

GRAIN SORGHUM

Tifton, Georgia:

Grain Sorghum Hybrid Performance, 2016, Nonirrigated

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year	Test Weight lb/bu	50% Bloom ² days	Plant Height in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre					
Pioneer	84P80	144.0	107.1	53.1	58	55	18	28
Pioneer	83P17	137.5	104.3	52.7	63	52	0	30
DeKalb	DKS51-01	135.6	.	54.6	63	50	0	34
Mehrrin Ag.	SH90G6	135.2	.	53.4	62	54	0	30
SS	SS 655	130.2	96.5	52.9	60	47	0	35
Sorghum Partners	SP7715	129.0	.	52.5	63	54	0	38
SS	SS 540	125.8	93.2	51.0	56	52	3	38
Sorghum Partners	NK6638	125.0	.	49.4	60	55	0	55
Southern States	SS EXP 45913	121.7	.	52.9	59	53	0	35
Gayland Ward	GW 9417	120.1	86.2	49.3	62	51	0	50
DeKalb	DKS 37-07	118.8	.	50.8	57	49	0	50
SS	SS 800	116.7	86.5	51.2	60	50	0	38
Athens	105	115.4	.	54.0	59	52	4	38
Alta Seeds	AG1203	112.6	87.6	51.6	58	47	0	33
Mehrrin Ag.	SH80G4	109.9	.	51.9	59	53	4	43
Sorghum Partners	SP78M30	108.9	.	50.4	67	46	0	28
Mehrrin Ag.	SH65G6	107.8	.	51.3	56	52	26	34
Southern States	SS 1592GS	107.0	.	51.2	61	50	4	28
Mehrrin Ag.	SH47G4	105.3	.	50.3	47	48	8	35
Alta Seeds	AG2103	104.3	80.3	51.7	60	49	0	42
Chromatin Inc	CHROL2042	103.3	.	51.0	64	51	0	30
Southern States	SS EXP 021913	103.0	.	51.2	54	54	13	38
Alta Seeds	AG3201	101.9	85.3	48.6	59	53	3	43
Mehrrin Ag.	SH59G4	99.6	.	49.7	58	45	0	41
Alta Seeds	AG2105	89.6	74.1	49.6	60	51	0	45
Sorghum Partners	SP7868	88.8	.	52.5	64	47	0	32
Chromatin Inc	CHROL0029	87.1	.	51.3	65	46	0	28
Average		114.2 ⁴	90.1	51.5	60	50	3	37
LSD at 10% Level		16.2	21.0	2.6	1	4	7	10
Std. Err. of Enty Mean		6.9	8.9	1.1	1	2	3	4

Tifton, Georgia:
Grain Sorghum Hybrid Performance, 2016, Nonirrigated
(Continued)

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1. Yields calculated at 14% moisture.
 2. Days from planting to 50% bloom.
 3. Percent grain head damaged.
 4. CV = 12.1% and df for EMS = 78.

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

Planted: April 28, 2016.

Harvested: August 15, 2016.

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

Soil Type: Tifton sandy loam.

Soil Test: P = High, K = Medium, and pH = 6.3.

Fertilization: Preplant: 50 lb N, 60 lb P₂O₅, and 90 lb K₂O/acre. Sidedress: 60 lb N/acre.

Previous Crop: Fallow.

Management: Disked, subsoiled/bedded, and rototilled; Dual Magnum and Atrazine used for weed control; Savanto used for insect control; Telone II used for nematode control.

Test conducted by R. Brooke, D. Dunn, and G. Smith.

Tifton, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2016,
Nonirrigated

Company or Brand Name	Hybrid	2-Year		Test Weight	50% Bloom ² days	Plant Height in	Lodging %
		Yield ¹ bu/acre	Average Yield bu/acre				
Desert Sun	DSM 40-920	95.1	.	55.0	56	51	31
SS	SS 540	90.7	92.6	53.8	55	52	31
Southern States	SS EXP 45913	90.4	.	55.5	57	55	13
Pioneer	83P17	89.9	93.4	42.8	60	53	73
Southern States	SS EXP 021913	89.7	.	51.5	55	51	65
Mehrrin Ag	SH59G4	89.5	.	57.0	55	53	16
Desert Sun	DSM 7-502	88.4	.	55.6	57	49	38
Mehrrin Ag	SH65G6	78.0	.	53.2	57	49	46
Mehrrin Ag	SH80G4	76.9	.	53.1	57	54	34
Southern States	SS 1592GS	75.0	.	52.0	55	53	24
Athens	105	75.0	.	51.6	56	55	56
DeKalb	DKS51-01	74.2	.	52.9	60	54	54
DeKalb	DKS 37-07	72.9	.	44.4	55	51	63
Desert Sun	DSM 45-480	72.7	.	45.5	53	48	79
Pioneer	84P80	71.2	72.7	47.0	59	47	61
Alta Seeds	AG2105	71.0	82.7	52.3	57	53	26
Mehrrin Ag	SH90G6	67.6	.	52.9	61	54	18
Alta Seeds	AG3201	65.6	64.8	49.9	54	51	50
Desert Sun	DSM 15-539	60.8	.	43.5	53	49	28
Alta Seeds	AG1203	58.4	55.9	40.8	57	53	35
Gayland Ward	GW 9417	55.9	60.5	46.5	58	54	80
Mehrrin Ag	SH47G4	53.0	.	45.1	41	41	10
SS	SS 655	41.3	41.5	48.6	57	49	9
SS	SS 800	41.0	55.4	46.1	55	47	18
Alta Seeds	AG2103	33.3	33.1	47.7	57	49	13
Average		71.1 ³	65.3	49.8	56	51	39
LSD at 10% Level		12.0	7.8	2.9	1	2	23
Std. Err. of Entry Mean		5.1	3.3	1.2	1	1	10

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. CV = 14.3% and df for EMS = 72.

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

Planted: June 17, 2016.

Harvested: September 22, 2016.

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

Soil Type: Tifton sandy loam.

Soil Test: P = Medium, K = Medium, and pH = 6.5.

Fertilization: Preplant: 60 lb N, 70 lb P₂O₅, and 60 lb K₂O/acre. Sidedress: 60 lb N/acre.

Previous Crop: Grain sorghum.

Management: Disked, subsoiled/bedded, and rototilled; Dual Magnum and Atrazine used for weed control; Savanto used for insect control; Telone II used for insect control.

Test conducted by R. Brooke, D. Dunn, and G. South.

Plains, Georgia: Grain Sorghum Hybrid Performance, 2016, Nonirrigated

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year		50% Bloom ² days	Plant Height in	Lodging %	Bird Damage ³ %	
			Average Yield bu/acre	Test Weight lb/bu					
Alta Seeds	AG1203	127.1	102.2		50.3	51	40	1	38
Athens	105	119.6	.		52.6	60	41	0	38
Mehrrin Ag.	SH65G6	118.1	.		53.8	53	45	0	31
DeKalb	DKS 37-07	116.8	.		51.1	51	39	0	26
Sorghum Partners	SP7868	115.8	.		54.2	63	45	0	42
Southern States	SS EXP 45913	114.2	.		52.2	58	42	0	32
DeKalb	DKS51-01	114.2	.		53.7	61	42	0	36
Pioneer	83P17	110.2	97.8		48.5	63	45	0	38
Sorghum Partners	SP78M30	107.1	.		47.5	62	41	0	41
Chromatin Inc	CHROL2042	107.0	.		51.0	59	40	1	32
Alta Seeds	AG2105	106.2	92.6		51.4	58	43	1	37
Mehrrin Ag.	SH80G4	105.2	.		52.9	60	42	0	29
Mehrrin Ag.	SH59G4	104.8	.		52.6	56	42	0	33
Southern States	SS EXP 021913	104.6	.		51.5	53	44	0	28
SS	SS 655	104.1	91.2		52.2	59	39	3	32
Pioneer	84P80	104.0	97.6		50.0	59	41	4	24
Mehrrin Ag.	SH90G6	102.6	.		50.8	61	46	0	35
Southern States	SS 1592GS	102.4	.		48.8	53	42	0	18
SS	SS 540	102.3	86.2		52.1	57	43	0	34
Alta Seeds	AG2103	102.1	95.1		51.1	58	38	0	38
Sorghum Partners	SP7715	98.9	.		51.2	63	41	1	32
Chromatin Inc	CHROL0029	98.5	.		51.2	63	44	0	27
Sorghum Partners	NK6638	98.0	.		47.4	61	41	0	36
Alta Seeds	AG3201	96.7	90.6		48.1	61	38	0	31
Gayland Ward	GW 9417	92.1	81.9		50.6	62	43	0	33
Mehrrin Ag.	SH47G4	90.7	.		49.2	45	41	8	26
SS	SS 800	83.4	79.7		45.2	61	40	0	38
Average		105.4 ⁴	91.5		50.8	58	42	1	33
LSD at 10% Level		8.7	8.4		2.0	1	2	2	6
Std. Err. of Entry Mean		3.7	3.6		0.9	1	1	1	3

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent grain head damaged.

4. CV = 7.1% and df for EMS = 78.

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

Planted: April 26, 2016.

Harvested: August 17, 2016.

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

Soil Type: Greenville sandy clay loam.

Soil Test: P = High, K = High, and pH = 6.3.

Fertilization: Preplant: 18 lb N, 46 lb P₂O₅, and 60 lb K₂O/acre. Sidedress: 55 lb N/acre.

Previous Crop: Soybeans.

Management: Disked twice, chisel plowed, and rototilled; Dual Magnum and Atrazine used for weed control; Savanto used for insect control; applied 1000 lb/acre lime.

Test conducted by D. Pearce, W. Jones, R. Brooke, D. Dunn, and G. South.

**Plains, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2016,
Nonirrigated**

Company or Brand Name	Hybrid	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
		Yield ¹ bu/acre	Average Yield bu/acre					
Mehrrin Ag	SH65G6	69.3	.	56.7	55	47	0	8
Desert Sun	DSM 40-920	66.7	.	56.0	53	46	1	0
Desert Sun	DSM 7-502	64.7	.	56.6	52	47	0	0
Southern States	SS EXP 021913	63.6	.	56.5	56	46	0	13
Southern States	SS EXP 45913	60.7	.	55.6	54	47	0	14
DeKalb	DKS 37-07	58.7	.	52.6	49	47	0	19
Desert Sun	DSM 45-480	57.7	.	54.0	47	51	54	21
Mehrrin Ag	SH59G4	56.9	.	55.8	56	46	0	3
Athens	105	54.0	.	52.5	55	47	1	7
SS	SS 540	53.2	59.9	55.5	56	46	0	7
Gayland Ward	GW 9417	49.6	49.5	54.9	54	52	21	22
Alta Seeds	AG2105	47.1	44.4	52.1	54	48	3	9
Alta Seeds	AG3201	46.6	45.8	53.3	49	49	43	25
DeKalb	DKS51-01	43.4	.	52.7	61	51	0	0
Alta Seeds	AG1203	42.6	41.3	49.9	54	46	0	13
Mehrrin Ag	SH80G4	41.7	.	53.2	58	47	0	3
Pioneer	83P17	40.8	55.7	49.7	54	47	1	10
Mehrrin Ag	SH47G4	40.7	.	45.3	42	46	9	38
Pioneer	84P80	35.6	46.8	53.2	55	47	0	11
Southern States	SS 1592GS	35.1	.	52.1	52	46	3	0
SS	SS 800	34.5	47.5	49.9	49	46	1	21
Desert Sun	DSM 15-539	32.7	.	47.7	45	45	28	32
Mehrrin Ag	SH90G6	27.9	.	49.3	62	51	0	0
SS	SS 655	22.6	28.3	46.4	56	42	0	13
Alta Seeds	AG2103	16.3	24.1	53.2	56	41	0	0
Average		46.5 ⁴	44.3	52.6	53	47	7	11
LSD at 10% Level		6.9	7.2	1.6	-	2	10	8
Std. Err. of Entry Mean		2.9	3.1	0.7	-	1	4	3

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent grain head damaged.

4. CV = 12.7% and df for EMS = 72.

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

Planted: First time: June 21, 2016. Second time: July 18, 2016.

Harvested: October 19, 2016.

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

Soil Type: Greenville sandy clay loam.

Soil Test: P = High, K = High, and pH = 6.3.

Fertilization: Preplant: 18 lb N, 46 lb P₂O₅, and 60 lb K₂O/acre. Sidedress: 55 lb N/acre.

Previous Crop: Soybeans.

Management: Disked twice, chisel plowed, and rototilled; Dual Magnum used for weed control; Savanto used for insect control.

Test conducted by D. Pearce, W. Jones, R. Brooke, D. Dunn, and G. South.

Griffin, Georgia: Grain Sorghum Hybrid Performance, 2016, Nonirrigated

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre	Yield					
Pioneer	83P17	83.1	93.8		52.9	70	40	13	9
DeKalb	DKS51-01	76.5	.		57.8	67	44	0	9
Pioneer	84P80	68.3	81.4		54.8	67	38	8	3
Alta Seeds	AG2105	65.7	88.6		53.8	63	40	0	9
Alta Seeds	AG2103	62.3	80.5		56.0	65	36	0	4
Alta Seeds	AG3201	61.4	76.6		54.9	65	40	0	6
Mehrrin Ag.	SH90G6	58.2	.		56.3	68	42	0	8
SS	SS 800	58.1	78.6		54.0	64	38	0	13
Southern States	SS EXP 45913	57.2	.		56.3	64	41	0	8
Athens	105	54.9	.		56.5	64	40	0	10
SS	SS 540	54.6	55.3		54.3	63	37	0	8
Gayland Ward	GW 9417	52.1	81.5		56.4	67	43	0	11
Mehrrin Ag.	SH80G4	51.9	.		56.7	65	39	0	4
Alta Seeds	AG1203	51.7	78.9		56.1	63	35	0	15
SS	SS 655	51.5	69.3		55.8	65	37	0	7
Mehrrin Ag.	SH59G4	49.6	.		54.4	61	38	0	5
Southern States	SS EXP 021913	49.0	.		50.7	60	39	0	5
Mehrrin Ag.	SH65G6	49.0	.		54.9	62	34	0	13
DeKalb	DKS 37-07	48.3	.		54.2	61	34	0	9
Southern States	SS 1592GS	47.7	.		55.4	62	37	0	2
Average		57.6 ⁴	78.4		55.1	64	38	1	8
LSD at 10% Level		9.7	14.7		2.3	2	3	N.S. ⁵	6
Std. Err. of Entry Mean		4.1	6.2		1.0	1	1	3	2

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent grain head damaged.

4. CV = 14.2% and df for EMS = 57.

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: May 15, 2016.

Harvested: September 1, 2016.

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

Soil Type: Pacolet sandy loam.

Soil Test: P = High, K = Very High, and pH = 6.3.

Fertilization: Preplant: 40 lb N, 80 lb P₂O₅, and 120 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Fallow.

Management: Chisel plowed, disked, and rototilled; Dual Magnum, Atrazine, and one cultivation used for weed control; Prevathon and Savanto used for insect control.

Test conducted by H. Jordon, G. Ware, and T. Dunn.

**Griffin, Georgia:
Late-Planted Grain Sorghum Hybrid Performance, 2016,
Nonirrigated**

Company or Brand Name	Hybrid	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
		Yield ¹ bu/acre	Average Yield bu/acre					
DeKalb	DKS51-01	90.0	.	60.6	61	51	0	3
Pioneer	83P17	83.9	120.2	54.6	57	44	0	0
Athens	105	76.0	.	59.2	58	45	0	1
Pioneer	84P80	74.1	81.9	60.5	60	41	0	0
Alta Seeds	AG1203	74.0	63.2	57.7	59	46	0	0
Desert Sun	DSM 15-539	70.8	.	49.2	54	45	1	3
DeKalb	DKS 37-07	69.7	.	58.5	58	44	0	0
Alta Seeds	AG2105	69.7	87.6	59.2	61	44	1	0
Alta Seeds	AG2103	69.6	68.8	57.3	60	41	0	0
SS	SS 800	69.6	73.9	57.8	58	43	1	1
Southern States	SS EXP 021913	69.6	.	57.1	57	46	0	0
Southern States	SS EXP 45913	68.6	.	60.2	57	48	3	1
Alta Seeds	AG3201	68.4	81.1	59.3	58	42	0	0
Mehrrin Ag	SH80G4	66.2	.	59.6	59	48	1	0
Mehrrin Ag	SH90G6	66.1	.	59.2	62	47	0	1
SS	SS 655	65.7	70.3	57.2	60	41	0	0
Gayland Ward	GW 9417	65.1	92.6	58.2	59	45	0	0
Mehrrin Ag	SH65G6	63.6	.	59.0	56	46	0	1
SS	SS 540	61.7	113.3	58.9	58	45	0	0
Desert Sun	DSM 40-920	60.8	.	57.9	56	41	3	3
Desert Sun	DSM 45-480	60.0	.	52.7	53	40	4	3
Mehrrin Ag	SH59G4	55.4	.	57.4	58	44	1	1
Mehrrin Ag	SH47G4	54.3	.	50.2	48	33	1	1
Desert Sun	DSM 7-502	52.1	.	55.3	58	41	0	0
Southern States	SS 1592GS	45.1	.	48.3	58	43	0	0
Average		66.8 ⁴	85.3	57.0	58	44	1	1
LSD at 10% Level		14.4	N.S. ⁵	5.2	2	4	N.S.	2
Std. Err. of Entry Mean		6.1	8.1	2.2	1	2	1	1

1. Yields calculated at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent of grain head damaged..

4. CV = 18.2% and df for EMS = 72.

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 28, 2016.

Harvested: October 10, 2016.

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

Soil Type: Appling sandy loam.

Soil Test: P = Medium, K = High, and pH = 5.8.

Fertilization: Preplant: 40 lb 80N, 1b P₂O₅, and 120 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Fallow.

Management: Chisel plowed, disked, rototilled, and one cultivation; Dual Magnum and Atrazine used for weed control; Prevathon used for insect control; applied 1500 lb lime/acre.

Test conducted by H. Jordan, G. Ware, and T. Dunn.