

GRAIN SORGHUM

Tifton, Georgia:

Grain Sorghum Hybrid Performance, 2013 Nonirrigated

Company or Brand Name	Hybrid	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Disease ³ rating
		Yield ¹ bu/acre	Average Yield bu/acre					
Pioneer	84P80	150.1	.	52.6	78	62	0	1.3
SS	SS650	148.0	.	51.6	77	62	5	1.0
Gayland Ward	GW 9417	142.9	.	52.0	75	63	8	1.3
Sorghum Partners	X840	134.7	.	51.6	86	78	0	1.3
Sorghum Partners	NK6638	129.1	.	51.5	80	55	0	1.3
Sorghum Partners	NK8416	126.9	.	50.7	80	64	5	1.0
Sorghum Partners	NK266	125.5	.	50.8	74	58	0	1.5
Sorghum Partners	NK7633	124.5	.	51.5	70	58	0	1.0
Dyna-Gro	GX13661	124.5	.	49.2	79	65	0	1.3
Pioneer	83P17	123.8	121.0	50.1	83	60	0	1.3
Sorghum Partners	NK8817	122.8	.	49.7	84	77	0	1.3
Southern States	SS560	120.5	.	54.1	76	54	0	1.3
Gayland Ward	Exp 9059	120.1	.	51.6	74	53	0	1.3
SS	SS800	120.0	.	50.5	78	59	0	1.0
Sorghum Partners	SP7868	119.1	.	53.0	83	58	1	1.0
Sorghum Partners	X742	112.7	.	49.6	78	58	3	1.5
Dyna-Gro	M77GB52	108.7	.	50.8	81	56	0	1.3
Sorghum Partners	X445	108.1	.	50.5	76	51	0	1.0
Sorghum Partners	NK7829	104.9	.	50.3	81	59	0	1.0
DeKalb	DKS53-67	104.3	121.8	51.5	78	58	0	1.3
Sorghum Partners	NK8828	103.7	.	52.6	80	57	0	1.0
Sorghum Partners	K35-Y5	99.3	.	51.6	68	51	3	1.3
Sorghum Partners	NK8831	94.6	.	45.0	80	47	0	1.8
Sorghum Partners	SP3425	94.1	.	54.2	70	41	0	1.3
Sorghum Partners	KS310	91.8	.	55.1	63	51	0	1.3
Dyna-Gro	M75GB39	90.4	.	51.9	74	49	5	1.0
Average		117.1 ⁴	121.4	51.3	77	58	1	1.2
LSD at 10% Level		15.8	N.S. ⁵	2.4	3	5	N.S.	0.6
Std. Err. of Entry Mean		6.7	4.3	1.0	1	2	2	0.3

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. Rated 1 = resistant to 5 = susceptible to foliar diseases.

4. CV = 11.4% and df for EMS = 75.

5. The F-test indicated no statistical differences at the alpha = 0.10 probability level; therefore, an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: April 19, 2013.

Harvested: August 8, 2013.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Fuquay loamy sand.

Soil Test: P = Low, K = Medium, and pH = 6.1.

Fertilization: Preplant: 24 lb N, 80 lb P₂O₅, and 80 lb K₂O/acre. Sidedress: 130 lb N/acre.

Previous Crop: Peanuts.

Management: Disked, subsoiled and bedded, rototilled; Atrazine and Prowl used for weed control.

Test conducted by A. Coy, R. Brooke, D. Dunn, and B. McCranie.

Tifton, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2013
Nonirrigated

Company or Brand Name	Hybrid	2-Year		Test Wt.	50% Bloom ²	Plant Ht.	Lodging	Disease ³
		Yield ¹ bu/acre	Average Yield bu/acre					
Sorghum Partners	X840	123.3	.	56.8	79	71	0	1.0
Pioneer	83P17	118.9	81.7	52.5	76	59	0	1.8
Sorghum Partners	NK8416	108.5	.	57.3	77	66	0	2.3
Pioneer	84P80	107.6	.	57.5	76	57	4	1.5
DeKalb	DKS53-67	107.3	76.1	57.0	77	57	0	1.3
Dyna-Gro	M77GB52	107.2	.	56.7	76	56	0	1.8
Sorghum Partners	NK8828	105.7	.	57.1	88	58	0	1.5
Gayland Ward	Exp 9059	104.4	.	50.3	76	52	1	1.3
Sorghum Partners	SP7868	104.0	.	57.8	74	56	0	1.3
Dyna-Gro	GX13661	102.0	.	50.8	88	56	1	2.0
Sorghum Partners	NK8817	99.0	.	52.9	88	74	0	1.8
Sorghum Partners	NK7633	98.7	.	53.4	72	52	1	2.0
Sorghum Partners	X445	94.4	.	55.3	77	50	0	1.3
Sorghum Partners	NK6638	94.2	.	56.1	74	59	0	1.5
Sorghum Partners	NK8831	93.9	.	54.6	85	49	3	1.5
Sorghum Partners	NK7829	86.3	.	54.5	89	56	1	1.5
SS	SS800	85.9	.	51.6	71	56	11	1.0
Sorghum Partners	NK266	80.1	.	48.0	67	57	1	1.3
Sorghum Partners	KS310	79.4	.	46.5	61	50	1	1.0
Sorghum Partners	SP3425	74.1	.	49.1	67	44	5	1.8
SS	SS650	73.3	.	56.2	75	57	33	1.0
Southern States	SS560	72.7	.	51.9	65	51	13	1.0
Sorghum Partners	K35-Y5	71.4	.	48.2	68	46	19	1.0
Sorghum Partners	X742	67.5	.	49.4	72	55	28	1.3
Gayland Ward	GW 9417	48.4	.	54.5	73	61	38	1.5
Dyna-Gro	M75GB39	43.6	.	50.6	75	54	38	1.3
Average		90.4 ⁴	78.9	53.3	75	56	7	1.4
LSD at 10% Level		12.3	N.S. ⁵	2.6	3	3	12	0.5
Std. Err. of Entry Mean		5.2	11.7	1.1	1	1	5	0.2

1. Yields calculated at 14% moisture.
2. Days from planting to 50% bloom.
3. Rated 1 = resistant to 5 = susceptible to foliar diseases.
4. CV = 11.6% and df for EMS = 75.
5. The F-test indicated no statistical differences at the alpha = 0.10 probability level; therefore, an LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: June 27, 2013.
Harvested: November 8, 2013.
Seeding Rate: 100,000 seed/acre in 30" rows.
Soil Type: Tifton sandy loam.
Soil Test: P = Low, K = Medium, and pH = 5.8.
Fertilization: Preplant: 24 lb N, 80 lb P₂O₅, and 80 lb K₂O/acre. Sidedress: 130 lb N/acre.
Previous Crop: Wheat.
Management: Disked, subsoiled and bedded, rototilled; Atrazine and Prowl used for weed control.

Test conducted by A. Coy, R. Brooke, D. Dunn, and B. McCranie.

Plains, Georgia: Grain Sorghum Hybrid Performance, 2013, Nonirrigated

Company or Brand Name	Hybrid	2-Year Average Yield ¹	Test Yield	Test Wt.	50% Bloom ²	Plant Ht.	Lodging	Disease ³	Bird Damage ⁴
		bu/acre	bu/acre	lb/bu	days	in	%	rating	%

A sorghum hybrid grain trial was planted at this location on May 20, 2013. However, damage to the developing grain head from unusual, persistent rainfall during July until mid-August plus disease and insects during the growing season resulted in some very low grain yields and considerable variation in performance within and among plots in the test. After careful analysis and review of the data, it is the opinion of the editors that the results of this trial may not accurately reflect the genetic performance potential of all the test entries. Since this data is not useful for making decisions and could be misleading if used in making hybrid selections, it will not be presented in the publication.

1. Yields calculated at 14% moisture.
2. Days from planting to 50% bloom.
3. Rated 1 = resistant to 5 = susceptible to foliar diseases.
4. Percent of grain head damaged.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: July 31, 2013.
 Harvested: November 22, 2013.
 Seeding Rate: 100,000 seed/acre in 30" rows.
 Soil Type: Greenville sandy loam.
 Soil Test: P = Low, K = High, and pH = 6.3.
 Fertilization: Preplant: 8 lb N, 36 lb P₂O₅, and 0 lb K₂O/acre. Sidedress: 50 lb N/acre.
 Previous Crop: Cotton.
 Management: Disked, chiseled, rototilled; Atrazine, Basagran, and Gramoxone used for weed control; Sniper used for insect control; 650 lb/acre lime applied.

Test conducted by A. Coy, R. Brooke, D. Dunn, B. McCranie, W. Jones, and D. Pearce.

**Plains, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2013
Nonirrigated**

Company or Brand Name	Hybrid	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Disease ³ rating	Bird Damage ⁴ %
		Yield ¹ bu/acre	Average Yield bu/acre						
Sorghum Partners	X840	62.8	.	46.8	.	59	0	1.3	.
Sorghum Partners	NK6638	62.1	.	47.9	.	47	1	2.0	.
Sorghum Partners	NK8416	58.1	.	46.1	.	55	0	2.0	.
Dyna-Gro	M77GB52	56.6	.	47.6	.	47	0	1.8	.
Sorghum Partners	NK266	53.2	.	53.4	.	47	3	1.8	.
Sorghum Partners	SP7868	52.6	.	42.5	.	48	0	1.8	.
Sorghum Partners	NK7633	49.9	.	47.1	.	45	0	1.5	.
Gayland Ward	Exp 9059	48.7	.	43.9	.	47	0	1.3	.
Pioneer	83P17	48.3	43.5	40.7	.	46	1	1.5	.
Sorghum Partners	NK8817	47.0	.	38.0	.	62	0	1.0	.
Sorghum Partners	X445	45.3	.	38.8	.	42	0	1.5	.
Sorghum Partners	NK8831	42.4	.	34.7	.	44	0	2.0	.
Pioneer	84P80	40.3	.	45.6	.	44	3	1.5	.
SS	SS800	40.2	.	44.3	.	45	1	1.8	.
DeKalb	DKS53-67	39.3	51.8	41.9	.	46	0	1.3	.
Sorghum Partners	KS310	37.7	.	52.5	.	41	6	1.5	.
Gayland Ward	GW 9417	37.1	.	48.1	.	50	4	1.5	.
Dyna-Gro	GX13661	36.1	.	34.0	.	46	0	2.3	.
Sorghum Partners	X742	35.3	.	39.3	.	47	2	1.5	.
SS	SS650	33.6	.	44.9	.	48	5	1.3	.
Sorghum Partners	SP3425	32.7	.	51.7	.	35	2	1.8	.
Sorghum Partners	K35-Y5	32.3	.	49.6	.	37	5	1.3	.
Dyna-Gro	M75GB39	31.8	.	42.8	.	37	1	1.5	.
Southern States	SS560	27.6	.	52.9	.	38	6	1.8	.
Sorghum Partners	NK7829	24.6	.	30.7	.	50	0	1.3	.
Sorghum Partners	NK8828	18.5	.	30.2	.	49	0	1.8	.
Average		42.1 ⁵	47.6	43.7	.	46	1	1.6	.
LSD at 10% Level		7.4	N.S. ⁶	4.1		2	2	0.5	
Std. Err. of Entry Mean		3.1	3.2	1.7		1	1	0.2	

1. Yields calculated at 14% moisture.
2. Days from planting to 50% bloom.
3. Rated 1 = resistant to 5 = susceptible to foliar diseases.
4. Percent of grain head damaged.
5. CV = 15.0% and df for EMS = 75.
6. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore, a LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: July 31, 2013.
Harvested: November 22, 2013.
Seeding Rate: 100,000 seed/acre in 30" rows.
Soil Type: Greenville sandy loam.
Soil Test: P = Low, K = High, and pH = 6.3.
Fertilization: Preplant: 8 lb N, 36 lb P₂O₅, and 0 lb K₂O/acre. Sidedress: 50 lb N/acre.
Previous Crop: Cotton.
Management: Disked, chiseled, rototilled; Atrazine, Basagran, and Gramoxone used for weed control; Sniper used for insect control; 650 lb/acre lime applied.

Test conducted by A. Coy, R. Brooke, D. Dunn, B. McCranie, W. Jones, and D. Pearce.

Griffin, Georgia: Grain Sorghum Hybrid Performance, 2013, Nonirrigated

Company or Brand Name	Hybrid	2-Year Average		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging % %	Disease ³ rating	Bird Damage ⁴ %
		Yield ¹ bu/acre	Yield bu/acre						
Sorghum Partners	SP7868	111.8	.	56.7	67	55	1	.	4
Dyna-Gro	M77GB52	107.7	.	55.3	65	57	1	.	4
Gayland Ward	Exp 9059	104.0	.	54.8	62	55	1	.	1
Sorghum Partners	NK6638	103.1	.	55.0	64	57	1	.	4
Sorghum Partners	X840	102.4	.	56.6	68	76	1	.	9
Pioneer	84P80	102.1	.	54.3	65	59	1	.	4
Pioneer	83P17	99.9	96.0	54.7	69	62	1	.	10
DeKalb	DKS53-67	98.8	89.5	56.4	64	59	1	.	4
Sorghum Partners	NK8416	96.2	.	57.4	67	72	1	.	9
Sorghum Partners	NK266	95.4	.	54.3	60	62	1	.	5
Sorghum Partners	NK7633	93.4	.	55.9	64	54	1	.	8
Southern States	SS560	87.5	.	55.6	59	54	1	.	16
Sorghum Partners	KS310	85.4	.	54.9	51	52	1	.	9
Sorghum Partners	NK8831	84.6	.	51.7	66	51	1	.	10
SS	SS800	82.3	.	54.4	64	55	1	.	9
Sorghum Partners	X742	82.2	.	52.7	66	58	1	.	14
Sorghum Partners	NK8817	81.1	.	56.7	68	75	1	.	6
Sorghum Partners	NK7829	75.2	.	54.1	68	57	2	.	5
Sorghum Partners	X445	68.4	.	51.3	67	52	1	.	10
SS	SS650	68.4	.	53.4	65	55	4	.	8
Dyna-Gro	GX13661	66.8	.	51.3	67	60	1	.	10
Sorghum Partners	K35-Y5	65.5	.	50.7	57	47	2	.	10
Sorghum Partners	NK8828	61.2	.	52.6	70	54	1	.	4
Dyna-Gro	M75GB39	60.7	.	51.6	64	52	3	.	6
Sorghum Partners	SP3425	59.5	.	50.6	57	47	1	.	13
Average		85.7 ⁵	92.7	54.1	64	57	1	.	8
LSD at 10% Level		13.5	N.S. ⁶	1.5	3	3	1		N.S.
Std. Err. of Entry Mean		5.7	5.6	0.6	1	1	1		3

1. Yields calculated at 14% moisture.
2. Days from planting to 50% bloom.
3. Rated 1 = resistant to 5 = susceptible to foliar diseases.
4. Percent of grain head damaged.
5. CV = 13.3% and df for EMS = 72.
6. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore, a LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: May 23, 2013.
 Harvested: October 2, 2013.
 Seeding Rate: 100,000 seed/acre in 30" rows.
 Soil Type: Cecil sandy clay loam.
 Soil Test: P = High, K = High, and pH = 6.5.
 Fertilization: Preplant: 50 lb N, 100 lb P₂O₅, and 150 lb K₂O/acre. Sidedress: 100 lb N/acre.
 Previous Crop: Fallow.
 Management: Chisel plowed, disked, rototilled; Dual Magnum and one cultivation used for weed control.

Test conducted by J. Gassett and G. Ware.

Griffin, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2013
Nonirrigated

Company or Brand Name	Hybrid	2-Year		Test Wt.	50% Bloom ²	Plant Ht.	Lodging %	Disease ³ rating	Bird Damage ⁴
		Yield ¹ bu/acre	Average Yield bu/acre						
Sorghum Partners	NK8416	112.9	.	54.5	64	73	0	.	9
Dyna-Gro	M77GB52	112.7	.	57.8	61	54	0	.	16
Sorghum Partners	SP7868	112.1	.	57.5	64	57	0	.	8
Sorghum Partners	NK6638	108.4	.	57.6	59	54	1	.	18
Sorghum Partners	X840	108.4	.	57.2	66	69	0	.	5
Sorghum Partners	NK8817	101.1	.	54.4	68	73	1	.	9
Gayland Ward	Exp 9059	98.9	.	55.3	59	55	0	.	8
Sorghum Partners	NK7633	88.7	.	56.6	59	54	0	.	10
DeKalb	DKS53-67	87.4	94.9	57.8	62	55	0	.	9
Sorghum Partners	X445	83.8	.	53.8	66	52	0	.	6
Pioneer	83P17	81.8	94.5	52.7	65	53	0	.	11
Sorghum Partners	NK266	80.9	.	55.6	57	60	0	.	20
Sorghum Partners	NK8831	80.7	.	54.7	66	49	0	.	5
Pioneer	84P80	78.4	.	57.9	60	56	3	.	26
SS	SS800	77.2	.	55.2	60	56	0	.	8
SS	SS650	74.4	.	56.3	61	55	46	.	13
Sorghum Partners	X742	69.6	.	56.0	61	57	11	.	9
Dyna-Gro	GX13661	67.5	.	52.1	64	55	0	.	4
Sorghum Partners	NK7829	67.4	.	51.5	68	58	0	.	5
Dyna-Gro	M75GB39	65.4	.	54.3	60	50	31	.	3
Southern States	SS560	62.3	.	57.1	55	53	3	.	38
Sorghum Partners	NK8828	60.1	.	47.4	72	51	0	.	1
Sorghum Partners	SP3425	57.6	.	56.1	54	46	3	.	49
Sorghum Partners	K35-Y5	48.9	.	54.9	54	47	11	.	39
Sorghum Partners	KS310	44.1	.	53.1	53	52	0	.	50
Average		81.2 ⁵	94.7	55.1	61	56	4	.	15
LSD at 10% Level		10.9	N.S. ⁶	2.3	2	3	8		12
Std. Err. of Entry Mean		4.6	4.6	1.0	1	1	4		5

1. Yields calculated at 14% moisture.
2. Days from planting to 50% bloom.
3. Rated 1 = resistant to 5 = susceptible to foliar diseases.
4. Percent of grain head damaged.
5. CV = 11.4% and df for EMS = 72.
6. The F-test indicated no statistical differences at the alpha = .10 probability level; therefore, a LSD value was not calculated.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: July 9, 2013.
Harvested: November 8, 2013.
Seeding Rate: 100,000 seed/acre in 30" rows.
Soil Type: Pacolet coarse loam.
Soil Test: P = Medium, K = High, and pH = 6.0.
Fertilization: Preplant: 30 lb N, 60 lb P₂O₅, and 90 lb K₂O/acre. Sidedress: 100 lb N/acre.
Previous Crop: Fallow.
Management: Chisel plowed, disked, rototilled; Dual Magnum and Atrazine used for weed control.

Test conducted by J. Gassett and G. Ware.