UNIVERSITY of NEBRASKA
LINCOLN

Cheyenne County Rainfed
2024 Grain Sorghum Hybrid Trial

Name	Company	Head Color[1]	Yield (bu/ac)[2]	Test Weight (lb/bu)	Plant Height (in)	Stand (plants/acre)	Days to 50% Bloom
5B29	Channel	BR	**65.5**	47.7	37.5	**22,154**	**68.0**
M62GC23	DYNAGRO	C	**63.0**	46.9	42.2	**22,900**	77.7
DKS28-05	DeKalb	BR	**62.1**	47.5	39.4	**23,620**	**68.2**
AC2103	RAGT Semences	C	**61.0**	**51.9**	41.5	21,101	**69.0**
SP 31A15	Sorghum Partners	BR	**59.1**	46.7	35.6	**23,534**	76.2
Polansky 5433	Polansky Seed	C	**57.9**	49.8	34.1	18,179	79.0
BH 3818	BH Genetics	R	**55.8**	49.2	35.9	**22,115**	77.7
BH 3701C	BH Genetics	C	54.8	46.4	38.9	**24,411**	76.5
Polansky X61R-A15	Polansky Seed	BR*	54.7	49.7	38.7	21,156	81.5
Polansky 5512	Polansky Seed	C	51.1	46.6	40.2	**22,024**	80.0
M59GB94	DYNAGRO	BR	50.7	48.4	42.7	**24,757**	80.2
SP 45A45 DT[3]	Sorghum Partners	BR	50.3	47.5	38.0	**22,518**	81.0
BH 3520	BH Genetics	BR	50.0	48.1	39.3	**23,797**	**72.0**
M59GB57	DYNAGRO	BR	49.7	48.7	37.2	**25,196**	**72.8**
GX24991	DYNAGRO	R*	49.3	49.1	35.2	**24,993**	78.2
251	Sorghum Partners	R	49.2	**52.8**	35.7	**23,152**	**67.3**
SP 30A30 DT	Sorghum Partners	BR	47.8	47.5	41.2	**23,583**	78.5
SP 25C10	Sorghum Partners	C	46.9	48.1	36.2	21,415	**68.3**
SP 58M85 DT	Sorghum Partners	BR	46.5	49.1	39.4	20,389	74.2
M54GR24	DYNAGRO	R	44.4	**51.7**	39.4	18,699	**71.2**
5B27	Channel	BR	44.3	48.2	38.7	**21,688**	**70.7**
SWGS2714 DT	Sorghum Partners	BR	41.4	47.4	36.5	14,376	76.7
SP 43M80	Sorghum Partners	BR	37.8	49.9	41.1	17,634	79.2
SWGS2744 DT	Sorghum Partners	C	32.1	48.1	38.4	15,597	77.2
SWGS4764 DT	Sorghum Partners	BR	29.2	47.8	37.7	15,369	82.3
SWGS4754 DT	Sorghum Partners	BR	24.5	46.1	38.0	16,730	78.2
S7G014	RAGT Semences	R	14.8	41.1	45.9	14,659	93.8
S8G031	RAGT Semences	R	12.1	40.0	43.6	10,946	94.0
	Standard Error		5.8	1.0	1.8	2,247	3.6
	LSD[4]		9.6	1.6	3.0	3,722	5.9
	Mean[5]		46.6	48.2	38.9	20,596	76.8

[1] Head colors: BR, bronze; R, red; C, cream. Those noted with * are as classified in field whereas others are classifications provided by seed company.
[2] Yield values corrected to 15.5% moisture content. Bolded values indicate highest LSD grouping.
[3] DT, Double Team sorghum hybrids carry non-GM trait for FirstAct/quizalofop tolerance.
[4] For differences between varieties that are equal to or greater than the LSD value, the chance that the difference is significant is 90%.
[5] Mean performance of all plots in the trial.

	CV[6]		12.5	2.0	4.6	10.9	4.6
	Reps		6	6	6	6	6

SITE INFORMATION

Collaborator:	UNL High Plains Ag Lab and Jacob Hansen
Planting Date:	5/24/2024
Seeding Rate:	45,000 seeds/a
Harvest Date:	10/16/2024
Fertility:	50 lb N applied on April 5
Herbicide/Fungicides:	1 lb atrazine applied fall pre-plant, pre-plant burndown in spring with 32 oz/a glyphosate; field cultivator used at ~V4 for weed control. Hand weeding employed as necessary during the season.
Soil Type:	Alliance loam
GPS:	41.228883, -103.002388
Planting Info:	Planted 1” into good soil moisture in no-till wheat stubble
Notes on Trial:	Yields good considering lower than optimal final stand and persistent drought throughout growing season. Stand impacted by moderate hail damage early in season and, to a lesser extent, cultivator blight. Moderate rains in August provided benefit to final grain fill and late frost ensured most hybrids reached physiological grain maturity. Test weights reflect drought conditions. Grain protein means available upon request.

[6] Coefficient of Variation (CV) indicates the quality of a trial, and lower than 15 indicates a high quality trial. For CV>15, there was higher than expected variability in the field or the data and the results should be used with caution.