Evaluations of Corn Hybrids in Alabama, 2011

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EVALUATION OF CORN HYBRIDS IN ALABAMA

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INTRODUCTION

Selected corn hybrids are evaluated annually by the Alabama Agricultural Experiment Station as a service to producers and industry. These tests are conducted throughout the state in an attempt to determine effects of different climatic factors and soil types on yield. There are several types of tests in the program. The Preliminary Hybrid Tests are conducted at one location in each of the northern, central and southern regions of the State. These tests include experimental and newly released hybrids. If a hybrid is outstanding in the preliminary test it is entered in the Regular Corn Hybrid Test the following year.

The Regular Corn Hybrid Test is conducted at two locations in the northern region, one location in the central region and three locations in the southern region. In addition, a regular corn hybrid test is irrigated at Belle Mina and Headland. A no-till test is conducted at Shorter, AL. Locations and cultural practices for all tests are given in Table 1.

EXPERIMENTAL PROCEDURES

All tests are laid out in a randomized complete block design with four replicate plots for each variety at each location. Rows are 30 to 36 inches apart, depending on location. Two-row plots are used, and both rows are harvested. Plots are 20 to 30 feet long, depending on location. The target plant population for the tests is 25,000 plants per acre with a seeding rate of 28,000 seeds per acre. The irrigated tests at Belle Mina, Tallassee and Headland are seeded to achieve 30,000 plants per acre, but are thinned to 25,000 plants per acre.

Grain yields are adjusted to 15.5 percent moisture and converted to bushels (56 lbs) per acre. Stalks broken or leaning more than 45 degrees are considered lodged. The mid-silk data show the number of days from planting until approximately half the plants in the plots are showing silks. The Regular Corn Hybrid tests also are examined for disease incidence at selected locations each year. When virus or other disease symptoms indicate crop damage, disease ratings are compiled and published in this report.

STATISTICAL ANALYSIS

All test were conducted in randomized complete block designs and analyzed accordingly. It is important to keep in mind that genotype x environment interaction is common in multi-year and multi-location mean. This interaction usually is an indication that the relative rankings of varieties change from one environment to the next. Thus, one cannot draw widespread conclusions if the interaction is significant.

INTERPRETATION OF DATA

In replicated experiments such as those reported here, yields from each of the four replicate plots of a particular variety at a given location will be slightly different, because of inherent differences in productivity among those plots. These differences in yield among replicate plots are known as random variation. Given this situation, it is clearly necessary to have a method to determine whether differences among hybrids are "true" or "real" differences, or whether they are due to random variation. To do this a statistical analysis was conducted to determine a "least significant difference" (LSD) by comparing the differences among varieties with random variation. If the difference in yield between two hybrids is larger than the LSD, then the difference between two hybrids is less than, but close to the LSD, then there is still a chance that it is real, but if it is considerably smaller than the LSD, then it is probably not real and mainly due to random variation.

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2010

With this in mind, it is very important to study differences in hybrid yields in relation to the LSD which is provided at the bottom of the table for each of the current year yield columns at each location. Clearly, LSD's vary from one location to another. This is because random variation varies among locations and from year to year. The coefficient of variation (CV) is a reflection of random variation, and is reported below the LSD values in the tables. If the CV is low, a precise or reliable test is indicated. Ideally, the CV should be below 10 percent, but CV's of 10 to 20 percent are acceptable. Values for the CV above 20 percent indicate a rather unreliable test, which may have been caused by factors such as disease variation among replicates, etc.

In comparing yield potential of two hybrids it is important to consider a wide range of results. Do not focus on results from only one year at one location. Two- and three-year average yields are provided by location and region. These are more useful guides than yields from only one year. However, other factors may deserve consideration. For example, differences between the highest and the lowest yield of a hybrid across several locations may be an indication of the stability of its yield under variable conditions, or what is the "risk level" of the variety.

Differences in yield of hybrids among locations will be a result of the combined effects of differences among locations in soil, weather (mainly rainfall), planting date, weed control, and other factors. To assist in estimating which factors most likely had the greatest effect on yield differences among locations, planting dates and cultural practices (Table 1), rainfall records (Table 10) and soil types (Table 11) are provided. This information also serves as a guide for assessing conditions to which results may be extrapolated.

TABLE 1. LOCATIONS AND CULTURAL PRACTICES FOR THE 2011 CORN HYBRID TRIALS

Location date Rate† pop. harvested used Ibs/ac seeds/ac		Planting	Nitrogen	Plant	Date	Herbicides
NORTHERN ALABAMA Tennessee Valley Res. and Ext. Ctr. (Belle Mina) Regular test (non-irrigated) March 4 175 25,000 August 29/30 Atrazine/Dual Regular test (irrigated) April 4 225 30,000 September 8 Atrazine/Dual Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine Central Alabama	Location	C	C			
NORTHERN ALABAMA Tennessee Valley Res. and Ext. Ctr. (Belle Mina) Regular test (non-irrigated) March 4 175 25,000 August 29/30 Atrazine/Dual Regular test (irrigated) April 4 225 30,000 September 8 Atrazine/Dual Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine CENTRAL ALABAMA	Location	date			nai vestea	usea
Tennessee Valley Res. and Ext. Ctr. (Belle Mina) Regular test (non-irrigated) March 4 175 25,000 August 29/30 Atrazine/Dual Regular test (irrigated) April 4 225 30,000 September 8 Atrazine/Dual Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine Central Alabama	NORTHERN ALABAMA		105/ ac	secus/ac		
Regular test (non-irrigated) March 4 175 25,000 August 29/30 Atrazine/Dual Regular test (irrigated) April 4 225 30,000 September 8 Atrazine/Dual Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine Central Alabama						
Regular test (irrigated) April 4 225 30,000 September 8 Atrazine/Dual Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine Central Alabama	•	`	· ·	27.000		
Sand Mountain Res. and Ext. Ctr. (Crossville) Regular test April 25 110 25,000 September 23 Atrazine Central Alabama				· ·	•	
Regular test April 25 110 25,000 September 23 Atrazine CENTRAL ALABAMA	Regular test (irrigated)	April 4	225	30,000	September 8	Atrazine/Dual
CENTRAL ALABAMA	Sand Mountain Res. and Ext. C	Sand Mountain Res. and Ext. Ctr. (Crossville)				
	Regular test	April 25	110	25,000	September 23	Atrazine
E.V. Smith Research Center (Shorter)	CENTRAL ALABAMA					
	E.V. Smith Research Center (Sh	orter)				
No-Till Early corn test March 24 120 30,000 August 11 Atrazine	No-Till Early corn test	March 24	120	30,000	August 11	Atrazine
Prattville Experiment Field (Prattville)	Prattville Experiment Field (Pra	attville)				
Regular test (non-irrigated) March 24 120 25,000 August 24 Atrazine/Dual	Regular test (non-irrigated)	March 24	120	25,000	August 24	Atrazine/Dual
Southern Alabama	SOUTHERN ALABAMA					
Brewton Experiment Field (Brewton)	Brewton Experiment Field (Bre	wton)				
Regular test (non-irrigated) March 25 120 25,000 August 17 Atrazine/Dual	Regular test (non-irrigated)	March 25	120	25,000	August 17	Atrazine/Dual
Wiregrass Res. and Ext. Ctr. (Headland)	Wiregrass Res. and Ext. Ctr. (H	eadland)				
Regular test (non-irrigated) March 29 120 25,000 Not harvested [‡] Atrazine/Dual	Regular test (non-irrigated)	March 29	120	25,000	Not harvested [‡]	Atrazine/Dual
Regular test (irrigated) March 29 200 30,000 August 23 Atrazine/Dual	Regular test (irrigated)	March 29	200	30,000	August 23	Atrazine/Dual
Gulf Coast Res. and Ext. Ctr. (Fairhope)	Gulf Coast Res. and Ext. Ctr. (F	airhope)				
Regular test March 23 150 25,000 August 4 Atrazine	Regular test	March 23	150	25,000	August 4	Atrazine

[†] Lime, phosphorus, potassium, zinc, and sulfur were applied according to soil test recommendations.

[‡] Dryland trial not harvested due to lack of rainfall.

TABLE 2. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CORN HYBRIDS IN NORTHERN ALABAMA, 2009-2011 †

	Grain	yield [†]	% stalks lodging [†]		
Brand name - hybrid	3-yr	2-yr	3-yr	2-yr	
	bu	/acre	9	6	
Terral-REV 28HR20	134	120		1.1	
DynaGro V 5683 VT3	130	116		4.8	
Croplan Genetics 7131 VT3	117	104		5.9	
Terral-REV 25HR39	112	98		3.6	
Terral-REV 26HR70	112	100		2.2	
Terral-REV 26R60	94	73		5.9	
Croplan Genetics 6926 VT3P		122		2.5	
Dekalb DKC 66-96 (GENVT3P)		115		3.9	
Croplan Genetics 6831 RHXT		112		3.5	
Dekalb DKC 68-05 (GENVT3P)		111		8.9	
Terral-REV 28HR29		109		2.1	
Croplan Genetics 6125 VT3		106		6.1	
DynaGro 56VP79		105		5.7	
Croplan Genetics 7505 VT3P		104		9.1	
Croplan Genetics 6286 VT3P		103		5.8	
Dekalb DKC 64-69 (GENVT3P)		103		5.5	
Golden Acres 27V01		101		5.5	
Croplan Genetics 6725 VT3P		88		8.8	
Terral-REV 28R10		76		8.2	
Terral-REV 25R19		73		7.7	
Test Average	116	102			
LSD0.10	11	13			
CV(%)	17	19			

[†] Multi-year averages do not include data from Belle Mina 2009 because of crop failure.

TABLE 3. 2011 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN NORTHERN ALABAMA

			2011 regional averages‡			
	Belle	Cross-		Lodg-		Harvest
Brand name - hybrid	Mina	ville	Yield	ing		moisture
T 1 DEW 2011D20		- bu/acre -		%		%
Terral-REV 28HR20	99	211	155	2	60	18
DynaGro D 56VP10	120	185	152	6	61	17
Croplan Genetics 6926 VT3P	113	186	149	4	61	16
DynaGro V 5683 VT3	94	201	147	7	57	17
Southern States SS 818 GENVT3PRO	77	215	146	5	58	18
Terral-REV 28HR30	99	193	146	4	59	19
Terral REV 27HR32	98	190	144	5	59	18
Terral-REV 26HR50	82	203	143	6	60	18
Croplan Genetics 8505 VT3	86	199	142	4	58	17
Southern States SS 788 GENVT3PRO	118	163	141	8	58	16
Terral-REV 28HR29	94	185	139	3	61	18
Dekalb DKC 66-96 (GENVT3P)	100	175	138	6	57	17
Croplan Genetics 8410 VT3PRO	94	181	137	7	59	17
Syngenta NK N72F-3000GT	106	167	137	11	56	17
DynaGro D 58VP30	90	183	136	7	58	17
Syngenta NK N77P-3111	107	163	135	8	55	17
Terral REV 26HR22	87	181	134	4	58	18
Croplan Genetics 6831 RHXT	91	176	134	5	56	18
Syngenta NK N68B-3111	98	166	132	8	52	17
Dekalb DKC 67-57 (GENVT3P)	96	167	131	5	59	17
Terral REV 27HR52	104	157	130	8	57	18
Golden Acres 27V01	95	163	129	8	55	16
Dekalb DKC 68-05 (GENVT3P)	108	149	128	13	56	16
DynaGro D 55Q80	100	157	128	10	58	18
Dekalb DKC 65-19 (GENVT3P)	99	152	126	16	59	17
DynaGro V 5373 VT3	88	162	125	8	56	17
Croplan Genetics 6286 VT3P	89	161	125	9	56	16
Croplan Genetics 7131 VT3	84	166	125	9	56	17
Dekalb DKC 64-69 (GENVT3P)	106	143	125	8	57	16
Croplan Genetics 6125 VT3	65	184	125	9	55	16
Dekalb DKC 64-04 (GENVT2P)	87	162	124	14	58	17
Dekalb DKC 63-87 (GENVT2P)	78	170	124	8	55	17
Croplan Genetics 7505 VT3P	100	147	123	14	56	16
Terral-REV 25HR39	61	182	122	5	60	17

TABLE 3. CONTINUED

			201	1 region	nal avera	ages†
Brand name - hybrid	Belle Mina	Cross- ville	Yield	Lodg- ing	Test-	Harvest moisture
		bu/acre -		%	lb/bu	%
Southern States SS 684 GENSS	87	154	120	10	57	17
DynaGro 56VP79	87	153	120	8	57	16
Terral-REV 26HR70	69	168	119	3	58	18
Syngenta NK N72Q-3111	86	151	118	12	54	16
Dekalb DKC 62-09 (GENVT3P)	87	148	118	12	53	15
Terral REV 26HR82	84	150	117	6	56	18
DynaGro D 51VP40	61	168	115	11	57	17
DynaGro D 56VP69	89	136	112	6	55	15
Dekalb DKC 61-49 (GENVT2P)	75	134	104	16	55	16
Croplan Genetics 6725 VT3P	73	132	103	13	58	18
DynaGro D 57GT60	82	116	99	11	58	20
DynaGro D 49VC59	39	148	97	10	56	16
Terral-REV 28R10	86	100	93	12	59	17
Terral-REV 26R60	64	104	84	9	58	18
Terral-REV 25R19	32	133	83	11	60	17
Test Average	88	164	126	8		
LSD0.10	17	36	13			
CV(%)	21	24	17			

TABLE 4. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, BELLE MINA, ALABAMA, 2009-2011 †

	Gr	ain yi	eld	I	Lodgin	g		
Brand name - hybrid			2011		2-yr			Harvest moisture
	bu/acre			%		lb/bu	%	
DynaGro V 5683 VT3	219	222	212	10	12	23		13
Terral-REV 28HR20	211	206	183	1	2	3		16
Terral-REV 26R60	210	206	179	2	3	5		15
Terral-REV 26HR70	207	205	195	5	6	13		14
Terral-REV 25HR39	199	206	182	1	1	2		15
Croplan Genetics 7131 VT3	189	189	166	4	5	10		14
Terral-REV 28HR29		212	201		1	3		17
Dekalb DKC 64-69 (GENVT3P)		211	184		6	11		16
Terral-REV 28R10		211	206		4	7		16
Croplan Genetics 6926 VT3P		210	194		2	5		16
Croplan Genetics 6286 VT3P		208	189		6	11		14
Dekalb DKC 66-96 (GENVT3P)		205	186		2	4		15
Dekalb DKC 68-05 (GENVT3P)		202	186		6	9		14
Croplan Genetics 6831 RHXT		202	194		7	14		14
Terral-REV 25R19		201	173		3	6		16
Golden Acres 27V01		199	175		4	7		14
Croplan Genetics 6725 VT3P		197	174		4	8		15
Croplan Genetics 7505 VT3P		193	181		3	5		14
Croplan Genetics 6125 VT3		188	181		3	5		14
DynaGro 56VP79		187	173		2	3		16
Dekalb DKC 62-09 (GENVT3P)			208			9		15
Croplan Genetics 8410 VT3PRO			207			4		16
Croplan Genetics 8505 VT3			200			6		14
DynaGro D 56VP69			199			9		15
Terral REV 27HR32			198			6		16
Dekalb DKC 63-87 (GENVT2P)			197			3		16
Terral REV 26HR22			197			5		15
Syngenta NK N68B-3111			196			6		13
Southern States SS 818 GENVT3PRO			196			22		15
Southern States SS 788 GENVT3PRO			193			4		17
Terral-REV 26HR50			193			7		18

TABLE 4. CONTINUED.

	G ₁	rain yi	eld	I	Lodgin	g		
Brand name - hybrid	3-yr	2-yr	2011	3-yr	2-yr	2011	Test- weight	Harvest moisture
		bu/acre	?		%		lb/bu	%
Dekalb DKC 65-19 (GENVT3P)			192			3		16
Syngenta NK N72F-3000GT			190			13		14
Terral REV 27HR52			189			4		16
Dekalb DKC 67-57 (GENVT3P)			188			2		15
DynaGro D 58VP30			186			7		15
DynaGro D 56VP10			183			5		15
Syngenta NK N77P-3111			182			11		13
Terral-REV 28HR30			180			19		17
DynaGro D 57GT60			179			9		16
Terral REV 26HR82			179			3		15
DynaGro V 5373 VT3			177			5		15
DynaGro D 55Q80			176			19		17
Southern States SS 684 GENSS			176			4		14
Syngenta NK N72Q-3111			175			18		14
DynaGro D 51VP40			171			3		14
Dekalb DKC 61-49 (GENVT2P)			164			8		16
DynaGro D 49VC59			156			12		16
Dekalb DKC 64-04 (GENVT2P)			151			11		16
Test Average	206	203	186					
LSD0.10	15	13	21					
CV(%)	14	10	12					

[†] The 2011 irrigated test received 7.05 inches of water.

TABLE 5. ONE, TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CORN HYBRIDS AT PRATTVILLE IN CENTRAL ALABAMA, 2009-2011

	G	rain yi	eld	-	Lodgir	ng		
							Test-	Harvest
Brand name - hybrid		2-yr	2011		2-yr		weight	moisture
		bu/acre	?		% -		lb/bu	%
Terral-REV 25HR39	73	76	47	2	1	1	59	7
Terral-REV 28HR20	70	76	45	0	0	1	60	8
Croplan Genetics 8756 VT3	66	69	41	1	1	2	60	8
Dekalb DKC 68-05 (GENVT3P)		105	102		0	1	59	8
Dekalb DKC 66-96 (GENVT3P)		91	77		1	2	56	7
Dekalb DKC 64-69 (GENVT3P)		88	74		1	1	55	7
Croplan Genetics 7131 VT3		82	66		0	1	58	8
Terral-REV 25R19		81	59		1	1	59	8
Terral-REV 28HR30		75	50		0	1	60	8
Terral-REV 28R10		72	51		0	0	60	7
Dekalb DKC 67-57 (GENVT3P)			99			1	60	8
Dekalb DKC 65-19 (GENVT3P)			85			0	59	7
Dekalb DKC 62-09 (GENVT3P)			82			1	54	7
Croplan Genetics 8410 VT3PRO			82			1	57	8
Southern States SS 788 GENVT3PRO			72			2	58	7
Croplan Genetics 8505 VT3			69			1	61	8
Terral REV 27HR32			67			1	61	8
Southern States SS 818 GENVT3PRO			61			0	59	8
Southern States SS 684 GENSS			60			0	58	8
Terral REV 26HR82			51			2	59	8
Terral REV 26HR22			47			0	60	8
Terral REV 27HR52			45			0	58	8
Test Average	70	82	65					
LSD0.10	5	11	24					
CV(%)	13	21	40					

TABLE 6. ONE, TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR THE NO-TILL EARLY CORN TEST AT SHORTER IN CENTRAL ALABAMA, 2009-2011.

	G	rain yi	eld	I	odgin	g		
Don't normal hadrid	2	2	2011	2	2	2011	Test-	Harvest
Brand name - hybrid	3-yr	2-yr bu/acre	2011		2-yr	2011	lb/bu	moisture
Constant Constant 9756 VIT2								
Croplan Genetics 8756 VT3	115	103	95 57	0	0	0	57	22
Terral-REV 28HR20	109	91	57	0	0	0	59	22
Terral-REV 25HR39	95	73	36	0	0	0	60	19
Dekalb DKC 68-05 (GENVT3P)		120	98		0	0	59	21
Dekalb DKC 64-69 (GENVT3P)		115	85		0	0	60	20
Dekalb DKC 66-96 (GENVT3P)		109	100		0	0	59	20
Terral-REV 28HR30		104	69		0	0	57	23
Terral-REV 28R10		100	67		0	0	60	21
Croplan Genetics 7131 VT3		92	49		0	0	57	21
Terral-REV 25R19		74	27		0	0	60	19
Dekalb DKC 67-57 (GENVT3P)			110			0	60	21
Croplan Genetics 8410 VT3PRO			91			0	59	21
Southern States SS 788 GENVT3PRO			90			0	61	21
Dekalb DKC 65-19 (GENVT3P)			87			0	61	20
Croplan Genetics 8505 VT3			81			0	59	21
Terral REV 27HR32			75			0	59	21
Dekalb DKC 62-09 (GENVT3P)			72			0	60	20
Terral REV 26HR22			68			0	58	20
Terral REV 27HR52			53			0	57	20
Southern States SS 684 GENSS			52			0	59	19
Southern States SS 818 GENVT3PRO			52			0	56	23
Terral REV 26HR82			44			0	58	21
Test Average	106	98	71					
LSD0.10	7	9	24					
CV(%)	13	14	37					

TABLE 7. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CORN IN SOUTHERN ALABAMA, 2009-2011 †

	Grair	n yield	% stalks lodging		
Brand name - hybrid	3-yr	2-yr	3-yr	2-yr	
	bu	/acre		%	
Terral-REV 28HR20	115	100	1	2	
Croplan Genetics 7131 VT3	114	102	1	0	
Terral-REV 26HR50	112	95	0	0	
Terral-REV 25HR39	109	92	1	1	
Croplan Genetics 8756 VT3	102	86	3	3	
DynaGro 56VP79		108		0	
Dekalb DKC 66-96 (GENVT3P)		108		1	
Dekalb DKC 64-69 (GENVT3P)		108		0	
Golden Acres 27V01		107		1	
Dekalb DKC 68-05 (GENVT3P)		106		0	
Terral-REV 28R10		102		1	
Terral-REV 28HR30		86		3	
Terral-REV 25R19		84		1	
Test Average	110	99			
LSD0.10	4	5			
CV(%)	10	11			

[†] Data from Headland not included because of crop failure in every year of the trial

TABLE 8. 2011 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN SOUTHERN ALABAMA

	2011 regional averages							
	Fair-	Brew-	Head-		Lodg-	Test-	Harvest	
Brand name - hybrid	hope	ton	land	Yield	ing	weight	moisture	
			/acre		%	lb/bu	%	
DynaGro D 56VP10	98	86		92	1	57	18	
Dekalb DKC 69-29 (GENVT3P)	80	91		85	1	58	18	
Southern States SS 787 GENVT3PRO	84	83		84	0	59	18	
DynaGro 56VP79	82	85		83	0	58	18	
Dekalb DKC 66-96 (GENVT3P)	92	69		81	1	59	17	
NK Brand N82V-3000GT	83	74		79	2	58	18	
Dekalb DKC 68-05 (GENVT3P)	92	62		77	0	58	18	
Croplan Genetics 8410 VT3PRO	78	76		77	0	59	18	
Croplan Genetics 7131 VT3	94	60		77	1	58	19	
DynaGro D 58VP30	94	53		73	0	59	18	
Dekalb DKC 64-69 (GENVT3P)	80	67		73	0	58	18	
Syngenta NK N78S-3111	92	54		73	1	60	19	
Golden Acres 27V01	81	62		72	1	58	19	
Southern States SS 818 GENVT3PRO	78	64		71	1	59	18	
Croplan Genetics 8505 VT3	80	62		71	1	58	18	
Dekalb DKC 67-57 (GENVT3P)	89	52		70	0	57	18	
Syngenta NK N72F-3000GT	73	66		70	1	59	19	
Southern States SS 684 GENSS	76	54		65	0	60	17	
DynaGro D 56VP69	78	53		65	1	58	19	
DynaGro D 57GT60	73	55		64	1	59	18	
Terral-REV 28HR20	70	57		63	2	60	18	
Master Choice MCT 6751 GT	78	49		63	1	60	18	
Southern States SS 851 GENVT3PRO	76	51		63	0	58	19	
Terral REV 27HR32	67	57		62	17	58	18	
Croplan Genetics 8756 VT3	72	52		62	6	58	19	
Terral-REV 28R10	75	50		62	3	58	18	
Terral-REV 26HR50	73	49		61	0	58	19	
Terral-REV 25HR39	86	32		59	2	59	18	
Terral REV 27HR52	71	40		55	3	58	18	
Terral REV 26HR22	70	36		53	3	58	17	
Terral REV 26HR82	74	28		51	1	58	19	
Terral-REV 25R19	64	29		46	1	58	17	
Terral-REV 28HR30	57	34		46	7	58	19	
Test Average	79	57		68	2			
LSD0.10	14	13		9				
CV(%)	20	25		20				

TABLE 9. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, HEADLAND, ALABAMA, 2009-2011 †

	G	Grain yield		I	Lodging	5		
Brand name - hybrid	3-yr	2-yr	2011	3-yr	2-yr	2011		Harvest moisture
		bu/acre			%		lb/bu	%
Terral-REV 28HR20	202	206	207	0	0	0	61	15
Terral-REV 26HR50	202	204	203	0	0	0	60	15
Croplan Genetics 8756 VT3	196	197	186	0	0	0	58	15
Croplan Genetics 7131 VT3	184	189	189	0	0	0	58	15
Terral-REV 25HR39	172	177	172	0	0	0	60	15
Terral-REV 28R10		199	190		0	0	61	15
Golden Acres 27V01		198	187		0	0	56	15
Dekalb DKC 68-05 (GENVT3P)		197	197		0	0	60	15
Dekalb DKC 64-69 (GENVT3P)		197	191		0	0	58	15
Dekalb DKC 66-96 (GENVT3P)		197	184		0	0	59	15
Terral-REV 28HR30		195	184		0	0	58	15
DynaGro 56VP79		179	166		0	0	61	15
Terral-REV 25R19		173	171		0	0	59	15

TABLE 9. CONTINUED[†]

	Grain yield		Lodging					
Brand name - hybrid	3-yr	2-yr	2011	3-yr	2-yr	2011	Test- weight	Harvest moisture
		bu/acre			%		lb/bu	%
DynaGro D 58VP30			199			0	59	15
Southern States SS 851 GENVT3PRO			196			0	60	15
Terral REV 27HR32			193			0	61	15
Dekalb DKC 69-29 (GENVT3P)			191			0	58	15
Croplan Genetics 8505 VT3			190			0	59	15
Dekalb DKC 67-57 (GENVT3P)			190			0	60	15
Terral REV 26HR82			185			0	57	15
Syngenta NK N72F-3000GT			184			0	57	15
DynaGro D 56VP69			183			0	59	15
Croplan Genetics 8410 VT3PRO			181			0	60	15
Terral REV 26HR22			181			0	59	15
Syngenta NK N78S-3111			180			0	57	15
DynaGro D 56VP10			180			0	60	15
Southern States SS 818 GENVT3PRO			178			0	58	15
NK Brand N82V-3000GT			174			0	57	15
Master Choice MCT 6751 GT			174			0	59	15
DynaGro D 57GT60			172			0	58	15
Southern States SS 787 GENVT3PRO			171			0	60	15
Terral REV 27HR52			168			0	57	15
Southern States SS 684 GENSS			159			0	57	15
Test Average	191	193	183					
LSD0.10	12	10	15					
CV(%)	12	8	9					

[†] The 2011 irrigated test received 9.0 inches of water.

TABLE 10. GROWING SEASON RAINFALL, 2009-2011.

				Monthly ra	infall in inch	es		-	7-month
Location	Year	Mar.	Apr.	May	June	July	Aug.	Sept.	total
Belle Min	a								
	2011	9.5	11.5	2.8	3.4	4.7	4.6	5.8	42.3
	2010	4.6	2.8	6.2	2.7	4.3	1.4	1.9	23.9
	2009	5.6	5.8	11.1	1.4	6.3	4.7	8.7	43.6
Crossville	<u> </u>								
	2011	8.7	7.6	2.3	7.0	5.5	1.8	8.9	41.8
	2010	5.4	5.5	5.6	2.9	0.7	1.8	1.5	23.4
	2009	4.9	3.5	8.9	1.1	6.5	2.7	6.4	34.0
Shorter									
	2011	5.4	2.3	2.4	3.7	6.6	0.5	5.8	26.7
	2010	5.4	1.3	5.5	2.2	4.6	4.5	1.7	25.2
	2009	10.8	4.9	12.7	3.8	3.9	7.5	6.8	50.4
Prattville									
	2011	7.8	3.1	4.8	2.7	4.5	2.0	3.8	28.7
	2010	4.8	1.7	4.1	4.2	4.4	3.6	0.6	23.4
	2009	10.6	4.3	12.4	1.4	6.3	2.8	9.4	47.2
Brewton									
	2011	7.9	4.3	3.1	5.2	7.7	2.3	5.4	35.9
	2010	3.9	2.7	6.4	2.1	4.6	10.5	0.9	31.1
	2009	11.3	6.7	8.6	3.8	6.1	8.2	5.5	50.2
Headland	l								
	2011	3.7	2.9	0.2	1.8	7.6	1.6	2.1	19.9
	2010	2.3	2.6	5.0	5.1	1.9	2.9	1.6	21.4
	2009	10.6	6.2	9.8	2.2	10.2	7.8	3.9	50.7
Fairhope									
	2011	4.6	1.1	0.9	3.9	10.1	1.2	11.1	32.9
	2010	5.2	2.0	7.0	5.0	2.2	10.3	6.3	38.0
	2009	14.4	2.1	7.3	3.7	5.6	6.2	7.4	46.7

TABLE 11. SOIL TYPES FOR CORN TRIALS, 2011.

Test location	Soil type				
North					
Belle Mina	Decatur silt loam				
Crossville	Wynnville fine sandy loam				
Central					
Shorter	Norfolk sandy loam				
Prattville	Lucedale fine sandy loam				
South					
Brewton	Benndale fine sandy loam				
Headland	Dothan sandy loam				
Fairhope	Malbis fine sandy loam				

SOURCE OF 2011 CORN HYBRID TRIAL SEED

Seed Company	Brand	Seed Company	Brand	
Crop Production Services 544 Pridgen Pond Rd Kinston, AL 36453	Dyna-Gro	Monsanto Company 800 N. Lindbergh Blvd St. Louis, MO 63167	Dekalb DKC	
Golden Acres P.O. Box 579 Buchanan Dam, TX 78609	Golden Acres	Southern States Coop., Inc. 6606 West Broad Street Richmond, VA 23230	SS Brand	
Land O'Lakes/ Winfield Solutions 17939 Morris Rd Elkmont, AL 35620	Croplan Genetics	Syngenta NK Brand Seed 13760 Appomattox Cr. Laurinburg, NC 28352	NK Brand	
Master Choice 3010 State 146E Anna, IL 62906	Master Choice	Terral Seed, Inc. P.O. Box 826 Lake Providence, LA 71254	Terral REV	