COLORADO STATE UNIVERSITY EXTENSION

2023 Dryland Grain Sorghum Hybrid Performance Trial at Seibert

Crops Testing
www.csucrops.com

Brand	Hybrid	Grain Yield[a]	Yield	2-Year Avg. Yield	Test Weight	Moisture	Emerged Plant Population	Harvest Population[b]	Tillering[c]	50% Bloom	Plant Height	Lodging	Maturity Group[d]	Grain Color
		bu/ac	% of test avg.	bu/ac	lb/bu	percent	plants/ac	heads/ac	tillers/plant	days after planting	inches	percent		
Dyna-Gro Seed	GX22923	**70.3**	126%	55	60	16	37,015	52,879	0.3	76	45	30	E	Cream
Channel Seed	5B70	**69.9**	125%	-	58	18	33,069	42,764	0.3	78	42	13	ME	Bronze
Channel Seed	5B29	65.1	116%	-	59	17	39,122	44,365	0.1	68	42	9	E	Bronze
Golden Acres	GA 2630C	61.1	109%	-	59	15	39,041	38,655	0.0	78	40	8	E	Cream
Dekalb	DKS28-05	59.9	107%	48	59	14	38,811	55,583	0.4	67	47	38	E	Bronze
Sorghum Partners	SP 43M80	58.8	105%	50	59	17	34,615	37,067	0.0	77	50	11	ME	Bronze
Pioneer	88P71	58.0	104%	-	60	17	37,605	51,766	0.4	75	50	20	E	Red
Golden Acres	GA 2730B	57.9	104%	51	60	17	32,074	46,819	0.6	74	52	75	ME	Bronze
Dyna-Gro Seed	M54GR24	57.7	103%	49	59	15	36,661	52,207	0.4	68	45	53	E	Red
Dyna-Gro Seed	M59GB57	56.7	101%	49	58	14	33,664	39,020	0.1	73	42	18	E	Bronze
Sorghum Partners	SP 45A45 DT	55.8	100%	47	58	16	38,701	38,362	0.0	79	36	5	ME	Bronze
Dekalb	DKS28-07	55.1	99%	47	59	15	34,630	41,290	0.2	70	42	20	E	Bronze
Dekalb	DKS29-28	54.7	98%	47	59	16	33,995	46,275	0.3	76	40	20	E	Bronze
Sorghum Partners	SP 30A30 DT	53.5	96%	44	59	15	37,247	39,959	0.1	77	38	8	ME	Bronze
Dekalb	DKS29-95	53.4	96%	50	58	16	38,661	48,555	0.3	76	41	8	E	Dark Red
Hoegemeyer Seed	H6041	53.4	96%	51	61	16	34,163	47,077	0.3	75	45	60	ME	Cream
Dyna-Gro Seed	M60GB31	52.4	94%	46	59	19	31,902	35,103	0.3	84	44	18	ME	Bronze
Pioneer	86P20	52.0	93%	-	59	16	33,679	51,413	0.5	74	41	30	ME	Red
Sorghum Partners	SP 31A15	51.3	92%	45	57	15	36,535	39,901	0.1	77	40	20	ME	Bronze
Dyna-Gro Seed	M59GB94	50.4	90%	44	58	18	36,531	38,690	0.1	78	44	28	E	Bronze
Hoegemeyer Seed	H6006	50.2	90%	-	60	20	36,156	47,733	0.3	75	45	31	ME	Red
Pioneer	89Y79	49.4	88%	-	60	16	37,785	43,299	0.2	71	44	13	E	White
Hoegemeyer Seed	H6020	48.7	87%	46	59	16	35,884	40,742	0.1	76	44	23	ME	Red
Golden Acres	GA 1510C	45.8	82%	45	60	13	34,106	51,051	0.4	72	36	15	E	Cream
	Average	**55.9**	**100%**	**48**	**59**	**16**	**35,900**	**44,600**	**0.2**	**75**	**43**	**24**		
	Replicates	4	-	8	4	4	4	2	2	4	1	4		
	[e]LSD (.30)	5.1												
	[e]LSD (.05)	9.7												
	Coefficient of Variation (CV)	11.9												

[a]Yields adjusted to 14% moisture and hybrids ranked by yield. Hybrid yields in bold are in the top LSD group (.30).

[b]Harvest population is the total number of grain-producing heads/panicles counted at harvest that were mature, including tillers.

[c]Average number of productive (grain containing and mature) tiller heads per plant. Does not include main plant head.

[d]Maturity group: E=early; ME=medium-early. Maturity groups are provided by the company and may not align with the observed flowering dates in the trial due to the latitude and relatively high elevation of the trial site (4,700 feet).

[e]If the difference between varieties is equal to or greater than the LSD value, the chance the difference is significant is 70% (for LSD 0.30) or 95% (for LSD 0.05). Farmers selecting a hybrid based on yield should use the LSD (.30) to protect themselves from false negative conclusions (concluding hybrids are the same when they are actually different). Companies or researchers may use LSD (.05) to avoid false positive conclusions (concluding hybrids are different when they are actually the same).

Site Information

Collaborator:	Tim Stahlecker
Planting Date:	May 28, 2023
Harvest Date:	October 16, 2023
Herbicide:	Pre-plant: atrazine 4L at 1 pt/ac, Dicamba HD at 3 oz/ac, and Callisto at 2 oz/ac
Soil Type:	Ascalon sandy loam
GPS Coordinates:	39.26016, -102.81586
Trial Comments:	Planted 1.5" deep into moisture. Excellent stands and emergence and good weed control throughout the season. Trial average flowering date of August 11th. Radar estimates showed the trial received about 16 inches of rain from planting to harvest, and 24.3 inches since January 1st, which is 125% of the ten-year average (year-to-date).