

*Evaluations of
Corn Hybrids
in Alabama,
2009*

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EVALUATION OF CORN HYBRIDS IN ALABAMA

K.M. Glass and E. van Santen

Agricultural Program Associate, and Professor,
Department of Agronomy and Soils, Auburn University, AL 36849

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 is probably real, but if the difference is less than the LSD, it may not be real. If 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 2009

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 2009 CORN HYBRID TRIALS

Location	Planting date	Nitrogen Rate [†] lbs/ac	Plant pop. seeds/ac	Date harvested	Herbicides used
NORTHERN ALABAMA					
Tennessee Valley Res. and Ext. Ctr. (Belle Mina)					
Regular test (non-irrigated)	April 8	125	25,000	September 29	Atrazine/Dual
Regular test (irrigated)	April 2	125	30,000	September 30	Atrazine/Dual
Sand Mountain Res. and Ext. Ctr. (Crossville)					
Regular test	April 23	140	25,000	September 8	Atrazine/Dual
CENTRAL ALABAMA					
E.V. Smith Research Center (Shorter)					
No-Till Early corn test	April 9	160	30,000	August 26	Atrazine/Dual
Prattville Experiment Field (Prattville)					
Regular test (non-irrigated)	March 20	120	25,000	September 9	Atrazine/Dual
SOUTHERN ALABAMA					
Brewton Experiment Field (Brewton)					
Regular test (non-irrigated)	March 24	120	25,000	September 10	Atrazine/Dual
Wiregrass Res. and Ext. Ctr. (Headland)					
Regular test (non-irrigated)	April 9	120	25,000	September 4	Atrazine/Dual
Regular test (irrigated)	April 9	200	30,000	August 26	Atrazine/Dual
Gulf Coast Res. and Ext. Ctr. (Fairhope)					
Regular test	March 23	150	25,000	August 25	Atrazine/Dual

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

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009**TABLE 2. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CORN HYBRIDS IN NORTHERN ALABAMA, 2007-2009[†]**

Brand name - hybrid	Grain yield [†]		% stalks lodging [†]	
	3-yr	2-yr	3-yr	2-yr
	----- bu/acre -----		----- % -----	
Dyna-Gro 58K02	110	109	2.3	1.5
Croplan Genetics 6831 VT3		122		3.4
Croplan Genetics 7505 VT3		118		0.9
Croplan Genetics 7131 VT3		118		0.6
Golden Acres 27Z07		116		1.8
DynaGro V 52R76		109		3.0
NK Brand N77P-3000 GT		109		2.4
<i>Test Average</i>	110	114		
<i>LSD0.10</i>		15		
<i>CV(%)</i>		20		

[†] Multi-year averages do not include data from Belle Mina trial as there was a crop failure in every year.

TABLE 3. 2009 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN NORTHERN ALABAMA

Brand name - hybrid	Belle Mina	Cross- ville	2009 regional averages†				
			Yield	Lodging	Test- weight	Harvest moisture	
			bu/acre	-- % --	lb/bu	mo-day	
DynaGro V 6263 VT3	‡	191		0.0	56.9	7-7	27.3
Dekalb DKC 63-84 (VT3)		185		0.0	56.5	7-1	25.3
DynaGro 57P12		184		0.0	56.5	7-1	25.0
Terral TV26BR41 (RR/YGCB)		184		0.0	55.7	7-4	26.1
DynaGro V 5373 VT3		184		0.0	55.0	7-3	23.9
DynaGro V 59R86		184		3.8	55.6	7-3	26.6
Croplan Genetics 7505 VT3		178		0.0	56.7	7-1	24.2
DynaGro 57N73		178		2.5	57.1	7-5	25.4
Terral-REV 28HR20		175		0.0	58.1	7-8	25.0
Golden Acres 26Y37		175		0.0	55.0	7-3	24.3
Golden Acres 28Z89		174		0.0	56.6	7-4	27.2
Terral TV25BR23 (RR/YGCB)		173		0.0	56.0	7-1	24.2
Dyna Gro 58K40		173		1.3	56.5	7-5	26.4
Croplan Genetics 6831 VT3		173		0.0	57.0	7-3	23.8
DynaGro V 5683 VT3		173		0.0	56.4	7-5	24.2
DynaGro 57K58		172		5.0	55.0	7-5	23.8
Terral-REV 25HR49		168		-0.0	56.5	7-5	25.5
Golden Acres 27Z07		166		0.0	53.7	7-4	26.1
Southern States SS 731 CL		165		3.8	57.3	7-5	25.2
Terral TV25R31 (RR)		164		1.3	56.0	7-4	26.4
DynaGro DG 57K33		164		5.0	56.2	7-1	24.1
DynaGro 58V69		163		0.0	55.2	7-7	27.2
Croplan Genetics 6725 VT3		163		1.3	57.2	7-1	23.6
Dekalb DKC 65-44 (VT3)		162		0.0	59.1	6-30	21.7
Croplan Genetics 8505 VT3		162		1.3	56.3	7-1	25.3
Terral TVX 22TR86		162		0.0	55.3	7-1	22.0
Dyna Gro 58P59		161		1.3	53.3	7-5	25.6
NK Brand N73V-3000GT		161		0.0	53.0	7-3	25.8
DynaGro V 6083 VT3		161		0.0	56.0	7-8	26.5
NK Brand N78N-3000GT		160		1.3	57.3	7-3	24.8
Dekalb DKC 62-54 (VT3)		160		0.0	58.1	6-30	22.9
Golden Acres 28Y97		159		0.0	56.2	7-8	27.5
Terral TV 25BR71		159		0.0	54.9	7-5	28.6
DynaGro 57V21		158		0.0	57.8	7-1	24.7
Terral-REV 26R60		157		3.8	56.6	7-4	24.8

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009**TABLE 3. CONTINUED**

Brand name - hybrid	Belle Mina	Cross- ville	2009 regional averages [†]				
			Yield	Lodging	Test- weight	Mid-silk	Harvest moisture
			----- bu/acre -----	-- % --	lb/bu	mo-day	-- % --
DynaGro 57V21	‡	158		0.0	57.8	7-1	24.7
Terral-REV 26R60		157		3.8	56.6	7-4	24.8
DynaGro DG 57V98		156		0.0	58.1	7-3	22.7
Croplan Genetics 7131 VT3		156		0.0	55.7	6-30	26.5
DynaGro 58P60		156		0.0	57.3	7-5	26.2
DynaGro DG 58P27		155		0.0	56.7	7-3	26.2
DynaGro 57V05		155		1.3	54.9	7-1	25.4
Dekalb DKC 60-51 (VT3)		154		0.0	58.6	6-29	22.0
NK Brand N73N-3000GT		153		0.0	56.7	7-1	23.9
Dyna-Gro 58K02		153		2.5	54.3	7-6	28.7
Terral-REV 25HR39		153		0.0	56.8	7-3	24.7
Dekalb DKC 65-63 (VT3)		153		0.0	57.3	6-30	24.9
DynaGro 58V50		153		0.0	55.5	7-5	25.7
Croplan Genetics 8756 VT3		152		0.0	55.6	7-8	26.2
Croplan Genetics 6986 VT3		150		0.0	57.3	7-1	23.3
DynaGro 57N96		150		6.2	56.3	7-3	24.0
Dekalb DKC 63-14 (VT3)		147		0.0	56.1	7-1	23.3
Southern States SS 746 VT3		147		-0.0	56.1	7-6	23.1
NK Brand N77P-3000 GT		147		1.3	56.1	7-2	24.2
DynaGro V 57R86		147		5.0	59.8	6-30	25.1
DynaGro 58V24		146		-0.0	54.2	7-5	26.2
Terral-REV 26HR70		146		1.3	55.7	7-6	24.3
DynaGro V 5783 VT3		144		-0.0	60.2	7-1	25.0
Dekalb DKC 68-06 (RR2/ YGCB)		144		1.3	56.2	6-29	26.9
Terral-REV 26HR50		143		1.3	58.1	7-5	26.7
Terral-REV 28R30		141		5.0	55.0	7-6	26.3
Croplan Genetics 851 VT3		138		-0.0	56.2	7-5	24.3
Terral TV 24R83		138		3.8	56.5	7-5	24.3
DynaGro V 52R76		135		3.8	56.2	7-1	23.5
DynaGro DG 57V40		124		0.0	56.9	7-1	23.3
<i>Test Average</i>		160		1.0			
<i>LSD0.10</i>		26					
<i>CV(%)</i>		18					

[†] Regional averages do not include data from the 2009 Belle Mina trial.[‡] Data for Belle Mina not listed because of low average yield of 40 bu/acre for the entire test.

TABLE 4. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, BELLE MINA, ALABAMA, 2007-2009

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest moisture -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----			----- % -----					
Dyna-Gro 58K02	195	189	196	4.6	6.5	2.5	58	6-21	16.5
Croplan Genetics 7131 VT3		201	189		1.5	0.0	58	6-18	17.0
Croplan Genetics 7505 VT3		201	176		0.1	0.0	60	6-20	17.3
Croplan Genetics 6831 VT3		200	203		8.6	0.0	59	6-18	16.6
Golden Acres 27Z07		194	201		11.9	0.0	56	6-22	15.4
NK Brand N77P-3000 GT		193	190		0.4	0.0	57	6-21	16.4
DynaGro V 52R76		172	158		3.6	0.0	59	6-16	15.9
DynaGro 58V24			221			0.0	57	6-23	16.6
Terral-REV 28HR20			221			0.0	61	6-22	17.6
DynaGro V 6083 VT3			221			0.0	58	6-23	17.3
DynaGro 58V50			219			0.0	60	6-22	17.8
Terral-REV 26R60			218			0.0	59	6-20	17.0
Dekalb DKC 65-44 (VT3)			215			0.0	61	6-17	17.4
NK Brand N73V-3000GT			215			0.0	58	6-20	16.9
DynaGro V 5683 VT3			213			0.0	58	6-21	15.8
Terral-REV 26HR70			211			0.0	59	6-22	16.2
DynaGro DG 57K33			208			5.0	58	6-20	16.4
Terral TV 25BR71			208			0.0	60	6-19	17.1
DynaGro DG 58P27			207			0.0	59	6-21	17.1
DynaGro 57P12			205			0.0	59	6-18	16.8
Dekalb DKC 63-84 (VT3)			203			0.0	57	6-18	15.6
Southern States SS 746 VT3			202			0.0	58	6-22	15.9
DynaGro 57N73			200			0.0	61	6-20	16.9
Croplan Genetics 6725 VT3			199			0.0	60	6-15	16.6
Dekalb DKC 68-06 (RR2/YGCB)			199			0.0	60	6-19	18.0
Golden Acres 28Y97			199			0.0	59	6-24	17.2
DynaGro DG 57V40			198			0.0	58	6-18	16.0
Dyna Gro 58P59			198			0.0	56	6-22	15.8
Dekalb DKC 65-63 (VT3)			196			0.0	58	6-18	16.6
DynaGro 58P60			196			0.0	60	6-19	17.4
Dekalb DKC 63-14 (VT3)			196			0.0	59	6-20	16.5
Croplan Genetics 8505 VT3			195			0.0	59	6-18	17.1
NK Brand N78N-3000GT			194			0.0	60	6-19	17.1

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009**TABLE 4. CONTINUED.**

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest moisture -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----			----- % -----					
Golden Acres 26Y37			193			0.0	58	6-20	15.7
DynaGro 57N96			192			5.0	58	6-22	16.1
Terral TV26BR41 (RR/YGCB)			191			0.0	58	6-20	16.6
Dekalb DKC 62-54 (VT3)			190			0.0	60	6-16	17.5
DynaGro V 6263 VT3			190			0.0	60	6-23	17.1
DynaGro V 59R86			190			2.5	59	6-20	17.2
Southern States SS 731 CL			189			2.5	59	6-22	16.9
DynaGro DG 57V98			189			0.0	60	6-19	16.4
Dyna Gro 58K40			189			5.0	61	6-22	17.3
Terral-REV 25HR49			188			0.0	60	6-18	17.0
DynaGro 57K58			188			2.5	56	6-22	15.6
DynaGro 57V05			186			0.0	59	6-20	17.1
Terral-REV 25HR39			186			0.0	61	6-21	17.1
Croplan Genetics 851 VT3			184			0.0	56	6-19	15.9
Croplan Genetics 6986 VT3			182			0.0	60	6-18	17.1
DynaGro V 5783 VT3			181			0.0	62	6-21	18.2
Terral TV 24R83			181			7.5	58	6-21	15.9
Terral-REV 28R30			181			0.0	59	6-20	17.3
DynaGro 58V69			179			0.0	58	6-22	17.4
Dekalb DKC 60-51 (VT3)			179			0.0	59	6-17	15.7
DynaGro 57V21			179			0.0	59	6-16	17.8
Terral TV25R31 (RR)			178			2.5	59	6-21	17.2
Croplan Genetics 8756 VT3			178			5.0	59	6-24	17.3
Golden Acres 28Z89			176			0.0	59	6-21	17.5
Terral-REV 26HR50			171			0.0	59	6-21	17.7
Terral TV25BR23 (RR/YGCB)			167			0.0	58	6-22	16.1
NK Brand N73N-3000GT			164			0.0	60	6-18	16.8
DynaGro V 5373 VT3			163			0.0	57	6-18	15.8
Terral TVX 22TR86			155			0.0	59	6-17	16.6
DynaGro V 57R86			140			5.0	61	6-22	18.9
Test Average	195	193	192						
LSD0.10		10	14						
CV(%)		14	14						

† The 2009 irrigated test received 5.7 inches of water.

TABLE 5. ONE, TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CORN HYBRIDS AT PRATTVILLE IN CENTRAL ALABAMA, 2007-2009

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest moisture -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----			----- % -----					
Dekalb DKC 67-23 (RR2/YGCB)	43	61	64	23.8	24	1	51	6-2	12.5
Dekalb DKC 67-87 (RR2/YGCB)	37	54	62	26.5	27	6	50	6-2	13.2
Dekalb DKC 69-40 (VT3)		81	77		3	-0	54	6-1	12.9
Croplan Genetics 8505 VT3			79			0.3	51	6-2	12.9
Terral-REV 28R30			78			0.0	50	6-3	13.1
Terral TV 25BR71			76			5.8	51	6-2	12.7
Terral-REV 26R60			73			0.5	51	6-2	13.1
Terral-REV 26HR50			73			0.0	59	6-4	13.0
Dekalb DKC 63-84 (VT3)			72			0.0	46	6-2	13.1
Dekalb DKC 62-54 (VT3)			71			0.3	51	6-2	12.6
Dekalb DKC 68-06 (RR2/YGCB)			71			1.0	50	6-1	12.1
Terral-REV 25HR49			69			0.0	50	6-3	12.6
DynaGro V 6083 VT3			69			0.5	52	6-6	12.2
Terral TV25BR23 (RR/YGCB)			66			3.8	50	6-3	13.5
Terral-REV 25HR39			65			4.0	53	6-2	13.3
Terral TV25R31 (RR)			64			0.0	50	6-2	13.0
DynaGro 58V69			64			0.0	51	6-6	12.9
Terral-REV 26HR70			63			0.0	50	6-5	13.3
Terral-REV 28HR20			60			-0.0	51	6-7	13.4
Croplan Genetics 8756 VT3			60			0.0	52	6-8	13.2
Terral TV26BR41 (RR/YGCB)			58			10.8	48	6-3	12.6
DynaGro 57N73			56			0.5	52	6-3	13.5
DynaGro V 6263 VT3			50			0.0	50	6-5	12.4
Test Average	40	65	67						
LSD0.10	5	6	6						
CV(%)	39	25	17						

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TABLE 6. ONE, TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR THE NO-TILL EARLY CORN TEST AT SHORTER IN CENTRAL ALABAMA, 2007-2009.

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest moisture -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----			----- % -----					
Dekalb DKC 69-40 (VT3)	†	119	135	†	0	0	61	6-9	19.5
Dekalb DKC 67-87 (RR2/YGCB)		115	131		0	0	59	6-11	18.3
Dekalb DKC 67-23 (RR2/YGCB)		108	127		0	0	58	6-10	18.7
Terral-REV 26R60			148		0	0	58	6-12	19.0
Dekalb DKC 68-06 (RR2/YGCB)			146		0	0	59	6-8	20.7
Terral-REV 28HR20			146		0	0	61	6-16	20.1
DynaGro 57N73			145		0	0	60	6-8	18.3
Terral TV26BR41 (RR/YGCB)			145		0	0	58	6-10	20.6
Terral-REV 28R30			142		0	0	59	6-12	20.2
Croplan Genetics 8505 VT3			142		0	0	60	6-12	20.1
Terral TV 25BR71			141		0	0	59	6-9	20.4
Dekalb DKC 62-54 (VT3)			141		0	0	57	6-8	17.0
Terral-REV 25HR39			140		0	0	60	6-12	18.9
Croplan Genetics 8756 VT3			139		0	0	60	6-15	20.3
Terral-REV 26HR50			138		0	0	60	6-11	20.7
Terral TV25R31 (RR)			138		0	0	59	6-12	20.6
Dekalb DKC 63-84 (VT3)			138		0	0	57	6-11	18.6
DynaGro 58V69			136		0	0	60	6-14	21.4
DynaGro V 6263 VT3			135		0	0	60	6-14	20.9
Terral TV25BR23 (RR/YGCB)			135		0	0	59	6-12	19.7
Terral-REV 25HR49			131		0	0	59	6-12	18.6
DynaGro V 6083 VT3			129		0	0	60	6-16	20.5
Terral-REV 26HR70			126		0	0	58	6-13	17.4
Test Average	114	138							
LSD0.10	6	7							
CV(%)	13	9							

[†]The 2007 trial was lost due to a prolonged drought, hence no three-year averages are available.

TABLE 7. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR YELLOW CORN IN SOUTHERN ALABAMA, 2007-2009[†]

Brand name - hybrid	Grain yield		% stalks lodging	
	3-yr	2-yr	3-yr	2-yr
----- <i>bu/acre</i> -----				
Dyna-Gro 58K02	140	132	1.4	1.6
Dyna Gro 58K40	133	128	1.9	2.3
Dekalb DKC 67-87 (RR2/YGCB)	126	125	0.5	0.7
Golden Acres 27Z07		130		4.1
Dekalb DKC 69-40 (VT3)		127		1.0
Croplan Genetics 6831 VT3		124		1.3
<i>Test Average</i>	133	128		
<i>LSD_{0.10}</i>	7	8		
<i>CV (%)</i>	13	14		

[†] Data from Headland not included in the 3-yr and 2-yr averages

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009

TABLE 8. 2009 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN SOUTHERN ALABAMA

Brand name - hybrid	Fair-hope	Brew-ton	Head-land	2009 regional averages [†]				
				Yield -----bu/acre-----	Lodg-ing -- % --	Test-weight lb/bu	Mid-silk mo-day	Harvest moist.
								-- % --
DynaGro 58V50	156	151	‡	154	1.0	59	6-12	19.3
Terral-REV 26HR50	162	134		148	1.0	59	6-13	19.1
Dekalb DKC 63-84 (VT3)	152	138		145	1.0	55	6-10	17.1
DynaGro V 6263 VT3	151	138		145	1.0	60	6-13	18.7
NK Brand N82V-3000GT	147	142		145	1.3	58	6-11	18.6
Terral-REV 28HR20	156	133		144	1.0	59	6-15	18.2
Terral-REV 25HR49	160	123		142	1.0	58	6-13	18.4
Terral-REV 25HR39	140	142		141	1.0	59	6-12	17.8
Terral TV25R31 (RR)	148	134		141	1.0	58	6-12	19.0
Dyna-Gro 58K02	152	129		140	1.0	57	6-12	18.5
Croplan Genetics 851 VT3	147	134		140	1.0	55	6-13	17.9
Terral TV 25BR71	145	135		140	1.0	58	6-11	19.5
Terral-REV 26HR70	149	131		140	1.0	58	6-14	18.3
Golden Acres 27Z07	148	130		139	1.3	56	6-12	18.3
Croplan Genetics 7131 VT3	156	120		138	1.0	56	6-11	18.9
Croplan Genetics 6725 VT3	152	122		137	1.0	56	6-11	17.8
Dyna Gro 58K40	150	126		137	1.0	60	6-13	18.5
Croplan Genetics 8505 VT3	155	119		137	1.0	58	6-12	18.1
Croplan Genetics 7505 VT3	144	128		136	1.0	58	6-10	18.0
Dekalb DKC 68-06 (RR2/YGCB)	147	130		135	1.0	58	6-11	19.4
Dekalb DKC 69-40 (VT3)	148	123		135	1.0	60	6-11	18.6
DynaGro V 6083 VT3	148	123		135	1.0	58	6-15	18.8
Croplan Genetics 8756 VT3	152	118		135	1.3	58	6-16	18.9
NK Brand N78B CB/LL	141	129		135	1.3	59	6-12	18.4
Dekalb DKC 62-54 (VT3)	147	122		135	1.0	56	6-11	17.0
Dekalb DKC 67-87 (RR2/YGCB)	155	115		134	1.0	57	6-11	17.8
Croplan Genetics 6831 VT3	149	118		134	1.0	55	6-11	18.0
NK Brand N78N-3000GT	144	123		133	1.0	58	6-12	18.8
NK Brand N69L CB/LL	146	118		132	1.0	57	6-12	16.9
Terral TV 27TR79	155	107		131	1.0	57	6-16	19.4
Golden Acres 28Y97	136	125		130	1.0	58	6-15	19.3

TABLE 8. CONTINUED.

Brand name - hybrid	2009 regional averages [†]							
	Fair-hope	Brew-ton	Head-land	Yield	Lodg-ing	Test-weight	Harvest moist.	
	----- bu/acre -----			-- % --	lb/bu	mo-day	-- % --	
Croplan Genetics 6986 VT3	149	110		130	1.0	57	6-10	18.0
NK Brand N77P-3000 GT	145	112		129	1.0	55	6-12	18.6
DynaGro 58V69	134	120		127	1.0	58	6-13	19.6
Terral-REV 26R60	145	101		123	1.0	56	6-12	18.1
Dekalb DKC 67-23 (RR2/YGCB)	141	104		122	1.0	56	6-11	17.8
Terral-REV 28R30	114	126		120	1.0	57	6-13	21.5
Test Average	148	125		136				
LSD0.10	13	18		9				
CV(%)	10	16		11				

[†] Regional averages do not include data from the 2009 Headland trial.

[‡] Data for Headland not listed because of low average yield of 30 bu/acre for the entire test.

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009

TABLE 9. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, HEADLAND, ALABAMA, 2007-2009

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----			----- % -----					
Dyna Gro 58K40	174	172	165	0.0	0.0				18.9
Dyna-Gro 58K02	172	179	180	0.1	0.0				19.1
Dekalb DKC 67-87 (RR2/YGCB)	159	157	176	0.1	0.3				17.8
Golden Acres 27Z07		173	180		0.0				16.7
Dekalb DKC 69-40 (VT3)		166	172		0.0				18.1
Croplan Genetics 6831 VT3		154	163		0.0				17.2
DynaGro V 6083 VT3			217						19.2
Terral-REV 26HR50			198						18.9
Croplan Genetics 8756 VT3			195						19.4
Terral-REV 28HR20			194						17.3
NK Brand N82V-3000GT			194						18.8
Terral TV 27TR79			194						19.2
Golden Acres 28Y97			192						17.9
Croplan Genetics 8505 VT3			192						18.0
Terral-REV 28R30			189						18.2
DynaGro 58V69			184						18.7
Dekalb DKC 63-84 (VT3)			183						16.3
NK Brand N78B CB/LL			182						19.2
Terral TV 25BR71			181						19.0
Dekalb DKC 67-23 (RR2/YGCB)			180						17.4
Terral-REV 26R60			178						17.6
Croplan Genetics 6725 VT3			176						16.2
Terral TV25R31 (RR)			176						19.4
NK Brand N77P-3000 GT			175						16.4
Croplan Genetics 7505 VT3			174						18.0
Croplan Genetics 7131 VT3			174						16.9
Terral-REV 25HR49			172						17.1
NK Brand N78N-3000GT			172						19.3
Dekalb DKC 68-06 (RR2/YGCB)			171						18.4
DynaGro 58V50			171						20.1
Croplan Genetics 851 VT3			170						17.6

TABLE 9. CONTINUED.

Brand name - hybrid	Grain yield			Lodging			Test-weight lb/bu	Mid-silk mo-day	Harvest -- % --
	3-yr	2-yr	2009	3-yr	2-yr	2009			
	----- bu/acre -----	----- % -----							
Terral-REV 26HR70			167						18.0
DynaGro V 6263 VT3			166						18.6
Terral-REV 25HR39			164						17.4
NK Brand N69L CB/LL			161						15.8
Dekalb DKC 62-54 (VT3)			152						16.4
Croplan Genetics 6986 VT3			151						16.4
<i>Test Average</i>	168	167	178						
<i>LSD0.10</i>	5	7	14						
<i>CV(%)</i>	9	11	15						

† The 2009 irrigated test received 4.5 inches of water.

EVALUATIONS OF CORN HYBRIDS IN ALABAMA 2009**TABLE 10. GROWING SEASON RAINFALL, 2007-2009.**

Location	Year	Monthly rainfall in inches						7-month total
		Mar.	Apr.	May	June	July	Aug.	
Belle Mina								
	2009	5.6	5.8	11.1	1.4	6.3	4.7	8.7 43.6
	2008	3.9	4.2	4.8	3.2	2.7	5.4	0.9 25.1
	2007	1.1	4.6	1.0	1.2	3.7	1.1	1.2 13.9
Crossville								
	2009	4.9	3.5	8.9	1.1	6.5	2.7	6.4 34.0
	2008	5.3	3.9	4.8	1.1	0.7	8.7	1.4 25.9
	2007	1.3	4.4	0.7	1.6	4.3	3.0	4.3 19.6
Shorter								
	2009	10.8	4.9	12.7	3.8	3.9	7.5	6.8 50.4
	2008	3.4	5.0	2.4	4.1	4.3	10.4	0.9 30.5
	2007	3.4	2.0	0.3	0.8	7.0	2.0	2.3 17.8
Prattville								
	2009	10.6	4.3	12.4	1.4	6.3	2.8	9.4 47.2
	2008	6.3	5.7	4.9	3.6	4.9	9.0	1.4 35.8
	2007	1.0	2.5	0.6	1.6	2.8	2.9	1.9 13.3
Brewton								
	2009	11.3	6.7	8.6	3.8	6.1	8.2	5.5 50.2
	2008	3.2	5.8	4.5	9.1	6.0	12.0	2.1 42.7
	2007	1.0	11.6	1.3	3.5	6.7	6.1	6.5 36.7
Headland								
	2009	10.6	6.2	9.8	2.2	10.2	7.8	3.9 50.7
	2008	2.1	4.1	0.9	3.6	4.9	10.3	1.4 27.3
	2007	1.3	7.3	0.1	1.4	5.2	3.8	4.2 23.3
Fairhope								
	2009	14.4	2.1	7.3	3.7	5.6	6.2	7.4 46.7
	2008	4.3	5.5	9.3	3.3	5.4	8.7	7.7 44.2
	2007	0.5	3.4	1.9	6.4	7.1	5.9	6.6 31.8

TABLE 11. SOIL TYPES FOR CORN TRIALS, 2009.

<u>Test location</u>	<u>Soil type</u>
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 2009 CORN HYBRID TRIAL SEED

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