

NEBRASKA GRAIN SORGHUM HYBRID TEST - 2017 -

Nebraska Sorghum Production Summary

According to the *National Agricultural Statistics Service*, there were 190 thousand acres of sorghum planted in Nebraska in 2017. 150 thousand acres of grain sorghum were harvested producing around 14.4 million bushels of grain. The average grain sorghum yield of Nebraska for 2017 was 96 bushels per acre (bu/a). The table below shows grain sorghum yields and the number of acres harvested from the previous 10 years.

Historical Average Grain Sorghum (bu/ac) Harvested

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Yield (bu/a)	94	91	93	90	96	59	67	82	96	102	96
Acres Harvested (in 1000)	240	210	135	80	90	60	145	160	240	175	150

Source: *National Agricultural Statistics Service* available online at <http://www.nass.usda.gov>.

Procedures and Highlights

Thirty sorghum hybrids were tested at University of Nebraska Havelock Research farm near Lincoln, Lancaster County, Nebraska. Treated seeds were provided by the participating companies for each hybrid. Seeds were planted using a 30 inch cone-mounted row planter. Each plot was two rows of 20 feet long. The test was planted on May 30th, 2017 on a conventionally tilled ground where the previous crop was. The soil type is Aksarben and Crete silty clay loam. The field was tilled with a field cultivator and 100 lb/ac N and 1 lb/ac atrazine were applied before planting. Herbicide application of 0.5 lb/ac atrazine and 1 pt/ac 2,4-D was made in June. Test plots were harvested on October 27th. The average yield (bu/ac), plant height (cm), and days to heading was respectively 116, 52, and 61.

Maturity of a hybrid is an important consideration in its adaptation to a given location. Variations in soil fertility, seasonal rainfall and other biotic and abiotic factors could create hybrid response variability. For this reason, small yield differences have little meaning. A statistical measure of differences required for significance is given in the accompanying table marked as difference required for significance (LSD). These differences were computed at the 5 percent levels of significance.

Nebraska Sorghum Variety Test (Lancaster County) - 2017

Brand	Variety	Grain Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)	Plant Height (inches)	Days to Heading	Stand Count
Sorghum Partners	SP7715	136	15	60	56	66	62902
Dyna-Gro Seed	M60GB31	133	13	60	53	63	72796
Dyna-Gro Seed	772B	131	14	60	53	64	56040
Dyna-Gro Seed	GX15371	127	14	62	57	69	64624
		12	127	14	60	52	62347
		8	126	14	60	55	61289
		4W	125	13	60	49	66103
Dyna-Gro Seed	M68GR41	125	14	59	52	64	56967
Dyna-Gro Seed	M74GB17	125	14	62	56	63	69436
Dyna-Gro Seed	M75GR47	123	14	60	50	59	74519
WARNER SEEDS	W844E	122	14	60	52	63	67907
Dyna-Gro Seed	GX17818	122	14	60	52	67	61228
Dyna-Gro Seed	GX16833	122	14	61	55	70	59914
WARNER SEEDS	W7012	120	14	60	56	65	61243
		W	118	12	59	49	64408
Dyna-Gro Seed	GX16523	116	13	59	50	59	42971
Dyna-Gro Seed	GX16535	116	14	60	53	59	54477
Dyna-Gro Seed	M73GR55	115	15	59	52	75	62820
		8	112	14	60	55	64913
Sorghum Partners	SP68M57	111	14	59	46	61	54975
Dyna-Gro Seed	GX16855	109	15	60	61	67	51643
WARNER SEEDS	W5901	109	14	61	50	60	53999
Dyna-Gro Seed	GX16367	108	14	61	54	69	69109
Dyna-Gro Seed	M60GB88	108	14	59	51	59	62306
Sorghum Partners	SP31A15	107	12	59	47	51	64857
Dyna-Gro Seed	M59GB57	107	13	61	42	51	60725
Sorghum Partners	SPX15616	106	14	60	51	63	61946
WARNER SEEDS	W5701	106	13	60	52	53	64922
		5R	92	13	58	44	54817
		1	84	13	57	45	57527
Average of all entries		116	14	60	52	61	61458
Difference required for significance at 5%		22	1	2	3	4	6141

Grain yield reported after adjusting to 13% moisture