	54.6	1350
CO 33875	Colorado State University	2560	8.7	56.5	1213
CO 55658	Colorado State University	2419	6.2	57.5	1100
CO 45308	Colorado State University	2410	6.6	57.5	1177
COB-2527-99	Gentec Inc	2331	7.4	59.5	1367
07220	AmeriSeed	2302	6.8	57.2	1273
ND-307	North Dakota State University	2299	6.2	56.2	1307
7218	AmeriSeed	2261	7.1	56.9	1373
GTS-904	Gentec Inc	2257	7.2	54.1	1300
6185	AmeriSeed	2156	7.4	57.0	1430
99195MR	AmeriSeed	1989	6.4	56.3	1470
La Paz	AmeriSeed	1784	6.4	55.8	1483
Average		2881	6.7	58.1	1294
LSD _(0.30)		424			

Experimental Design: randomized complete block with 3 replications

Field plot size: 10' x 31'. Harvested plot size 25 ft² (due to late planting and wet field conditions we had to hand harvest 10 linear ft of each plot, dry and thresh to obtain plot yields)

Site Information

Collaborator: Richard Wacker
 Soil type: Platner loam
 Previous crop: Corn
 Planting date: 6/25/2009
 Seeding rate: 85,000 seeds/ac
 Irrigation: Sprinkler
 Fertilization: N-P-K-S-Zn = 63-51-18-18-1 lb/ac
 Herbicide: Dual, Outlook, and Select
 Insecticide: Brigade for Western Bean Cutworm
 Fungicide: Nu-Cop (2 times), Headline
 Harvest date: 10/7/2009

Yields corrected to 14% moisture

2009 Pinto Bean Variety Performance Trial at Holyoke

Variety	Source	Yield	Test Weight	Seeds per pound
		lb/ac	lb/bu	number
Montrose	Colorado State University	3320	61.9	1250
Shoshone	University of Idaho	3265	61.6	1227
Windbreaker	Seminis	3256	59.9	1243
ND-307	North Dakota State University	3171	59.0	1187
Kimberley	University of Idaho	3157	62.0	1310
Stampede	North Dakota State University	3153	60.1	1307
Bill Z	Colorado State University	3137	60.6	1267
6185	AmeriSeed	3024	62.5	1370
Durango	AmeriSeed	3022	61.9	1277
Mariah	Seminis	3010	62.1	1307
GTS-904	Gentec Inc	3010	60.7	1247
P239222	ADM Seedwest	3001	61.0	1285
7220	AmeriSeed	2982	63.3	1333
6203	AmeriSeed	2978	62.6	1313
P35161	ADM Seedwest	2927	60.0	1377
CO 34142	Colorado State University	2894	61.3	1260
COB-2527-99	Gentec Inc	2868	61.8	1233
Lariat	North Dakota State University	2865	61.6	1220
7221	AmeriSeed	2864	60.8	1255
CO 24972	Colorado State University	2850	60.5	1183
CO 55119	Colorado State University	2820	60.8	1223
Grand Mesa	Colorado State University	2815	60.7	1317
99195MR	AmeriSeed	2791	62.2	1367
CO 55646	Colorado State University	2748	61.1	1273
CO 55658	Colorado State University	2739	60.7	1093
5200	AmeriSeed	2727	61.9	1330
CO 45308	Colorado State University	2672	60.1	1143
Croissant	Colorado State University	2639	60.7	1290
CO 33875	Colorado State University	2594	58.7	1273
La Paz	AmeriSeed	2570	61.7	1467
6189	AmeriSeed	2519	61.8	1493
6187	AmeriSeed	2505	61.7	1265
CO 29258	Colorado State University	2400	58.9	1223
Medicine Hat	Seminis	2358	60.6	1310
7218	AmeriSeed	2313	62.2	1443
Average		2856	61.1	1285
LSD _{0.30}		144		

Experimental Design: randomized complete block, 3 replications

Plot size: 10' x 31

Site Information

Collaborator: Brent Adler
 Soil Type: Balant sand
 Previous Crop: Corn
 Planting Date: 6/1/2009 (6" rain followed planting)
 Seeding Rate: 85000 seeds/ac
 Irrigation: Sprinkler
 Fertilization: N-P-K-5 (90-40-15-15)
 Herbicide: Sonalan, Dual, Eptam
 Fungicide: Nu-Cop
 Harvest Date: 9/7/2009

Note: trial recovered from a strong hail storm 7/14/09

2009 Irrigated Corn Variety Performance Trial at Rocky Ford

Hybrid	Yield	Grain Moisture	Test Weight	Plant Height	Plant Population	Lodging
	bu/ac	%	lb/bu	in	plants/ac	%
Croplan 6168	297.6	17.5	58.9	93	34848	3.7
Triumph 1536 H	267.4	16.6	58.6	91	32670	1.3
Mycogen 2T789	274.6	16.4	58.6	92	32670	3.3
Mycogen 2T804	296.2	16.6	58.9	91	34122	2.3
Mycogen 2V732	288.6	16.2	58.0	90	36300	1.3
Triumph 7514X	278.2	16.9	57.7	88	34848	1.7
LG Seeds 2619VT3	291.1	16.7	57.5	93	36000	0.3
LG Seeds 2642VT3	297.2	17.0	57.2	91	35574	0.7
Syngenta NK N72K-GT/CB/LL	296.2	17.6	56.7	95	34848	3.7
Syngenta NK N74C-3000GT	286.2	17.1	57.9	94	34848	0.0
Triumph 1305X	259.8	16.0	58.0	89	35574	2.0
Average	284.8	16.8	58.0	92	34755	1.8
LSD _{0.30}	16.5					
LSD _{0.05}	32.3					

LSD_{0.30} is the most useful for producers using these results to select a variety but some collaborators find LSD_{0.05} useful.

Experimental Design: randomized complete block, 3 replications.

Harvested Plot size: 5' x 30'

Site Information

Collaborator: Arkansas Valley Research Center (Mike Bartolo)
 Soil type: Rocky Ford silty clay
 Previous Crop: Alfalfa
 Planting Date: 4/30/2009
 Irrigation: furrow
 Fertilization: N-P-K (202-104-0) lb/ac
 Herbicide: Dicamba
 Insecticide: Comite II
 Harvest Date: 11/5/2009

Yields corrected to 15.5 % moisture.

2009 Irrigated Corn Variety Performance Trial at Wiggins

Company	Hybrid	Yield bu/ac	Grain Moisture %	Test Weight lb/bu	Plant Height in	Plant Population plants/ac	Lodging %
Monsanto	DKC52-59 (VT3)	251.8	15.6	56.4	83	33,818	0.3
Monsanto	DKC55-24 (VT3)	241.4	16.1	58.6	84	31,375	0.7
Mycogen	2Y547	239.0	16.2	56.6	89	32,184	0.3
Monsanto	DKC61-69 (VT3)	233.2	17.4	53.1	94	34,942	0.7
Mycogen	2R577	224.2	16.2	56.0	90	30,785	0.0
LG Seeds	LG2547VT3	223.7	15.7	52.4	84	33,818	0.3
Triumph	9958VT3	223.4	15.9	59.2	89	31,288	0.7
Monsanto	DKC51-13 (VT3)	222.3	16.3	58.1	85	31,531	0.0
Syngenta	N58L-3000GT	221.7	17.2	55.7	88	30,070	0.3
Triumph	5501X	219.6	17.0	55.2	97	31,073	1.0
Monsanto	DKC58-16 (VT3)	219.2	17.4	54.6	82	33,897	1.3
LG Seeds	LG2507VT3	219.1	15.5	58.4	87	33,349	1.0
Monsanto	DKC62-54 (VT3)	216.5	17.3	54.3	90	31,569	0.7
Triumph	1121V	215.0	17.9	56.6	92	31,926	1.3
Monsanto	DKC59-35 (VT3)	214.8	19.2	53.7	89	32,519	0.3
Mycogen	2E696	213.0	18.1	56.5	90	32,506	0.3
Syngenta	N68B-CB/LL/RW	211.3	18.6	51.9	84	31,195	2.0
Mycogen	2K662	194.5	17.6	52.4	93	31,850	0.3
Average		222.4	17.0	55.5	88	31,240	0.6
LSD _(0.30)		8.5					
LSD _(0.05)		16.5					

LSD_(0.30) is most useful for producers using these results to select a variety but some collaborators find LSD_(0.05) useful.

Experimental Design: randomized complete block, 3 replications

Harvest plot size: 5' x 31'

Site Information

Collaborator: Cooksey Farms

Soil Type: Clay-Loam

Previous Crop: Pumpkins

Planting Date: 5/8/2009

Irrigation: Sprinkler

Fertilization: N-P-K (200-40-10) lb/ac

Herbicide: Lumax

Insecticide: none

Harvest Date: 11/30/2009

Yields Corrected to 15.5% moisture

2009 Irrigated Corn Variety Performance Trial at Burlington

Brand	Hybrid	Yield bu/ac	Grain Moisture %	Test Weight lb/bu	Plant Height in	Plant Population plants/ac	Lodging %
Monsanto	DKC55-24 (VT3)	224.4	29.6	51.2	87	29105	0
Syngenta	N72Q-CB/LL/RW	214.0	39.5	47.1	91	29977	0
Monsanto	DKC51-13 (VT3)	207.5	29.3	49.1	84	28300	1
Monsanto	DKC52-59 (VT3)	207.3	29.1	47.8	84	29422	0
Triumph	1204V	206.7	40.6	48.8	90	29873	0
Monsanto	DKC61-69 (VT3)	204.3	39.2	48.9	86	28564	0
LG Seeds	LG2575BT	201.4	35.6	46.2	89	28650	0
Mycogen	2R577	200.1	32.5	47.8	92	28841	0
Monsanto	DKC58-16 (VT3)	195.8	35.6	47.4	83	29134	0
Mycogen	2E696	193.4	37.5	48.9	93	28900	1
Monsanto	DKC59-35 (VT3)	190.0	38.1	48.4	89	29019	1
Syngenta	N74C-3000GT	189.8	40.0	48.2	100	30111	0
Triumph	1121V	188.6	36.5	48.5	92	29134	0
LG Seeds	LG2641VT3	179.7	41.0	46.6	90	28881	0
Monsanto	DKC62-54 (VT3)	178.9	39.3	48.3	88	27979	1
LG Seeds	LG2549VT3	178.4	39.2	45.1	90	29516	0
Syngenta	N68B-CB/LL/RW	174.6	40.6	46.7	86	28117	0
Mycogen	2V732	172.9	41.2	47.5	90	28946	1
Triumph	1305X	165.8	39.2	45.9	85	29022	0
Mycogen	2T789	162.8	40.3	49.1	97	29105	0
	Average	191.8	37.2	47.9	89	29030	
	LSD _(0.30)	17.7					
	LSD _(0.05)	34.2					

LSD_(0.30) is useful for producers using these results to select a variety but some collaborators find LSD_(0.05) useful.

Experimental Design: randomized complete block, three replications

Plot size: 5' x 31'

Site Information

Collaborator: Chuck Pautler
 Soil Type: Rago-Weld silt loam
 Previous Crop: Wheat
 Planting Date: 5/5/2009
 Irrigation: Center pivot sprinkler
 Fertilization: N-P-K-S-Zn-Fe-Mg (175-30-0-0-0.5) lb/ac
 Herbicide: Lumax
 Insecticide: None
 Harvest Date: 10/16/2009

Note: Trial harvested as high moisture corn.

Yields corrected to 15.15% moisture.

2009 Irrigated Oil Sunflower Variety Performance Trial at Idalia

Company	Hybrid	Yield	Grain		Plant Height	Plant	
			Moisture	Test Weight		Population	Oil Content
		lb/ac	%	lb/bu	in	plants/ac	%
Monsanto	DKF38-75 NS	2716	9.7	27.7	50	11850	40.4
Monsanto	DKF38-45 HO	2559	8.0	28.2	47	13048	42.8
Triumph Seed	657	2549	11.9	22.8	60	13652	40.1
Triumph Seed	TRX 8341	2485	12.6	25.1	57	13835	41.2
Mycogen Seeds	8N510	2408	9.4	26.8	49	14099	37.4
Seeds 2000	Firebird Express	2348	11.4	22.7	57	13846	36.9
Monsanto	DKF34-33 NS/DM	2331	8.1	29.7	51	11989	42.9
Croplan Genetics	369 DMR NS	2234	11.3	25.6	58	14895	41.5
Monsanto	DKF37-31 NS	2178	9.7	26.6	41	12224	40.2
Mycogen Seeds	8N187	2168	9.7	25.2	44	14688	39.6
Mycogen Seeds	8N453DM	2168	9.7	28.8	53	12402	41.5
Monsanto	DKF39-80CL	2134	9.2	25.9	57	13902	37.4
Advanta	AP461NS	2131	10.7	28.0	51	13035	39.8
Monsanto	DKF37-32 NS	2129	9.8	25.6	43	11740	38.9
Triumph Seed	664	2126	10.6	24.8	56	11428	40.0
Croplan Genetics	356A NS	2118	10.7	26.9	43	13692	40.3
Triumph Seed	s655	2109	8.7	25.1	33	13995	40.6
Triumph Seed	s878HO	2095	11.8	27.0	48	11205	41.2
Advanta	AP462NS	2093	10.1	26.5	56	13786	40.4
Monsanto	MH9002CL	2083	10.2	29.9	54	13745	38.6
Mycogen Seeds	8N433DM	2072	10.2	25.3	47	14504	41.1
Croplan Genetics	460 E NS	2030	11.0	24.3	56	12832	40.1
Seeds 2000	Blazer CL	2027	10.3	24.4	56	14661	39.1
Triumph Seed	630CL	2021	10.0	24.0	52	10214	37.6
Advanta	F30294NS,Rust	2013	9.9	24.4	60	14567	37.4
Triumph Seed	845HO	1971	13.1	22.4	53	12358	39.7
Croplan Genetics	555 CL DMR NS	1968	9.6	23.7	62	12455	37.6
Triumph Seed	s668	1960	11.1	25.9	44	14380	40.2
Mycogen Seeds	8H449DM	1950	11.0	27.7	57	11961	39.0
Triumph Seed	s678	1934	11.7	26.6	44	13630	41.1
Advanta	F30008NS,CL	1925	11.8	24.6	57	13849	36.9
Monsanto	IS7120 HO/DM	1919	9.3	25.5	43	13380	40.3
Triumph Seed	s674	1888	9.3	27.5	33	14707	43.0
Monsanto	DKF34-80CL	1841	9.0	25.8	48	13725	39.6
Triumph Seed	s680CL	1827	9.1	28.1	37	13433	39.2
Monsanto	MH9001CL	1796	10.5	25.7	52	13089	37.3
Croplan Genetics	378 DMR NS	1749	12.7	24.3	56	12671	36.5
Mycogen Seeds	8N358CLDM	1675	10.0	26.6	48	13371	41.4
Average		2098	10.3	25.9	50	13233	39.7
LSD _(0.30)		209					
LSD _(0.05)		400					

LSD0.30 is most useful for producers using these results to select a variety but some collaborators find LSD0.05 useful

Experimental Design: randomized complete block design with four replications

Plot size: 5' x 31'

Site Information

Collaborator: Triple T Farms
 Soil type: Colby silt loam
 Previous crop: Pasture
 Planting Date: 6/26/2009
 Seeding: Over planted and thinned to a target of 15,000 plants/ac
 Fertilization: N-P-K (60-14-0)
 Herbicide: Sonalan, Dual II, Roundup
 Harvest Date: 11/6/2009 and 11/10/2009

Note: Field received hail in late July but plants recovered well.

Yields corrected to 10% moisture

2009 Irrigated Oil Sunflower Variety Performance Trial at Stratton

Company	Hybrid	Yield	Grain	Test Weight	Plant Height	Plant	Oil Content
			Moisture			Population	
		lb/ac	%	lb/bu	in	plants/ac	%
Monsanto	DKF38-45 HO	3448	6.4	30.4	64	16206	50.2
Monsanto	DKF38-75 NS	3374	6.7	31.9	67	16487	46.3
Triumph Seed	664	3234	8.6	31.6	77	19298	49.2
Mycogen Seeds	8H449DM	3076	8.0	32.3	71	17237	49.8
Mycogen Seeds	8N453DM	2909	6.8	32.1	73	19391	50.5
Monsanto	DKF34-33 NS/DM	2795	6.6	33.8	64	19017	49.4
Seeds 2000	Firebird Express	2748	7.9	29.8	68	16019	44.9
Croplan Genetics	369 DMR NS	2693	8.1	29.9	71	18080	48.1
Monsanto	DKF37-31 NS	2692	6.8	30.2	60	18361	47.5
Croplan Genetics	356A NS	2681	7.6	31.5	65	17892	47.4
Croplan Genetics	555 CL DMR NS	2677	6.9	30.0	73	18267	44.8
Monsanto	DKF37-32 NS	2670	7.1	31.0	66	18923	47.9
Seeds 2000	Blazer CL	2655	7.9	32.8	72	16581	46.4
Mycogen Seeds	8N433DM	2633	6.7	29.2	64	17705	49.3
Monsanto	DKF39-80CL	2630	7.1	29.9	72	14988	46.0
Seeds 2000	Sierra	2593	7.5	28.2	66	15176	44.7
Monsanto	MH9002CL	2577	6.7	33.0	68	15550	45.6
Monsanto	IS7120 HO/DM	2414	7.4	31.0	65	19298	47.0
Seeds 2000	Barracuda CL	2393	9.5	31.4	73	16113	46.0
Triumph Seed	657	2301	8.4	29.1	75	15363	50.6
Croplan Genetics	378 DMR NS	2222	8.2	30.1	76	19391	47.1
Triumph Seed	s680CL	2197	7.6	32.4	45	17424	48.9
Monsanto	MH9001CL	2188	7.8	32.6	74	17237	45.0
Triumph Seed	s668	2177	10.0	31.5	56	18735	49.9
Croplan Genetics	460 E NS	2173	7.4	30.2	73	18361	48.9
Mycogen Seeds	8N510	2170	6.9	30.5	70	19860	46.4
Monsanto	DKF34-80CL	2169	6.8	30.0	63	18548	46.0
Mycogen Seeds	8N187	2025	8.0	30.0	66	13958	45.4
Triumph Seed	s678	1951	8.7	32.6	58	18080	49.2
Triumph Seed	s674	1862	8.3	32.0	46	17237	48.4
Triumph Seed	S671	1656	7.1	31.6	49	17799	48.6
Average		2516	7.6	31.1	66	17503	47.6
LSD _(0.30)		331					
LSD _(0.05)		633					

LSD0.30 is most useful for producers using these results to select a variety but some collaborators find LSD0.05 useful.

Experimental Design: Randomized complete block design with 3 replicates

Plot size: 5' x 31'

Site Information

Collaborator: Shulte Bros.

Soil type: Norka silt loam

Previous crop: Corn

Planting Date: 6/10/2009

Seeding: Overplanted and thinned to target of 18,000 plants/ac

Fertilization: N-P-K (50-30-0)

Insecticide: Headline

Herbicide: Round Up, Spartan, Advance, Select

Harvest Date: 11/4/2009

Yields corrected to 10% moisture

2009 Irrigated Confection Sunflower Variety Performance Trial at Stratton

Company	Hybrid	Yield	Grain Moisture	Test Weight	Plant Height	Plant Population	Seed Size				
							Above 24/64	23/64 to 22/64	21/64 to 20/64	19/64 to 16/64	Through 16/64 to below
		lb/ac	%	lb/bu	in	plants/ac	%	%	%	%	%
CHS Sunflower	RH 3126RT	2710	10.9	20.4	77	17283	7.6	18.6	25.8	46.4	1.6
Seeds 2000	Panther II	2689	9.1	20.7	70	14333	25.4	28.8	25.6	19.6	0.6
Triumph Seed	777C	2336	9.2	20.8	81	14052	21.0	40.4	23.0	14.4	1.2
Red River Commodities	2216	2305	8.5	19.9	72	13115	23.4	32.4	29.2	14.8	0.2
CHS Sunflower	RH 1121	2293	8.4	19.8	76	15269	39.2	34.2	17.6	9.0	0.0
Seeds 2000	Jaguar	2253	8.4	19.0	67	14520	25.8	33.6	25.4	14.6	0.6
Seeds 2000	X9681	2228	8.5	18.3	72	13864	42.6	27.0	19.2	11.2	0.0
Red River Commodities	2215	2226	8.3	20.3	70	13396	14.2	33.8	33.6	18.4	0.0
Mycogen Seeds	8C451	2135	8.2	18.3	73	14895	34.8	33.8	18.0	12.6	0.8
Red River Commodities	2217	2032	8.4	18.5	71	14707	27.4	36.0	23.6	12.2	0.8
Red River Commodities	7015	1971	8.9	19.8	74	16206	38.0	29.6	17.4	14.6	0.4
CHS Sunflower	RH 400CL	1812	8.4	18.7	63	15738	18.8	25.6	34.2	20.4	1.0
Average		2249	8.8	19.5	72	14782	27	31	24	17	
LSD _(0.30)		251									
LSD _(0.05)		490									

LSD0.30 is most useful for producers using these results to select a variety but some collaborators find LSD0.05 useful.

Experimental Design: Randomized Complete Block Design

Plot size: 5' x 31'

Site Information

Collaborator: Shulte Bros.

Soil type: Norka Silt Loam

Previous crop: Corn

Planting Date: 6/10/2009

Seeding: Overseeded and hand-thinned to 15,000 plants/ac

Fertilization: N-P-K (50-30-0)

Insecticide: Headline

Herbicide: Round Up, Spartan, Advance, Select

Harvest Date: 11/4/2009

Yields corrected to 10% moisture

2009 Dryland Oil Sunflower Variety Performance Trial at Akron

Hybrid	Yield	Moisture	Test Weight	Plant Height	Population	Oil Content
	<u>lb/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>in</u>	<u>plants/ac</u>	<u>%</u>
Croplan Genetics 356A NS	2154	12.6	27.0	53	15363	42.3
Monsanto DKF38-75 NS	2079	11.1	26.9	61	13852	39.0
Triumph Seed 657	2020	14.5	24.2	68	12270	41.0
Mycogen Seeds 8N510	1973	14.4	25.3	55	15668	38.9
Triumph Seed S671	1948	14.1	26.6	43	15316	40.5
Monsanto DKF37-32 NS	1930	12.1	26.6	54	14895	41.8
Mycogen Seeds 8N187	1887	13.1	24.6	51	14540	37.3
Monsanto DKF34-33 NS/DM	1846	10.8	25.1	56	14262	43.1
Monsanto DKF37-31 NS	1748	10.0	24.9	57	14283	41.3
Monsanto DKF39-80CL	1683	13.5	25.1	67	13623	37.9
Mycogen Seeds 8N358CLDM	1674	11.0	25.8	60	13911	40.4
Mycogen Seeds 8N433DM	1659	12.7	25.0	57	14403	42.1
Monsanto DKF34-80CL	1649	12.2	25.7	55	15105	40.9
Croplan Genetics 460 E NS	1643	12.8	24.0	59	14305	39.4
Mycogen Seeds 8H449DM	1637	14.2	27.2	57	13754	41.1
Monsanto IS7120 HO/DM	1632	12.4	25.1	55	14507	42.0
Mycogen Seeds 8N453DM	1621	12.8	26.8	59	15744	42.2
Monsanto DKF38-45 HO	1580	9.6	25.1	57	13387	39.7
Triumph Seed s655	1562	13.3	26.1	38	16300	40.4
Triumph Seed s678	1550	16.1	26.7	52	15501	42.1
Monsanto MH9001CL	1501	17.3	26.5	61	12719	38.3
Monsanto MH9002CL	1464	10.5	27.1	63	16099	38.7
Croplan Genetics 555 CL DMR NS	1438	12.7	24.0	63	13333	38.6
Croplan Genetics 369 DMR NS	1418	13.6	24.3	59	14023	39.7
Croplan Genetics 378 DMR NS	1339	12.0	23.7	61	15158	39.3
Average	1705	12.8	25.6	57	14493	40.3
LSD _{0.30}	255					
LSD _{0.05}	487					

LSD_{0.30} is most useful for producers using these results to select a variety but some collaborators find LSD_{0.05} useful.

Experimental Design: randomized complete block design with four replications

Plot size: 5' x 31'

Site Information

Collaborator: USDA Central Great Plains Research Station at Akron (Dr. Merle Vigil, Director).

Soil type: Weld silt loam/Keith Kuma Complex

Previous crop: spring barley

Planting Date: 6/19/2009

Seeding Rate: 14,000 seeds/ac

Fertilization: N 40 lb/ac

Herbicide: Spartan, Roundup

Harvest Date: 10/27/2009

Yields corrected to 10% moisture

2009 Limited Irrigation Winter Canola Variety Trial at Akron

Variety	Yield	Plant Height
	lb/ac	in
Safran	2052	40
Visby	1940	46
Hornet	1854	49
Baldur	1837	48
NPZ0604	1832	35
KS4085	1797	47
Kronos	1755	51
KS3254	1743	54
KS4158	1732	35
Sumner	1701	38
Kiowa	1698	56
HyClass107W	1674	48
BSX-6242	1670	52
BSX-501	1657	42
Sitro	1652	38
BSX-6406	1641	53
HyClass154W	1556	56
CWH633	1478	45
Virginia	1469	31
Wichita	1445	52
BSX-6131	1420	50
KS4022	1372	37
BSX-6271	1335	40
DKW46-15	1279	40
Dimension	1260	50
CWH111	1229	33
DKW45-10	1067	34
DKW47-15	1017	46
DKW41-10	766	31
Flash	515	46
Average	1552	106
LSD _{0.05}	318	

Experimental Design: randomized complete block design, 3 replications

Plot size 5'x15'

Site information

Collaborator: Central Great Plains Research Station
 Soil Type: Weld silt loam
 Previous crop: Wheat
 Planting Date: 8/26/2009
 Seeding rate: 7 lb/ac
 Irrigation: Sprinkler- total water received (precipitation plus irrigation) = 12.2 in
 Fertilization: N-P-K (80-0-0)
 Herbicide: Sonalan (2 pints/ac)
 Harvest Date: 7/26/2009

Yields corrected to 8.5% moisture.

2009 Dryland Winter Canola Variety Trial at Akron

Variety	Yield	Plant Height	Pod Shattering
	lb/ac	inches	%
Kronos	1194	35	13
Hornet	1093	34	17
KS3254	1074	30	13
NPZ0604	993	32	13
KS4022	948	34	13
Safran	927	37	10
Visby	847	34	10
Wichita	828	32	13
BSX-501	826	35	17
BSX-6406	782	31	17
Kiowa	779	35	13
Sitro	740	36	13
KS4158	732	33	17
KS4085	715	35	13
Sumner	711	36	13
CWH111	710	32	10
BSX-6271	706	34	17
HyClass107W	702	37	10
CWH633	673	36	13
Virginia	644	35	13
HyClass154W	641	33	10
Baldur	628	35	10
Dimension	600	35	10
BSX-6242	576	30	10
DKW47-15	551	34	13
BSX-6131	495	35	10
DKW45-10	428	37	10
DKW46-15	417	29	10
Flash	234	37	10
DKW41-10	229	33	10
Average	714	34	12
LSD _{0.05}	380	5	

Experimental Design: randomized complete block design, with 4 replications

Plot size: 5' x 15'

Site information

Collaborator: Central Great Plains Research Station
 Soil Type: Weld silt loam
 Previous crop: Wheat
 Planting Date: 8/26/2009
 Seeding rate: 7 lb/ac
 Fertilization: N-P-K (40-0-0)
 Herbicide: Sonalan (2 pints/ac)
 Harvest Date: 7/26/2009
 Precipitation: Planting to harvest = 2.18 in
 Yields corrected to 8.5 % moisture.

2009 Dryland Camelina Variety Trial at Iliff

Company/Source	Variety	Yield lb/ac	Plant Height in
Great Plains Oil Company	Celine	1584	33
Blue Sun Biodiesel	BSX G21	1552	31
Montana State University	Ligena	1537	32
Montana State University	Suneson	1500	33
Blue Sun Biodiesel	Bear Paw	1492	33
Blue Sun Biodiesel	BSX G74	1472	32
Blue Sun Biodiesel	Blaine Creek	1461	32
Great Plains Oil Company	Cheyenne	1446	31
Montana State University	Yellow Stone	1409	35
Blue Sun Biodiesel	BSX G72	1370	32
Europe	Calina	1366	33
Blue Sun Biodiesel	BSX G24	1342	32
Blue Sun Biodiesel	BSX G22	1299	30
Average		1449	32
LSD _{0.05}		NS	

Experimental Design: randomized complete block design, 5 replications

NS: No significant difference among varieties for yield

Plot size: 5'x15'

Site information

Collaborator: Trial conducted at the Lower South Platte Irrigation
Research and Demonstration Project

Soil Type: Weld silt loam

Previous crop: Sugar beet

Planting Date: 4/5/2009

Seeding rate: 7 lb/ac

Fertilization: N-P-K (0-0-0)

Herbicide: Sonalan (2 pints/ac)

Harvest Date: 7/21/2009

Yields corrected to 8.5% moisture

2009 Dryland Safflower Variety Trial at Yellow Jacket

Entry	Company	Primary oil type	Seed yield ² (lb/ac)	Oil content (%) ³	Test weight (lb/bu)	Seed moisture (%)	Plant height (in.)	50% bloom Julian day
STI 01	STI ⁴		1218	37.3	41.4	5.8	25	208
CW88OL	Cal/West Seeds	Oleic	1208	41.0	39.3	5.5	23	211
3151*	SeedTec	Oleic	1137	40.0	41.0	5.7	22	209
MT3538	STI		1109	36.9	41.7	5.9	24	211
7313*	SeedTec	Oleic	1063	37.8	43.4	6.6	25	213
CW99OL	Cal/West Seeds	Oleic	1050	41.3	39.3	5.6	25	209
STI 90	STI		997	34.0	43.1	6.1	23	208
CW1221	Cal/West Seeds	Linoleic	994	41.9	39.7	5.7	23	209
MT7446	STI		979	37.3	41.5	5.7	23	209
S-345	SeedTec	Oleic	940	41.5	39.9	5.6	25	210
STI 50	STI		923	44.6	35.8	4.9	24	209
3125*	SeedTec	Oleic	900	41.8	41.8	6.2	23	211
2106*	SeedTec	Oleic	861	42.8	40.6	5.3	22	207
Average			1029	39.9	40.6	5.7	24	209
CV (%)			11	1.0	2.7	4.6	5.9	0.6
LSD_{.05}			161	0.6	1.5	0.4	2.0	1.8

¹Trial conducted at Colorado State University's Southwestern Colorado Research Center

² Adjusted to 10% moisture

³ Oil content at 0% moisture/Oil analysis courtesy of Art Weisker of SeedTec

⁴ Safflower Technologies International, LLC

* Not available for sale

Planted: May 7, 2009

Harvested: September 25, 2009

Seeding rate: 25 lb/ac in 12" row spacing

Previous crop: Summer-fallowed in 2007 and 2008

Fertilizer: 50 lbs N/ac + 20 lb P₂O₅/ac on 5/1/09

Herbicide: Sonalan @ 2 pt/ac PPI on 5/6/09

Precipitation (rain + snow):

Jan.-Apr.: 1.8 in. (40% of normal)

May-Sept.: 4.4 in. (67% of normal)

Planting to harvest: 4.1 in. (65% of normal)

Comments: Soil moisture at planting was excellent, partly because the ground was summer-fallowed for two consecutive years. Pre-season precipitation was below average as was July and August rainfall. Seed yields were comparable to last year's. None of the entries lodged. Seed shattering was negligible. Grasshoppers were plentiful in the area but did not seem to cause much damage to safflowers.

2009 Dryland Sunflower Variety Performance Trial at Yellow Jacket

Company	Hybrid ¹	Oil type ²	Seed Yield lb/ac	Oil Content %	Plant Population plants/ac	Seed Moisture %	Test Weight lb/bu	Plant Height in	50% Flower date	Lodging %	Deer & Elk Damage %	Bird Damage %
Pioneer	63M91	NuSun	1387	46.0	13184	5.4	31.1	51	9-Aug	0.0	1.7	2.3
Mycogen	8N453DM	NuSun	1348	46.6	13765	5.7	33.4	41	10-Aug	0.0	0.0	1.7
Mycogen	8H449DM	High Oleic	1259	47.3	12952	5.8	32.9	47	10-Aug	1.7	1.7	5.3
Triumph	657	NuSun	1246	46.6	10861	5.6	29.1	49	12-Aug	3.3	0.0	11.3
Pioneer	MH6640	NuSun	1226	44.4	13126	5.5	30.9	44	10-Aug	3.3	2.3	1.0
Mycogen	8N510	NuSun	1191	42.5	14172	5.7	30.2	40	11-Aug	0.0	0.0	1.7
Triumph	s878HO	High Oleic	1171	43.9	10745	5.9	31.7	37	14-Aug	0.0	4.3	4.3
Triumph	664	NuSun	1160	44.4	10571	5.7	29.9	48	12-Aug	0.7	0.7	3.3
Dekalb	37-31	NuSun	1154	44.1	11500	5.5	31.8	46	10-Aug	2.3	7.0	2.7
Triumph	820HO	High Oleic	1104	45.4	13707	5.3	31.5	46	5-Aug	2.3	1.7	10.7
Mycogen	8N187	NuSun	1099	42.4	11848	5.5	29.9	39	9-Aug	0.0	4.3	9.3
Mycogen	8N433DM	NuSun	1098	45.8	12894	5.5	29.8	44	8-Aug	0.7	0.0	2.0
Pioneer	64H41	High Oleic	1032	42.9	12197	5.6	30.4	50	10-Aug	0.0	0.0	6.0
Triumph	s671	NuSun	1027	45.1	12661	5.4	32.4	31	13-Aug	1.7	4.7	8.0
Mycogen	8H419CL	High Oleic	1002	42.6	11790	5.7	29.3	41	10-Aug	3.3	2.7	2.0
Triumph	845HO	High Oleic	996	44.7	11326	5.7	28.8	42	10-Aug	1.7	0.3	0.7
Mycogen	8H288CLDM	High Oleic	952	44.8	10512	5.4	31.0	43	6-Aug	5.0	2.0	7.7
Triumph	s655	NuSun	637	44.2	11442	5.5	31.4	32	13-Aug	0.0	19.3	16.3
Average			1116	44.6	12181	5.6	30.9	43		1.4	2.9	5.4
LSD _{.05}			211									

¹ CL = Clearfield; DM = Downy mildew resistant

² NS = NuSun (mid-oleic); HO = High-oleic

Experimental Design: randomized complete block design with 3 replications

Plot size: 10' x 170'

Site Information

Trial conducted at the Southwestern Colorado Research Center in Yellow Jacket, CO

Soil type: Weatherhill silty clay loam

Previous crop: Summer fallow

Planting Date: 6/2/2009

Seeding rate: Target 15,563 seeds/ac

Rain (Jun-Oct): 3.29 in (gross amount) or 43% of normal

Fertilization: N-P-K (50-20-0) on 5/1/2009

Herbicide: Sonalan @ 2.0 pt/ac on 5/6/2009

Deer repellent: PlantSkydd on 7/17, 8/04, and 8/18/09

Harvest Date: 11/4 & 11/5/2009

Seed yields corrected to 10% moisture

Comments: Summer precipitation was well below average but good soil moisture at planting helped achieve decent seed yields.

Triumph hybrid s655 incurred substantial deer, elk, and bird damage.

2009 Dryland Grain Sorghum Variety Trial at Walsh¹

Brand	Hybrid	Days to Emerge	50%	50%	Maturity group	Plant	Harvest	Plants Lodged	Test Wt.	Grain Yield	Yield %
			Bloom	Maturity		Ht.	Density				of Test Average
			<u>DAP</u>	<u>DAP</u>			<u>plants/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>bu/ac</u>	<u>%</u>
DeKalb	DKS 28-05	8	59	103	E	44	26,300	0	59	61	115
DeKalb	DKS29-28	8	61	104	E	37	34,100	0	60	60	113
Sorghum Partners	K35Y5	8	63	104	E	35	24,400	0	59	55	103
Sorghum Partners	SP 3303	10	61	104	E	39	20,100	0	59	46	86
Sorghum Partners	251	9	57	99	E	34	32,500	1	59	45	83
AERC	CGSH 8	9	58	101	E	42	20,500	4	56	40	75
AERC	CGSH 27	9	55	99	E	42	19,400	3	56	25	47
Sorghum Partners	KS310	7	66	107	ME	42	30,200	0	60	72	135
Sorghum Partners	NK5418	9	69	110	ME/M	37	28,300	0	58	65	122
Triumph	X82629	8	68	114	ME	42	30,600	0	60	64	119
Triumph	TR 452	8	67	107	ME	42	24,800	0	58	62	116
Triumph	TR 438	9	65	105	ME	42	24,800	0	58	62	116
Asgrow	Pulsar	9	65	110	ME	41	29,400	1	59	56	104
DeKalb	DK39Y	9	65	109	ME	36	28,300	0	59	51	96
DeKalb	DKS36-06	8	71	117	M	46	30,400	0	56	67	125
DeKalb	DKS37-07	8	72	117	M	41	28,700	0	56	65	121
Triumph	X84732	8	73	117	M	43	29,800	0	56	63	117
Triumph	X95003	8	76	HD	M	47	27,500	0	55	56	104
Hybrid Check	399 X 2737	8	79	SD	ML	40	25,200	0	53	38	72
Triumph	X85002	9	88	SD	ML	45	28,300	0	52	15	28
Average		8	67	109		41	27,180		57	53	
LSD _(0.20)										7.2	

¹ Planted: June 8; Harvested: November 4, 2009.

Yields are adjusted to 14.0% seed moisture content.

DAP: Days After Planting or maturation of seed at first freeze.

Seed Maturation: EM, early milk; MM, mid milk; LM, late milk; ED, early dough; SD, soft dough; HD, hard dough; mature (DAP).

Maturity Group: E, early; ME, medium early; M, medium; ML, medium late; L, late.

2009 Dryland Grain Sorghum Variety Trial at Brandon¹

Brand	Hybrid	Days to Emerge	50%	50%	Maturity group	Plant	Harvest	Plants	Test	Grain	Yield %
			Bloom	Maturity		Ht.	Density	Lodged	Wt.	Yield	of Test Average
		<u>DAP</u>		<u>DAP</u>	<u>in</u>		<u>plants/ac</u>	<u>%</u>	<u>lb/bu</u>	<u>bu/ac</u>	<u>%</u>
Mycogen	1G557	10	66	116	E	38	31,400	18	57	67	118
DeKalb	DKS 28-05	11	66	116	E	41	31,800	39	57	65	116
DeKalb	DKS29-28	11	66	118	E	37	25,600	14	58	64	114
Sorghum Partners	251	11	63	112	E	38	24,400	5	58	60	106
Sorghum Partners	SP 3303	12	69	118	E	41	15,100	1	56	47	84
AERC	CGSH 8	11	65	116	E	43	18,200	66	56	46	81
AERC	CGSH 27	11	63	115	E	38	10,800	93	56	40	70
DeKalb	DKS37-07	11	74	HD	ME	42	30,200	1	56	66	117
DeKalb	DKS36-06	11	73	119	ME	44	32,400	2	56	63	112
Sorghum Partners	KS310	9	74	119	ME	40	29,400	6	56	62	110
Asgrow	Pulsar	9	73	119	ME	42	25,200	5	56	58	102
DeKalb	DK39Y	11	72	119	ME	37	22,800	1	57	56	98
Sorghum Partners	NK5418	10	80	HD	ME/M	40	22,800	1	55	55	97
Triumph	TR 452	10	78	HD	ME	41	25,900	1	55	54	96
Sorghum Partners	K35Y5	9	73	119	ME	37	25,600	4	56	53	94
Mycogen	M3838	10	79	SD	ME	39	27,900	1	53	49	87
Average		10	71	117		40	24,969		56	57	
LSD _(0.20)										6.7	

¹ Planted: June 5; Harvested: November 20, 2009.

Yields are adjusted to 14.0% seed moisture content.

DAP: Days After Planting or maturation of seed at first freeze.

Seed Maturation: EM, early milk; MM, mid milk; LM, late milk; ED, early dough; SD, soft dough; HD, hard dough; mature (DAP).

Maturity Group: E, early; ME, medium early; M, medium; ML, medium late; L, late.

2009 Dryland Grain Sorghum Variety Trial at Akron

Hybrid	Yield	Test Weight	Height	Mid Bloom Date	Lodging
	<u>bu/ac</u>	<u>lb</u>	<u>in</u>	<u>mm/dd/yyyy</u>	<u>%</u>
Monsanto DK 28 E	114.0	54.3	40	8/16/2009	3
Pioneer 8925	103.0	54.0	41	8/15/2009	2
Monsanto DKS29-28	98.9	51.4	40	8/18/2009	1
Sorghum Partners 251	93.8	53.9	40	8/17/2009	3
Sorghum Partners KS310	87.5	49.3	45	8/24/2009	1
Triumph TR420	82.7	52.9	42	8/19/2009	4
Sorghum Partners K35-Y5	81.3	46.5	41	8/22/2009	2
AERC CGSH 8	79.4	50.1	48	8/18/2009	6
AERC CGSH 27	71.3	49.6	41	8/22/2009	6
Monsanto DKS37-07	68.2	44.2	47	8/24/2009	1
Sorghum Partners NK5418	64.4	43.5	42	8/26/2009	1
Sorghum Partners SP3303	58.7	42.5	43	8/26/2009	2
Average	83.6	49.3	42	8/20/2009	2
LSD _{0.30}	8.5				
LSD _{0.05}	16.5				

LSD_(0.30) is most useful for producers using these results to select a variety but some collaborators find LSD_(0.05) useful.

Experimental Design: randomized complete block, 3 replications

Harvest plot size: 2.5' x 31'

Site Information

Collaborator: USDA-ARS Central Great Plains Research Station

Soil Type: Weld Silt Loam

Previous Crop: Sunflower

Planting Date: 6/5/2009

Fertilization: N-40 lb/ac

Herbicide: Roundup, Attrex, Callisto

Insecticide: None

Harvest Date: 11/24-25/2009

Yields Corrected to 14% moisture

2009 Irrigated Forage Sorghum Variety Trial at Walsh¹

Brand	Hybrid	Forage Type ²	Days to Emerge	50%	Harvest	Plant	Harvest	Stem	Plant	Forage	Yield %
				Bloom	Density	Ht.	Stage ³	Sugar	Lodging	Yield	of Test
			days	plants/ac	in		%	%	tons/ac	Avg.	
Sorghum Partners	Trudan Headless	HS	7	99	59,600	116	FL	14	0	22.0	110
Sorghum Partners	NK300	FS	7	84	54,600	77	HD	12	5	21.5	107
Sorghum Partners	Sordan Headless	SS	7	104	48,000	118	FL	14	0	21.4	107
Hybrid Check	NB 305F	FS	7	85	29,800	90	SD	15	0	19.4	97
Pioneer	33D49	Corn	6	71	34,500	84	SD	9	0	18.4	92
AERC	CSSH 45	SW	7	71	42,200	89	MT	16	5	17.4	87
Average			7	86	44,783	96		13		20.0	
LSD _(0.20)										2.4	

¹ Planted: June 8; Harvested: October 23.

² Forage Type: FS, Forage Sorghum; SS, Sorghum Sudangrass; HS, Hybrid Sudangrass; SW, Sweet Sorghum.

³ Harvest Stage: Veg, vegetative; BT, boot; FL, flowering; PM, premilk; EM, early milk; MM, midmilk; LM, late milk; ED, early dough; SD, soft dough; HD, hard dough; MT, mature.

Forage Yield adjusted to 70% moisture content based on oven-dried sample.

2009 Dryland Forage Sorghum Variety Trial at Walsh¹

Brand	Hybrid	Forage Type ²	Days to Emerge	50% Bloom	Harvest Density plants/ac	Plant Ht. in	Harvest Stage ³	Stem Sugar %	Plant Lodging %	Forage Yield tons/ac	Yield % of Test Average
Sorghum Partners	HIKANE II	FS	8	72	43,800	79	MT	13	2	16.1	119
Sorghum Partners	Sordan Headless	SS	9	107	47,600	83	FL	17	0	15.4	114
Sorghum Partners	NK300	FS	9	85	40,300	53	HD	18	0	15.1	112
Sorghum Partners	Trudan Headless	HS	9	101	41,800	89	FL	15	0	14.0	103
Mississippi St Univ	Topper 76-6	SW	9	99	36,800	76	PM	20	0	13.9	102
Sorghum Partners	Sordan 79	SS	8	70	46,100	83	MT	13	25	13.7	101
Hybrid Check	NB 305F	FS	11	85	22,100	65	SD	19	0	13.6	101
AERC	CSSH 45	SW	9	70	29,400	78	MT	16	12	11.4	84
Sorghum Partners	Trudan 8	HS	8	65	39,900	89	MT	11	12	11.2	82
PIONEER	33D49	Corn	7	70	26,700	72	SD	11	0	11.1	82
Average			9	82	37,450	77		15	5	13.5	
LSD _{0.20}										1.9	

¹ Planted: June 9; Harvested: October 26.

² Forage Type: FS, Forage Sorghum; SS, Sorghum Sudangrass; HS, Hybrid Sudangrass; SW, Sweet Sorghum.

³ Harvest Stage: Veg, vegetative; BT, boot; FL, flowering; PM, premilk; EM, early milk; MM, midmilk; LM, late milk; ED, early dough; SD, soft dough; HD, hard dough; MT, mature.

DAP: Days after planting

Forage Yield adjusted to 70% moisture content based on oven-dried sample.

2009 Irrigated Soybean Variety Performance at Yuma

Hybrid	Yield	Test Weight	Grain Moisture	Plant Height
	<u>bu/ac</u>	<u>lb/bu</u>	<u>%</u>	<u>inches</u>
Farmer-1*	73.2	56.7	10.5	33
Farmer-2	67.7	56.3	11.0	31
Farmer-3	67.1	56.7	10.6	35
AG2403	64.8	56.0	9.8	27
Farmer-4	58.8	57.1	10.6	32
AG3005	57.8	56.0	13.5	35
DKB27-52	56.5	55.8	11.1	28
Average	63.7	56.4	11.0	32
LSD _{0.30}	3.8			
LSD _{0.05}	7.6			

LSD_{0.30} is most useful for producers using these results to select a variety but some collaborators find LSD_{0.05} useful.

Experimental Design: randomized complete block design with 3 replications.

Plot size: 6' x 30'

With 10" row spacing

Site Information

Collaborator: Taylor Farms

Soil Type: Weld silt loam

Previous Crop: corn

Planting Date: 6/1/09

Seeding Rate: 165,000 seeds/ac

Irrigation: sprinkler

Fertilization: 1.5 g/ac foliar Kugler solution

