Corn Hybrids for Grain 2017

Introduction

Corn seed companies provided 43 hybrids that were part of the official variety trials on several LSU AgCenter research stations during 2016. Seven hybrid trials were conducted at four AgCenter research stations across the state.

In addition to those research station tests, the on-farm core block demonstrations were conducted with a total of 13 hybrids planted over 11 locations in the corn-growing areas of Louisiana. LSU AgCenter extension agents coordinated these demonstrations.

The official corn hybrid trials were conducted according to AgCenter best management practices. The on-farm core block demonstrations were placed with corn producers and subjected to the standard production practices for each producer.

On-farm core block demonstration information is presented to provide yield results by trial, as well as trend comparisons from the compiled data. As opposed to the official variety trial research, core block demonstrations sometimes are not replicated in the field, and a rigorous statistical analysis is not possible. Sufficient trials were conducted across a variety of locations, however, so meaningful and relevant observations can be made that will be useful to Louisiana producers as they make hybrid selection decisions.

The data provided in this publication should help you make more informed decisions about which hybrids will perform best for your production area.

Hybrid Selection

Seed companies offer multiple hybrids for sale to producers for good reasons. Each corn producer has somewhat different soil conditions, irrigation practices and crop rotations than neighboring growers. Some hybrids tend to perform better than others based on soil type, planting date, environmental conditions and location.

Relative maturity is determined genetically, but maturity date of a given hybrid depends on the daily temperature mean accumulation (growing degree units) above 50° F for corn. Below that temperature, minimal corn growth occurs. Louisiana producers can grow early hybrids (100-108 days), midseason hybrids (109-119 days) and full-season hybrids (more than 120 days).

Plant height, ear height and stalk strength are factors that influence corn stands and, ultimately, yield. Husk cover is important in wet harvest seasons because loosely shucked hybrids may dry quicker. Loosely shucked hybrids tend not to withstand a wetter, more humid Louisiana harvest season as well as the thicker, tightly shucked ones. Grain quality can be affected as can the susceptibility to pathogen.

Planting Rate and Depth

The optimal plant population for corn ranges from 25,000-30,000 live plants per acre. Assume 80 percent field emergence if planting early (plant 31,250-37,500 seeds per acre). The lower end of the recommended range should be used when lower yields are expected due to soil type, late planting date, drought-prone areas or low fertility. Higher populations should be used on highly productive, deep alluvial soils or irrigated fields where moisture will not be a limiting factor.

Seed size and shape are not critical for a good stand, but be sure to use the correct plate and planter for the size purchased. Corn should be planted 2 inches deep. It is vitally important to establish seed contact with moist soil, but planting seeds more than 2 inches deep can increase the probability of an uneven plant stand, which can affect growth and yield.

Fertilization

Proper fertility is critical for optimizing crop yields, particularly in corn. Soil pH should be at least 5.8 for corn production. Nitrogen should be applied according to whether the field is an alluvial plain (such as the Delta) or an upland soil, and whether it is irrigated or dryland (Table 1).

Apply nitrogen in a split application with 50-75 percent applied before or at planting and the balance when corn is 3-12 inches tall. All the nitrogen can be applied preplant or at planting, but this increases the risk of fertilizer burn on seedlings and nitrogen loss from leaching or volatilization. An application of 20-50 pounds of nitrogen at tassel may be beneficial if environmental conditions resulted in leaching or volatilization of nitrogen.

Banding phosphorus will increase its efficiency when the soil pH is very acidic or alkaline or when soil test phosphorus levels are low. Soil testing is recommended to apply appropriate levels for each field, but in many soils, 40-60 pounds of P_2O_5 and K_2O per acre will be needed. Corn uses phosphorus and potassium early in its growth cycle, so these nutrients should be applied preplant or at planting.

Soil testing also is recommended for determining sulfur and zinc needs. If sulfur is lower than 12 parts per million (Mehlich 3), apply at least 10 pounds of sulfur – in the sulfate form – per acre. If zinc is lower than 1 ppm, apply 10 pounds of zinc in a soluble form, such as zinc sulfate or zinc chelate, per acre. Among the inorganic zinc sources on the market, the most common sources are sulfates, oxides and oxysulfates. Zinc sulfate and zinc chelates essentially are 100 percent water soluble, while zinc oxides essentially are insoluble in a single crop season, thus unavailable to the crop to be planted. Oxysulfates are a mixture of sulfates and oxides, with varying proportions of sulfates and

oxides and different solubility levels (0.7-98.3 percent). The effectiveness of these can be highly variable, depending on solubility. Low solubility materials may have some value in a long-term buildup program, but when immediate results are the goal, highly soluble fertilizers are the best choices. For acceptable in-season efficacy, a zinc-fertilizer source should be at least 50 percent water-soluble. If a soil test shows zinc is between 1 and 2.25 ppm, apply 5 pounds of zinc per acre when broadcasting. Less is needed if using a banded application.

Table 1. Nitrogen rates for corn in Louisiana based on field conditions.

Soil	Irrigation	Nitrogen Rate (lbs./acre)
Alluvial	Yes	180-270
Alluvial	No	140-210
Upland	Yes	160-230
Upland	No	120-190

Planting Date

Corn should be planted as close as possible to the date of the average last spring freeze. The optimal planting window for south Louisiana is from Feb. 25 to March 20, and for north Louisiana the optimal planting window generally is March 10 to April 1. In most years, April 15 is the last date for maximum yield potential. Extending planting to May 1 can result in a yield reduction of 30 percent or more.

Corn younger than V6 (6-leaf stage) usually can withstand a light frost if the temperature does not drop below 30° F. A moderate freeze will burn any existing leaves and cause them to drop, but new leaves can emerge in four to five days with warmer temperatures. However, as the growing point moves upward near the soil surface the possibility of injury increases.

Evaluating the Data

This report begins with yield data from the official variety trials conducted by LSU AgCenter scientists in a replicated format that allow for statistical comparisons (tables 2 and 3). Detailed measurements were made, but this report only displays yield data. For a complete review of the official variety trial data visit the corn section of the LSU AgCenter website at www.lsuagcenter.com/corn.

For a better understanding of how corn hybrids performed in Louisiana, refer to the official variety trial data first. Choose the hybrids that performed well overall and those that performed well in the region that best represents your growing area. Finally, check the on-farm core block data to see if it is consistent with the official variety trial data for your chosen hybrids (tables 4-15). By making thorough comparisons across the full range of information available, you can improve your chances of choosing hybrids that will perform well on your farm.

LSU AgCenter Official Variety Trial Data

Table 2. Cultural practices for OVT trials, 2016.

Location	Soil Type	Previous Crop	Planting Date	Harvest Date	Row Spacing	Seeding Rate	Irrigated
St. Joseph	Commerce silt loam	Cotton	4/8/16	9/6/16	38″	36,000	None
St. Joseph	Commerce sandy loam	Soybeans	3/23/16	9/3/16	38″	36,000	Furrow
St. Joseph	Sharkey silty clay	Cotton	3/23/16	8/30/16	38″	36,000	Furrow
St. Joseph	Sharkey silty clay	Cotton	3/23/16	8/31/16	38″	36,000	None
Winnsboro	Gigger silt loam	Soybeans	3/21/16	8/23/16	38″	36,000	Furrow
Alexandria	Coushatta silt loam	Soybeans	4/5/16	9/1/16	38*	36,000	None
Bossier City	Caplis very fine sandy loam	Soybeans	3/20/16	9/9/16	40″	36,000	Furrow

Table 3. Yield performance of hybrids entered in the LSU AgCenter corn hybrid performance trials, 2016.

St. Joseph								
			Commerce	Commerce	Sharkey Silty Clay			
Hybrid	Alex.	Bossier	Silt loam*	Sandy loam	Dryland	Irrig.	Winnsboro	Avg.
	Bu./acre @ 15.5%							
REV®23BHR55™	189.3	176.9	204.8	229.1	171.3	187.4	195.3	193.4
RE®25BHR26™	197.8	154.7	198.2	198.1	174.0	182.8	199.3	186.4
RE®26BHR50™	201.0	172.6	214.8	235.9	189.8	193.5	210.4	202.6
RE®28HR20™	176.6	150.1	192.9	206.5	181.5	204.0	186.5	185.4
RE®28R10™	198.8	157.7	203.5	218.7	189.0	202.7	200.8	195.9

Continued

Table 3. Yield performance of hybrids entered in the LSU AgCenter corn hybrid performance trials, 2016.								
St. Joseph								
			Commerce	Commerce	Sharkey Silty Clay			
Hybrid	Alex.	Bossier	Silt loam*	Sandy loam	Dryland	Irrig.	Winnsboro	Avg.
	Bu./acre @ 15.5%							
Pioneer P1197YHR	194.8	157.7	194.2	210.8	160.8	178.7	196.6	184.8
Pioneer P1637YHR	187.7	167.6	200.2	223.7	184.1	196.2	190.7	192.9
Pioneer P1916YHR	179.3	165.3	174.1	215.8	169.6	188.5	203.5	185.2
Syngenta N68K-3111A	203.0	161.2	172.4	185.7	155.1	159.1	164.8	171.6
Syngenta N69D-3000GT	192.4	148.7	170.8	196.2	154.4	165.1	187.7	173.6
Delta Grow 3660	198.5	143.1	188.8	194.9	152.5	171.0	193.9	177.5
Delta Grow 2888	184.8	153.8	169.9	180.4	155.9	170.0	187.6	171.8
Delta Grow 2688	191.7	121.3	154.3	198.4	130.8	160.4	178.1	162.1
Armor 1414	181.4	163.1	207.3	215.1	182.9	202.3	198.2	192.9
Armor 1500	194.5	153.8	165.8	189.1	156.4	165.0	183.7	172.6
Armor AXC6116	198.0	150.9	206.0	218.1	173.3	193.7	204.1	192.0
Armor 1717	193.1	176.3	205.6	219.4	172.5	177.1	208.5	193.2
Armor AXG6118	171.8	146.8	186.2	212.8	171.2	188.6	199.5	182.4
Mycogen 2C797	196.7	168.5	194.2	201.0	167.8	181.0	205.6	187.8
Mycogen 2Y744	205.3	132.9	192.9	208.0	165.8	177.1	184.3	180.9
Mycogen 2D848	198.7	173.8	198.9	213.5	177.1	187.7	198.4	192.6
Mycogen X14730VH	212.7	168.2	196.4	205.1	162.0	183.7	195.3	189.1
Mycogen X13823S3	194.6	155.7	182.0	198.2	167.1	177.4	184.2	179.9
Mycogen X13813VH	197.1	164.0	200.7	215.8	173.0	193.0	195.6	191.3
DEKALB DKC62-08	200.0	152.0	.	201.3	174.6	171.1	206.8	184.3
DEKALB DKC66-87	208.7	161.8	189.7	213.0	171.2	179.0	191.4	187.8
DEKALB DKC67-72	178.8	151.2	201.1	205.4	180.1	180.0	191.5	184.0
DEKALB DKC67-14	182.1	166.3	195.8	219.3	175.8	185.3	193.9	188.4
DEKALB DKC68-26	214.2	146.5	185.7	209.4	176.9	193.9	200.2	189.5
DEKALB DKC70-27	205.1	174.3	203.4	220.0	169.3	203.7	211.9	198.2
DEKALB DKC67-44	194.4	174.2	208.9	216.7	188.6	197.9	203.7	197.8
DEKALB DKC66-75	210.6	164.9	198.8	223.8	169.7	193.3	207.2	195.5
DEKALB DKC64-35	199.2	153.3	191.6	194.0	161.6	180.3	204.5	183.5
DEKALB DKC66-59	206.9	149.8	194.2	200.7	173.1	192.1	197.6	187.8
Dyna-Gro D54VC52	188.7	152.0	178.2	199.0	159.1	182.8	200.2	180.0

Continued

Table 3. Yield performance of hybrids entered in the LSU AgCenter corn hybrid performance trials, 2016.

St. Joseph								
			Commerce	Commerce	Sharkey Silty Clay			
Hybrid	Alex.	Bossier	Silt loam*	Sandy loam	Dryland	Irrig.	Winnsboro	Avg.
	Bu./acre @ 15.5%							
Dyna-Gro D54DC94	206.2	160.2	200.8	208.1	182.6	199.2	209.0	195.2
Dyna-Gro 56VC46	203.9	140.4	173.3	198.9	158.0	176.9	202.4	179.1
Dyna-Gro 57VP51	205.6	164.5	164.4	222.6	169.8	190.1	215.1	190.3
Dyna-Gro D58VC37	207.0	167.8	195.2	197.1	154.1	171.9	192.4	183.6
Dyna-Gro CX16118	182.5	154.0	187.1	219.0	174.2	190.9	206.3	187.7
BH 8721VT2P	191.7	168.7	204.9	219.3	178.2	173.6	218.0	193.5
BH 8735VTTP	190.7	166.9	199.8	209.4	180.6	195.0	197.3	191.4
Augusta 7768	205.2	164.2	192.0	213.2	167.4	186.0	184.6	187.5
Average	**195.8**	**158.5**	**191.3**	**209.0**	**170.0**	**184.5**	**197.4**	
CV,%	**11.6**	**7.4**	**6.7**	**6.4**	**8.8**	**6.7**	**7.9**	
LSD (0.10)	**26.7**	**12.4**	**15.0**	**15.7**	**17.5**	**14.5**	**16.3**	

***Raccoon-damaged plot.**

Table 4. Summary of on-farm corn core block demonstrations at 11 locations by parish, 2016. Yield expressed in bu. per acre (15.5% moisture).

Hybrid	Beauregard	Caldwell	E. Carroll	Franklin	Madison	Morehouse	St. Landry	Rapides	Tensas	W. B. Rouge	W. Carroll	Average
Mycogen 2C797		187.7	200.4	212.4	171.9		197.5	177.7	259.5		186.6	199.2
DeKalb 67-14	183.6	184.3	199.8	184.9	196.3	187.8	200.5	187.4	202.8	175.7	193.9	190.6
Mycogen 2D848		172.3	196.8	173.9	196.4		201.4	159.8	251.0		195.2	193.4
DeKalb 68-26	171.4	181.3	209.5	200.2	164.0	169.0	206.3	183.0	275.9	167.1	203.4	193.7
Armor 1414	151.2	176.7	197.0	209.4	168.1	193.3	210.2	167.6	265.7	138.0	224.2	191.0
Terral 28R10		165.4	212.0	201.6	184.0	209.2	194.6	191.9	272.5	118.0	221.4	197.1
D-Gro D56VC46	171.2	203.0	223.3	229.7	189.9	213.2	215.4	194.6	256.8	154.6	210.3	205.6
Syngenta N78-S	166.8	176.5	198.0	201.3	183.0		185.6	179.6	257.7	150.9	202.2	190.2
Terral 25BHR26	165.6	180.0	203.6	189.8	140.3	211.1	200.1	171.8	259.9	129.5	206.7	187.1
Armor 1717	175.6	200.5	218.5	219.2	159.4	188.5	213.5	172.2	273.1	155.5	189.2	196.8
Pioneer 1637	177.4	193.9	204.4	176.8	146.9	189.3	193.2	180.5	249.0	145.6	211.0	188.0
Syngenta N83-D	177.1	176.0	197.6	186.6	147.3	187.2	186.1	180.7	265.2	134.1	203.8	185.6
Terral 26BHR50	167.7	192.1	208.3	221.0	164.3	203.7	201.6	178.0	261.8	129.8	183.7	192.0
Average	170.8	183.8	205.3	200.5	170.1	195.2	200.5	178.8	257.8	145.3	202.4	

Table 5. Beauregard Parish.		
Community: Deridder	Date planted: 4/2/16	Tillage: Minimum
County agent: Keith Hawkins	Row spacing (inches): 30	Harvest date: 8/31/16
Cooperator: David Smith	Plant population: 30,000	GPS coord: 30.84369N, 93.37013W
Previous crop: soybeans	N rate (lb/acre): 200	
Soil type: Caddo-Messer complex	Irrigation: No	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Terral 26BHR50	12	590	0.41	14.9	61.7	167.65	7
Dyna-Gro D56VC46	12	590	0.41	15.3	59.2	171.18	6
Syngenta N78-S	12	590	0.41	15.8	56	166.84	8
Terral 25BHR26	12	590	0.41	15.3	58.6	165.63	9
Armor 1414	12	590	0.41	15.1	54.5	151.19	10
DeKalb DKC67-14	12	590	0.41	15.0	58.4	183.55	1
Pioneer P1637YHR	12	590	0.41	14.8	57.6	177.42	2
Armor 1717	12	590	0.41	14.6	58.9	175.62	4
Syngenta N83-D	12	590	0.41	16.0	58.1	177.11	3
DeKalb DKC68-26	12	590	0.41	15.3	56.7	171.36	5

[1]Adjusted to 15.5% moisture.

Table 6. Caldwell Parish.		
Community: East of Columbia-HWY. 4	Date planted: 4/5/16	Tillage: Reduced
County agent: Jim McCann	Row spacing (inches): 38	Harvest date: 9/7/16
Cooperator: Lelon Kenney	Plant population: 34,000	GPS coord: 32.07853N, 92.02409W
Previous crop: Soybeans	N rate (lb/acre): 200	
Soil type: Hebert silt loam	Irrigation: Furrow	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Armor 1414	16	1011	1.18	14.9	58.1	176.70	9
Syngenta N78-S	16	1016	1.18	14.8	57.7	176.52	10
Terral 26BHR50	8	1021	0.59	14.9	61.2	192.08	4
Dyna-Gro D56VC46	8	1025	0.60	14.5	61.3	203.02	1
Armor 1717	8	1030	0.60	14.5	60.1	200.47	2
Syngenta N83-D	8	1035	0.60	15	60.6	175.95	11
Terral 28R10	8	1040	0.60	14.5	61.2	165.44	13
Terral 25BHR26	8	1045	0.61	14.2	60.6	179.96	8
Mycogen 2C797	8	1050	0.61	13.8	59.4	187.70	5
Pioneer P1637YHR	8	1055	0.61	14.1	61.3	193.91	3
DeKalb DKC67-14	8	1060	0.62	13.7	60.6	184.31	6
DeKalb DKC68-26	8	1065	0.62	14.2	60.3	181.27	7
Mycogen 2D848	8	1070	0.62	15	60.3	172.33	12

[1]Adjusted to 15.5% moisture.

Table 7. East Carroll Parish.		
Community: Hollandale	Date planted: 3/29/16	Tillage: Minimum
County agent: Donna R. Lee	Row spacing (inches): 38-twin rows	Harvest date: 8/20/16
Cooperator: Teddy Schneider	Plant population: 35,500	GPS coord:
Previous crop: Cotton	N rate (lb/acre): 292	
Soil type: Commerce silt loam	Irrigation: no	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Terral 28R10	8	304	1135	16.7		211.99	3
Terral 26BHR50	8	304	1135	16.6		208.26	5
Terral 25BHR26	8	304	1135	14.8		203.62	7
Pioneer 1637YHR	8	304	1135	15.7		204.36	6
Syngenta N83-D	8	304	1135	16.5		197.61	11
Syngenta N78-S	8	304	1135	15.5		198.00	10
DeKalb DKC68-26	8	304	1135	15.7		209.46	4
DeKalb DKC67-14	8	304	1135	16		199.81	9
Dyna-Gro 56VC46	8	304	1135	16.5		223.30	1
Armor 1717	8	304	1135	16.1		218.48	2
Armor 1414	8	304	1135	15.1		196.98	12
Mycogen 2C797	8	304	1135	14.5		200.37	8
Mycogen 2D848	8	304	1135	17.3		196.80	13

[1]Adjusted to 15.5% moisture.

Table 8. Franklin Parish		
Community: Jigger	Date planted: 3/23/16	Tillage: Stale seedbed
County agent: Carol Pinnell-Alison	Row spacing (inches): 38	Harvest date: 8/29/16
Cooperator: Campbell Farms	Plant population: 33,000	GPS coord: 32.076874N, 91.74334W
Previous crop: Soybeans	N rate (lb/acre): 200	
Soil type: Gilbert-Gigger	Irrigation: Furrow	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Terral 26BHR50	8	1266	0.74	15.3	62.8	220.99	220.99
Armor 1717	8	1269	0.74	14.1	62.6	219.16	219.16
Syngenta N78-S	8	1272	0.74	14.9	57.9	201.29	201.29
Dyna-Gro D56VC46	8	1274	0.74	15.2	61.1	229.65	229.65
Mycogen 2C797	8	1277	0.74	14.4	58.2	212.40	212.40
Terral 28R10	8	1280	0.74	15.2	62.8	201.61	201.61
DeKlalb DKC67-14	8	1283	0.75	14.6	59.6	184.91	184.91
Pioneer P1637YHR	8	1285	0.75	14.3	61.2	176.79	176.79
Syngenta N83-D	8	1288	0.75	15.7	59.4	186.58	186.58
Armor 1414	8	1291	0.75	14.8	60.3	209.35	209.35
Mycogen 2D848	8	1294	0.75	16.2	61	173.90	173.90
Terral 25BHR26	8	1296	0.75	14.4	61	189.84	189.84
DeKalb DKC68-26	8	1299	0.76	14.4	61.1	200.18	200.18

[1]Adjusted to 15.5% moisture.

Table 9. Madison Parish		
Community: Willow Bayou	Date planted: 3/8/16	Tillage: Minimum
County agent: R.L. Frazier	Row spacing (inches): 38	Harvest date: 8/4/16
Cooperator: Collins Farm	Plant population: 33,000	GPS coord:
Previous crop: Soybeans	N rate (lb/acre): 200	
Soil type: Sharkey clay	Irrigation: No	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Mycogen 2C797	12	769	0.67	21.8		171.86	6
DeKalb DKC67-14	12	760	0.66	22.72		196.25	2
Mycogen 2D848	12	775	0.68	25.97		196.42	1
DeKalb DKC68-26	12	760	0.66	23.06		163.97	9
Armor 1414	12	775	0.68	22.13		168.15	7
Terral 28R10	12	767	0.67	24.61		183.95	4
Dyna-Gro D56VC46	12	770	0.67	24.53		189.86	3
Syngenta N78S	12	765	0.67	24.33		182.99	5
Terral 25BHR26	12	790	0.69	21.1		140.28	13
Armor 1717	12	760	0.66	21.73		159.43	10
Pioneer P1637YHR	12	775	0.68	19.64		146.93	12
Syngenta N83-D	12	770	0.67	21.78		147.32	11
Terral 26BHR50	12	775	0.68	22.5		164.31	8

[1]Adjusted to 15.5% moisture.

Table 10. Morehouse Parish.		
Community: Collinston	Date planted: 4/5/16	Tillage: Conventional
County agent: R. Letlow and O. Hill	Row spacing (inches): 38	Harvest date: 9/2/16
Cooperator: Harper Armstrong	Plant population: 32,000	GPS coord: 32.71800N, 091.85342W
Previous crop: Corn	N rate (lb/acre): 200	
Soil type: Mer Rouge- Gallion silt loam	Irrigation: Furrow	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Dyna-Gro D56VC46	8	1182	0.69	15.4	56.6	213.21	1
Syngenta N83-D	8	1182	0.69	14.6	56.4	187.19	9
DeKalb DKC67-14	8	1182	0.69	13.8	56.6	187.78	8
DeKalb DKS68-26	8	1182	0.69	13.3	59.6	169.04	10
Armor 1414	8	1182	0.69	13.3	57.6	193.34	5
Armor 1717	8	1182	0.69	13.1	60.1	188.45	7
Pioneer P1637YHR	8	1182	0.69	13.4	59.2	189.29	6
Terral 25BHR26	8	1182	0.69	12.9	59.4	211.05	2
Terral 26BHR50	8	1182	0.69	13.3	59.8	203.69	4
Terral 28R10	8	1182	0.69	13.9	59	209.21	3

[1]Adjusted to 15.5% moisture.

Table 11. St. Landry Parish.		
Community: Washington	Date planted: 4/6/16	Tillage: Conventional
County agent: Vince Deshotel	Row spacing (inches):	Harvest date: 9/2/16
Cooperator: Lawrence Thistlewaite III	Plant population: 31,500	GPS coord: 30.67059N, 092.06336W
Previous crop: Soybeans	N rate (lb/acre): 180	
Soil type: Gallion silt loam	Irrigation: No	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Syngenta N78-S	8	582	0.32	15.9	54.5	185.56	13
Armor 1414	8	582	0.32	14.6	57.7	210.16	3
Dyna-Gro D56VC46	8	582	0.32	15.1	61.6	215.42	1
Mycogen 2D848	8	582	0.32	15.9	59.2	201.41	6
Terral 28R10	8	582	0.32	15.3	58.7	194.59	10
Armor 1717	8	582	0.32	14.1	57.6	213.54	2
DeKalb DKC67-14	8	582	0.32	14.8	56.3	200.45	7
Mycogen 2C797	8	582	0.32	14.4	55.3	197.45	9
Pioneer P1637YHR	8	582	0.32	13.8	60.1	193.15	11
Terral 26BHR50	8	582	0.32	13.8	60.5	201.56	5
Syngenta N83-D	8	582	0.32	15.7	56.1	186.11	12
DeKalb DKC68-26	8	582	0.32	14.4	57.9	206.25	4
Terral 25BHR26	8	582	0.32	14	60.2	200.07	8

[1]Adjusted to 15.5% moisture.

Table 12. Rapides Parish.		
Community: Alexandria	Date planted: 4/5/16	Tillage: Reduced
Study director: Dan Fromme	Row spacing (inches): 38	Harvest date: 9/1/16
Cooperator: Dean Lee Res. & Ext. Ctr.	Plant population: 34,000	GPS coord: 31.18408N, 092.41730W
Previous crop: Soybeans	N rate (lb/acre): 225	Misc. replicated 4 times in a RCBD, plot sizes 4 rows by 28 feet, harvested with a small plot combine.
Soil type: Coushatta silt loam	Irrigation: no	

Hybrid	Days to mid-silk	% Lodging	% Moisture	Test wgt.	Bu/acre	Rank
Dyna-Gro D56VC46	62.0	0.00	16.37	59.04	194.6	1
Terral 28R10	63.5	0.00	16.23	59.62	191.9	2
DeKalb DKC67-14	60.8	0.23	15.59	59.40	187.4	3
DeKalb DKC68-26	61.5	0.24	15.53	59.06	183.0	4
Syngenta N83-D	62.5	0.00	16.58	57.81	180.7	5
Pioneer P1637YHR	62.3	0.43	15.59	59.96	180.5	6
Syngenta N78-S	63.8	0.42	15.98	57.74	179.6	7
Terral 26BHR50	63.8	0.00	15.95	61.23	178.0	8
Mycogen 2C797	61.8	0.00	14.89	57.71	177.7	9
Armor 1717	61.5	2.70	15.55	58.74	172.2	10
Terral 25BHR26	63.0	0.00	15.04	58.57	171.8	11
Armor 1414	62.3	0.00	15.41	56.13	167.6	12
Mycogen 2D848	64.4	0.22	17.22	59.66	159.8	13
CV	1.98	314.4	3.85	1.31	11.61	
LSD (.05)	1.74	1.4645	0.8576	1.1033	NS	
P>F	0.0067	0.0483	0.0003	0.0001	0.5635	

[1]Adjusted to 15.5% moisture.

Table 13. Tensas Parish.		
Community: Newellton	Date planted: 3/17/16	Tillage: Minimum
County agent: Dennis Burns	Row spacing (inches): 30	Harvest date: 8/22/16
Cooperator: B. Kifer, L. Stonecipher	Plant population: 34,000	GPS coord: 32.049931, -91.226247
Previous crop: Soybeans	N rate (lb/acre): 330	
Soil type: Bruin silt loam	Irrigation: Pivot	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Terral 25BHR26	8	2380	1.09	15.9		259.93	7
DeKalb DKC67-14	8	2290	1.05	15.1		202.79	13
Pioneer P1637YHR	8	2340	1.07	14.6		249.03	12
Syngenta N78-S	8	2250	1.03	14.9		257.66	9
DynaGro 56VC46	8	2290	1.05	15.7		256.78	10
Armor 1414	8	2180	1.00	14.9		265.65	4
Armor 1717	8	2260	1.04	15.2		273.13	2
Terral 28R10	8	2140	0.98	16.4		272.53	3
Terral 26BHR50	8	2230	1.02	17.1		261.77	6
Syngenta N83-D	8	2020	0.93	16.6		265.23	5
Mycogen 2D848	8	2310	1.06	17		250.96	11
Mycogen 2C797	8	2000	0.92	16.7		259.53	8
DeKalb DKC68-26	8	2290	1.05	15.7		275.88	1

[1]Adjusted to 15.5% moisture.

Table 14. West Baton Rouge Parish.		
Community: Erwinville	Date planted: 4/8/16	Tillage: Minimum
County agent: Steve Borel	Row spacing (inches): 36	Harvest date: 8/19/16
Cooperator: Ray Schnexyder	Plant population: 34,000	GPS coord: 30.50802N, 091.39604W
Previous crop: Soybeans	N rate (lb/acre): 200	
Soil type: Sharkey clay	Irrigation: No	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Syngenta N83D-3000 GT	8	2045	1.13	19.8		134.12	8
Terral Rev 26BHR50	8	2047	1.13	19.3		129.79	9
Armor 1414 PDG	8	2062	1.14	18.4		138.03	7
Dekalb DKC67-14	8	2075	1.14	19.5		175.65	1
Pioneer P1637YHR	8	2083	1.15	19		145.60	6
Terral Rev 25BHR 26	8	2084	1.15	19.3		129.47	10
Syngenta N785-3111	8	2089	1.15	19.4		150.86	5
Armor 1717 Pro 2	8	2094	1.15	20.2		155.52	3
Terral Rev 28R10	8	2089	1.15	19.4		118.11	11
Dyna-Gro D56VC46	8	2087	1.15	20.2		154.58	4
DeKalb DKC 68-26	8	2085	1.15	20.3		167.14	2

[1]Adjusted to 15.5% moisture.

Table 15. West Carroll Parish.		
Community: Goodwill	Date planted: 4/8/16	Tillage: Reduced
County agent: Bruce W. Garner	Row spacing (inches): 30	Harvest date: 9/1/16
Cooperator: Ty Rodgers	Plant population: 33,000	GPS coord: 32.47474N, 91.33738W
Previous crop: Soybeans	N rate (lb/acre): 280	
Soil type: Calhoun/Grenda silty clay	Irrigation: Furrow	

Hybrid	Rows/plot	Row length	Acres/plot	% moisture	Test wgt.	Bu/acre[1]	Rank
Syngenta N78S-3111	24	1030	1.42	15.4		202.23	8
Pioneer 16337YHR	24	1030	1.42	15.4		211.04	3
Terral 25BHR26	24	1030	1.42	15.4		206.69	5
Dyna-Gro D56VC46	24	1030	1.42	16		210.26	4
Terral 28R10	24	1030	1.42	15.8		221.43	2
Armor 1414	24	1040	1.43	14.9		224.19	1
Syngenta N83-D	24	1080	1.49	15.7		203.78	6
DKC 68-26	24	1080	1.49	15.5		203.35	7
Mycogen 2D848	24	1050	1.45	16.4		195.21	9
Terral 26BHR50	24	1090	1.50	16		183.71	13
Armor 1717	24	1130	1.56	15.3		189.21	11
DKC 67-14	24	1130	1.56	15.5		193.93	10
Mycogen 2C797	24	1130	1.56	13.6		186.63	12

[1]Adjusted to 15.5% moisture.

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